SOCIAL FORESTRY NETWORK

BEYOND COMMUNITY WOODLOTS:
PROGRAMMES WITH PARTICIPATION

Michael M. Cernea

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Michael M. Cernea can be contacted at HIID, Harvard University, Dept. of Anthropology, 1 Elliot Street, Cambridge, MA 02138, USA.

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THE SOCIAL PREMISES OF REFORESTATION PROGRAMMES

The `social' in social forestry should be understood to signify a broader meaning than individual behavioural change alone: it includes collective action, institutional development, and the establishment of enduring social structures and value systems that activate and organize individual actors.

Collective actions have the highest chance to occur and be effective when people belong to organized groups, when they are informed and consciously perceive that it is in their best interests to act purposively in a coordinated manner. Performance of these groups will also improve when the group has developed leadership structures and internal norms and procedures capable of organising and managing its members and to overcome conflicts and deviant behaviour. The common position of many people as direct users of a certain resource is a propitious social condition that often turns itself spontaneously, and can certainly be turned deliberately, into a powerful motivating and organizing force for producing the needed resource. The deliberate construction of user groups is therefore particularly important for using and husbanding a common pool resource in programmes such as afforestation or irrigation which depend on sustained, long-term consensual action of a large number of individual actors.

When an innovative programme is deliberately pursued, central among the social prerequisites for success is a unit of social organisation capable of sustaining that programme. Therefore, social forestry projects must start with the identification (or the establishment) of such a viable unit or group; aim to engage the rural users of forest products in patterns of collective action for producing the products they need; tend to ensure a match between the silvicultural technologies they promote and the social groups they address; and deal with the issues of social engineering (group formation, leadership, participation in decision-making, intra-group structures, incentives, penalties, communication, benefit distribution, and so on) with the same scrupulous attention as is given to the technical or financial elements of the strategy.

Unfortunately, the planners of financially induced social forestry programmes often do not yet realize that consideration of these social factors has to be woven into the very fabric of such programmes from the outset. There is often a contradiction between the theory and the practice of social forestry and `many projects that are called social forestry are a far cry from the theoretical vision of social forestry' (Fortmann, 1988). The

penalty for ignoring the social factors is project failure.

Practical recipes for how to incorporate these social prerequisites into action plans are not readily available. Culturally informed forestation strategies have to be produced, tailored, and retailored anew for each socio-ecological context. For that, foresters, planners, and action-orientated sociologists and anthropologists have to cooperate, search, predict, design, test, monitor, learn, redesign, and retest in order to combine effectively the technical and social approaches into coherent reforestation programmes (Guggenheim and Spears, 1990). In the quest for creative new solutions, much of the already existing sociological know-how can be mobilized and used as a stepping stone to action, to testing, and to new knowledge.

Recognising that there is a need for creative, sometimes new solutions for each context does not mean that no substantive sociological knowledge is available about the general socio-cultural processes in forestry and everything is still to be discovered. Much of the already existing sociological know-how can be mobilised and used as a stepping-stone to actions, to testing and to new knowledge. There is no justification for sociologically illiterate social forestry programmes.

SOCIAL FORESTRY IN AZAD KASHMIR

This study of two successive World-Bank assisted social forestry projects in the same area of Pakistan describes how good intentions proved to be no substitute for missing social knowledge. The study demonstrates the costly fallacies of planning without having a sound sociological understanding of the socio-economic forces spontaneously at work and of the social strategy requirements for translating pursued goals into social actions. Salient sociological factors are at work always, and forcefully so, under the thin layer of the new `reality' temporarily constructed by the financial in-flows of the programme. Such factors in this case were: the existing land ownership system and the rights-to-use system; the local power and authority system; farmers' tree planting behaviour; and the absence of social structures for collective action aimed at reforestation.

The Hill Farming Technical Development Project (HFTDP) began in 1978 in Azad Kashmir as a pilot test of new approaches in several agricultural sub-sectors, with the intention of replicating the successful ones in a subsequent, larger-scale project (World Bank, 1978). The pilot forestry component financed fuelwood plantations, tested new tree species under local conditions, and established tree-seedling nurseries.

Increasing demand for fuelwood and timber had caused large-scale deforestation in Azad Kashmir over the preceding 30 years. In 1972 about 1.5 million residents, or 300,000 families, relied entirely on gathering fuelwood for cooking and heating. Pressure on government forests was increasing as people cut trees both for fuel and for clearing forest land for farming.

Both the formal regulations (enacted under British colonial rule) and the old customary rules in Azad Kashmir

have allowed rural people to remove deadwood, branches, and non-commercial species from reserved forests without payment, primarily for personal consumption. In practice, however, customary rights have been liberally interpreted and broadened, while the limits set through formal regulations have been transgressed. In the Chir pine areas, long thin vertical slices of the bole of the tree are removed at stump level for kindling. Forest resources have also been devastated by local livestock that graze without adequate controls. The situation is aggravated by the transhumant livestock of semi-nomadic populations coming from Punjab and the North-West Frontier Province to use the Azad Kashmir alpine rangelands during summer.

Under such circumstances, the Forest Department needed the cooperation and support of the area population to stop and reverse deforestation. Instead, however, it came into open conflict with many local inhabitants. At the time of project appraisal, over 50,000 cases of forest offences were pending in the Azad Kashmir courts. This amounted to about one household in six involved in an alleged forest offence. Many farmers were therefore reluctant to participate in reforestation schemes and were suspicious of the Forest Department.

Far-reaching changes were therefore required, both to improve the management of existing forests and to reforest depleted areas, if the increasing need for fuelwood was to be met.

