Nurturing Joint Forest Management Through Microfinance

A Case from India

K. K. Kaushal and J. C. Kala

Abstract: India has embarked upon a community involvement process to restock the state-owned forests through a recent approach called Joint Forest Management. But the success of the Joint Forest Management program lies in the provision of alternative livelihoods to woodcutters and grazers. This article presents how the forest department of a southern state of India devised a potent tool of microfinance promotion for weaning those who are dependent on the forest by implementing a massive externally aided Joint Forest Management Project. Based on a study of 27 program villages in the Tamilnadu state, this paper proves that the success of Joint Forest Management is dependent on and directly linked to the provision of microfinance to villagers through a people’s representative body—the Village Forest Council. The forest department was successful in this unusual task of promoting microfinance even in villages where formal microfinance institutions have failed, which corroborates an earlier finding that microfinance is more workable and successful if it is properly packaged in a locally suitable development program.

A substantial track record of accomplishment and a significant body of empirical studies worldwide together underline the significance of microfinance as an effective antipoverty and development strategy (Wright, 2000; Zaman, 2000; Khandker,
However, even a well-designed microfinance program is unlikely to have a positive impact on the poorest unless it specifically seeks to reach them through appropriate product design and targeting (Wright, 2000). It is clear from various reports that there are strong potential synergies between microfinance and the provision of basic social services to clients. However, the services provided need to be relevant to the needs of the target groups and not just an add-on that is of poor quality (Marcus, Portes, & Harper, 1999).

Of the 63.72 million hectares (ha) of actual forest area of India (most of which is state owned) almost 38% is degraded, with a canopy density\(^1\) of less than 40% (FSI, 2000). This degradation of forests is mainly ascribed to the rigid state control and the resulting disempowerment and displacement of indigenous tribal and hill communities, accompanied by the disintegration of community-based resource management (Fernandes & Menon, 1987; Guha, 1991; Kelkar & Nathan, 1991; Gadgil & Guha, 1992). Consequently the Government of India made a major policy shift in 1988 and switched over to Joint Forest Management (JFM). JFM is an evolving policy-based program, which sets out to establish management “partnerships” between local forest-dependent communities and the state for the sustainable management and joint benefit-sharing of public forest land (Sarin, 1995). To accomplish this, JFM seeks to shift the existing inequitable distribution of management control by directly involving local people and institutions in forest management (Campbell, 1996). JFM does not involve the transfer of ownership over forests, but attempts instead to restructure the formal system of access, decision-making, and sharing of benefits to account for the needs of local communities. So far, 22 state governments have issued orders to implement JFM and the states have evolved their own mechanisms of involving local communities in conformity with the proclaimed policy.

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About 36,130 Village Forest Councils are managing a total of 10.25 million ha of forest area in the country (FSI, 2000).

It is a known fact that during the last 140 years of state control, most of the land with the potential for agriculture was cleared of forests. The remaining forest in India is now concentrated in rugged and inaccessible areas, and this reduces the potential to harvest and manage the forest for production purposes. The abutting population has increased manifold; their needs have also multiplied. It is impossible to create forest-based livelihoods for all the abutting population. Consequently, most of the states are following a two-pronged approach to involve communities: increasing the stake of the neighboring communities in the management and utilization of the forests, and creating alternative sources of employment to reduce the pressure on forests (Kumar, Naresh, Yogindra, & Kinsuk, 2000). But the resources to promote alternative income are limited and cannot wean all forest dependents (Kaushal & Kala, 2004). However, if the limited available funds are used for the creation of a revolving fund for microfinance provision instead of providing doles to a few individuals, then the impact can be larger and more sustainable also.

This paper seeks to present how microfinance as a component of the Joint Forest Management project has emerged as a potent tool for the development of forest villages in Tamilnadu and is reducing people’s dependence on forests to nontimber forest products and indirect benefits. Further it substantiates with field data that the regeneration of forests is directly linked to the successful working of microfinance.

**Tamilnadu Forestry Project**

Tamilnadu, the southern state of India, has a geographic area of 13 million hectares, which constitutes 3.96% of the land area of the country. The total population of the state is 55.86 million (1991 census), accounting for 6.60% of the country’s population. The recorded forest area\(^2\) is 2.26 million hectares, which constitutes 17.40% of the land area of the state. But the actual forest cover\(^3\) as assessed through remote sensing is only 1.71 million hectares—a mere 13.13% of the land area. Furthermore, half of this actual for-
est cover is degraded and has a canopy density of less than 40% (FSI, 2000).

