

UNDERSTANDING LIVELIHOOD IMPACTS  
OF PARTICIPATORY FOREST  
MANAGEMENT IMPLEMENTATION IN INDIA  
AND NEPAL

## WORKING PAPER NO 3

# Participatory Forest Management in **WEST BENGAL**: A Review of Policies and Implementation



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Understanding Livelihood  
Impacts of Participatory Forest  
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## Participatory Forest Management in WEST BENGAL: A Review of Policies and Implementation

**Ajit Banerjee**

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**Oliver Springate-Baginski**



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# CONTENTS

Tables, Maps, Abbreviations and Terms Used.....	iv
Acknowledgements.....	v
Summary.....	vi
<b>1 THE SOCIAL AND POLICY CONTEXT OF PARTICIPATORY FOREST MANAGEMENT IN WEST BENGAL.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Indian Forests.....	2
1.3 West Bengal: Geographic, Socio-Economic Profile and Macro-economic Market Factors.....	4
1.4 Broad Policy Measures to Reduce Rural Poverty.....	8
<b>2 FORESTS IN WEST BENGAL: A BRIEF INTRODUCTION.....</b>	<b>9</b>
2.1 The Forest Resource.....	9
2.2 Forests and Livelihoods.....	11
<b>3 THE HISTORICAL EVOLUTION OF FOREST MANAGEMENT IN WEST BENGAL.....</b>	<b>13</b>
3.1 The Pre-Colonial Period.....	13
3.2 Forests in the Early Colonial Period: The 'Company Raj' 1767-1860.....	13
3.3 The Later Colonial Period 1860- 1947.....	15
3.4 Post-Independence Diverse Policy Changes in India and West Bengal.....	16
3.5 West Bengal: 1950-70.....	16
3.6 Policy Changes, Conflict and Field Experimentation with Alternatives (1970-80).....	18
3.7 Scaling up Participation in Forest Management (1980 – Present).....	21
<b>4 ENABLING AND CONTRARY ENVIRONMENT IN CURRENT LEGAL, ADMINISTRATIVE AND INSTITUTIONAL POLICY FOR PFM DEVELOPMENT IN WEST BENGAL.....</b>	<b>24</b>
4.1 Nature of the 'Enabling Environment' for Participatory Forestry.....	24
4.2 Contradictions in the JFM Policy Framework.....	25
<b>5 PFM IMPLEMENTATION STRATEGIES OF DIFFERENT STAKEHOLDERS.....</b>	<b>27</b>
5.1 Implementation Strategies of the Forest Department.....	27
5.2 Strategy of Forest Protection Committees.....	29
5.3 Donor Policies and Strategies.....	30
5.4 Civil Society.....	32
<b>6 ACTUAL IMPLEMENTATION OF PFM IN THE FIELD.....</b>	<b>33</b>
6.1 Assessments and Evaluations.....	35
6.2 Positive and Negative Aspects of Implementation.....	36
<b>BIBLIOGRAPHY.....</b>	<b>43</b>
<b>ANNEX 1: THE JFM ORDER IN WEST BENGAL.....</b>	<b>45</b>

## TABLES, MAPS, ABBREVIATIONS AND TERMS USED

### Tables

Table 1: Head-Count ratio of Rural Poverty (Based on NSS rounds quoted from Gazdar and Sengupta, 1999).....	8
Table 2: Forest Cover in India and West Bengal .....	10
Table 3: Progress of Establishment of Tea Gardens in 1866-1874 in Darjeeling District.....	15
Table 4: Legal Status of Forest Area in West Bengal (area in sq. km.) .....	17
Table 5: Summary of the Evolution of Forest Use and Tenure in West Bengal and India.....	23
Table 6: Donor Project Support to Forest Management in West Bengal.....	30
Table 7: Forest Protection Committees in West Bengal (As on December 2001).....	34
Table 8: Eco-Development Committees (EDC) in Protected Areas (as on December 2001).....	35
Table 9: Total payment of Usufructs to Forest Protection Committees (between 1995 to 2000).....	37

### Maps

Map 1: Forest Cover of West Bengal .....	6
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### Abbreviations

ARDD	Animal Resources Development Department
CFM	Community Forest Management
EC	Executive Committee of the FPC
FD	Forest Department
FDA	Forest Development Authority
FPC	Forest Protection Committees
GoI	Government of India
JFM	Joint Forest Management
PFM:	Participatory Forest Management
VSS	<i>Vana Samaraksha Samiti</i>
WB	World Bank

## **Terms Used**

Forestry	Management of forests according to 'scientific' silvicultural principles and norms, as distinct for example from indigenous forest management.
Forest area/Forest land	All lands legally notified or recorded as 'forest' in land records, even though these may not bear any trees.
Forest Cover	Standing forest with at least 10% tree canopy density though may not be statutorily declared as forest. Forest Cover is divided into two classes as follows:
Dense Forest	Forest with canopy density of 40% or more
	Open Forest: with canopy density of 10 to 40%:
Degraded Forest	Used for 'Open Forest' and 'Scrub Forest' to convey that the site has reached the open/scrub forest status by degeneration. Being degraded they provide little or none of the direct and indirect functions that a dense forest would normally.
Micro-plan	A plan of management of the forest block associated with the village in JFM, supposed to have been written jointly by the FD and the FPC.
Afforestation	Vegetating a bare land
Reforestation	Planting a harvested forest cover

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## SUMMARY

This review paper considers the nature and type of implementation strategies adopted by different stakeholders involved in Participatory Forest Management (PFM) in the case of West Bengal. At the outset it gives a very brief introduction to the context of forest management in India. It then discusses the history, policy, legal, administrative and institutional framework for management of the forests of West Bengal, analyzing its impact, and investigating the causes for its successes and failures. Thereafter, it discusses the impact, beneficial or adverse, of the frameworks of PFM on the poverty and livelihood of the people in general and that of the forest-fringe people in particular. At the end, it indicates the gaps in knowledge, in order to propose steps for improving the ongoing PFM process.

West Bengal is in many ways the pioneer of forest management in India. It was part of the region that saw the introduction of forest management during the Mauryan Dynasty (circa 321 B.C. to 184 B.C.). Later, under the British Colonial administration the northern forests were amongst the first areas to be declared as Reserved Forests, a process that was later extended to the entire country. The recently introduced Joint Forest Management (JFM) also had its origin in West Bengal; in the Arabari forest experiment of 1972 (in Midnapore District), and was also later adopted across India from 1990 onwards.

The number of Forest Protection Committees (FPCs) in West Bengal has grown rapidly in recent years under the Joint Forest Management scheme. From 600 in 1989, it grew to 1,738 by 1991 (Guhathakurta and Roy, 2000), and has swelled to 3,614 by the end of 2001, with a total of 415,200 members (West Bengal, 2001). Large parts of the forest area in a degraded condition (including plantations) have been put under the protection of FPCs.

The West Bengal Forest Department estimated that 60% of the FPCs in South West Bengal are 'good' to 'very good' (i.e. active) while the figure is only 30% in North Bengal (GoWB 2001). For West Bengal the percentage of active groups averages out to about 50% of the total. The total area formally transferred to the protection of the people is 529,945 ha., about 44% of the total forest area of the state.

This paper discusses some of the factors that have had a bearing on this rapid growth, and the performance of the FPCs. Some of these factors emanated from the political and social action of the people, others were from the state. Perhaps the most important was the continued dependence of the people on the forests for their subsistence needs. Their continued use of the forest, in spite of forest protection staff harassing them, led to violent clashes between the two, which obviously had to be resolved. The second important factor was specific to North Bengal, where the *taungya* villagers began demanding cash for forest work that they had historically performed for free as part of a long term arrangement with the Forest Department. The third factor was the outbreak of *Naxalism* in the early seventies, a radical movement for people's empowerment. There were also state-related factors involved not specific to forestry although their fall-out has influenced participatory forestry. These include the electoral success of the Left Front Government in the 1970s, and their distribution of surplus land to landless people, providing tenancy rights to *bargadars* and the promotion of the elected panchayat system throughout the state.

Through JFM, the FPC members receive conditional entitlements to collect dry firewood and other subsistence forest products unharassed, plus 25% net revenue from timber marketed from the forest; on the condition that they protect the forest from theft and damage. In case there is a breach of conditions, the FD have the power to revoke the JFM agreement. But no such case has happened so



far, as far as we know, and the FD is not likely to take such action, as a single such action could jeopardize the whole JFM operation.

Considering the provisions of JFM in West Bengal, there are three stakeholders: the FPC members, the Forest Department and to a lesser extent the *Panchayat Samity/Gram Suba*. The FD has not encouraged Non Governmental Organisations to be involved in the execution of JFM, other than in a few cases where the department has specifically permitted an NGO to be associated with FPCs as a consultant for an operation.

The perspectives, objectives and strategies of the FD are found to be quite different from those of the FPCs. The FD's commitment to JFM clearly comes from their interest in protection and up-gradation of degraded forests, *without wishing to make any change in the forest management system that they had conventionally pursued*. The implementation strategy of the FD, in translating these twin objectives into action, is to promote participation of the FPC, by making them fully responsible in forest protection, but without giving them any decision-making powers in respect of forest management methods, marketing, micro-plan preparation and implementation, or money management.

It would be wrong to give the impression that most forestry personnel are devoted to the cause of participation. The FD personnel expect JFM to help avoid the violence and tension they experienced in the 1960s and 1970s, without losing any grip on the management and control of the forest. During the 1960s and 1970s, the tension was caused by local people and the FD working at cross-purposes: the local people were collecting their subsistence needs, and the FD was trying to manage the forests to maximize revenue by producing industrial timber. In JFM operations, the majority of foresters have been biased in favour of maintaining their own domain. For instance no forest management powers available to FD staff are being transferred to the FPC, although the forest officials at the ground level have more or less stopped patrolling the forest areas to catch offenders.

Furthermore, the FPCs micro-plans (written for their forest activities) are subordinate to the forest officials' working plans for the Forest Division within which the FPC is located. Local participation in planning is allowed only to the limited extent of 'investment', if any, on rural economic and social welfare measures in the area (called 'entry point activities' and quite unrelated to forest management). Another manifestation of the foresters' mindset to maintain their own domain is the lack of any serious attempt by the FD to reduce staff, considering that the protection of degraded forests is now with the FPCs. On the contrary, the majority of FD officials claim that they now have more work to do with JFM in place.

The benefits that FPC households get vary tremendously from place to place. It depends on: the participation and efficacy of the FPC and the degree of cooperation of the FD; the extent of forest attached to the FPC and its' quality; the nature of products generated in the forest and their value, (subsistence or market); and the number of households in the FPC. A recent study of 58 villages show that per household income varied between Rs. 2 to Rs. 17,749 with an average of Rs 10,366. Although there is the solitary case of Rs. 2, the majority households get between Rs. 8,000-11,000 (or about £106-£146) (Dutta, Roy et al, 2004).

The World Bank is the only donor that has been involved in participatory forest management in West Bengal in a substantial way. It supported two projects: the West Bengal Social Forestry Project (WBSF) from 1982-91, and the West Bengal Forestry Project (WBFP) from 1992-97. The first World Bank intervention did not respond to the new opportunities for promoting participation, despite of the success of the ongoing Arabari experiment begun in the 1970s. The second project, made good the deficiency; the donor's strategy this time, among others, was to promote FPCs and assist them to

rehabilitate degraded forests. The other objective was to restructure the Forest Department in order that it could handle the people-oriented policies and also increase forest and plantation productivity.

There have been contradictions between the second World Bank project objectives and what the FD have emphasized and achieved. The first example is 'target-hunting' to increase number of FPCs. This would be acceptable if the people responded to it at the grass-roots, but there was no serious attempt either by the Department or by the donor to insist on devolution of more power to the FPCs. During supervision of the second World Bank Project, the Bank wanted more micro-plans, but did not look for action planning that would increase the sustainable supply of livelihood-related products required by local people. For example, there was virtually no emphasis on converting forest cover to fodder areas to accommodate the open grazing of cattle – an important livelihood need, nor to raise specific firewood plantations to reduce the gap between demand and supply of domestic firewood in the state (barring one component in North Bengal that did not fare well), nor to plant more NTFPs that provide much income to local people. Although the project was focused on rehabilitation and improved growth of degraded Sal and miscellaneous forests, the research unit pushed for and approved a consultancy for developing improved nurseries for Eucalyptus and a few other exotic species.

An overall assessment by the World Bank at the completion of the project indicated its satisfaction in the state attaining more than appraisal estimates in respect of rehabilitation of degraded forests with people's participation, but the increase of forest productivity was less than anticipated and the survival rate of planted saplings was only 53%. A few other agencies carried out evaluations of West Bengal JFM and their overall assessment was generally positive.

The financial allocation pattern of state funds relating to forest management seems to be donor driven. When a particular project with focus on any special aspect of forestry is offered and accepted, the allocation to that specific aspect goes up. For instance when the West Bengal Forestry Project of the World Bank (1992-97) was proceeding, of Rs.1,140 million ongoing budget, the allocation to JFM vis-à-vis the total forest budget was very high. But the downside of this 'responsiveness' is that when the project was completed it dipped back to a very low level. The emphasis then shifted to the new GEF project with wildlife emphasis. The changes in emphasis indicate the lack of commitment in policy, and also the low budget allocation to forestry, forcing the FD to do as specific funds dictate. Only recently, without any large scale foreign funding in sight in most states including West Bengal, the Centre and the States are starting to inject reasonable funds into JFM.

The status of JFM continuing in the state leads us to believe that it is a 'two-way street', one which can lead both to great heights of ecological resurrection, social empowerment and livelihood improvements, and the other to ecological, livelihood and empowerment downturns. The main positive and negative aspects discussed in the paper are summarised below.

*Positive aspects of JFM:*

1. The women and the poor in many FPC associated forests have got back a certain amount of dignity as they are generally out of the range of the 'law and order guardians' of the FD.
2. A reasonably friendly relationship has developed between the FD and the FPC members.
3. Involved FPC families are receiving a certain amount of sustained income from JFM that contributes positively to their livelihood.
4. The market forces for a few NTFPs have been responsible for tremendous development of private business. The most important is sal leaf collection, its primary processing, sal-leaf plate making, and sale and distribution in the rural and urban areas of West Bengal, Orissa and other parts of India.

5. A number of different local activities have received some institutional support from the FD. These include rural development, micro-credit, women group participation, and eco-tourism, which have been internalized by the FPCs.
6. Some improvement in biodiversity and forest quality has taken place in forests especially in SW Bengal.
7. Employment opportunities have gone up in certain areas.

*Negative aspects of JFM:*

1. The West Bengal JFM orders have not fully reflected the GoI's policies and orders relating to JFM in fundamental ways, allowing only degraded forests to come under the ambit of PFM while the GoI order allows the closed forest to be included, as well;
2. NGOs have not been encouraged to be part of the JFM scheme
3. JFM micro plans fail to reflect local people's needs
4. FDs fail to technically manage the forests to achieve JFM objectives. The technical side is, surprisingly, a negative element of JFM operation. For example; no innovative or experimental work has been done to improve the productivity of NTFPs, which are one of the most important money-generating features of JFM to improve the subsistence of the poorer sections of the community. This means that livelihood has not been improved to its potential.
5. No compensation is given to those deprived of their income when JFM is introduced in the village
6. There is a lack of interest from many forest officials in the promotion of JFM
7. Poor people, particularly the poor women, continue to remain isolated from the FPC.
8. Although some women FPCs are working, overall the voice of the women in the JFM operation is minimal.
9. The FPC Executive Committees dominate JFM activities at the expense of the FPCs
10. There is a lack of transparency in FPCs
11. Lack of proper institutionalization of FPCs decision-making, monitoring and other processes.

There are a range of issues relating to PFM functioning which have not been received the attention of the implementing authorities to ensure that proper processes are followed. These relate to:

- Monitoring processes for JFM activities,
- Power relations in the FPC, and the nature and level of democracy among FPC members,
- Corruption in benefit distribution,
- Livelihood changes,
- Gender issues

There is no regular or systematic supervision of FPCs, either by the FD, by the FPC themselves or their executive committees, nor is there any regular reporting system. *Ad-hoc* attempts are made occasionally by the Regional Directors to conduct evaluations of specific issues or individual officers, highlighting current problems such as man-animal conflict (e.g. elephant depredations in villages). Some actions may be taken, but these rarely address the underlying problems. Sometimes, the FD organizes meetings of FPCs where the members register problems in the FPCs, but again these are hardly taken up in a comprehensive manner. Some meetings to address problems are also arranged by NGOs to hear the grievances of the FPC members. The proceedings are then passed on to the respective DFOs for action. Again this is felt to have little effect.

This paper proposes that proper monitoring and appropriate research on the listed issues is urgently necessary to correct these deficiencies.

# 1 THE SOCIAL AND POLICY CONTEXT OF PARTICIPATORY FOREST MANAGEMENT IN WEST BENGAL

## 1.1 Introduction

This paper deals with the forest resources and their management in West Bengal. It focuses on the role of the forests in alleviation of poverty and enhancement of livelihood, and asks: *what role can natural resources play in assisting the poverty alleviation strategy?* The natural resources of the nation are arguably the most appropriate assets upon which the productive use of poor people's labour could be utilized to enhance pro-poor growth. The impact however depends on the nature, extent and condition of the asset, its potential, the rights of the people to the asset, the quality of labour power to make use of the asset, and how the asset managers assist the poor.

Before going into the subject matter of the paper, we will discuss in brief the Indian and West Bengal forests, and follow this with some relevant details of the recent history of economic, social and market features of the State, in order to provide the context to discuss Participatory Forest Management of West Bengal and its role in alleviating poverty.

