SOCIAL FORESTRY NETWORK

SOCIAL FORESTRY AND COMMUNAL MANAGEMENT IN INDIA

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INTRODUCTION

The Social Forestry programmes in India form one of the largest and most innovative experiments in participatory forestry anywhere; and also one of the largest interventions designed to improve the productivity and use of communal land. Though none of the component projects has been in existence long enough to demonstrate how the complete cycle will evolve in practice, enough experience has accumulated to allow some tentative conclusions to be drawn. The present paper is based on a number of recent studies which have attempted to document and evaluate parts of this experience\(^1\).

Social Forestry had its formal origins in India with the report of the National Commission of Agriculture of 1976, which recommended growing trees on lands accessible to village people in order to reduce the pressures on forests set aside for production forestry brought about by mounting rural demands for fuel, grazing and other forest products (GOI 1976). This was to be achieved by encouraging the growing of trees by farmers on their land, and by block plantings on various categories of public land. A number of different approaches to achieving the latter have been developed, of which only those designed to establish woodlots on communal land, to be collectively managed by the user community, are examined in this paper.

\(^1\) This review is based primarily on recent evaluations of the Social Forestry programmes in Gujarat, Himachal Pradesh, Rajasthan and Uttar Pradesh (World Bank/USAID/GOI 1988), Tamil Nadu (Arnold \textit{et. al.} 1988), Orissa (SIDA 1987, GOO 1987), Bihar (SIDA 1990), Andhra Pradesh (CIDA 1986), Karnataka (ODA 1989), Madhya Pradesh (USAID 1985) and Maharashtra (USAID 1985).
Table 1: Areas planted to communal woodlots under Social Forestry projects in selected states  

<table>
<thead>
<tr>
<th>State</th>
<th>Period</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gujarat</td>
<td>1985/86 to 87/88</td>
<td>9,720</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>1985/86 to 87/88</td>
<td>24,500</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>1981/82 to 85/86</td>
<td>112,629</td>
</tr>
<tr>
<td>Orissa</td>
<td>1984/85 to 87/88</td>
<td>32,076</td>
</tr>
<tr>
<td>Karnataka</td>
<td>1983/84 to 87/88</td>
<td>26,946</td>
</tr>
</tbody>
</table>

Social forestry projects and programmes were initiated in most states during the first half of the 1980s. By the end of the decade, their communal woodlot components had in aggregate already covered considerable areas. The figures in Table 1 record areas planted under donor supported projects in just five states; in each case with the project forming only a part of the total woodlot activity in that state. This activity has been spread over very large numbers of communities; the 32,076 ha planted over four years in Orissa, for example, was distributed among about 3,200 villages (SIDA 1987).

Management and Use of Common Lands

The establishment of woodlots has occurred predominantly on village lands, and other uncultivated government lands available to villagers for communal use, in the drier plain areas of the country. Traditionally the main role of such common property resources (CPRs) has been to complement the highly variable level of private agricultural production. A large percentage of the draught animals that are needed for dry land agriculture have been maintained on non-arable CPRs. Vegetation on CPRs helps farmers guard against the risk of unstable rainfall, forming a major source of fodder, food and saleable products in the long period when there is little or no crop production or stored supplies from the last harvest. This role is especially important during extended periods of drought.

During the last two decades much of that part of common land that is cultivable without substantial investment to improve its productivity has been allotted to the rural poor. Wherever agriculture was possible, land that has not been allotted has usually been either encroached upon, or has had earlier encroachments regularized. Much of the rest of the common land is of low productivity and is likely to remain uncultivated, as it cannot sustain low input annual agriculture. Although there are substantial regional differences in the magnitude and role of CPRs, generally land allocation and encroachment have reduced communal lands to a small area, on average perhaps 20 ha per village, which is typically heavily degraded and under open access usage (Chambers et al. 1989).

As a consequence of these inroads and pressures the range, quality and quantity of products collected have often been sharply reduced. Nevertheless, the rural poor are still heavily dependent on CPRs. In his study of common property resource management in the dry regions in India, Jodha found that CPRs supplies most of their fuel and grazing, and that CPR product collection is an important source of employment and income for
the poor, especially during periods when other opportunities are not available. In contrast, the rest of the population in the areas studied depended on supplies from CPRs to only a very limited extent (Jodha 1986).