There are 15,822 villages in the state, of which 1405 are forest abutting. The total population of these forest villages is estimated to be 3.11 million. No separate consumption or income data are available, but it is a known fact that forest communities are the poorest of the poor (Tiwari, 1994; Kaushal & Kala, 2004). Because of remoteness and a thin and scattered population, modern development and amenities have not reached them. Moreover, the development departments hardly reach these areas. Likewise, the cooperative banks and grameen banks restrict their operations to the villages in the plains, which have more productive lands that allow their people to make gainful use of loans.

The Tamilnadu Forestry Project (TFP) is a Joint Forest Management (community forestry) Project that is funded by the Japan Bank for International Cooperation at a level of US$100 million. This project has been implemented in Tamilnadu state since 1997–98. In the Project, degraded forest microwatersheds along with abutting habitations are selected. The forest area is divided into three zones—Lower zone or Utility zone, Middle zone or Asset creation zone, and Upper zone or Eco-restoration zone. Normally, the area for all three zones is 250 ha, in which the zone-wise gap planting is taken up. The unique feature of the Project is that it has a provision of $12,000 for the development of abutting village population over a period of three years. The aim is to reduce the dependence of villagers on forests by initiating alternate activities for generating income.

In each of the identified management units, the people’s representative body, called a Village Forest Council (VFC), is formed which is fully involved in the planning and execution of works, protection, harvesting, and benefit sharing, with focus on degraded forests. One man and one woman from each household, provided that they are willing, are enrolled as its members. Any person who opts out from the membership of VFC is not entitled to any benefits. The VFC meets as and when called for, but in any case at least once in three months.
Each Village Forest Council elects an Executive Committee, with each hamlet electing at least two members; each VFC elects a minimum of 5 and a maximum of 15 members to the Executive Committee. The panchayat members of the management unit are co-opted as ex-officio members of the Executive Committee (EC). The members of the Executive Committee elect a President from among themselves who is also President of the VFC. The Forest Ranger concerned is the Member Secretary of the Executive Committee, who facilitates the election of the members and President of the Executive Committee. The Executive Committee is responsible for the day-to-day activities of the VFC and meets at least once a month. A Memorandum of Understanding is signed in the beginning between the Divisional Forest Officer (on behalf of Forest Department) and the VFC President. This gives the details of the roles and responsibilities of the Forest Department and VFC—the partners in Joint Forest Management. All the VFCs have been registered under the Societies Registration Act 1975.

The government order sanctioning funds from JBIC soft loan defined the objective of the program as increasing the tree cover through the involvement of people. But once the program was launched, it was continuously reviewed, modified, and broadened in consonance with the feedback from the people and the field officers. The amount for development of forest dependents was increased to $12,000 from $6000. The individual grants were converted into interest free loans so that the VFC can build up its corpus fund and extend loans to the remaining forest dependents for acquiring productive assets. The VFC President was made the joint signatory for the withdrawal of funds and the submission of accounts. State Government ordered the involvement of all other line departments, like Public Works Department, Electricity, Health, Agriculture, Animal husbandry, and Tribal Development, etc., for the holistic development of these microwatersheds on a priority basis. Thus the Project has come to acquire a multidisciplinary approach in which the promotion of microfinance plays the lead role.
TFP and Microfinance

Each VFC opens an account with the nearest post office and bank, which account is jointly operated by the President and Member Secretary. Income from the following sources accrue into that account:

1. Fines imposed for offenses (like grazing or illicit removal) in the JFM area.
2. Recovery of loans.
3. Income from the sale of nontimber forest products (NTFPs).
4. Membership fees.

Out of $12,000 meant to be spent on the buffer zone in each village, about 30% is spent on village development and community assets like threshing floors, community halls, etc. The remaining amount is given to individuals for acquiring productive assets. Soon after the launching of the Project, this amount was declared as a loan, which individuals have to pay back to the VFC so that it can give loans to other people, as well as later further assistance to the same individuals. In fact, this buffer zone amount is the major source of VFC fund, as income from the sale of NTFPs will take many more years to be significant.

Presently, extending credit is the main financial activity of the VFC. But the term microfinance has been applied to the VFC because it arranges insurance for the cattle purchased through its loans. Some VFCs have also taken group insurance policies for their members. Further, NTFP sales are done by the VFC only.

Methodology

Study Area

There are 48 field-level implementing units called Forest Divisions in Tamilnadu State Forest Department which have been implementing TFP. Plantation Division, Madurai is undertaking TFP
implementation in Madurai and Theni districts of Tamilnadu State. So far 27 villages have been brought under the Project in this division and this study was conducted in the 27 villages of the Plantation Division, Madurai.