In the 1950s and 1960s, it was internationally believed that macro economic growth of the nation would enhance household income, consumption level and standard of living (World Bank, 1990). It was realized from the evidence pouring in by the 1970s, that macro-growth alone does not alleviate poverty; in spite of growing average per capita income of many nations, the absolute number of poor below the poverty was enormous and still growing. It was realized that besides growth, additional strategies are necessary particularly to have direct provisions of health, nutrition and educational services to the poor in the public domain.

The 1990 World Development Report affirmed that a two-pronged strategy is needed to achieve sustainable progress on poverty reduction. One is promoting the productive use of poor peoples' most abundant asset, namely labour. This is possible through the 'harnessing of market incentives, social and political institutions, infrastructure and technology to that end'. The other is the provision of basic social services targeted to the poor. In other words, poverty is reduced and livelihoods improved if the nation formulates and implements policies enhancing growth through using poor peoples' labour and at the same time improves their skills and capacity through education, better nutrition and health.

Besides promotion of macro economic growth and social services, a third strategy often neglected is that progress in poverty eradication can be achieved if local people are entrusted with the power to manage the natural resources in their vicinity. Not only does this lead to greater democracy and so is socially justified, it also reduces protection costs for the assets, an unproductive cost component in all development works. In addition, it unleashes the creativity of the local people, gives them a stake on the asset that ensures they do a better job of the asset's upkeep and growth. There is however a caveat that has to be kept in mind in the matter of 'empowering' people. In many developing countries including India, poorer sections in rural areas still suffer from semi-feudal relationship dominated by the higher caste, rich, vocal and the educated minority. Additionally, the women in all communities, poor or rich, continue to be suppressed in the family and outside, although they shed more than half of the share of sweat for living. The risk of these 'elite' sections taking over and monopolising power in local fora is high and has to be guarded against. Empowerment of the poor, disadvantaged and the women of all sections in all spheres of decision making and implementation

activities including those of natural resource management should therefore be especially emphasized, but simultaneously monitored.

## 1.2 Indian Forests

In a developing economy, well-managed forest resources can provide a number of major supports to livelihood of the people. Among others, they are:

- A sustainable supply source of forest produce including fodder for cattle with downstream economic benefits, firewood for home and cash sale to outsiders, and poles and timber for making of agricultural implements, transport carts and house construction;
- scope for productive economic investment and tourism thus generating local employment;
- environmental services such as ameliorating climate, conserving soil, retaining moisture, and providing organic manure thereby improving agricultural productivity at the local and regional level and sequestering carbon and improving bio-diversity at the global level.

In the Indian context we have to consider whether our forests are providing the desired support at the macro-level to the livelihood of the country's populace. For example:

- is the forest resource sufficient for the social needs, and are they appropriately managed?
- is investment in the forest resource adequately fulfilling the employment potential?
- are the indirect environmental services in the form of soil conservation, water retention, carbon sequestration, bio-diversity and eco-tourism sufficient and effective?
- are the benefits where possible targeted directly to reduce poverty and improve the livelihood of the people?

An overall assessment about the potential to achieve these benefits and the actual attainment would give mainly negative answers to all the questions.

Land classified as forests is around 23% of the country's area (76.53 million hectares) is classified as forest land'. Of this, forest cover is reported to be about 63.73 million hectares (mha.) in extent, of which more than 40% (25.51 mha) is degraded, or at least is recorded as open and scrub forests (FSI, 1999). If degraded then their beneficial effects on both the economy and the ecology are hardly being realized<sup>1</sup>. Published data showed a slight increase of dense forest at the expense of open forests (see Table 2). Forest degradation has resulted in large and increasing shortfalls between needs and supply of forest produce, especially of timber, firewood and fodder. In 1999, the requirement of timber (in roundwood equivalent) in the country was 55 million m<sup>3</sup> yet the supply was only 29 million m<sup>3</sup>, creating a shortfall of 26 million m<sup>3</sup>. The shortfall in the case of firewood was even larger; namely 390 million m<sup>3</sup> (demand in 1999 was estimated at 334 million m<sup>3</sup> and recorded supply from forests 56 million m<sup>3</sup> (Ganguly, 2000); the balance might have come from private sources and partly unrecorded supply from public forests. Against estimated total fodder requirement of 1,712 million tones of cattle feed, non-forest area provides only 654 million tones, leaving 1,058 million tones grazed or collected from forests, leading to more fragility of the existing forest areas and grasslands recorded as forest. The estimated management yield of timber has had to be compulsorily curtailed in India in the last ten years to stop downturn of inventory.

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<sup>1</sup> A note of caution is needed here: 'forest land' figures are highly contentious (see Agarwal 1999), and a neglected aspect of the often heated debate relates to the conventional assumption that all of the 'forest land' area were forested to begin with. In fact, due to the different objectives and the manner in which extensive areas have been declared 'forests' by govt fiat, many of these areas never had nor can have forest cover, and were in fact pasture land, grazing 'wastes' and so on. Assessing their present condition using the criteria of tree cover can lead to a mis-formulation of the problem. Many areas are ecologically suited to being 'open forest' or shrub-land rather than needing planting for conversion into closed forest.

Forest management currently leaves much to be desired, as most of the forests are presently subjected to man-made vicissitudes. These are claimed by the FD to be due to 'theft', 'encroachment', 'damage', 'incendiary fires' and other similar 'human interferences'. The FD staff often neglect to consider these problems as being due to smuggling, or because of their reservation of forest resources that provide subsistence needs of forest-fringe people.

The mean annual timber and firewood increment of the Indian forests is only 0.7 million m<sup>3</sup>, compared to its expected potential of 2 million m<sup>3</sup> (Planning Commission, 2001). The biomass increment (of all parts of the entire faunal and floral components of the forest) has not yet been assessed, although it would be much larger than the timber and firewood increment alone, although still would not make up the wide shortfall in overall biomass demand. The increments are in fact extremely low when we consider that most of India is located in agro-climatic zones of high vegetative growth. In spite of the fact that Nature provided India with a large number of commercially valuable timber species, such as Teak, Sal, Paddauk, Rose wood, Mahogany, Sandal, Pine, and Deodar, and highly demanded non-timber forest products (NTFPs) such as Biri leaves, Sal leaves, quality fibres, medicinal plants, and firewood woods of high calorific values, the revenue yield of from Indian forests is very poor. This low yield is a result of unsatisfactory management practices leading to insufficient production.

About 97% of Indian forests are state-owned. In common with many states, in most forested areas of West Bengal *de jure* rights of the local people have been extinguished by forest reservation. However in some particular states people have retained some legal rights in forests, as in Himachal Pradesh, Uttaranchal, and Jharkhand for instance. Also in the North east the government h Owns little of the forest and peoples customary rights remain intact.

Forests were a central component in local livelihoods prior to their reservation. After appropriation by the state, the forests of India have failed to provide support to livelihood of the people of India in general and the forest fringe people in particular. It is not a coincidence that most poor people of India live in or in the vicinity of the forest (Poffenberger, McGean, and Khare 1998).

Investment in forestry remains at about only 1% of the development budget of the country, even though the forest land over 23% of the country's land area. In view of low investment, the employment potential is hardly reached and therefore the labour asset of the poor is not being harnessed at anywhere near to its potential.

As an effect of forest degradation, the country faces recurring environmental problems: degrading watersheds, floods, destructive storms, encroaching desert and increasing soil erosion, affecting the economic growth of the nation and increasing poverty of those affected by these disasters.

So called 'eco-tourism' is growing in importance for urban people and this could be a source of income for rural people. This is beginning to happening to a certain extent, but in most cases the way the tourism is developing cannot certainly be accepted as examples of eco-tourism. In most cases, there is no restriction to number of visitors, or use of the site by the visitors with ecology in mind. Thus, sustainability of tourism in several potentially excellent sites is questionable. Management practices must be improved if the potential is to be realised.

### **1.3 West Bengal: Geographic, Socio-Economic Profile and Macro-economic Market Factors**

West Bengal is a state in North-eastern India, bordered to the north by Sikkim and Bhutan, to the east by Assam and Bangladesh, to the south by the Bay of Bengal, to the southwest by Orissa state, and to the west by Jharkhand, Bihar, and Nepal. Its capital, Calcutta, is one of the largest cities in India. There are also major industrial towns at Asansol, Bankura, and Baharampur.

West Bengal is made up of the fertile delta of the Ganges River. In the north are the foothills and the outer ridges of the Himalayas. The population is Hindu, with a significant Muslim minority. There are also Buddhists, Christians, Jains, and Sikhs in West Bengal.

The state's area is 88,752 square km with a population in 2001 of 80.2 million, density of 904 per sq.km, the highest among all the states of India. The rate of population growth is diminishing, yet between 1991-2001 it was 1.78%. 71.97% of the population is rural and majority are dependent on agriculture either as cultivators or labourers, although livelihoods are increasingly diversified. Rice is the most important crop on the plains, where farmers also raise jute, leguminous plants, oilseeds, corn (maize), wheat, barley, sugarcane, vegetables, and some tropical fruits. West Bengal's tea plantations account for much of India's tea production.

Three main geographical regions of the state are: North Bengal, SW lateritic region and South Bengal (See Map 1 below). There is the fourth region in Central West Bengal, but being mostly devoid of forest and JFM operation, is left out of discussion.

The major economic activities in the three regions revolve largely around agriculture. But there are variations in the three regions in respect of other activities. For example, the northern hills attract tourists, for which local people are largely engaged in transport business and hotel management. Besides, many people are engaged as workers in tea gardens or in secondary activities related to tea gardens. In the plains of northern region, tea is even more important, in fact, the dominant industry. In addition, there are quite a few industries dealing with forest products including timber and firewood. As the town of Siliguri in the northern plains is the gateway to NE India, Sikkim, and Nepal, the city has grown substantially in the recent past with a particularly vibrant service sector.

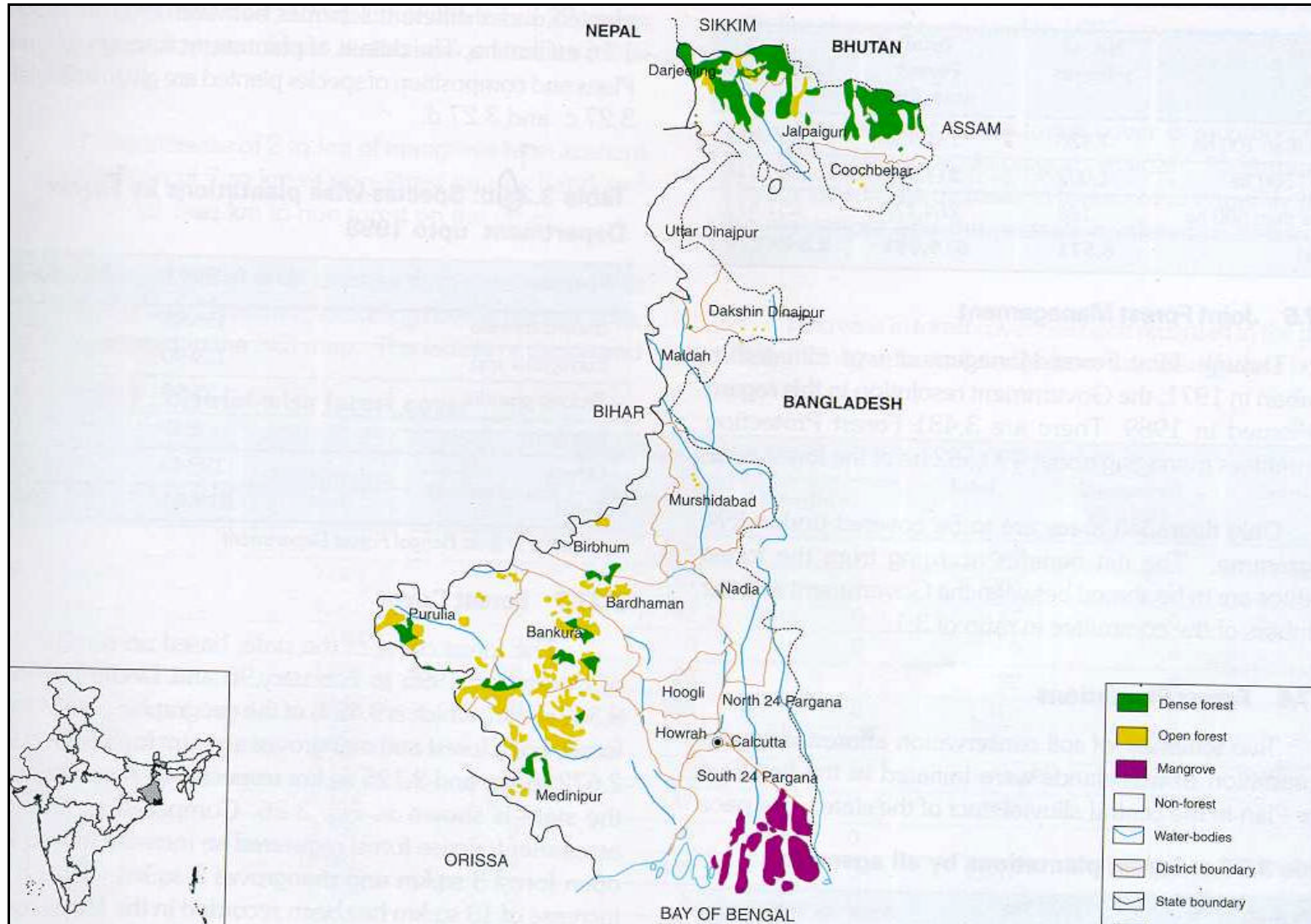
The north-western parts of the southern region, adjacent to Jharkhand, have mining activities especially of coal, iron ores, fire-clay and others. In this part, a number of big manufacturing industries and a few multipurpose dams dominate the economic scene. To the south are the SW Bengal forests, on which many villagers are at least partially dependent for their livelihood. Calcutta and suburbs are highly industrialized, and if we go further south, people living in and around the Sunderbans live from fishing, forest products, tourism income and most predominantly agriculture.

Except for the construction of new industries and multi purpose dams in the north-western parts of South Bengal, and the development of the service sector, the development of West Bengal as we see it today is largely an edifice built on what the British colonialists constructed as a foundation. On the British leaving in 1947, the State received some advantages and disadvantages compared to the other states. First it got a head start over other states: it had functioning tea gardens and scientifically managed forests in the north, jute, paper, small-scale precision tools, match and other factories in the south, and a core of educated people in Calcutta providing the need of the service sector. The major disadvantages were that much of this infrastructure was old and outdated. The tea gardens were old; tea bushes planted a long time back needed urgent uprooting. The jute, paper and other factories were also old with hardly any modern machinery and hence productivity was low and many of the functions were done manually. Secondly, the timber and bamboo needed for paper making were largely in Assam, which became unavailable as the transport linkage with Calcutta factories were cut

off with partition except a small corridor in the north, with Pakistan coming in-between, thus adding about a thousand extra miles to transport. Similarly the jute for the factories were mainly grown in East Bengal included in Pakistan and was not easily obtained.



**Map 1: West Bengal: Districts and Forest Cover** (According to Forest Survey of India 1999)



Source: Forest Survey of India 1999

Just as tea bushes needed uprooting and replanting, the factories some of which were starved of raw materials also needed new machines, new raw material sources, and cash investment which was largely unavailable.

At the time of partition of Bengal there was an exodus of millions of Hindus from Pakistan (East Bengal) swelling the population of West Bengal, generating social tension, and political unrest, with refugees legitimately claiming employment and assistance for settling down in the new circumstances. The cost of living also started going up and labour unions clamoured for higher pay.

Thus, most of the old factories in West Bengal either ran with large losses or went bankrupt. Flight of commercial and industrial capital took place and new investments were made in states that had raw materials near at hand, cheap labour and less social and political tension.

In the late sixties to early seventies, the State was in turmoil. Politically the Congress, so long in power, lost it to the left parties that backed a range of social movements: the labour Unions confronting the owners for better pay, emoluments and facilities, the unemployed refugees clamouring for jobs and income opportunities, the share coppers forcing the land-owners to give them a larger share of the crop, and the office staff striking for better pay from their employers. The government failed to encourage the people to take more responsibility in improving productivity in return for fulfilling their demands. At this time also the Naxalite revolutionary movement came about in India especially in West Bengal, demanding changed agrarian relationship in the country by violent means if necessary; and the left government of the state responding to it violently.

It was only in the late 1980s that State showed some signs of economic recovery. The contribution of agriculture to the state domestic product remained constant between 1980-81 (28%) and 1996-97 (29%). The productivity of food-grains was also stagnant for a long period, from 1970 to 1983, the estimated trend growth rate being 0.04% per year. However, this increased to 4.29% per year from 1983-92 (Gazdar and Sengupta, 1999, page 73) and although the rate has come down since, it still follows an upward curve. The state has only 3% of India's cultivable land but contributes to 8% of its food grain production showing thereby its higher productivity. West Bengal is strongest in rice production and contributes to 16.5% of the total rice crop of the country (IIPS, 2001). The contribution of the manufacturing sector to State domestic product, however, has declined from 1980-81 to 1996-1997 from 21% to 17%. The service sector on the other hand gained from 51 to 55%.

The annual per capita net domestic product in West Bengal has increased from Rs. 1,773 in 1980-81 to Rs. 2876 at constant prices in 1999. In the recent past, although there is no reliable data, it seems that the purchasing power of the people has substantially increased, reflected in the plethora of shops, sufficient stock of goods in the shops and brisk sale even in small towns.

Poverty has somewhat reduced, partly due to the increase of food grain production, The increase in cereal production by some is attributed to technological inputs such as deep water level tapping, distribution of better rice seeds and increase in *boro* cultivation.