The same period has seen a progressive weakening, and often collapse, of the institutional arrangements within which common property was controlled and managed. Jodha found that, of the communities that in 1950 had exercised controls such as rotational grazing, seasonal restrictions and watchmen, only 10 per cent had such controls in 1980, while use of fines, taxes and fees had ceased altogether. Most CPRs had become an open access type resource.

Growing population pressure, greater commercialization, and technological change all contribute to this breakdown. In addition, privatization has lessened interest in and commitment to the maintenance of CPRs on the part of the wealthier and more powerful. Possibly the most important factor in undermining communal control, though, has been the progressive replacement of local leadership and authority with centralized political control - 'the ever increasing tendency of the state to expropriate the initiatives and activities which belong to people' (Jodha, 1990).

The Social Forestry interventions

The attempts to increase the productivity of CPR use through communal woodlots have therefore taken place within a situation characterized generally by shrinking CPR availability and breakdown of local control of CPR use (Figure 1). Though there has been considerable variation from state to state, the main features of most Social Forestry communal woodlot activities have been as follows:

- Planting, and management during at least the early years, has been undertaken by the forest department;

- Planting has been on village lands or uncultivated revenue lands, which have usually been temporarily transferred to the forest department for this purpose;

- Planning was to be in conjunction with the local government body, the panchayat, or some other community level body, which was to take over responsibility for management in due course in accordance with rules prescribed by the forest department, and a management plan drawn up jointly with the latter. Benefits were to be split between the forest department and the community.

Although the target areas were usually small relative to the total nominal areas of uncultivated public land, at the local level Social Forestry programmes in several States have already encountered shortages of actually available plantable land. The reasons have included encroachment, competition from other government programmes (including competition between the Social Forestry programmes of different departments), competition from grazing and other existing local uses, and poor productivity (additional land could be brought to plantable state, but only at a per hectare cost well in excess of what had been budgeted and made available).

As a result, the area of woodlot available to a community is usually small; often too small to contribute significantly to meeting local needs. Another consequence of shortage of village land has been to divert Social Forestry planting onto areas such as roadsides which are available to forest departments but which are less easily brought under communal management and usage, and on to categories of public land for which legal authority for establishment of village woodlots is weak or absent.
In many, though not all, states the forest departments responsible have achieved high standards of establishment and maintenance, and the woodlots are exhibiting satisfactory survival and yields. However, the structure of most plantations reflects forest department rather than local preferences and priorities. Though the earlier preponderance of eucalypts and other commercial species has usually now been superseded by a range of coppicing, timber, fruit.
Figure 1:  *Process of depletion of common property resources in the dry regions of India* (Jodha 1990)
Figure 1: Process of depletion of common property resources in the dry regions of India (Jodha 1990)
and fodder tree species, and bamboo, these are commonly grown in intimate mixtures, which have been criticized (Banerjee 1986) as being difficult to manage and inefficient ways of producing fuelwood and fodder (as these trees are likely to be progressively suppressed by the longer rotation species).

Management regimes still predominantly give priority to the final timber crop rather than intermediate products. Close spacing to minimize the need for maintenance has the same effect of reducing grass, prunings, thinnings and other annual or short term outputs. In short, technology with which the foresters were familiar for large scale commercial plantations within forest areas has tended to be applied to small scale village woodlots, where the need was more for fodder and fuelwood than for timber.
The imbalance between the woodlot resource and local needs for CPR outputs has been accentuated by misunderstandings about what these needs actually are. Priority was given to production of fuelwood over fodder; apparently because the importance of CPRs in fodder supply systems, and of fodder and livestock in agricultural systems, was not fully grasped by forest departments. Woodlots have reportedly often reduced fodder supplies to those who earlier used the sites for grazing. Though the protection of the grass cover in woodlot areas, and its enrichment in some places, has often subsequently increased fodder supplies, it requires cutting and stall feeding and so is not necessarily available to the graziers displaced. When woodlots are reopened to grazing the grass cover can quickly deteriorate again.

At the same time, the extent and magnitude of rural fuelwood shortages was often overestimated; and the role of other gatherable biomass fuels (woody shrubs, agricultural residues, animal dung) underestimated. Shortages of fuel are often severe, and bear particularly heavily on women. However, village studies have shown that when confronted with shortages of fuelwood, the landless and poor shift to other gatherable fuels rather than to purchased fuelwood (Bhagavan and Giriappa, 1987). Fuelwood which is to be sold, as is the case with most Social Forestry woodlot projects, is therefore unlikely to be accessible to them - even at concessionary prices. Moreover, as they need regular supplies of small quantities, sources which produce only at the infrequent intervals provided by the harvesting of woodlots are likely to be of only limited value to subsistence users.