**Procedural Description and Results**

Data regarding the financial position and recycling of money were collected from the records of each VFC, since each VFC maintains the loan disbursement and loan recovery registers and cashbook. Recovery and recycling were separately rated on a scale of 0 to 1. If loan recovery for the village showed 100% recovery, we gave it a value of 1, and if loan recovery was less, then the decimal value corresponding to the loan recovery percentage was assigned. For analyzing recycling, evaluation considered whether the funds after recovery were kept in a bank account or given as fresh loans to new individuals within a reasonable period, with a value from 0 to 1 assigned. We allowed a period of 1 month and an accumulation of up to Rs 50000 for giving fresh loans. As per expectations, the values were almost the same as the better recovery villages for early disbursement. The average of loan recovery and recycling values was taken to arrive at the value of the combined parameter of loan recovery and recycling.

Then a team of three Forest Range Officers assessed the protection and regeneration status of each program area. Better protection through effective social fencing was reflected in the growth of planted seedlings, the regeneration of existing rootstock, and the absence of goat or cattle dung on the forest floor. The team perambulated the forest area of each of the 27 forest villages to assess the protection and regeneration status and independently rated the same on a scale of 0 to 1. The average of the ratings assigned by the three rangers was taken as the value of forest protection status for the respective villages.

Data regarding the financial position of each village is presented in Table 1, which shows the year of the formation of the Village Forest Council, the amount extended as loan, along with the ratings of the VFC fund and forest protection.
### Table 1: Village Forest Councils’ Fund Working as of 31-03-2004 in Plantation Division, Madurai, India

<table>
<thead>
<tr>
<th>Year</th>
<th>S. No.</th>
<th>Name of TFP Village</th>
<th>Total Loan given</th>
<th>Rating of Loan Recovery and Recycling (0 to 1 scale)</th>
<th>Rating of Forest and Protection Regeneration (0 to 1 scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997–</td>
<td>1</td>
<td>Konapatti</td>
<td>375365</td>
<td>0.40</td>
<td>0.60</td>
</tr>
<tr>
<td>1998</td>
<td>2</td>
<td>Thethoor</td>
<td>344000</td>
<td>0.40</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Krishnapuram &amp; Vasinagar</td>
<td>270400</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Kaloopathu</td>
<td>36600</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>1998–</td>
<td>5</td>
<td>M.Ayyampatti</td>
<td>290249</td>
<td>0.40</td>
<td>0.60</td>
</tr>
<tr>
<td>1999</td>
<td>6</td>
<td>Nallathathunaickenpatti</td>
<td>310000</td>
<td>0.50</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Nagamanaiickenpatti</td>
<td>304000</td>
<td>0.40</td>
<td>0.50</td>
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<tr>
<td></td>
<td>8</td>
<td>Mondikundu</td>
<td>464480</td>
<td>0.30</td>
<td>0.50</td>
</tr>
<tr>
<td>1999–</td>
<td>9</td>
<td>Srirangapuram</td>
<td>495000</td>
<td>0.80</td>
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<td>2000</td>
<td>10</td>
<td>Thatchapatti</td>
<td>397000</td>
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<td>0.70</td>
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<td>Kunnuvarpatti</td>
<td>490000</td>
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<td>0.60</td>
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<td></td>
<td>12</td>
<td>Gunnuthupatti</td>
<td>390000</td>
<td>0.70</td>
<td>0.60</td>
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<tr>
<td>2000–</td>
<td>13</td>
<td>Rengarampatti</td>
<td>510000</td>
<td>0.70</td>
<td>1.00</td>
</tr>
<tr>
<td>2001</td>
<td>14</td>
<td>Vannathiparai</td>
<td>516000</td>
<td>0.70</td>
<td>0.80</td>
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<tr>
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<td>15</td>
<td>Chithayagoundanpatti</td>
<td>450000</td>
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</tr>
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<td></td>
<td>16</td>
<td>Nottampatti</td>
<td>396900</td>
<td>0.40</td>
<td>0.50</td>
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<tr>
<td>2001–</td>
<td>17</td>
<td>Aruguveli K.S.Puram</td>
<td>440000</td>
<td>0.50</td>
<td>0.80</td>
</tr>
<tr>
<td>2002</td>
<td>18</td>
<td>Sukkanodai</td>
<td>510000</td>
<td>0.70</td>
<td>0.80</td>
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<tr>
<td></td>
<td>19</td>
<td>Solaithevanpatti</td>
<td>500000</td>
<td>0.60</td>
<td>0.80</td>
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<tr>
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<td>Nehrujinagar</td>
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<td>1.00</td>
</tr>
<tr>
<td>2002–</td>
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<td>Errampatti</td>
<td>210000</td>
<td>0.70</td>
<td>1.00</td>
</tr>
<tr>
<td>2003</td>
<td>22</td>
<td>Panamooppanpatti</td>
<td>472900</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Pommampatti</td>
<td>150000</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2003–</td>
<td>24</td>
<td>Kuranguthoppu</td>
<td>210000</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2004</td>
<td>25</td>
<td>Sanampatti</td>
<td>279200</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>Pandiyarajapuram</td>
<td>287500</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Sathiravellalapatti Keelamettupatti</td>
<td>200000</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**GRAND TOTAL** 9927794
Income from fines, membership fees, and NTFP sales is almost negligible in all the villages and has not been shown. The main source of VFC funds is the amount given by the department to individual beneficiaries for alternative income promotion, which they pay back to the VFC concerned. Most of the loans are for purchasing hybrid cattle, because cattle rearing comes naturally to them, and if a village has 20 cattle, the milk procurement society gets started at the nearest road head. Hybrid cattle are not amenable to grazing and have to be stall-fed. They yield 10–12 litres of milk per day in comparison to 1–2 liters from indigenously bred cattle. In some cases artisans have taken loans to improve their profession. In Rangarampatti village, people have taken up iron file making, and as many as 102 men and women are gainfully engaged in that trade (Kaushal, 2004). The forest department has not imposed an alternative income generation activity and the people decide on their own. Almost all the successful VFCs have voluntarily imposed an interest rate of 1% per month on all the loans given by them. For instance, in Naurjinagar village only Rs 4 Lakhs was given from the project fund, but with 1% per month interest, the total amount has grown to Rs 7.5 Lakhs. As can be seen in columns 5 and 6 of Table 1, there is a direct correspondence between the VFC fund working and forest protection; this shows that once the people get alternate livelihoods they need not do woodcutting and consequently forest protection improves. In the villages where loan recovery is poor, the remaining forest dependents could not be provided with productive assets and they continue to indulge in the grazing of goats or the removal of firewood from the forest. In successful villages, the people received loans two times and are therefore able to engage themselves in other vocations. The social fencing of the forest area is complete in such villages and there is no reason why it should not sustain itself in future. The concept of Joint Forest Management hinges on social fencing, which means the local people agree through their local institutions and mechanisms not to indulge in grazing and woodcutting and to ensure that others also comply with it.
The VFC President handles the loan collection and only in case of default is persuasion by the VFC members and forest staff adopted, because most of the people do not have collateral securities and even when they do, the tedious legal process of loan recoveries cannot be pursued by the VFC President or Member Secretary. Since the Forest Ranger enjoys a tremendous amount of respect and fear in forest villages, his persuasive role, if enacted sincerely, is enough to keep people paying on their loans even in villages where formal financial institutions have failed.