A number of livelihood elements have been indicated below to show the changes, as compared to the neighbouring states. (Table 1 below). Gazdar and Sengupta (1999) opines that since 1983 to 1999, the rate of decline in head-count ratio of rural poverty in West Bengal was faster than in any other Indian state. Infant Mortality in West Bengal of 95 deaths per 1000 live births in 1981-83 came down to 72 in 1990-92 and was the fifth lowest among the states of India. It went further down to 49 deaths during 1993-1998. However, the sex ratio is tilted towards male by having 963 females for 1000 males in rural areas and 912 females per thousand in urban areas. Literacy rate in 2001 for 6+ aged male and female was 77.58% and 60.22%. However, there is very slow growth in other sectors. For example,

only 37% of households have electricity, 25% piped drinking water and 55% have no toilet facilities (IIPS, 2001).

**Table 1: Head-Count ratio of Rural Poverty (Based on NSS rounds quoted from Gazdar and Sengupta, 1999)**

	<b>Bihar</b>	<b>Orissa</b>	<b>West Bengal</b>	<b>India</b>
1973	69.19	67.03	60.51	55.36
1983	69.94	69.94	49.21	45.31
1987	56.45	56.45	34.10	38.81
1992	67.81	36.57	28.15	43.47

### **1.4 Broad Policy Measures to Reduce Rural Poverty**

Despite increase in food grain productivity and some impressive gains in literacy and other parameters, poverty in the state did not reduce as significantly as it might. This is obvious as the head-count ratio in 1992 of 28.15 even though less than neighbouring states remains quite high. The State Government took three special measures to improve the economic status of the poorer section of the rural communities. They are: distribution to landless people of surplus land obtained by statutory land ceiling of individual land owners; by ensuring that share croppers are not dislodged from the land they were sharecropping with the land owners i.e. securing tenancy rights; and decentralizing governance by introducing Panchayati Raj of elected representatives at three levels namely, district, block and the village cluster. Whether these three measures were instrumental in some reduction in poverty has been controversial (Boyce, 1987).

## **2 FORESTS IN WEST BENGAL: A BRIEF INTRODUCTION**

### **2.1 The Forest Resource**

Looking to West Bengal forests and their relative support to livelihood, the main focus of this paper, the picture is as gloomy as that of India as a whole. The forest area data from 1901 (13,491 sq.km.) to 2001 (11,879 sq.km) show that 1,612 km<sup>2</sup>, or about 12% of the 1901 forest area had been lost (GoWB 2001). However, the total forest cover (as distinct from forest area) in 1999 assessment was 8,362 km<sup>2</sup> (West Bengal 2001), which shows a small positive change of 13 km<sup>2</sup> over 1997. The forest cover is only 9.42% of the total land area of the state and 71% of the forest area. This means that large part of the forest area has no trees. Furthermore, open forests constitute a large part of this area (see Table 2 below). Furthermore, due to the increasing population, the per capita area under forest and jungle has reduced from 0.09 in 1901 to 0.01 ha in 2001. This is highly concerning as firewood supplies about 50% of the energy requirements of the state (although supplies may be increasingly coming from on-farm sources). The rural population, who make up almost 72% of the state population, continue to depend substantially on the energy and wood from the forest. With this shortage, they use leaves, forest floor organic matter and cow-dung for cooking, so depriving the soil of the natural ingredients that enrich it and thereby increase agricultural and forest productivity.

It is not the forest cover alone, which is reduced, but also the diffuse geographical spread of forests across the state. For example the mangrove forests in the Sunderbans in South Bengal area have been substantially reduced during the period, due to conversion of a part of the land to agriculture. Until 1853, the major policy was to convert the mangrove forest areas to agriculture. Even after the forests were protected in 1878, and later declared as Reserved Forest in 1943, they have visibly degraded, particularly the eastern part has. The mangrove forests are a reservoir of unique biodiversity both in respect of flora and fauna, and are also the most effective barriers to the storms rushing inland from the Bay of Bengal. Its degradation therefore has long-term adverse impacts for the population.

The forests of the South-West Bengal districts of East and West Midnapur, Purulia, Birbhum, Bardhaman and Bankura are constituted of low height Sal coppice mixed with a small percent of miscellaneous species. They have become much more fragmented, and small blocks of forest now intervene between villages leading to much animal-man conflict. The deaths of poor village people and damage to the huts and their cash crops by animal depredation particularly by elephants are often reported.

The story of North Bengal forests is somewhat different. In this region, large forest blocks composed of tall montane broadleaved species in the hills and large Sal and miscellaneous trees in the piedmont region have been managed according to classical forest management principles for almost a century. But they are being severely damaged by smugglers and sometimes reported to be by local militants in the last two decades. The depredations of elephants on the property of the local people in the plains are also on the increase, due to a number of factors, an important one being the loss of 'migration' corridors of the larger mammals to settlement, construction or uses other than forests.

The Forest Department has afforested (planting or promoting planting of 'waste' and tree-less lands) and reforested (cutting trees and replanting) substantial areas in the state. Starting from the small area of 9,570 ha in the first five year development plan (1951-56), the area afforested in the Eighth plan (1993-98) was 299,630 ha falling off to 100,838 ha in the Ninth plan (1998-2002) (West Bengal, 2001). This broadly correlates with the periods of donor project funding support.

**Table 2: Forest Cover in India and West Bengal**

Year (Data Period)	INDIA				WEST BENGAL			
	Dense Forest (mha)	Open Forest (mha)	Mangrove Forest (mha)	Total (Forest as % of land area)	Dense Forest (mha)	Open Forest (mha)	Mangrove Forest (mha)	Total (mha)
1901								1.34**
1941								1.21**
1961				78.4* (24%)				1.19**
1987 (‘81-‘83)	-	-	-	64.0 (19.49)	0.34	0.29	0.21	0.84
1989 (‘85-‘87)	-	-	-	63.8 (19.43)	0.33	0.29	0.21	0.83
1991 (‘87-‘89)	-	-	-	63.9 (19.45)	0.34	0.25	0.21	0.80
1993 (‘89-‘91)	-	-	-	63.9 (19.45)	0.34	0.27	0.21	0.82
1995 (‘91-‘93)	-	-	-	63.8 (19.43)	0.35	0.27	0.21	0.83
1997 (‘93-‘95)	36.7	26.1	0.5	63.3 (19.27)	0.36	0.27	0.21	0.84
1999	37.7	25.5	0.5	63.7 (19.39)	0.36	0.26	0.21	0.83

Source: (State of Forest Report, 1999, GoI; GoWB, 2001)

\* Forest Area: 100 years of Indian Forestry, 1961, GoI

\*\* Area under forest and jungles as reported in West Bengal Forests (GoWB 1964, p263, Table I.A)

Dense Forest: with tree cover of Canopy density of 40% and above

Open forest: all lands with tree cover of Canopy density between 10 to 40%

Mangrove : salt tolerant forest ecosystem found mainly in tropical and subtropical and inter-tidal regions.

Reforestation was a common forest management practice in North Bengal (harvesting of old forests and replacing it with new plantation) but large-scale afforestation was the new initiative by the Forest Department mainly to rehabilitate overused extensive degraded land, tree-less lands and wasteland undergoing erosion, with fast growing exotic species such as Eucalyptus and Acacias. Around 1960s, an attempt was made for a few years to afforest with indigenous species, but without success as these species were slow growing at the start and were palatable to cattle, so were killed after planting due to over-grazing. In contrast, exotic species, especially Eucalyptus, fast growing, non-palatable and with industrial demand for paper-making, seemed to the Forest Department at the time to be the perfect choice to vegetate tree-less or degraded areas. There was however adverse ecological and social fall-out. First, Eucalyptus had allelopathic impact on most other vegetation and therefore does not allow undergrowth to develop, which means Eucalyptus plantation was neither a good anti-erosion choice nor a suitable habitat for small animals. Secondly, the degraded lands that were earlier the common grazing and collection ground of dry indigenous tree and shrub firewood by the local people for cooking and partly for sale in the local market was no more available to the poor for subsistence.

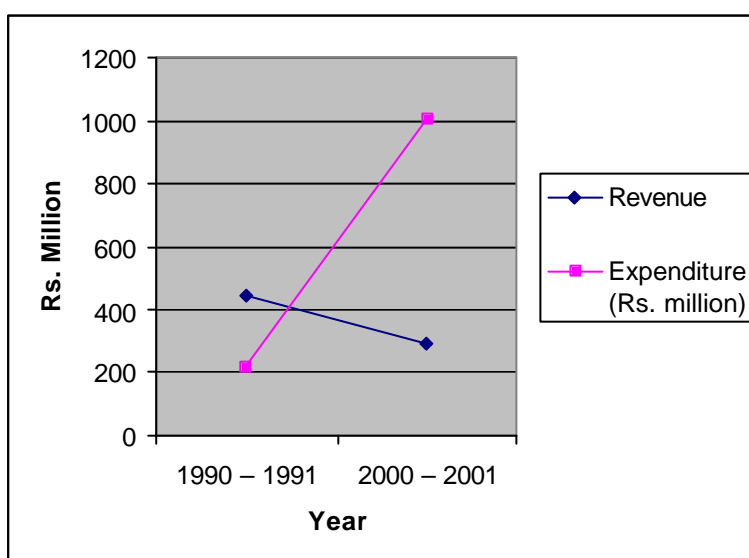
The outturn of timber from the forest has reduced substantially over recent decades; from 301,319m<sup>3</sup> in 1976–1977 to 88,000m<sup>3</sup> in 2000–2001. The production of total firewood had also shown a large downturn. It was 827,173m<sup>3</sup> in 1976-77, which stood at 250,399m<sup>3</sup> in 2000-2001. The reduction is partly due to less per hectare density of growing stock but also for allocating as a conservation measure less area for annual felling.

The outturn of specific minor produce has however increased. For example, honey production, only 42 quintals in 1989-90, stood at 494 quintals in 2000-2001; although the reason for such increase is not explained (GoWB, 2001).

The West Bengal Forest Department revenue from 'major products' has been reducing, despite increasing prices of timber, firewood and minor forest produce: revenue of Rs.449 million in 1994-1995 has come down to Rs. 218 million in 2000 - 2001.

The expenditure has however been increasing. The total expenditure during 1994-95 and 2000-2001 was Rs. 863 million and Rs.1393 million respectively (GoWB 2001). Of these, non-plan expenditure (i.e. expenditure for staff and maintenance of assets) in 1994-95 was 405 million, which rose to 1007 million in 2000-2001. In contrast, 'development' expenditure for creation of new assets such as plantations, JFM and associated activities, etc. in 1994-95 was Rs.458 million reducing to Rs.386 million in 2000-2001.

**Figure 1: West Bengal Forest Department Revenue and Expenditure (at current prices)**



The increase in non-plan expenses shows the phenomenal increase in staff and maintenance leaving fewer funds for new investments. This seems surprising as it is during the period of devolving forest protection responsibilities to local Forest Protection Committees. It is to be remembered however that the increase in expenditure has increased the percent of the Forest Development to the total budget of the state by a few decimal points only.

## 2.2 Forests and Livelihoods

The total number of villages in West Bengal is 37,910, of which 8,571 villages have forest land listed as a land use (GoWB 2001 page 32, quoting FSI, Dehra Dun). This statistic indicates that about 23% of the villages, with a population of 8.3 million in 2001, are in proximity to the forest and have a level of dependence on the forests<sup>2</sup>. The total forest area associated with the villages is 614,682 ha, mostly situated as fragmented forests in South-West Bengal, and only marginally as fringes of larger

<sup>2</sup> This number of forest households is likely to be an understatement because many nationalised forest lands have been taken out of village boundaries, so the number of villages with forest as a land use is not an entirely accurate indicator.

contiguous forest blocks in the Sunderbans of South Bengal and *Duars* and Hill forests of North Bengal. .

These forests have been under the ownership and management control of the Government Forest Department for about four and a half decades in South-west Bengal and for more than a hundred years in North Bengal and the Sunderbans. A critical analysis would show that during this period of government control, transfer of direct benefits from the forests to this huge number of fringe people were contrary to the imposed FD rules and whatever the people gathered were opposed by the government officials. Although we do not have any statistic, the quantity thus gathered by the people was many times smaller than that sold by the government to outsiders for revenue. There was some provision of supply of firewood and fodder to the people and grazing of their cattle at subsidized rates (a paternalistic measure). In addition, employment was generated for the local people and the traders in view of the investment that the Forest Department made in the forests for various operations, but principally through development schemes. However, the total employment generated in plan schemes fell from a high of 6.48 million man-days (17,753 person years) in 1994-95 to 3.27 million (8,958 person years) in 2000-01 (GoWB 2001). Compare this with the dependent population of 8.3 million and it is clear that this can have little benefit.

## **3 THE HISTORICAL EVOLUTION OF FOREST MANAGEMENT IN WEST BENGAL**

### **3.1 The Pre-Colonial Period**

In order to get a context in which to assess the relative impact of 'Classical Forest Management' (CIFM) and JFM on the people and their livelihood in West Bengal we must first look at the recorded past history of the forest and forest management of India and how the land portion now included in West Bengal is related to it. Although this may sound a little extreme, but we will see later in the paper this is because CIFM and JFM are not exclusive matters of forest management alone but encompass the questions of democracy and rights and entitlements of the forest dependent people. The history of Indian forests, apart from its persistence in some parts and gradual disappearance from others, is also intimately entangled with these aspects of peoples' lives. Before the introduction of iron on a large scale, after all, forests and its products were the major ingredients that made human existence possible. Man was born in the forests and till a few thousand years was completely dependent on it for shelter, food, medicine, and culture. Even today, in many parts of the world including India, the proverb that wood is needed in all stages of life from the cradle to the coffin still applies.

We will skip discussion of forestry in India and West Bengal in the ancient Indian period as it has been dealt with in the paper on India in this series, as well as widely elsewhere in the literature. We will start our discussion with the Moghul period

### **3.1 Forest Management and Rights during the Moghul Period**

During the Moghul period the area of forest and uncultivated areas were extensive. The Moghul emperors, although having a considerable territorial grip, did not enjoy monopoly of use either over the land or the forest resources on it. (Literature that providing forest-related information from this period: Babarnama, Aaini Akbari by Abul Fazal, and early English travellers). The major focus of the ruling empire was to increase cultivation in forestland, wasteland and jungles. The administration provided special incentives of tax relief for a few years to the people, who would cut down jungles and forests to establish agricultural land. At this time many enterprising people established *Zamindari* (landlord) estates by felling jungles, establishing villages and promoting cultivation. It was not entirely clear who owned the forestland, but there are examples where it was clearly noted that the rulers used forest products of various categories for constructional and commercial purposes. In addition, the emperors used forests for shooting animals and also for domesticating them in large numbers for emperor's kitchen, for using them in warfare and for transport. At the same time, however, the people in the forest or near the forest used the forestland and its products as their own and continued using them as their customary right.

### **3.2 Forests in the Early Colonial Period: The 'Company Raj' 1767-1860**

Eight years after their victory at the Battle of Plassey in 1757, the British East India Company assumed control of revenue collection for the whole of Bengal, in 1765, effectively taking control of the area. Coming from a country where mercantile capitalism was in full swing and industrialization was gradually accelerating, the forests of India increasingly suffered due both to the growing commercial interest of the colonialists in the forest products, and the prioritization of the extension of cultivation, (both of agricultural grain production and commodity cultivation) in order to raise revenue. There



was thus little disincentive to unsustainable extraction, and besides there was a prevalent assumption that the forests and the commercial trees were so extensive as to be inexhaustible. Thus the period was one of reckless exploitation of the commercial products of the accessible forests (Brandis, 1897 reprinted 1994, p36).

But so far as South-West Bengal and adjoining regions in its west are concerned, 'Even in 1800 nearly two thirds [of Midnapore district] consisted of jungle, the greater part of which was uninhabited and inaccessible' (Price cited in Sivaramakrishnan p.46)

'Political conquest on the forested frontiers of an emerging empire was lengthy and uncertain. In pursuit of a stable agricultural order, Company Raj in southwest Bengal and other central Indian forest regions worked to dismantle forest polities and thus rid itself of the endemic problems that characterized frontiers. ... the forests were largely seen by their new British rulers as a refuge for politically recalcitrant and stubbornly backward people. ... During the period 1770 to 1820, the East India Company struggled to stabilize its rule in the jungle areas. The struggle was marked by protracted campaigns against jungle landlords; the construction of these people, their followers and the local peasantry as primitive peoples; attempts to consolidate and enhance land revenue; the *chuar* (rural militia) disturbances; and the establishment of a police and judicial administration acceptable to British notions of rule of law prevalent at the time' (Sivaramakrishnan, 1999 p.29).

'The early administration of woodland Bengal emerged as a series of exceptions and anomalies within the overarching standardizations undertaken in the land settlement process. Well into the nineteenth century, forests were unruly, uncivil wastes in most of Bengal, awaiting the civilizing touch of the plough wielded by a settled cultivator. Several cultures of governance were elaborated ... What unified them was the urge to render the landscape of woodland Bengal productive and secure for the formation of stable village communities. A major concern here was hunting and game management ... (Sivaramakrishnan, 1999 pp.20-21)

On the wake of 1793 Permanent Settlement legislation, mainly between 1795 to 1850, the Company Raj chiefly viewed forests as limiting agriculture. 'The East India Company continued the practice of selling blocks of forests or individual trees to Indian merchants for a fixed down payment that encouraged great destruction and waste in their extraction. (Sivaramakrishnan, 1999 p.132).

During this time however the control of British on most parts of India was very loose. They were in fact fighting with many principalities, which were busy defending themselves from the British for the survival of their own kingdom. They had therefore not much control also on the non-agriculture land, which included forests. People in the forest continued to enjoy the customary rights of shifting cultivation, collection of forest products for their own needs and collection of small timbers, NTFPs, sandalwood, and other valuable wood for bartering with the near cities and townships.