In general, the woodlot planting has therefore created a resource which is unlikely to make a significant contribution towards meeting local needs of the poor for subsistence supplies of fodder and fuelwood. The main benefit to the poor has usually been from the wage employment created, which has often been on a considerable scale. Local studies have shown that employment in woodlots has generally gone to the poor in the local community, and that women have benefitted proportionately (Olsson 1988). What are being created are important resources of poles and timber. However, the pole and timber products are proving to have greater commercial than subsistence value. The output from older communal plantations that have already been harvested has been largely sold to urban and commercial markets. In Tamil Nadu, a survey in 1985 disclosed that 97% of the wood harvested from communal tank bed plantations was in the form of billet, faggot and brush wood; of which only 6% was used by local people. The rest was sold into urban markets (GOTN 1985).

Intermediate products such as grass and dead wood may be allocated to villagers, or made available to them to gather, but may also be auctioned or sold to contractors. There is widespread evidence that village and panchayat bodies perceive the Social Forestry woodlots as primarily as significant sources of communal income, rather than as sources of produce to meet village needs. For this reason there is usually a preference for auctioning the output, rather than selling it at preferential rates or distributing it.

Management Arrangements

Many of these characteristics of Social Forestry reflect the nature of the management arrangements that have emerged. The communal groups charged with the dialogue with forest departments over the planning of woodlots, and with their eventual take over, have nearly everywhere been panchayats, or a sub-committee of the panchayat, rather than a village council or user group or a body selected by a village specifically for the purpose of managing the woodlot. Decisions have therefore reflected the politicized functioning of the panchayat system, and the interests of the local elites which frequently control panchayats, rather the interests of those dependent on CPR management.
With panchayats not functioning for periods of several years in many states, even this level of local involvement has often been absent. Mechanisms for direct consultation by the forest department with villagers, such as the 'microplanning' developed in Karnataka, have generally not been put into practice.

Village Forest Committees in Orissa were one of the more ambitious efforts to establish user group institutions. Although Committees were found to be in existence in all villages visited in late 1987, it was reported that they appeared to have been formed in an ad hoc manner, without much if any prior consultation among the various interest groups in the village about their composition, and in many cases they were not functioning at all actively. Also, that they were 'in danger of becoming the instruments of government authority, and more specifically of the Forest Department' (SIDA 1987). The panchayat leader (sarpanch), who often came from another village, was the chairman and representatives of the Revenue and Forest departments were members (with the latter also being the convener). Village Forestry Committee members were often unclear about the Village Forest Rules and had not seen the Joint Management Plan.

The literature reports an almost universal failure to precede woodlot establishment with effective public discussion. Repeatedly reports record villagers being unaware that the woodlot had been established for the community; it was a 'government woodlot'. Often even village and panchayat officials have also appeared to be unaware that a woodlot was to be handed over to them, or of the implications of such a transfer.

Where people were aware, there appears usually to have been lack of belief that the produce would be distributed within the community; particularly where the panchayat or forestry committee leader came from another village. Benefit sharing agreements are frequently neither finalized nor formalized. A government evaluation of the Orissa Social Forestry Project (GOO 1987) indicated that 82% of the villages did not know how the produce from village woodlots would be distributed. Most of the people did not expect any share from the final output. They looked upon such woodlots as another category of government reserved forests.

Lack of communal involvement

Almost everywhere that woodlots have reached the stage at which the panchayat or forestry committee should take them over, reluctance to do so has been encountered. Even in the longer running programmes only a small proportion of the qualifying woodlots have been transferred; and then the transfer of responsibilities has usually been of a limited nature. It has been reported for a number of states in north India that 'Out of the thousands created, only a handful of woodlots have been turned over to panchayats, and the majority of them continue to be managed by Forest Departments' (World Bank/USAID/GOI 1988).