The results are the poorest in 1997–98 villages, because the Project was launched hastily and initially loan recovery was not envisaged. Only in February 1998 was it announced that individual beneficiaries have to pay back the loan amounts to the concerned VFCs. The results are better in recent years due to better interest taken by a fresh set of Rangers in the latter years. Nurturant style of Forest Ranger is more successful in JFM (Rishi, 2003). Also, the Department personnel have learned the technique of fostering the VFCs in the latter years.

The efficient working of a VFC fund is reflected not only in forest protection but also in the improvement of the living standards of the people, as evidenced through the increase in the number of concrete houses, people switching over to the use of cooking gas from firewood, number of cycles and mopeds, etc.

**Conclusions**

1. In Joint Forest Management programs, forest regeneration and a profit yield from NTFPs will take years; hence the people have to be compensated for the lost opportunity cost of grazing and illicit removal to ensure effective social fencing of the forests. If properly applied, microfinance is a potent tool in this regard.

2. In Joint Forest Management Program villages, forest regeneration and protection show a direct correspondence with the working of Village Forest Councils as microfinance institutions.
3. Microfinance is more successful if it is launched as a component of a development package relevant to the people and the area.

4. In forest villages, the Forest Department has more interaction and rapport with the people. Hence any development initiative including microfinance implemented by the forest department has a better chance of success.

5. The post-Project sustainability of the program is assured in all such villages, where microfinance has been well established, because the people need not revert to grazing and illicit woodcutting and can pursue alternative livelihoods through microfinance. Also, the Village Forest Councils in such villages acquire more popularity and authority, which further helps in forest protection.

Notes

1. Canopy density indicates the extent to which sunlight is prevented from falling on the ground by tree crowns. Canopy density of 40% and above is taken as dense forest whereas 10–39% is taken as degraded.

2. Forest areas in all lands statutorily classified as forest, though they may not necessarily bear tree cover.

3. Forest cover is all lands with a tree canopy density of more than 10%, though they may not be statutorily classified as forestland.


5. The panchayat is the lowest tier of local self-government in India.

6. NTFPs are goods of biological origin other than wood that are derived from the forests. These include fruits, nuts, tubers, mushrooms, essential oils, medicinal herbs, spices, resins, and gums.

References