By around 1840 the British Government began to realize that the forests in the country were reducing (Brandis, 1897, reprinted 1994) and were losing many of the commercial trees, which they needed for revenue, internal use and export. They also realised that this was due to the increasing population extending cultivation, a practice they had encouraged. The Government decided that since the non-cultivated land including the forests and the wastelands have no recorded owners, they legitimately belonged to the Government. The Government agreed that there are customary rights of the people; but these have to be restricted to those recorded through forest settlements to facilitate management of forests for sustained yield of timber.

In 1839 and 1840, the Government of Bombay Presidency issued orders to stop Teak cutting in government land (Brandis, 1897, reprinted 1994). Reservation of forests for strict control by the state

made headway thereafter, including taking on lease some of the forests that belonged to the principalities.

### 3.3 The Later Colonial Period 1860- 1947

The Indian Forest Act was passed in 1878 and by 1882 area of Reserve Forest was 35 242 square miles (Brandis, 1897, reprinted 1994). The Reserved Forest was a category that extinguished customary or de jure rights. The other categories of forests were Protected Forests and Village Forests. In these categories of forests certain rights were allowed but ‘more as a matter of favour than as a matter of rights’ (Lynch and Talbott, 1995) (although in at least some areas like Jharkhand, Uttaranchal, HP, rights granted are relatively extensive and legally enforceable). More and more forests were gradually brought under the government regulations of the Act and by 1900 almost all the areas due for reservation were brought under certain categories of reservation.

The Indian Forest Act of 1927 was the next in line of the Act regulating the forests of India. The 1927 Act was not much different from the 1878 Act except that more stringent regulations against offenders were included. Although village forests continued to be included as a category of forest for the use of villages, hardly any forest in India except for some forests in Uttarakhand (Van Panchayat) and Central Provinces (Nistari forests) and some forests in Chhotanagpur and Santal Paraganas where extensive rights for fuel and fodder etc. were allowed (Sarin, 2003 – although the Van Panchayats were not created under the IFA but the Scheduled Districts Act, 1878 – they were brought under IFA only in 1976). The Act of 1927 continues to be in force India today.

No attempt to introduce conservancy was made in the eastern region of India till after the revolt of 1857 (Sivaramakrishnan, 1999 pp.132). In West Bengal forest conservation began in the 1860s.

‘Considerable areas of these terai forests are of recent alluvial origin, and while the soil is then often light and suitable for the growth of sal, the ground is occupied by very inferior species only ... we should here step in and assist nature, and by these means add greatly to the value of the estate’ (EP Dansey, Dec 1890 cited in Sivaramakrishnan 1999 p.1).

‘Over the next 2 decades [1890s and 1900s] the rate of ‘managed change’ in the forested landscapes of Bengal accelerated at a rapid pace (Sivaramakrishnan *ibid.* pp.1-2).

Between the forests are large blocks of privately managed tea gardens are on long-term ongoing leases given by the government. These areas were one time forests, around 1880 described as ‘the whole of the district Jalpaigiri (*sic*) was covered with dense forest, the timber was magnificent and the soil splendid” (quoted by Griffiths 1967, p 116). Government of the period offered jungle land for tea cultivation at liberal terms to boost growth of tea industries (*ibid* page 116). Thus tea area was 38,805, 134 572 and 156 000 acres in 1880, 1899 and 1913 respectively. In Darjeeling District, the number of gardens increased, even earlier (Table 3).

**Table 3: Progress of Establishment of Tea Gardens in 1866-1874 in Darjeeling District**

Year	Acres Area	Number of tea gardens
1866	10 000	39
1870	11 000	56
1874	18 888	113

West Bengal in the first half of the 20th Century, still under colonial rule, saw the consolidation of scientific forestry as was prescribed in working plans for the North Bengal forests of the hills and the

plains. A number of prescriptions of management were introduced depending on their applicability as understood at the time. These included selection and improvement felling of commercial trees of largest diameters, coppice felling of trees with retention of standards, and clear-felling with artificial plantations by taungya villagers. These methods of management had no doubt sustained the vegetative cover and in some planted areas increased the per hectare timber productivity, but these had also resulted in removal of the best quality trees from the forests, and reduced the biodiversity of the forests, in fact converted some of the diverse forest associations to an association of a single or a few commercial tree species. But,

'Taken together these [network of working] plans and the attempts to implement them gave expression to the enormous and swift professionalization of modern forestry in West Bengal. Foresters in eastern India, working through these plans, participated in the emerging worldwide ideas of rational forest management for the maximization of resources in which dominant social groups had immediate interests. Arguably, the spate of forest working plans that were quickly formulated after the initial Darjeeling plan of 1892 were drawing upon, and disseminating, a sense of technocratic confidence that paid little heed to the ecological complexities of the landscape they were representing, even as they proposed sweeping interventions in them' (Sivaramakrishnan *ibid.* pp.1-2).

Sivaramakrishnan asserts that the current government structures and patterns of forest management, for the north Bengal forests, were fully established by the end of the 19<sup>th</sup> Century.

### **3.4 Post-Independence Diverse Policy Changes in India and West Bengal**

Post-independence, the GoI came out with the Forest Policy of 1952. The new policy comprised the following: First, it categorized forests into Protection forests, National Forests, Village forests and Tree lands. Second, local needs were considered as secondary to the national industrial needs; the act categorically denied any special consideration for the needs of the people settled near the forest when the same forest is nationally 'needed'. Even customary village forests were declared to be a 'national', instead of a local resource. In other words, forest-related livelihood considerations of the tribal and the local people were not a part of the main agenda.

The Indian Constitution provided that 'Forest' is a subject of the state, which with the passing of the Conservation Act of 1980 became a concurrent subject of the centre and the state. The Central government took over the powers of deciding on de-reservation of any reserved forest or use of any forest for non-forest purposes. However, the management of the forest remained with the state government for the entire period with some minor changes after the Joint Forest Management orders were issued in 1989. The Constitution (Seventy-Third Amendment) Act included for Panchayat operation some of the hitherto Forest Department activities related to social forestry, farm forestry and minor forest products.

### **3.5 West Bengal: 1950-70**

In pursuance of 1952 Policy, the Government of West Bengal through the enactment of the West Bengal Estate Acquisition Act of 1953 included all privately owned forestland to be vested without encumbrances but compensated for income foregone, to the Government on April 1, 1955. Through the Land Reforms Act of 1955, all unutilized land under private tea gardens (the majority of which was forest) was also assumed by the government. Beside a small part in North Bengal, most of it was in SW Bengal, generally low height closed and open dry forests of sal and its associates. It took a few years for the government to bring the acquired forests under legal status of 'Protected Forest' of Indian Forest Act, 1927. The acquisition of private and tea garden forests under the management of

the government is apparent from data on the legal status of forest in West Bengal in 1951, 1964 and 1971 (Table 4).

**Table 4: Legal Status of Forest Area in West Bengal (area in sq. km.)**

Year	Reserved forest	Protected forest	Un classed State Forest	Private Protected forest	Tea garden forest	Other private forest	Total forest
1951	6,845	17	128	-	258	5,007	12,256
1964	7,000	3,512	520	593	244	118	11,987
1971	7,054	3,772	1,053	0	0	0	11,879

Source: GoWB, 1964)

Through the 1952 Forest Policy the government tightened its grip on the forests, considering it as national wealth. During this period, some new Acts (e.g. Wild Life Protection Act 1972, Forest Conservation Act, 1980) were also introduced, with a significant impact on forest regulations; depriving people further of their customary (unaccepted by the government) rights. Nevertheless, during 1960-89, denudation of forest, deforestation and over-felling continued to take place in a very large way.

By 1971 (Table 4) all forests in the state were owned by the government, including previously private and zamindari forests. The government accepted virtually no customary rights of the people or the private corporations such as tea companies. This may look like an overstatement but we would quote for example from the Tenth Working Plan for the Darjeeling Forest Division (1967-68 to 1976-77), Vol.1 page 39: "Rights: None exists; Concesssions: Khasmahal tenants are permitted to enjoy the privilege of grazing their cattle in the forest areas above 8500 feet elevation". The First Working Plan for the East Midnapore Division of Southern Circle (1871-1883) discussing the rights of the people in the forests (mainly protected forests, of SW Bengal) reports 'None exists' (GoWB, 1982, p 35) .

Settlement officers were as far as we know not appointed to enquire into these rights being extinguished, as they might be expected to do under section 29 of the IFA. This is clearly a major recent watershed in drastically altering people's customary rights over local forests. The role which the resulting alienation of people played in souring FD-community relations and converting the forests into *de facto* open access areas, and contributing to their degradation (together with the state policy of commercial exploitation, cannot be understated.

The Central Government followed up the 1952 policy promoting industrial needs by sponsoring a scheme of fast growing industrial plantations on 'wasteland' and also on clear felled primary forestland (as in Arunachal Pradesh). During this period all states including West Bengal began planting fast growing species such as Eucalyptus, Acacia, Kadam, Semul and others with rotation as short as 10 to 20 years, often after clearing natural forest. This scheme also included planting of *Prosopis* in dry areas (e.g. Rajasthan, Cutch) for vegetating 'wasteland' and creating fuelwood resources for the local people. The West Bengal Forest Department participated in the scheme and planted thousands of hectares of Eucalyptus, *Acacia auriculiformis*, and *Cassia siamea* mainly in the degraded forests of South West Bengal (See also section 2.1). The 'wastelands' in the village and elsewhere that had indigenous species and were used for grazing and fuel wood collection were being replaced with exotic species more useful for industry. This must have had a major impact on local livelihoods, particularly of the poorest, being most dependent on access to common property.

Decentralization was also proceeding during this period in order to devolve more powers to the people at the grass-roots level. First Panchayat elections in West Bengal took place in 1958 and three-

tiered Panchayat Raj was fully established in 1978. The influence of Panchayat system in farm and social forestry was significant, but later it has also played a significant part in JFM.

### **3.6 Policy Changes, Conflict and Field Experimentation with Alternatives (1970-80)**

In the late 60s and the 70's the forestry protection situation in SW Bengal was extremely tumultuous, due to intensifying demands on the resources and increasing social mobilization by the left political parties to claim their due of the resources. At the same time major policy changes occurred.

The next major shift in forest management policy came with the publication of the report of National Commission on Agriculture (NCA) in 1973. The NCA proposed a number of measures to strengthen forest management, the ones most relevant to our present paper are:

1. Forest Corporations should be established in each state. The Corporation should concentrate on production of fast growing plantation wood for industry with bank loans and need not have to depend on the government budget support, which was in short supply. They should do this by clearing 'low value' natural forests and replacing them with fast growing commercial plantations.
2. Social forestry should be introduced on a large scale outside the forest area in order that the need of the people for firewood and fodder be collected from trees outside the forest area.

The Government of West Bengal subsequently established the West Bengal Forest Development Corporation over 822 km<sup>2</sup> of Darjeeling District Forests to convert inaccessible hill mixed forests to plantations. However, in addition the Corporation started a business of its own buying Forest Department timbers at concessional rate for its commercial sawmills. Thus, the government timber products were exposed to competition in the market, albeit from an advantageous position as the logs were obtained with subsidy.

Social forestry promoting tree planting by the farmers in private and community land in rural areas and on roadsides, canal banks etc. was initiated in 1973-74, although it actually took on more noticeable activity with the advent of financial support from the West Bengal Forestry Project of The World Bank (starting in 1984 and ending in 1991 – discussed further below). According to the World Bank estimate (quoted by Guhathakurta and Roy, 2000 p 25) 40% of the total farmers received 266 million seedlings free of cost for planting over 150,554 ha equivalent of land (assuming 1767 seedlings per ha). The survival percentage was estimated to be 53% by the end of the project. Assuming that the seedling number distribution data is not overstated, the nominal area equivalent planted would be about 75 000 ha. (Of course statistics for target-oriented project measures or where financial incentives are involved may be of questionable veracity, for instance in relation to survival rates)).

Despite these efforts timber, fuel wood and fodder for the local population remained in short supply. A 'wood balance' study carried out in 1986 (PSC, 1987, page 76) indicated that the estimated supply in the state of fuel wood was 3.0 million cubic meter and the estimated demand was 16.8 leaving a gap of 13.8 million cubic meter. The supply of wood other than fuel wood was 0.28 million cubic meters while the demand was estimated to be 2.3 or a gap of 2.02 million cubic meters. Although the gap may have been less in absolute numbers in the 60s and 70s, relatively speaking the situation of demand over supply per capita was equally large. The timber and firewood produced by the Forest Department through forest management was sold to the highest bidder thus the timber and firewood often went to outside users. In the context of high demand and low supply and the complete apathy of the FD to cater to local subsistence demand, the poverty of a large number of rural people with little resources for subsistence, the picture was ideal for overuse of government controlled but in fact open access forest resources. Degradation of the resource was inevitable and it showed largely in SW Bengal forests.

The relationship between the people particularly those living in or on the forest fringe people and the Forest Department staff reached a nadir. Because rights of local people had been so comprehensively extinguished, very small issues, including collection of forest products for home use, could regularly result in violence. On an average, 22 staff received physical injury from 1966 onwards for many years (Guhathakurta and Roy, 2000). The number of village people injured or killed and the property lost by them during the period because of this adverse relationship is not available but it was significant.

During the 1970's a number of issues in West Bengal related to local people's living conditions compounded the already strained forest management activities and relationships. Firstly, '**Naxalite**' political movement emerged in 1967 in Naxalbari forests of north Bengal, later spread to Midnapore and other places of SW Bengal. . This movement was demanding land rights and as response of the government was none, forcibly appropriating some of the private cultivated lands of the richer farmers for distribution to the landless and the other poor people. The movement initially had its headquarters in Naxalbari forest beat in North Bengal, and there played 'hide and seek' with the law authorities, involving periodic pitched battles.

Contentious issues included demands for the return of forest rights to the people. Additionally they challenged the high price that the *dom* tribals had to pay for the bamboos and the scarcity of fuelwood required by the artisans such as potters, blacksmiths and other caste groups (Poffenberger and McGean 1996 page 141). The movement rapidly spread to other parts of the state and the country. In West Bengal it lost steam by middle of 1970s after the leaders were arrested or killed in 'encounters'. It rapidly spread to other parts of the state and the country, although in West Bengal there was a lull by the middle of 1970s after the leaders were arrested or killed in 'encounters'. The movement however left its mark signifying the simmering discontent of the poor rural people about their landlessness and lack of rights in natural resources around them.

So-called 'Naxalite' mobilization continues to this day across the poorest and most oppressed areas of India. in Andhra Pradesh, Chhattisgarh, Maharashtra, Orissa, Bihar, Tamil Nadu, Jharkhand and Uttar Pradesh, as well as various 'liberation movements in the North East states'. The phenomenon is particularly, though not exclusively, focused in predominantly forested areas of the country. It is estimated that hundreds of thousands of people have died in these struggles, in AP alone over 10,000 since the 1980s. (Bhaumik 2003). In the last few years, similar militancy has also resurfaced in the western part of SW Bengal and in North Bengal. Their demands are not clear but basically for space for own administration, empowerment and for more rights to land and natural resources. The widespread phenomenon may be understood as the most recent emergence in a long history of insurrection against unjust demands on the rural poor, whether excessive taxation, expropriation or imposition of restrictive forest access rules. When the 'moral economy' is exceeded, insurrectionary violence is the desperate last resort: the 'weapon of the weak' in Scott's term: reflecting the discontent and powerlessness of the rural poor.

A second major issue was the changes to the **Bargadari** system, a customary practice in agricultural land tenure in West Bengal. In the system, the owner of the land allowed another farmer to cultivate his land under certain conditions (the cultivating farmer is called Barga or sharecropper), including sharing between the owner and the sharecropper the cost of production and the output. The problem of the cultivator apart from sharing a good portion of the output, was that he was at the mercy of the owner, who could change the sharecropper from time to time. Most of the sharecroppers were landless people and their removal from the land spelt disaster for the family. From 1940 onwards this system attracted much agrarian unrest in the state. When the Left Front Government came to power in the state in 1977, they introduced a major change. They got the *bargas* officially registered, thus giving them permanent tenancy right of cultivation on the land, with of course continued sharecropping with the owner. This development brought about a great measure of confidence

among the poor and landless to also demand rights to natural resources. Although this change was not reflected in any special demand for forest rights it did have some effect on the poor man's strength as a group.

The third issue was the **forest villagers' protest** in North Bengal in the latter part of the 1960s. From around 1920s, *taungya* cultivation was introduced by the British administration in the then Bengal and continued in the north Bengal forests after independence. *Taungya* cultivation is a form of agro-forestry in which agricultural crops were raised between the young forest seedlings planted or sown in rows in year 1 after felling the natural forests, and cultivation continued in years 2 and 3 as well or until the forest seedlings grew to cover the space between the rows to make cultivation not worthwhile. The Forest Department established forest villages near the forest blocks where reforestations were planned. The tribal or the local forest fringe people occupied the villages and came to be known as forest villagers. They had contracts with the Forest Department by which each family had to look after and nurture the young forest plantations and also carry out other forest works for 45 days annually *free of cost* in north Bengal reserve forests but in lieu of which they would be allowed to cultivate 1 acre of space in the current plantation between the planted rows and continue it for two or three years or till the canopy covers up the space and makes cultivation ineffective. This would mean that the villagers would have to travel to cultivate in plantations as the plantation sites changed from year to year. Each family was also provided a living space of 0.5 acre in the forest village and not more than 3.5 acres of wet cultivation (GoWB, 1970 pp.119-120)

The protest movement started when the villagers demanded that other things being unchanged, they have to be paid the normal wages for looking after the plantations. They also wanted more cultivation land for the increased number of families. The agitation turned violent and in response the government agreed to do away with the free service but did not agree to the demand of more agriculture land for the increased families. At this time, there were also serious attempts by the people including some from Bhutan to encroach on the reserve forestland without success. Also vandalism, smuggling of valuable timber, and theft appeared particularly by the tea garden labour living in the gardens on the fringe of the forests and by some mafia gangs. All these happenings indicated that the north Bengal forests, so long peaceful, was now becoming exposed to the aspirations of the people to establish their certain rights which they thought to have been neglected. Further, the reserved forest boundary believed by foresters to be sacrosanct was being violated.