A number of reasons for this failure of communal bodies to take on responsibility for management can be discerned:

- Control carries with it financial responsibilities which villages and panchayats have difficulty in meeting - as a minimum hiring watchers to protect the woodlot. Sometimes the budgetary implications are much more burdensome - in Tamil Nadu, for example, the panchayat had to pay a deposit equal to the floor price value of the produce in the woodlot before taking it over (Arnold et al. 1988);

- Woodlot management plans, village forest rules, etc., are often complex, unclear and require skills and experience that panchayats do not possess. Very few communities have had any experience of management of anything remotely resembling a woodlot; and the task of acquiring the necessary skills
is complicated by management systems which reflect the technical orientation of the forest departments;

- Continued involvement of the forest department discourages local bodies from taking over; and encourages them to opt for extending forest dept. management. Handover arrangements commonly empower forest depts. to exercise a considerable degree of control and involvement, and to retain a share of the revenue. As this is often allied with pressures on forest departments to meet very ambitious Social Forestry planting targets, they are frequently reluctant to hand over effective control;

- Lack of local interest in the woodlots because of their smallness relative to local needs, difficulties in ensuring satisfactory distribution of benefits, and uncertainties about their status and access to the benefits.

Security of access and tenure has often been further undermined by the uncertain legal situation, which has been summarized as follows: 'The legal status of the 'community' executing community woodlot schemes is often vague. The people are not in a position to actually negotiate the terms of contract with the forest department and are sometimes in conflict with the interests of the local government (panchayat) ... Appropriate legal models for benefit sharing and usufruct rights have not been worked out with the communities. They have been verbally assured in some places, but there is no legal document to guarantee the benefit sharing.' (Chhatrapati Singh in World Bank/USAID/GOI 1988).

Non forestry laws often conflict with Social Forestry. In Gujarat, village woodlots are not legal on revenue land; but have been established there by the forest department because of shortage of communal land (World Bank/USAID/GOI 1988). Similarly, in Orissa communal land used for grazing may not be afforested, but some has been planted under Social Forestry (SIDA 1987). States have been slow to amend laws - or to implement them. In Orissa, where many woodlots had been established on forest land, by 1987 none had yet been given legal status as 'village forests' under the Indian Forest Act (SIDA 1987).

In addition, the December 1988 amendments to the Forest Conservation Act have created considerable uncertainty over the status of communal woodlots, by preventing the lease of any forest land to any non-government entity without prior permission of the GOI. Revenue and other public land which has been transferred to the forest department for afforestation under Social Forestry programmes falls under this Act.

Discussion

To sum up, Social Forestry programmes have created important new resources on land used as CPRs. However, in doing so, prior uses have often been altered, and the focus of control has shifted. As one observer has put it: 'The village or community woodlot is conceived as common village property at the planning stage, but ... acquires an alien nature, especially because of the commercial crops grown there. The establishment of a village woodlot by [the] Forest Department has shifted the nature of the CPR away from a common property regime to a private property regime. Grass and fuel may be sold by the panchayat ... and those who lack purchasing power get nothing. Commercial crops are harvested by [the Forest Department] and [part of] the profit goes to the panchayat with no guarantee that the income will be spent on the welfare of those who were most dependent on the area as a CPR previously' (Ewers Andersen 1988).

This raises the question as to whether there could be alternative approaches to enhancing the productivity,
control and use of these common lands. Examination of surviving indigenous regimes, and of promising new ones, elsewhere in India shows that they are generally characterized by control and management by the user group rather than the state or official village or panchayat level bodies, investment in outputs that users value and can manage rather than commercial products, and state commitment to securing the rights of the user group and in defending those rights against intrusion by outsiders (Arnold and Stewart in press). These characteristics contrast sharply with those of most Social Forestry woodlot programmes.

Many of the more successful regimes are in heavily forested hill areas, where the ratio of CPRs to population is high, and, in contrast to the dry rainfed areas, all households tend to have similar resource use patterns, and hence a shared interest in CPR management. Their applicability to the resource poor dry areas is consequently likely to be limited. Nevertheless, some of the lessons that emerge from them could probably be usefully drawn upon in designing any future Social Forestry interventions.

However, when local institutions have broken down under the pressures of change, it is not to be expected that new village institutions capable of controlling resource allocation and use can be created easily. Interventions which increase the productivity and value of a CPR may attract interest in its privatization, and so undermine even the present level of control. The low returns and high social cost associated with trying to control CPRs may prove unacceptable to users, to the point at which they prefer to leave it to the state to manage them. Indeed, one recent evaluation covering Social Forestry projects in a number of states concluded that '[Forest] Departmental management must be considered as the likely alternative for the future, at least in areas of heavy population pressure' (World Bank/USAID/GOI 1988). But as this would be at the expense of the poor who are at present the main users of the land, it raises the question of whether any future interventions do indeed exist able to deliver fuel, fodder and other locally valued products to them. The last remaining possibility might be sowing low-value bushes and grasses; at least the poor have shown some enthusiasm for such an approach.
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