In this rather gloomy scenario one small glimmer of hope emerged; the '**Arabari' socio-economic forestry experiment**, in Arabari range of Midnapur District of South-West Bengal, starting in 1971 and still continuing.

Within the very strained forest-department / local people relations already discussed above, this experiment covered a forest area of 1256 ha of which 400 ha was closed sal forests, 400 degraded forests of sal and miscellaneous trees and 456 ha barren land. 11 villages of 618 families surrounded the forest (Chatterjee, 1996). The people collected wood and firewood for home use and sale for subsistence. In 1971, a survey made in Arabari showed that the people of the villages earned about 1 lakh (Rs. 100 000) by collection of small wood and firewood from Arabari forests. This was equivalent to 50,000 person-day works.

The objective of Arabari experiment was to find out if the villagers could participate in the management of Arabari forest to stop its degradation and simultaneously restore it. The experiment promised that in lieu of their successful participation, the people would earn perpetual entitlement of their family needs of firewood, small timber and 25% of the net income that the forest management would earn by final felling of the timber crop in a systematic manner. In addition, the small subsistence income that the villagers particularly the poor women earned by locally marketing

firewood from Arabari forest would be compensated by an equivalent amount with wage labour that would be generated to carry out Arabari productive forest development work. Thus, the experiment provided 50,000 person-days of employment annually through productive investment to restore the blank area and the degraded portion of the forests.

The experiment proved successful. The forest was largely restored with the active participation of the people of the 11 villages. The government fulfilled the promise, besides NTFPs and employment of the required number of people for a reasonably long period, of 25% reimbursement of the net income after felling. This was done by a special order issued for Arabari experimental forests in 1988. This order is recognized as a paradigm shift in regard to rights of the people on the forests in West Bengal.

### **3.7 Scaling up Participation in Forest Management (1980 – Present)**

In 1988, the Central Government issued the new forest policy. The policy shifts from that of 1952 was dramatic. The policy recognized that the first charge of the forest was to the tribal and the poor people living near or in the forest and the forests should meet their needs. By this policy change, though in a general sense and with restrictive features, the government recognized the entitlements of the people in the forests adjoining to them. This policy was followed by a Central Government order providing measures of how the policy can be made effective and it wanted the states to follow the Arabari principle of sharing the usufructs of the forest with the fringe people in lieu of their co-managing the forests with the Forest Department. Thus was born Joint Forest Management in India. In West Bengal, the state government came out with three JFM orders separately for SW Bengal, North Bengal and Sunderbans in 1989, re-issued in 1990 with amendments in 1991, 1991 and 1991 (Annex 1) respectively. The resolutions are more or less the same with some variations in benefit distribution.

The Second World Bank Project of US\$ 39 starting in 1992 spread over 5 years (later extended by two more years) focused its major attention to promote JFM in West Bengal.

In the year 1992 and onwards, consistent with the policy of the Eco-development Projects sponsored by GEF and supported by the GoI for Tiger Project areas of India including Buxa Tiger Project of North Bengal, the West Bengal Government accepted the concept of Eco-development committees with people residing on the fringes of the protection areas of West Bengal. The major focus of the project was to wean the people away from the dependence of the protection areas by investing in village development and thereby improving the economic status and the livelihood of the people.

### **3.3 Drivers of the Policy Changes in West Bengal**

In the post-colonial period we here analyze the driving forces for the changes that have taken place in policy and forest management in West Bengal. There has been a major (although as yet incomplete) change away from 'Classical Forest Management' pattern towards Joint Forest Management. Participation of the people in state forest management, albeit in the very restricted form that we discuss later in the paper, made its appearance for the first time in about 150 years. (Although on the other hand in the significant areas of West Bengal's forests that were nationalised after independence the people initially enjoyed extensive use and management rights, until the state extinguished rights by 1971)

The Forest Department realized over the 1970s and 1980s that it is beyond them to manage the forests with the forest staff or according to the forest management system that it had adopted in the post-colonial period. For a long while they thought that protection could be improved by increasing the number of staff. Leaving aside the increase in the 1960s to 80s, the staff number went on swelling



even in the immediate past decade. The State Report of West Bengal Forests for the year 1990-91 mentions the number of senior posts as 120 and 6,345 posts of all other categories. In 2001, it reports 239 and 11,778. In other words, the Department has increased its staff by about 100% in 10 years without any significant gain either in the forest area, the quality of forest and its ecosystem. Neither has the FD been capable to close the gap between demand and supply of the major forest produces. It has been commented by some that this might indicate that perhaps JFM has been part of the continuing strategy of expanding and extending the FD 'empire'. But how and why such massive staff increases took place is certainly intriguing, as in most other states recruitments have been strictly limited since the late 80s, leading to another type of crisis.

Social Forestry did not 'wean' local people away from the use of state-appropriated forest as a common property resource. The people disposed the additional wood produced by them in their own land to cater to industrial and urban needs (as was probably intended). Their dependence on the local forest for firewood and grazing was not reduced.

The people at large, but particularly those near the forest, had shown their disapproval for the Department's way of functioning through a number of local but violent protests which resulted in the death and injury of a number of people including both activists and Forest Department staff. The 1980s saw the forest staff more or less staying away from their duty of forest protection partly due to the violent nature of protests as well as mafia operation in timber smuggling. A small number of forest staff realised the value of participation as the way out of the impasse and they worked proactively to bring about the change, and indeed, with people taking over a large part of protection this impasse was effectively resolved.

It became clear from two success stories (namely of the Arabari experiment in the 1970s, and farm and social forestry in the 1980s) that local people would constructively assist in the growth and development of forest provided they had benefits from its management. The Arabari experiment also indicated that the people were not thieves as they were being labelled, but long standing users who had to satisfy some legitimate demands namely their home needs of and subsistence support for their livelihood from the forest resources. The problem lay in people being deprived of their customary access through declaration of local CPRs as 'national' forests as least in SW Bengal)

The change in the central policy of 1988 was another driving force that expedited the implementation of participatory forestry. In addition, some enabling features helped in driving management towards participatory management

**Table 5: Summary of the Evolution of Forest Use and Tenure in West Bengal and India**

Historical Period	Extent of Forest As Known	Ownership of The Ruler	Nature of Use	Ownership by The People	Nature of Use by The People As Documented
East India Company Mercantile Period 1700 – 1850	Extensive Forests but degrading of commercial trees	Ownership with the princes in principalities and unclear of the forests and wastelands in company owned lands but attempts are on to reserve them for exclusive use by the company	Extensive selective felling of commercial trees and valuable NTFPs	Tribal people and forest fringe villagers continuing to exercise customary rights	Shifting cultivation, sedentary marginal agriculture, conversion to cultivation areas, hunting and gathering
British Occupation 1850 – 1947	Extensive forests at the beginning gradually reducing and denuding	All forests and wastelands claimed to be government property and customary rights extinguished in many instances. Forest classified into different categories including Village forests, but only comparatively small areas little of it allowed for customary rights	Classical Forest Management introduced, more revenues collected for the colonial state and plantations of commercial species started	Forest area available for the tribal and forest dependent people shrinking as lands were usurped by the government for national use	Marginal agriculture shifting cultivation, hunting over restricted areas
Independent India 1947 – 1989	Forest depleting, major forest felling during take over of zamindari and princely state forests due to change in tenure	Most forests brought under government control, including the ones recognized as community forests under British rules, by zamindars and princely states	Revenue but later conservation measures and more of social and farm forestry	People trying to assert customary use rights and government opposing it creating great divide between Forest Department and the people, several major protests against commercial forest felling by the FD e.g. Chipko, Jharkhand, Bastar	Using the forests for collection of NTFP, small timber and firewood and encroaching on the forest for marginal agriculture unlawfully a lot of this is not 'encroachment' but non-recognition of the land rights of pre-existing dwellers due to faulty or incomplete forest settlements
Independent India 1989 – present	Forests depleting but rate of depletion reduced	Most forests under government control but Joint Forest Management introduced	Government managing for revenue, as well as biodiversity etc.	People participating Joint Forest Management in many degraded forests and therefore were allowed some of the customary rights	Shifting cultivation and hunting and unrestricted collection and cutting going on where JFM is not introduced. The problem is that where communities continue to own their communal lands shifting cultivation lands are officially categorized as 'forests' as in the NE, and in other shifting cultivation areas, as in Orissa & AP, the rights of shifting cultivators are yet to be settled

## **4 CURRENT LEGAL, ADMINISTRATIVE AND INSTITUTIONAL POLICY: ENABLING OR CONTRARY ENVIRONMENT FOR PFM DEVELOPMENT IN WEST BENGAL?**

### **4.1 Nature of the 'Enabling Environment' for Participatory Forestry, and Drivers for Policy Change**

West Bengal had a few achievements, compared to other states, which have provided an enabling environment for participatory forest management activities.

The first is the land distribution by the government to landless people in the 1980s. The land area so distributed totals 9% of the total cultivable area in West Bengal by the year 1998, and 15% of households were affected: as many as 1 in 3 of all landless households. (Bardhan and Mookherjee, 2004 page 967) This measure generated a goodwill that made it easier for even forest officials to introduce participatory forestry.

The second supporting factor has been the seriousness with which the Panchayat system was established with regular elections. The decentralization of political representation raised the expectation of the local people about realization of their potential rights and privileges in respect of natural resources, forest being one of them.

The third factor has been continued dominance of the Left Front in State and the rural decentralized administration. The group has had a more poor-people oriented bias, and at least at the beginning of its long term in power was more sympathetic to the introduction of participatory activities, including PFM, and has not at any stage obstructed it. Unless we consider recent incidents of Panchayat politics invading FPCs, the Panchayat system has assisted the formation and progress of JFM without undue interference in its functioning.

Fourthly, as mentioned above the Forest Department has recognised that it has been beyond their capacity to manage the forests and fulfil forest product demand with the forest staff or according to the forest management system that it had adopted in the early post-colonial period, even with the vastly increased staff numbers. Conflict with local people had become acute to the extent that forest staff were staying away from their duty of forest protection.

Fifthly, as discussed above change came as a small number of forest staff realized the value of participation as the way out of the impasse, and worked pro-actively with local people to bring about the change. Two success stories (namely of the Arabari experiment in the 1970s, and farm and social forestry in the 1980s) demonstrated that local people would constructively assist in the growth and development of forest provided they had benefits from its management, and that the problem lay in people being deprived of their customary access through declaration of local common property resources as protected forests.

The change in the central policy of 1988 was another driving force that further expedited the implementation of participatory forestry.

If there has been obstruction to the development of PFM, it has come primarily from the antipathy of some forest staff, which has not accepted that the people who they believed to be the destroyers of

forest could be the agents of conservation. The other obstruction can be in the form of 'elite domination'; which has jeopardized the potential for distributional equity of the system. (Dreze and Sen, 1989 in another context, quoted by Bardhan and Mookherjee, 2004 p 965) The leaders were the rich and the more vocal people of the village and therefore voice of most was not heard.

Obstruction has also come from urban-based environmentalists who have demanded rigid protection of the forest, and to exclude local people from it. They believed in moving the people away from the protected forest to alternative sites. Guha has labelled this group as 'full-belly' environmentalists, in contrast to the 'empty-belly' livelihood environmentalism of grass-roots livelihood-oriented campaigners who believe equitable and sustainable resource management must be inclusionary of the interests of the poorer sections.

Thus, there were a number of 'enabling factors' that contributed to growth of PFM. However, it worked well for SW Bengal JFM operations but not in the North and the Sunderbans. The enabling JFM resolution for the north Bengal forest had a drawback compared to that for the southwest, namely there was no provision of sharing of the net income coming from the final harvest. The people therefore lacked the same incentive for participation, and so were not so motivated by the resolution. Further, the fringe people in North Bengal are composed of heterogeneous communities that do not harmoniously function in projects. The communities include old migrants from Bihar most working in Tea gardens, poor Bengali from the south Bengal but mostly refugees from Northern parts of Bangladesh and the indigenous community. In the Sunderbans PFM implementation system did not work as most of the forests had been declared as Protection Reserves of different kinds, which do not statutorily allow any resource exploitation and hence few forest benefits were left to offer. The new paradigm introduced in the area as a result is Eco-development by which rural development incentives are offered to each village to wean the people away from forest dependence.

#### **4.2 Contradictions in the JFM Policy Framework**

An issue that regularly crops up in analytical discussions on JFM is the continued absence of any law legitimizing the government orders on JFM. There is an apprehension among the people and the activists supporting participatory forestry that it would be possible for the government to bypass the orders on JFM in future if they felt it expedient. In fact, quite a few legal judgments and even government orders are already negating the provisions and intents of the resolutions on participatory forestry.

One example is the contradiction between the Forest Conservation Act (1980) and its 1988 amendment with the JFM orders. The Act prohibits, without the permission of the Central government or its representatives, clearing of naturally growing trees in forestland even if the clearing is followed by 'scientific' reforestation. In contrast, the JFM order specifies that the FPC members would be entitled to 25% of the net income from natural forest felling. In consequence, the court ordered stoppage of all green harvesting in India without an approved Working Plan and accordingly the Regional Forest Officer stopped all felling as the FD was in arrears in working plan preparation. To quote an example; the Regional Forest Officer of GoI stopped all fellings of forests/natural trees of Sal Working Circle of Purulia Forest Division by a letter of 8 October, 1997 (Guhathakurta and Roy, p 82, Box 4/5). He did not accept micro-plans of FPCs as appropriate management plans and thus derailed FPC operations. Presently, working plans have been updated and accepted by the Regional CCF for fellings to continue.

Another example is The Constitution (Seventy Third Amendment) Act 1992 Amendment (SPWD, 1993), which states that powers of planning and implementation of social forestry and minor forest produce will rest with the Panchayat systems at the appropriate level. This implies that the NTFP operations deriving the major benefit to the FPC members would be in the domain of the Panchayats.

Although this policy is yet to be operationalised in West Bengal, this is a situation that may create great conflicts in future between the village Forest Protection Committee and the *gram sabha*. On the other hand it may well have the potential for strengthening decentralized local governance of forests and transforming the relationship of local people to the Forest Department, introducing oversight and challenging the FD's pre-eminence and *de facto* authoritarianism...

The most recent case is the introduction by Central Government orders of Forest Development Authority (FDA) in handling PFM funds and its allocation to different FPCs. The authority of allocation has gone to a large body composed of officials, Panchayat and representatives of FPCs members of a forest division. Although the scheme may look good on paper to some people, in practice because the fund comes to the Conservator of Forests, she / he would become the *de facto* decision maker. Although there is provision for PRA exercises at the FPC level to assess the needs of each FPC, intimate open discussion that the members would make in a small FPC to justify demands is not possible in a large body. Therefore the FDA concept threatens to reverse the entire decentralization enterprise. However this is a recent introduction and it remains to be investigated, in terms of how it is functioning.

## 5 PFM IMPLEMENTATION STRATEGIES OF DIFFERENT STAKEHOLDERS

The basic features of JFM resolutions (Annex 1), main objective being to involve the people in forest management in West Bengal are:

- JFM would be offered by the state only in degraded areas in SW Bengal and no timber sharing in high forests as in North Bengal
- A forest block would be attached to a village for management
- Initially only economically backward people would constitute the Forest protection |Committee (FPC). (Although the subsequent resolution opened it for all families in the village.) For each family one representative shall be a member with the spouse automatically becoming a joint member of the FPC.
- There would be an executive committee composed of: a member of the *Ban-o-Bhumi Sanskar Sthayee Samity* of the local *Panchayat Samity*, *Gram Pradhan* or a member of the local *Gram Panchayat(s)*, elected representatives of the of the FPC members (not exceeding 6 members) and concerned beat officer. The latter is the member secretary. The term of the committee is for one year. A micro-plan would be written for the associated forest in consultation with the FPC in respect of its management and related matters.
- The FPC would ensure smooth and timely execution of all forestry work taken up in the area and would also protect forest/plantations
- The members would be entitled to 25% of cashew nut yield, sal seeds, tendu leaf, honey, and wax on approved tariff to LAMPS only. Rest of NTFPs would be free
- The members would be entitled to 25% of the net income from timber sale except in north Bengal
- In case there is breach of conditions, the FD would have the power to revoke the JFM. But no such case has happened so far and as far as we realize, the FD is not likely to go into such action as a single such action may jeopardize the whole JFM operation.

Looking at the provisions of JFM of West Bengal, there are actually three stakeholders: namely the FPC members, the Forest Department and the *Panchayat Samity/Gram Suba*. There has been no scope for NGOs to be involved in the execution of JFM unless the FD has specially permitted an NGO to be associated with any FPC.

### 5.1 Implementation Strategies of the Forest Department

The depth of implementation strategy for JFM can partly be assessed by looking at the relative allocation of the budget by the forest department to various components of forestry development. We therefore examine here the approved outlays for the 9<sup>th</sup> Five Year Plan (1997-02), as by 1997 JFM and Eco-development have developed into important aspects of the forestry in the state. In the Ninth Five Year Plan (1997-2002), the total approved outlay for the state Forest and Wildlife Plan was Rs.1,858 million (1.1% of the state outlay for development) and under the centrally sponsored and central sector schemes was Rs. 1,695 million or a total of Rs. 3,553 million (West Bengal, 2001). The estimated expenditure was Rs.1,205.1 million and Rs.620.7 million or a total of Rs.1825.8 or 51.38 % of the total approved outlay. The allocation for the PFMs within this has not been clearly estimated, but by adding up the schemes that are mainly focused on participatory forestry, we can make an intelligent guess. The approved allocation directly for community development and other allied works component was 41.2 million (36.3 million expenditure anticipated), farm forestry, strip plantation and public forestry 17.4 million (15.4 million anticipated), economic rehabilitation to fringe population 25.4 million (19.9 million anticipated), Publicity cum extension 6.9 million (6.1 million anticipated), decentralized peoples nursery 2.6 million (0.6 million anticipated), economic rehabilitation of fringe population in the hill areas 1.5 million (1.5 million), peoples nursery in the hills

14.3 million ( 2.2 million), eco-development programs around wildlife sanctuary 181.1 million (44.7 million), and under GEF Project allocation 433.5 million (240.4 million). The approved allocation for the ninth plan therefore to PFM is estimated to be about 723.9 (West Bengal State Forest Report 2001). The anticipated expenditure as given for each within bracket is 367.1 million or only 50.71% of the approved outlay.

**Table 6: Allocation of 9<sup>th</sup> Plan Budget (1997-2002) to Forestry Development and PFM (extracted from GoWB, 2001 pp. 110-118)**

Components of Forestry Development	Budget allocation (Rs. Million)	
	Allocated	Actual expenditure anticipated
<b>State Forest and Wildlife Plan (total)</b>	1,858.0	-
<b>Centrally sponsored and central sector schemes (total)</b>	1,695.0	-
<b>Combined Total of state and centre allocation</b>	3,753.0	-
<b>Allocation for PFM (estimated)</b>	723.9 <i>(22.5% of total approved allocation for the ninth plan)</i>	367.1 <i>(50.71% of PFM allocation)</i>
Community development and other allied works component	41.2	36.3
Farm forestry, strip plantation and public forestry	17.4	15.4
Economic rehabilitation to fringe population	25.4	19.9
Publicity cum extension	6.9	6.1
Decentralized peoples nursery	2.6	0.6
Economic rehabilitation of fringe population in hill areas	1.5	1.5
Peoples' nursery in the hills	14.3	2.2
Eco-development programmes around wildlife sanctuary	181.1	44.7
GEF Project	433.5	240.4

The financial allocation pattern seems to be donor driven. When a particular project with focus on any special aspect of forestry is offered and accepted, the allocation to that specific aspect goes up. When the West Bengal Forestry Project of the World Bank (1992-97) of Rs. 1,140 million was ongoing, the allocation to JFM vis-à-vis the total forest budget was very high. For example, the State Plan (annual plan) which included the World Bank fund could spend Rs 405 million in 1996-97, it sharply came down to Rs 96 million in 1998-99 (GoWB, 2001 page 118) when the World Bank Project was just completed. The emphasis then shifted to GEF project with wildlife protection as GEF fund became available. The changes in emphasis indicate the lack of commitment to policy as also low budget allocation to forestry, forcing the FD to do as specific funds dictate.

In order to improve the skill of the staff, the FD has regular training schedules components. The top officials are sent for training immediately after selection to Dehra Dun. State Forest Officers and Forest rangers are trained in Dehra Dun and other equivalent colleges in India. Within the state, there is one forester school (Dow Hill) and two forests guard school (Jhargram and Rajabhtakhawa) with training intake capacities of 40 foresters and 40 guards and forest extension workers respectively. The curricula in the schools have been changed from time to time to accommodate JFM features but the emphasis continues to be on technical aspects. FD arranged re-training through consultants and this

emphasized the need of change of the mind-set of the ground staff and the supervisor staff. However it has had indifferent results.

The FD has also arranged training of the FPC members by NGOs and consultants. The areas of trainings have been apiary, sal leaf plate making, bamboo crafts, mushroom cultivation, tasar cultivation, lac culture, tree nursery preparation, floriculture etc. The Ramakrishna Mission Lok Shiksha Parishad engaged by FD during 1991-2002 trained about 20 000 members of FPCs in 800 training sessions.

Departments other than FD were also associated with the JFM activities. In the World Bank Forestry Project, there was a close cooperation between FD and ARDD Fodder Development Program but it ended with the Project.

There is virtually no institutional mechanism for the Forest Department to coordinate with other departments at the local level or at the district level. Recently the FPCs have started to form federations to bring their demands and grievances to the local FDs or to their headquarters. The newly introduced Forest Development Authority (FDA) in the states by the GoI is a conduit for allocation of central government funds to different FPCs. FDA would have the pool of central government money (JFM related and forest fringe village development related including central government development funds of all departments related to forest fringe villages) that would be disbursed to FPCs by the FDA headed by the local Conservator of Forest. This is a new implementation strategy and we have to wait to see how it functions.

Based on the authors' interactions with the forest officials at various levels and from their body language at different meetings of the FPCs, the perspectives, objectives and strategies of the FD are found to be quite different from the other major stake holder namely FPCs. The objective of JFM for the FD is clearly the protection and up-gradation of degraded forests, without making any change in the forest management system that they have pursued before the JFM introduction. The implementation strategy of the FD in translating into action the twin objectives is to promote participation of the FPC by making them fully responsible in forest protection without giving them any decision-making powers in respect of forest management methods, marketing, implementation of projects or money management. Thus the FD expects to avoid the violence and tension they experienced in the 1960-80 period without losing any grip on management of the forest. This is the mindset of the majority of the foresters, which is obvious when we see that no management powers as available to a FD person are being given to the FPC, although the forest officials at the ground level have more or less stopped patrolling the forest areas to catch offenders. Furthermore, the 'micro-plan' written for the forest activities of FPCs is in accordance with and subordinate to the working plan written by the forest officials for different forest divisions in South-west Bengal. Local participation in planning is encouraged only to a limited extent in respect of investment, if any on rural economic and social welfare measures in the area (thus unrelated to forest management). Another manifestation of the mindset alluded to is the lack of attempt by the FD to reduce staff considering that protection of degraded forest is with the FPCs. On the contrary, the majority of FD officials believe that they have more works to do now that JFM is in place.

## **5.2 Strategy of Forest Protection Committees**

The objectives of the local people at the beginning was to earn entitlements to the forest use benefits that they had been deprived of for the last few decades in SW Bengal and more than a century in North Bengal and Sunderbans. This was apparent when many villages on their own started protecting forest contiguous to them when they heard that Arabari forest villagers might be receiving



large benefits in lieu of their protection services. The interest of the people in JFM became a flood when the Government order for Arabari villagers was issued in 1988. This desire of the villagers for more entitlement is further manifest in the recent pronouncement by various FPCs to increase the share of the net income from the final felling from 25% to 50% or even more. Another objective evolving over time in the perception of the villagers is to get more decision-making powers. Some of the FPCs are quite frustrated when the forester secretary fails to convene any FPC or executive committee meeting for months if not years. They are not very vocal as yet for additional powers but if asked specifically about this, they immediately accept the need of the powers. For example, it is a constant refrain of many FPCs that when they capture outside forest offenders, they have no way to arrest them or extract any fine from them. They have to perforce send them to the local forest officials who might let them off with small fines.

A further problem local people are concerned about is the lack of reciprocal transparency on the part of FPCs and Forest Department in relation to investment schedules and estimate details.

The FPCs took up two things very seriously at the beginning in implementing their roles in JFM. One is the task of protection. They adopted various methods of protection. In some, each family spared one person to join the protection party once in a while (the number of days for each family equalled [365/no. of families x number in the party] to patrol the forest area. Others engaged a guard on their own to look after the forests and so on. The other thing in which the FPC was quite active was in evolving methods in distributing the forest products.

There are many NGOs who would want to be involved in promoting participatory forestry particularly on women issues, researches on equity, NTFP, marketing, benefit distribution, micro-planning and training of forest officials and FPC members. But except for a few NGOs most were engaged as consultants, who have to operate within the mandate of the contract.

The local Panchayats are also becoming associated with the PFMs: while at the beginning and up to 2000 there was hardly any presence of the Panchayats in the activities of the FPCs. It appears that the Panchayat politics is now making inroads into the FPC operations in the sense that their elected members have started in a few places to dictate about various aspects of FPC and forest management. This is a new issue emerging in West Bengal, which requires further investigation.

### 5.3 Donor Policies and Strategies

The only donor that did get involved in a large way in the participatory activities was the World Bank. It supported two projects namely the West Bengal Social Forestry Project (WBSF) from 1982-91 and West Bengal Forestry Project (WBFP) from 1992-97. (Table 5 below)

**Table 6: Donor Project Support to Forest Management in West Bengal**

Project Title	Period	Donor	Fund Provision/Expenditure (Rupees million)
West Bengal Social Forestry Project	1982-91	World Bank	Rs. 639 (expenditure)
West Bengal Forestry Project	1992-97	World Bank	Rs.1,140 (provision)

The total expenditure for the first project was Rs. 639 million and averaged 58% of the state's annual plans for forestry. It focused on promoting growing of small poles, fuel wood, tree fodder, some NTFPs in farm land, on village waste land, linear strips of non forest government land etc. to reduce gap between the supply and demand of these products for benefit of the small and marginal farmers.

In fact, the promotion was very quickly taken over by those who had lands rather than the landless and marginal farmers, with one exception. Some of the landless people, who had been provided with land during surplus land distribution pooled their land and planted it up (called group farm forestry) with the seedlings supplied initially free and later at subsidized price by the project.

The project also had a component of rehabilitation of degraded forest with a target of 500 ha of planting and 10,000 ha of regeneration by coppice. Although the targets were exceeded, the accomplishment particularly in respect of forest protection was poor. The farm forestry component of the project was highly successful particularly in south and south western Bengal (nominal planting achievement was 150554 ha. against target of 62,000ha), but creation of village woodlot could be done only on 2405 ha in place of a small target of 6,000ha. It was a pity that in spite of the success of the Arabari experiment the idea of participation of the people remained in rehabilitation of degraded forest remained untapped (Guhathakurta and Roy, p20)

The second Project, however, made good of the deficiency. The donor's strategy this time, among others, was to promote FPCs and assist them to rehabilitate degraded forests. The other objective was to restructure the Forest Department in order that it can handle the people oriented policies and also increase forest and plantation productivity. Besides promoting coppice regeneration to rehabilitate degraded forests, the project had developed 13 afforestation treatment models of afforestation or reforestation.

The restructuring of Forest Department, it is claimed by the Bank and the Forest Department was done with a bottom-up approach.

'The beat and boundaries was made co-jurisdiction with Gram Panchayat or Gram Sava Samity. Division and circles have made compact areas of a district or region' (GoWB2001).

The restructuring did away with geographical overlaps of many functional divisions. For example social forestry division, wild life division and territorial divisions mostly overlapped in the same geographical area. This used to create problems between the overlapping divisions.

In certain aspects, there developed a contradiction between what the project wanted and what it was emphasizing and achieved. The first was target hunting to increase number of FPCs. This would be acceptable if the people responded to it, but there was no attempt either by the Department or by the donor to insist on developing sharing the powers equally with the FPCs. There was over-emphasis on the evaluation of treatment models rather than on participation, which alone could sustain the development. Furthermore, FPC micro-plans, which ought to be the most useful document for incorporating peoples' wishes into forest management, were commonly written by the Department staff themselves. During supervisions, the Bank in the mid term review mentioned among others on enhanced JFM supportive work in the FPC villages through completion of micro plans which fell on arrears (Guhathakurta and Roy, p35). Another example that needs to be documented is that the project was focused on rehabilitation and improved growth of degraded Sal and miscellaneous forests but pushed for and approved research consultancy mainly for developing improved clonal nursery for Eucalyptus and other species. The evaluation of the project has been made by a number of agencies discussed later in the paper.

The other donor that had been involved in a small way is the Ford Foundation, which has financially supported participation in forest management in West Bengal through the Rural Development Department of Indian Institute of Technology, Kharagpore (IIT) and Ramakrishna Mission Lok Shiksha Parishad (RKMLSP). Its main thrust has been to train the people associated with JFM in forest-based small-scale enterprises and also assisting self-help village development from earnings of JFM, as models for emulation by others. For example, RKMLSP emphasizes on accumulation of

funds by the women of the village from a part of their wage for providing credits to its members at the time of distress. The last named idea gained ground in many villages with women of the FPCs contributing small amounts every week to build up a fund of their own and taking loan from it when needed.

#### **5.4 Civil Society**

Except for the forest users, civil societies' role in the formulation and implementation has been minimal. The later included some media publications, a few books and a few NGO's trying to introduce promoting participatory forestry, training including special focus on women.

One excellent example is the role of the '*Nari Bikash Sangha*' (NBS) and the '*Raniband Banabasi Sangha*' (RBS) as indigenous grass roots women's organization may be cited. Their partner organization Center for Women's Development Studies (CWDS) first mobilized local tribal women of more than 20 villages, which led to establishment of '*Mahila Samity*' in several cluster of villages. By 1986 '*Nari Bikash Sangha*' came into existence as a federation of many *Mahila Samities*. NBS along with CWDS motivated FPCs of *Ranibandh* range and followed it by CWDS, NBS and RBS and FPCs develop the capacity to dialogue with the local rangers and other levels of forest officers to remove obstructions to full development of PFM (Narayan Banerjee, 2002)

The judicial system in the recent few years has been playing some role in forest conservation, which some judges have aimed to promote. The cases in point include court order issued in 1996 in respect of requirement of approved working plan to allow green felling and in 2002 to oust forest encroachers with a cut-off date. But unfortunately, these were literally interpreted by the executives in many states to create obstructions to ongoing participatory projects rather than its enhancement.

## 6 ACTUAL IMPLEMENTATION OF PFM IN THE FIELD

The strategy of actual implementation by the Forest Department for forming groups at field level was by motivating the village leaders in one-to-one meetings, and approaching villagers by publicity, consultation, and by local area meetings in order to get their agreement to form a FPC. The next step was for the *Panchayat Samity* to select the members, which as we discussed earlier include all the families of the village unless some family specially objected to being included. Generally no household is left out if the household intends to participate. Although the number is less, there are examples where some families have not joined the FPCs. The executive committee is then formed with six selected or elected FPC members, two representatives of Panchayats with local forester joining as the convener-secretary. The executive meetings are then supposed to be convened by the local forester-secretary. The micro-plan is prepared in due course by the forester convenor/Forest ranger in a meeting held with the FPC. The forest management micro-plan prescriptions follow the working plan without any change. The FPC meetings take their own decision how they would protect the forests and give their advice on where the entry point activities as a part of village development work should be done. In other matters as well, the Department was to do it in consultation with the FPC but basically it is avoided. Unless some investment is made, usually little attention is given by the local foresters to activate or enthuse the FPCs for better performance.

In other places, the villagers themselves took the initiative to start protecting the forest adjacent to them. Later, they would request the local forester to assist them to form the FPC as per rules and regulations.

The number of Forest Protection Committees (FPC) has grown rapidly in recent years. Starting with 600 in 1989, it has grown to 1,738 in 1991 (Guhathakurta and Roy, 2000), and has swelled to 3,614 by the end of 2001 with a total of 415,200 members. (West Bengal, 2001). The total area formally transferred to their protection is 529,945 ha (about 44% of the total forest area of the state). The forestland (ha)/ FPC member is 1.28.

The largest number of FPCs is in South-West Bengal namely 3,270 followed by 334 in North Bengal and only 10 in the Sunderbans. The total numbers of EDCs is 87. Seventy of them are in North Bengal and the balance in Sunderbans covering 77,462ha of protected areas, and having 18,072 members.

Of the FPCs, 17 are exclusively women FPCs of 1005 families located in 3 forest divisions namely in Bankura (North), Bankura (South) and Panchet Soil Conservation Division of SW Bengal. It is generally believed that women FPCs are more organized and are better achievers compared to the male dominated FPCs (GoWB 2001 p60), although this remains to be assessed in research.

**Table 7: Forest Protection Committees in West Bengal (As on December 2001)**

<b>Division</b>	<b>Total No. of FPC</b>	<b>Total Area Protected (ha.)</b>	<b>Total No. of FPC Members</b>	<b>Forest Land (ha.) /FPC Member</b>
East Midnapore	320	42,615	43,874	0.97
West Midnapore	511	62,791	40,057	1.57
Kharagpur S. Forest	100	7,520	29,300	0.26
Rupnarayan P. & S.	200	30,613	25,115	1.22
Bankura (North)	498	43,596	44,210	0.90
Bankura (South)	538	40,858	50,310	0.81
Panchet	220	27,618	24,230	1.14
Purulia	174	25,479	17,865	1.45
Kangsabati S. Cons. - I	204	27,687	30,588	0.91
Kangsabati S. Cons. - II	291	24,894	28,754	0.87
Burdwan	57	16,380	16,249	1.00
Durgapur S. Forestry	20	2,199	2,106	1.04
Birbhum	114	9,068	8,289	1.09
24-Parganas (South)	23	39,167	9,648	4.05
Darjeeling	43	9,207	2,761	3.33
Kalimpong	54	22,883	3,440	6.65
Kurseong	26	8,219	1,247	6.59
Kurseong Soil Cons.	11	7,010	727	9.64
Jalpaiguri	49	18,266	12,169	1.50
Cooch Behar	21	5,891	2,893	2.05
Cooch Behar S. Forestry	22	3,405	1,458	2.33
Baikunthapur	67	10,513	7,616	1.38
Buxa Tiger Reserve (E)	17	10,288	3,454	2.98
Buxa Tiger Reserve (W)	24	16,213	4,083	3.97
Sundarbans T. Reserve	10	17,565	4,757	3.69
<b>Total FPC</b>	<b>3,614</b>	<b>529,945</b>	<b>415,200</b>	<b>1.28</b>

**Table 8: Eco-Development Committees (EDC) in Protected Areas (as on December 2001)**

<b>Division</b>	<b>No. of EDC</b>	<b>Area Covered (ha.)</b>	<b>No. of Members</b>	<b>Area (ha.) / EDC Member</b>
Wildlife Divn.-I	24	16,437	2,452	6.70
Wildlife Divn.-II	9	5,592	1,418	3.94
Buxa Tiger Reserve (E)	14	18,002	2,547	7.06
Buxa Tiger Reserve (W)	6	5,309	616	8.62
Sundarbans T. Reserve	14	20,670	4,483	4.61
Cooch Behar	20	11,452	6,556	1.74
<b>Total EDC</b>	<b>87</b>	<b>77,462</b>	<b>18,072</b>	<b>4.29</b>

## 6.1 Assessments and Evaluations

The World Bank conducted a statistically designed evaluation in 1995 of the West Bengal Forestry project. The main findings were as follows (Quoted from First Annual Report on Performance and Impact of JFM (West Bengal) by EERN .

- (i) The project exceeded appraisal estimates in rehabilitating large areas of degraded forests with peoples' participation
- (ii) Forest Productivity did not increase to the appraisal expectation; survival rates in plantations were 50% only. The project however exceeded appraisal expectation on biodiversity improvement
- (iii) Significant gain was that foresters changed their attitude and supported the new approach of forest management

The donor at the time was in complete agreement with the FD about the level to which the participation of the people should proceed. As a result, chances were missed in terms of more people-oriented forestry in the state. For example, attention should have been given to micro-planning in a manner that the people had choices for deciding which management they would like to adopt to deal with the forests associated with them rather than formally consenting to Working Plan proposed management system; rules and regulations could have been modified to empower the members to deal with offences in their forests rather than sending the offenders to the FD for disposing the offence; FPCs could have been empowered to decide how they would like to sell the forest products of the final felling rather than leaving compulsorily to the FD to dispose them off etc.

Tata Energy Research Institute engaged by the Government of India carried out the next survey, funded by the Japanese in the year of 1998-99. The report states that JFM in general has helped in forest regeneration. The dependency of the people on wood-fuel has also decreased. Later on, the monitoring department of FD assessed that performance of JFM is variable; overall about 50% are good. 50% to 60% of FPCs are considered to be 'good' and 'very good' in South West Bengal, in the sense that the forests are improving, whereas only 30% of FPCs are doing well in North Bengal (GoWB 2001).

The next study is the ongoing assessment by the Indian Academy of Science, Bangalore. They have randomly selected 200 FPCs in SW Bengal and would make assessment in two phases. In the first phase, the researchers have completed situational analysis of the FPCs and found that among the six states they are working, WB had done better in terms of participation etc. In the second phase they have come out with the following findings among others (Mishra, Maity and Mondal, 2004):.

- The income by the individual families in different FPCs studied from the final harvest varies tremendously from a few hundred rupees to Rs.8,300/- p.a.
- Significant portion of the income of people particularly the poorer sections of the community come from NTFP
- The primary producers or collectors namely the poorer sections of the FPCs get little portion of the actual value at which the materials are sold in the market. This is because of the fact that the collectors do very little value addition to the forest produce collected by them. Besides, they are not conversant with the market price and as such are often manipulated by the middlemen and the whole-sellers. This needs to be investigated.
- Women FPCs have better track records than the mixed FPCs.
- Though husband and wife are joint members of the FPCs women generally hesitate to attend meetings

The above income aside, in the villages that were selected for final felling etc. all the FPC villages have additional income due to collection and sale of some NTFPs, mainly kendu leaf, sal leaf, and others of lesser value. In addition, employment was generated by the investments made for village development, for plantations and cultural operations in the forests. The state government estimated the employment generation for different plan periods: In 2000-2001, the man-days in the state plan were about 18 lakhs and in the centrally sponsored schemes 14.98 lakhs. This is about 50% of the employment generated in 1994-95, indicating the decreasing employment in JFM activities from public fund

Besides providing free NTFP (except Cashew nuts, Sal seeds and tendu leaf) and share of the final product and some employment, the FD, supports a number of investment activities in the fringe villagers associated through JFM. These are:

- Promotion of agricultural development by creating irrigation facilities and supplying improved inputs, pump sets etc.
- Drinking water facilities, solar lights, village road development,
- Animal husbandry, piggery, poultry, apiculture etc.
- Promoting cottage industry such as leaf plate making, bamboo basket making, sewing, knitting, etc.
- Income generating vocational training
- Promotion of self-help group activities for community dairy, farming, piscine culture etc.
- Development of marketing facilities
- Promotion of women's micro-credit associations

As the total amount on the investments is small and there is no specific promotion for developing a movement for the people to take to the activities on a self-help basis, the effect of the investments on the economy does not amount to much. However, no separate statistical figures of income generation on account of these activities are available to confirm it or otherwise. This requires further investigation.

Overall investment is reducing and with it employment as it would appear from some general statistics available from the department. The state government estimated the employment generation for different plan periods. In 2000-2001, the man-days in the state plan were about 18 lakhs and in the centrally sponsored schemes 14.98. It is about 50% of the employment generated in 1994-95. This indicates the decreasing employment in JFM activities from public fund.

## **6.2 Positive and Negative Aspects of Implementation**

Participatory Forest Management (PFM) is a two-way street, one of which can lead to great heights in respect of ecological resurrection and livelihood improvements, and the other to ecological and

livelihood downturns. Here the positive aspects and some of the significant beneficial impacts are discussed along with the areas of weakness. We would also indicate the achievements of PFM where it stands in respect of the universal three pronged strategy for poverty as discussed in the introduction to this paper.

#### *Positive Aspects*

1. *The women and the poor in many FPC associated forests have got back a certain amount of dignity as they are generally out of the clutches of the 'law and order guardians' of the FD.*

Generally speaking, there is no bar for the FPC members to collect NTFPs (with a few products as exceptions) including dry sticks for own use from the forests associated with them. Women normally do the collection.

In addition, the women specially the poor would go to the FPC areas to collect dry and fallen firewood for sale in the local market. This is done especially in the winter and summer. As the wood is wet in rain, firewood collection is stopped in the rainy season. However, the women also collect the sticks for local sale (that is prohibited but not contested by the FD) to earn a part of the subsistence of their family. Besides, women of other villages that do not have FPCs often come to collect dry sticks.

2. *A reasonably friendly relationship has developed between the FD and the FPC members.*

This statement is however true only with respect to vocal, educated and richer members of the FPCs. The relationship of FD officials with the poor men and women continues to be one of negligence but no more of belligerence as it used to be before the introduction of JFM. Even this achievement however is a substantial one when we think of the 70-80s when violence between the FD officials and the villagers used to be a common feature in West Bengal.

Before JFM, many local guards would extract a fee from each head loader. If the head-loading woman could not satisfy the demand, she would be harassed. This situation is almost totally absent. The women would carry the head load without fear unless there is some objection within the FPC.

I am not assessing whether this uninterrupted removal of dry sticks (sometimes green ones camouflaged with dry sticks) is degrading the forest or not as it hardly known how much firewood and how many poles are regularly removed in this fashion. This would need investigation

3. *Involved FPCs families are receiving a sustained income from JFM.*

The total payments are tabulated in Table 10 below (

**Table 9: Total payment of Usufructs to Forest Protection Committees (between 1995 to 2000)**

Year	Amount in million	Number of FPC	Number of 'Beneficiary' families	Average in Rupees per family
1995-1996	12.3	163	20,311	605
1996-1997	24.3	354	42,361	573
1997-1998	25.1	248	32,156	780
1998-1999	27.7	369	40,283	687
1999-2000	39.6	404	50,989	776

Source: GoWB 2001 p69, Table 6.5 summarised

The income varies tremendously from a few hundred to a few thousands rupees per family annually depending on per household forest, forest species, its quality and density, market price of the products etc. It must be noted that felling is not done in all FPCs every year. Therefore the income



data above is the average receipt of the families in the FPCs that had forest felling during the year. But NTFP collections particularly sal leaves, which was hardly ever collected about 20 years back has increased and with it the income of all FPC collecting members every year. Whether this is sustainable or not is unclear due to lack of data.

The market forces for a few NTFPs have been responsible for tremendous development of private business. The most important is sal leaf collection, primary processing, sal-leaf plate making, and its sale and distribution to the rural and urban areas of West Bengal, Orissa and other parts of India. Women belonging to the tribal, schedule castes and the poorer sections of the other communities generally do the collection. The collection is done throughout the year but more in the spring, rains and the autumn. In some families all the women work together and either earning from this work could be about 15-20% of their family income.

4. *A number of different local activities have received institutional support from the FPCs.*

These include micro-saving, women group participation, involvement in eco-tourism etc. The last, facilitated by West Bengal Forest Development Corporation, has been internalized by the FPCs. Such areas are few in numbers at present but are quite popular with the local people and also people from distant urban places. Few FPC members are trained in cooking and as caretakers. The visitors have to take their services during their stay in the forest cottages.

5. *Some improvement in bio diversity and forest quality has taken place in forests, especially in SW Bengal.*

The figures for 1999 indicate that a marginal improvement in area of closed forest has taken place at the cost of open forest. The percentage of forest cover to land area came down to 9.03 in 1991 but has gone up to 9.42 in 2002. It is said that this increase has mostly taken place in JFM areas (GoWB 2001).

6. *Employment opportunities have gone up in certain areas.*

This however had been temporally variable depending on the external funds available for funding JFM. Up to 1997, the Second World Bank Forest Project ended, the employment was significant. It plummeted, as the state finances were meagre. For example, the actual expenditure in state plan in 1997-98 was Rs. 255 million while in 1998-1999 it came down to 96 million. It however went up gradually again to its former level and with it employment generation has improved.

*Negative Aspects*

1. *The West Bengal JFM orders have not fully reflected the GoIs policies and orders relating to JFM in fundamental ways:*

The GoIs forest policy objectives of 1988 state thus:

- First, to maintain country's environment stability through preservation and ecological balance;
- Second, to conserve the natural forests;
- Third, meeting the basic needs of people specially fodder, small timber, rural people; and maintaining the relationship between tribal and the fringe people by protecting their customary rights on the forest. One of the strategies to do the last is to actively involve the people in the conservation of the forest (JFM UPDATE 1998 p 242).

The strategy resulted in the GoIs order of 1<sup>st</sup> June 1990. Govt. of West Bengal issued the orders first in 1988 with respect to Arabari Socio Economic experiment and later through three more resolutions for South West Bengal, North Bengal and Sundarbans. These resolutions reasonably well reflected the GoIs policies and orders but not fully. For example:

- West Bengal restricted the operation of JFM to degraded areas only.
- The emphasis in the GoIs orders of involving the NGO's to motivate the people to participate in JFM was more or less neglected.

- The state introduced JFM regulations in a manner that the major power stays with the FD and the people participate as minor partner.

*2. JFM Micro plans failed to reflect local people's needs:*

The micro-plans are expected to incorporate the actions to be undertaken over a period of time to successfully carry out JFM. In order the micro plan to be written, the facilitator must first determine the local people's needs, (and distinguish the perceived from actual where necessary). In fact, the West Bengal orders indicated that PRA exercise has to be made before micro plans are written. Unfortunately however, the findings of these exercises are generally not reflected in the micro plans. It is the observation of the author that no matter what the PRA findings are, the micro plan prescribes similar remedies for all areas in South West Bengal.

*3. FD failed to technically manage the forests to achieve JFM objectives:*

The technical side is surprisingly a negative element of JFM operation. For example, no innovative or experimental work has been done to improve the productivity of NTFPs, which are one of the most important money-generating features of JFM to improve the subsistence of the poorer sections of the community.

*4. FD failed to socially manage the forests to achieve JFM objectives:*

On the social plane also, a similar situation is noticed. The rules are very rigid in requiring that the local forester is the convener of FPC, yet since the local forester is in charge of a large forest area, where more than 10 FPCs may be formed, the forester is generally not available to convene and attend the meetings. This results in many FPCs meetings not being called for months.

*5. No consideration is given to compensate those deprived of their income as JFM is introduced in the village*

Many local people are very poor and subsist on forest produce. When JFM is introduced, certain operations, which on the face of it look to be the required steps for ecological improvement, go against the subsistence of the people. I am not questioning the regulations but to lack of emphasis to provide alternative occupation. It may be recalled here that the Arabari experiment surveyed at first what income the people would lose and arranged for employment to compensate the loss during the experiment.

*6. Lack of interest of many forest officials in promotion of JFM*

It is common that in many FPCs, local foresters hardly participate in forest protection. They are of the view that FPCs would look after it. But they also are not available for JFM meetings. It is incomprehensible what they are so busy about! Further investigation is needed in this issue, particularly in relation what the actual daily schedule of foresters now comprises of.

*7. Poor people particularly the poor women continue to remain isolated from the FPC.*

Although some women FPCs are working, overall the voice of the women in the JFM operation is minimal.

*8. FPC Executive Committees dominate JFM activities*

JFM resolutions have a deficiency, which somehow never finds a place in the critical analyses of the JFM institutional structure. The resolutions envisage an Executive Committee to coordinate the members. Yet this committee is now found to be the major administrative and executive body, both taking decisions and implementing the decisions as managers. While this may seem to be reasonable and workable for smoother functioning of any institution, it suffers from a fundamental lack of participation of the majority of the members who are not in the committee. The institution practices democracy by vote and not by participation. Looking at the Panchayat system in India, we find that the voters of the villages who elect members in due course lose all their clout with the elected

members. The likelihood of executive committee taking over the power of the FPC remains a threat. This is particularly relevant as the elected are generally the vocal and richer sections of the community. This issue also demands closer research investigation.

#### *9. Lack of transparency in FPCs*

This is another lacuna in the JFM. The FPC members are rarely aware of the allocation of fund for different components of the investment made in the FPCs. As a result, the members are legitimately apprehensive that part of the money is siphoned off either by the contractor or by the staff. In a recent complaint by an FPC member, he reported that 20% of the Rs.1 lakh proposed investment in a bund has not been utilized (Anon, 2003).

#### *10. Lack of proper institutionalization in FPCs of decision-making monitoring and other processes.*

There are a whole range of areas relating to PFM functioning, which have not been received, the proper attention by the implementation authorities, in order to ensure that proper processes are followed. These relate to:

- Monitoring processes for the JFM activities,
- Power equations in the FPC,
- Nature and level of democracy among members,
- Livelihood changes,
- Corruption in benefit distribution,
- Gender based inequality

Therefore, there is no regular supervision either by the FD or by the FPC or the executive committee nor is there any regular reporting. Once in a while, *ad hoc* attempts are made by an individual officer to highlight some specific problems such as man-animal conflict (elephant depredations in villages). Some actions are taken, which rarely solve the problem. Sometimes, FD organizes meetings of FPCs where the members register problems in the FPCs but hardly are they taken up in a comprehensive manner.

Some meetings to get at the problems are also arranged by the NGOs to hear the grievances of the FPC members. These are then passed on to the respective DFOs for action without much effect.

There is a JFM network sponsored by SPWD. The network also publishes and widely circulates a multilingual quarterly supplement. This has, however, very little effect on the JFM operations or policies in the state (SPWD, 2003).

### **6.3 Achievement of PFM in the Universal Three Pronged Strategy for Poverty Alleviation**

At the outset of this paper, we discussed three pronged universal strategies for poverty alleviation, which are: macro economic growth; social services with equity, and empowerment. We do not have the data to evaluate PFM in respect of these three parameters but we can make some indicative remarks at the end of the paper.

As earlier stated the forest cover, despite occupying more than 9 % of the land area of the state makes little contribution to its gross domestic product. The net state domestic product from forestry as a whole (quick estimate at 1993-94 constant prices) for 2000-2001 was only Rs. 5,330 million against the state total net domestic product of Rs 838,140 million or only 0.63% (GoWB 2003). Similarly the forest development expenditure was only 1.1% of the total development expenditure of the state (GoWB 2001).

A recent investigation (Dutta, Roy et al 2004) showed that the income derived per household per year in the sample of randomly selected 58 villages in SW Bengal was an average of Rs. 10,366 of which NTFP alone constituted Rs 10,080. Further, it was estimated that the NTFP income constituted an average of 30% of all incomes of the family. It is to be however kept in mind that not all the income from NTFP is additional cash income but includes estimated value of Rs 8,340 consumed at home, as fuel, fodder and food. This is however, a definite contribution to income at the local level. As this enhancement is not sufficiently high and as the forest dependent population is rather small relative to the total population, it does not make any noticeable change to the state picture. But the per family average additional annual income of Rs.10,080, when multiplied by 5,008 families of 58 villages, works out to Rs. 51.7 million, a tidy sum for the forest dependent generally poor rural villages.

In a few villages, irrigation water, drinking water, soil conservation measures, planting of fruit and firewood and fodder trees that assists the people in enhancement of their income in an indirect manner. There is another contribution, which would be perhaps visible later. This would come from the improving forest asset both in terms of extent and density.

The second parameter namely social service brought about by PFM is not very significant. For example, it had no effect on health, education, infant mortality, birth and death rates, fertility etc. as also little on equity. The little effect of PFM on the social services consists of:

- (1) Reduced time allocation and drudgery of firewood collection in the FPC villages. Due to better protection of village forests, the firewood necessary for the family can be collected near at hand thus saving time.
- (2) Development of credit facilities developed by the women. The amount thus garnered is small but it has a potential that is reached in neighbouring Bangladesh.
- (3) Slow but gradual improvement of women's participation
- (4) Development of cooperative working of families in some matters such as NTFP collection, firewood and pole wood distribution etc.
- (5) Developing some expertise to resolve intra and inter-village conflicts

The third parameter namely empowerment is a case of a lost opportunity or perhaps we should say deliberate neglect. Decentralization to the forest user's level is a good idea provided the devolution of power of management takes place. This does not appear to have happened, as most of the power including planning, allocation of funds distribution of benefits are all at the discretion of the FD. Where the villagers are useful is in protection. If any additional power is used it is due to paternalistic approach of some well meaning bureaucrats. This does not lead to any significant and sustainable power sharing in the long term.

## **6.4 Urgent Tasks**

Considering all the shortcomings of the implementation of JFM, two major gaps must be done away.

One is monitoring and evaluation, in a manner that can be used as a base line study for successive survey and assessment. Hardly any statistically acceptable survey of the forest resources has been done for the forests associated with the JFMs. In place of this all we have to understand the actual ongoing impact of JFM are vague statements like: a specific forest area is improving, or claims that a few sq.km of additional dense forests in the latest forest survey may be due to JFM. This fails to support the assessment of the impact of current policy and the development of future policy. There is also no in-depth regular economic and social study of sample villages to follow up on the impact of JFM on the village economy, family welfare and budget, intra and inter-family and village co-operation and conflicts, social and economic equity and so on. The once-in-a-while reports by researchers about JFM impacts are very useful but they are one-time one cluster data that give a

snapshot indication and then lose significance unless followed up in the same sites and same designs. Researchers could perform ongoing studies if adequate importance was attached to them and funds provided.

The second problem is the complete negligence by foresters to empower the people to manage the forests. This is very unfortunate, as the FD has also singularly failed to use their expertise in forest management. They have become routine, and are found harping on the same tune of 'classical management'; emphasising timber and a limited number of harvesting rotation periods, although at the same time talking of new demands of the people such as firewood, fodder, NTFPs. This mismatch between what is demanded and the attempts of officials to produce only those products which they had routinely learnt to produce borders on intellectual blindness. And yet the foresters are adamant not to make any significant change in their perspective, nor to empower the people to take over as a dominant partner in management, as they claim local people are ignorant of forestry.

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## **ANNEX 1: THE JFM ORDER IN WEST BENGAL**

*The State Government modified its July 1989 orders with a new Resolution (No. 5062-For/D/IS-16/88) dated 27th July, 1990. It is as follows:*

In partial modification of this Department's Resolution No. 4461-For. D/IS-16/88 dated the 12th July 1989 the Governor has been pleased to direct that the composition, duties and functions, the usufructuary benefits and restrictive measure pertaining to Forest Protection Committees shall be as follows:

### **Composition**

1.

The Divisional Forest Officer in consultation with "Bon-O-Bhumi Sanskar Sthayee Samiti" of the concerned Panchayat Samiti shall select beneficiaries for constitution of the Forest Protection Committee(s), within their jurisdictions, and within the framework of this Resolution.

The beneficiaries ordinarily shall be economically backward people living in the vicinity of the forests concerned. Every family living in the vicinity of the forests shall, however, have the option of becoming a member of the Forest Protection Committee, if such family including the female members is interested in the work of protection.

The concerned Gram Panchayat(s) shall extend necessary support and help to such Committee(s) to ensure their smooth and proper functioning;

Each Forest Protection Committee shall have an Executive Committee to carry out the various activities assigned to the Committee;

The composition of the Executive shall be as follows:

Sabhapati or any member of the Bon-O-bhumi Sanskar Sthayee Samiti of the local Panchayat as may be nominated by the Sabha pati - Member

Gram Pradhan or any member of Local Gram Panchayat(s), as may be nominated by the Pradhan(s) - Member

Elected representatives of the beneficiaries (not exceeding 6) - Members

Concerned Beat Officer - Member-Secretary

The members of the Executive Committee shall elect the president in each meeting.

Constitution of the Forest Protection Committee including Executive Committee will be approved by the Divisional Forest Officer concerned on recommendation of the "Bon-O-Bhumi Sanskar Sthayee Samiti" of the concerned Panchayat Samiti

The "Bon-O-Bhumi Sanskar Sthayee Samiti" of the respective Zilla Parishad will monitor, supervise and review functions of the Forest Protection Committee;

If any inclusion or change in the Committee/Executive Committee is necessitated, after initial constitution, the Executive Committee shall make suitable recommendation to the Divisional Forest Officer concerned, duly endorsed by the "Bon-O-Bhumi Sanskar Sthayee Samiti" of the local Panchayat Samiti, for approval;

The Beat Officer, as Member-Secretary shall convene the meetings of the Executive Committee as well as Forest Protection Committee, as per Schedule Procedure;

The representatives of the beneficiaries to the Executive Committee shall be elected each year in Annual General Meeting of the Committee, where the concerned Range Officer shall be the observer.



**Duties**

2.

The Forest Protection Committee (FPC) shall maintain a register showing necessary particulars of beneficiaries who are Members of the Committee, e.g. name, father's name, address, age, number of family members, name of nominee, etc. The nomination forms duly filed in and approved by the Executive Committee should be pasted in the register. Such registers are also to be maintained in the concerned Range Offices of the Forest Department for permanent record;

The Forest Protection Committee shall maintain a minutes book wherein proceedings of the meetings of the Executive Committee held from time to time as well as the proceedings of the Annual General Meeting of the FPC will be recorded under the signature of the President of the Committee and such minutes duly attested shall be sent to the concerned Range Officer for record;

The Forest Protection Committee shall hold general body meeting once every year where activities of the Committee as well as details of distribution of usufructuary benefits are to be discussed, besides electing representatives of the Beneficiaries to the Executive Committee.

**Functions**

3(a)

To ensure protection of forest(s)/plantation(s) through members of the Committee;

To protect the said forest(s)/plantation(s) with the members of the Committee;

To inform forest personnel of any person or persons attempting trespass and wilfully or maliciously damaging the said forest(s)/plantation(s) or commit theft thereon;

To prevent such trespass, encroachment, grazing, fire, theft or damage.

To apprehend or assist the forest personnel in apprehension of such person or persons committing any of the offences mentioned above.

(b)

To ensure smooth and timely execution of all forestry works taken up in the area under protection by the Committee;

To involve every member of the Committee in the matter of protection of forest(s)/plantation(s) as well as other duties assigned to the Committee;

To assist the concerned forest official in the matter of selecting/engaging of labourers required for forestry works;

(c)

To ensure smooth harvesting of the forest procedure by the Forest Department;

To assist the concerned Forest Official in proper distribution of the earmarked portion (i.e. 25% of net sale proceeds) among the members of the Committee (as per list maintained by "Sthayee Samiti")

To ensure that usufructuary rights allowed by the government is not in any way misused by any of the members and forest/plantation sites are kept free from any encroachment whatsoever;

(d)

To prevent any activities in contravention of the provisions of Indian Forest Act of 1972 and any Acts and Rules made thereunder:

To report about activities of a particular member which are found prejudicial and detrimental to the interest of particular plantation and/or forest to the concerned Beat Officer/ Range Officer, which may result in cancellation of membership of the erring member;

To assist the Forest Officials to take action or proceed under Indian Forest Act of 1927 and any Acts and Rules made thereunder, against the offenders, including any erring member of the Committee found to be violating the Act or damaging the forest/plantation.

**Usufructuary Benefits**

4.

The members will have to protect the forest/plantation for at least 5 years to be eligible for sharing of usufructs under this programme;

The Forest Official in Consultation with the Executive Committee and with the approval of the Bon-O-Bhumi Sanskar Sthayee Samiti of the concerned Panchayat Samiti will distribute to the eligible members his

proportionate share of usufructs from the final harvesting, not before the crop attaining the age of 10 years, upon satisfactory performance of functions detailed here inbefore.

The members shall be entitled to collect following items free of royalty without causing any damage to forests/plantations:

Fallen twigs, grass, fruits, flowers, seeds (excluding cashew) etc. and leaves;

One-fourth of the product obtained as intermediate yield from R.D.F. coppicing, multiple shoot cutting, thinning etc. and also 25 per cent of the net sale proceeds of cashew where available to be shared proportionately.

This will not in any manner, extinguish the rights and privileges already granted to the members of the Scheduled Tribes by the State Government in their Order No./2001-For. Dated 20.4.81 and/or may be granted in future

Entire sal seeds, and kendu leaves so collected shall have to be deposited with the West Bengal Tribal Development Co-operative Corporation Ltd., through the local LAMPS and LAMPS will pay the members, in approved tariff against their individual collection.

The concerned forest official shall set apart 25 per cent of the net sale proceeds at every final harvesting of the concerned plantation/forests (i.e., timber, pole, etc.) and shall pay to all eligible members or their nominee their proportionate share out of the said earmarked funds, as per para 4(ii) of the Resolution.

#### **Termination of Membership**

5.

Failure to comply with any of the conditions laid down hereinbefore as well as contravention of provisions of the Indian Forest Act of 1927, or Acts and/or Rules made thereunder, may entail cancellation of individual membership and/or dissolution of the Executive/Forest Protection Committee, as the case may be, by the Officers of the Forest Department as stated below:

The concerned Divisional Forest Officer (DFO), shall be entitled to take appropriate action, even dissolution of any Executive/Forest Protection Committee, on the grounds stated above, on the recommendation of the 'Bon-O-Bhumi Sanskar Sthayee Samiti';

The Range Officer concerned may be authorized by the DFO to take proper action, even termination of an individual membership, on the above mentioned grounds on the recommendation of the Executive Committee of FPC;

Appeal against any such penal action by the Range Officer may be preferred to the concerned DFO through local Panchayat Samiti;

Appeal against any such penal action by the DFO may be preferred to the concerned Circle Conservator of Forests (CCF), through the concerned panchayat samiti and the Zilla Parishad, whose decision shall be final.

#### **Resolution No.8554-For of 15th November 1991 covering North Bengal**

Whereas the Forest Department has taken up a massive programme for resuscitation of the degraded forests of the State as a whole for converting the areas into productive forests;

And whereas active participation and involvement of local people are vital for regeneration, maintenance and protection of aforesaid forests/plantations and successful implementation of the programme;

And whereas necessary resolution in this connection has already been passed covering districts in South-West Bengal;

Now, therefore, the Governor is pleased to decide that FPCs shall be constituted for the purpose of development and protection of degraded forests in North Bengal plains area and beneficiaries acting as members of such Committee shall be allowed, as a measure of incentive a share of the usufructs subject to observance of the conditions provided in the Resolution.

The composition, duties and functions, usufructuary benefits and restrictive measure pertaining to such protection committees shall be as follows:

### **Composition**

1.

The DFO in consultation with "Bon-O-Bhumi Sanskar Sthayee Samiti" of the concerned Panchayat Samiti shall select beneficiaries for constitution of the FPCs, within their jurisdictions, and within the framework of this Resolution;

The beneficiaries ordinarily shall be economically backward people living in the vicinity of the forests concerned. Every family living in the vicinity of the forests shall, however, have the option of becoming a member of the FPC, if such family including the female members is interested in the work of protection.

There shall be normally a joint membership for each household (i.e. husband becoming a member, wife automatically becoming a member). Either of the two can exercise rights to represent the household at any point;

The concerned Gram Panchayat(s) shall extend necessary support and help to such committee(s) to ensure their smooth and proper functioning;

Each FPC shall have an Executive Committee to carry out the various activities assigned to the Committee;

The composition of the Executive Committee shall be as follows:

Sabhapati or any member of the Bon-O-Bhumi Sanskar Sthayee Samiti of the local Panchayat Samiti may be nominated by the Sabhapati: Member

Gram Pradhan or any member of Local Gram Panchayat(s), as may be nominated by the Pradhan(s) Member

Elected representative of the beneficiaries (not exceeding 6) Members

Concerned Beat Officer Member-Secretary

The members of the Executive Committee shall elect the President in each meeting/

Constitution of the FPC including Executive Committee will be approved by the DFO concerned on recommendation of "Bon-O-Bhumi Sanskar Sthayee Samiti" of the concerned Panchayat Samiti;

The "Bon-O-Bhumi Sanskar Sthayee Samiti" of the respective Zilla Parishad will monitor, supervise and review functions of the FPC;

If any inclusion or change in the Committee/Executive Committee is necessitated, after initial constitution, the Executive Committee shall make suitable recommendation to the DFO concerned, duly endorsed by the "Bon-O-Bhumi Sanskar Sthayee Samiti" of local Panchayat Samiti, for approval;

The Beat Officer, as Member-Secretary shall convene the meetings of the Executive Committee as well as FPC, as per agreed procedure;

The representatives of the beneficiaries to the Executive Committee shall be elected each in year in the annual general meeting of the Committee, where the concerned Range Officer shall be the observer.

### **Duties**

2.

The FPC shall maintain a register showing necessary particulars of beneficiaries as well as Members of the Committee, e.g. name, address, age, number of family members, name of nominee, etc. The nomination forms duly filled in and approved by the Executive Committee should be pasted in the register. Such registers are also to be maintained in the concerned Range Officers of the Forest Department for permanent record;

The FPC shall maintain a minutes book wherein proceedings of the meetings of the Executive Committee held from time to time as well as the proceedings of the annual general meeting of the FPC will be recorded under the signature of the President of the Committee and such minutes duly attested by the Member-Secretary shall be sent to the concerned Range Officer for record;

The FPC shall hold an annual general meeting once every year where activities of the Committee as well as details of distribution of usufructuary benefits are to be discussed, besides electing representatives of the beneficiaries to the Executive Committee.

### **Functions**

3.(a)

To ensure protection of forest(s)/plantation(s) through members of the Committee;

To protect the said forest(s)/plantation(s) with the members of the Committee;

To inform forest personnel of any person or persons attempting trespass and willfully or maliciously damaging the said forest(s)/plantation(s)/wildlife or commit theft thereon;

To prevent such trespass, encroachment, grazing, fire, theft or damage;

To apprehend or assist the forest personnel in apprehension of such person or persons committing any of the offences mentioned above.

(b)

To ensure smooth and timely execution of all forestry works taken up in the area under protection by the Committee;

To involve every member of the Committee in the matter of protection of forest(s)/plantation(s)/wildlife as well as other duties assigned to the Committee;

To assist the concerned forest official in the matter of selecting/engaging of labourers required for forestry works;

(c)

To ensure smooth harvesting of the forest produce by the Forest Department;

To assist the concerned Forest Official in proper distribution of the earmarked portion of the net sale proceeds among the members of the Committee (as per list maintained by "Sthayee Samiti")

To ensure that usufructuary rights allowed by the government is not in any way misused by any of the members and forest/plantation sites are kept free from any encroachment whatsoever;

(d)

To prevent any activities in contravention of the provisions of Indian Forest Act of 1927 and any Acts and Rules made thereunder and the Wild Life (Protection) Act, 1972 as amended from time to time;

To report about activities of a particular member which are found prejudicial and detrimental to the interest of particular plantation and/or forest/wildlife to the concerned Beat Officer/ Range Officer, which may result in cancellation of membership of the erring member;

To assist the Forest Officials to take action or proceed under Indian Forest Act of 1927 and the Wild Life (Protection) Act, 1972 and any Acts and Rules made thereunder, against the offenders, including any erring member of the Committee found to be violating the Act or damaging the forest/plantation.

### **Usufructuary Benefits**

4.

The members will have to protect the forest/plantation/wildlife for *at least 5 years* to be eligible for sharing of usufructs under this programme;

The members shall be entitled to collect following items free of royalty without causing any damage to forests/plantations:

Fallen twigs, grass, fruits, flowers, mushroom, seeds, leaves and intercrops raised by FPCs, subject to any restrictions imposed from time to time, provided however such collection will not be allowed in National Park, core area of Tiger Reserve and sanctum sanctorum of sanctuary.

Medicinal plants in North Bengal will be permitted to be collected by the FPC members free strictly on the basis of approved micro-plans, except in National Park, core area of Tiger Reserve and sanctum sanctorum of sanctuary;

Members of the FPC will receive 25 per cent net of sale proceeds of firewood and poles which are harvested during thinning and cultural operations. The poles for the purpose of this order will be upto 90 cm bhg for all species except teak. For teak the upper limit of bhg is 60 cm.

Timber would not be subject to revenue sharing. However, lops and tops derived out of clear felling as per approved working plan which comes under a category of firewood would be shared on 25 per cent net sale proceeds basis.

Entire sal seeds so collected shall have to be deposited with the West Bengal Tribal Development Co-operative Corporation Ltd., through the local LAMPS (where LAMPS are functioning) and LAMPS will pay the members, in approved tariff against their individual collection.

The concerned forest official will distribute to the eligible members their proportionate share of the usufructs from the harvesting after satisfactory performance of functions detailed hereinbefore.

The usufruct sharing will be subject to restrictions imposed from time to time on account of silvicultural and management requirements and from preservation of wildlife point of view.

**Termination of Membership, Dissolution of Committee, Appeal, etc.**

5.

Failure to comply with any of the conditions laid down hereinbefore as well as contravention of provisions of the Indian Forest Act of 1927, Wild Life Protection Act or Acts and/or Rules made thereunder, may entail cancellation of individual membership and/or dissolution of the Executive/Forest Protection Committee, as the case may be, by the Officers of the Forest Department as stated in (ii) below:

The concerned DFO, shall be entitled to take appropriate action, even dissolution of any Executive/Forest Protection Committee, on the grounds stated above, on the recommendation of the 'Bon-O-Bhumi Sanskar Sthayee Samiti' of the concerned panchayat samiti;

The concerned Range Officer concerned may be authorized by the DFO to take proper action, even termination of an individual membership, on the above mentioned grounds on the recommendation of the Executive Committee of FPC;

Appeal against any such penal action by the Range Officer may be preferred to the concerned DFO through local Panchayat Samiti;

Appeal against any such penal action by the DFO may be preferred to the concerned CCF, through the concerned panchayat samiti and the Zilla Parishad, whose decision shall be final.