When the pilot project was prepared, it was thought that social support for the programme (contributions from private users) could be blended with public support (government financing). Accordingly, the strategy was designed to experiment with both the technical and the social variables of developing forestry, particularly to involve local users in planting and maintenance. Community acceptance was regarded a crucial for the project's success. The government was to finance the establishment of four local nurseries (at Patika, Kotli, Hajira and Bagh) to produce seedlings for sale at a low price to the area farmers. The government was also prepared to finance the costs of planting trees in several communities on common property lands in order to work out a model replicable by other communities and benefitting primarily the small farmers.

The project design was based on a set of assumptions made by technicians and planners about the tenure of the land to be reforested, about community processes, and about farmers' willingness to participate. In hindsight, these assumptions appear rather naive and uninformed.

Lacking a sociological field analysis, the appraisal report relied on explanations about land tenure offered by local officials, as understood by the members of the appraisal team. The report vaguely identified **shamilat** land as `land generally left uncultivated, owned jointly by a number of families' (World Bank, 1978). Shamilat land was considered to be community land, over which all villagers had decision-making authority as well as rights to share in its use. The appraisal report estimated the existing shamilat areas to be a major resource, totalling some 325,000 acres. This was equivalent to more than half the total farmed area in Azad Kashmir, then about 500,000 acres.

Based on these estimates, the project planned to finance the pilot planting of 3,000 acres of fuelwood, mainly on shamilat land; only a small proportion was expected to be planted on government or private lands. The small farmers in Azad Kashmir, who had limited access to firewood, were expected to be the primary beneficiaries of project-financed planting on communal land. An explicit assumption was that local village-level institutions

would mobilize villagers' support for fuelwood planting, in the form of labour, payment for seedlings, tree protection, or other contributions toward reforestation costs, in exchange for which the project would generate tangible benefits for the people involved. The community structures were assumed to be strong enough to enforce the temporary closure of reforested areas to prevent indiscriminate grazing and protect the tree seedlings.

During the first project year the physical targets of the reforestation component were met: fuelwood trees were planted on 500 acres and the first nurseries were established. The project staff reported that the owners and users of private and community land agreed to its allocation for fuelwood plantations, although no formal contract was signed.

For the second year, the project had an increased planting target of 1,250 acres. Other landowners came forward and volunteered their non-arable lands for tree plantations, and the project staff tentatively identified for planting about 750 acres of community and private land and 500 acres of government land. The farmers' response seemed to suggest that significant tracts of community (shamilat) and private lands could be incorporated into the fuelwood production circuit.

THE PRIVATISATION OF THE COMMONS

In 1978-80, a social analysis was undertaken of the progress of the forestry component. The study assessed the socio-economic status of the farmers who had been contacted by the reforestation component; determined the tenurial status of the lands involved in the project in the first two years and estimated the likely beneficiaries; evaluated the procedures used in implementation, particularly the communication patterns between the project staff and the farmers. Attention was also paid to the mechanisms of community decision-making and to the envisaged procedures for sharing the expected profits from the forestry investments.

The analysis of the tenure system in Azad Kashmir showed that there were three basic categories of lands:

> Khalsa, (Khalisa) or Crown land, is land that is `reserved', land unassigned and unencumbered by title; the authority over this land is vested in the government. Khalsa land usually consists of `demarcated' and `undemarcated' forests.[1]

[1] The official definitions of these categories of forest land, given in the 1930 Jammu and Kashmir Forest Regulation Act, Nº 2 are:

Demarcated Forest means forest land or waste land under the control of the Forest Department, of which boundaries have already been demarcated by means of pillars of stone or masonry or by any other conspicuous mark, or which nay hereafter be constituted as demarcated forest;

Undemarcated Forest means and includes all forest land and waste land (other than demarcated forest and such waste land as is under

Shamilat land belongs to the communities and derives its name from the concept of `getting together'. These lands are used as grazing areas, forests, sites for village public buildings and village graveyards.

Malkiat land is privately owned. Ownership rights are recorded in the revenue register and are validated by it.

While these were the main legal categories for Azad Kashmir land, field assessment of the status of specified land plots discovered, however, significant difference between the legal/formal status of the lands as recorded in the land register and the de facto situation.

Contrary to expectations, what was called shamilat land appeared to be for the most part, not true community land. Over time, cumulative changes in most of Azad Kashmir had resulted in a dual, divergent status to evolve. Although shamilat continues to be considered in principle community land, now much of it is operated and used as private land. Usufruct benefits from this land are now accessible to selected individuals, rather than to the whole community.

Thus, the sociological study invalidated a basic assumption made when the planting of shamilat was originally planned. This different actual tenure was likely to cause unanticipated consequences for the planting programme, mainly by diverting the intended flow of benefits away from the target population.

How did this major change in tenure come about?

Historically, shamilat land was set apart for joint possession and use by a village as pasture, graveyard, woodlot, or a water source for use by people and cattle. The village's shamilat was not necessarily one consolidated plot, more frequently it consisted of several plots of land located at various distances from the core settlement. The shamilat plots had often both different users and uses. Villagers living at different locations closer to one or another plot of the shamilat land became its more frequent users and sometimes encroachers. Increasing needs and skewed household abilities in using shamilat resources asserted themselves over time. Patterns of differential use and access gradually crystallized, and subtle changes in the actual status of various plots cumulated over time.

Three broad historical stages in the evolving condition of shamilat can be roughly distinguished over time:

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the management and control of the Revenue Department) which is the property of the Government and is not appropriated for any specific purpose.'

Generally, the demarcated forests are of higher density and better quality than the undemarcated ones, which are often located between the demarcated forests and the cultivated lands.

Informal Partitioning

Village households whose land directly adjoined the shamilat areas became increasingly associated with the use of specific sections of shamilat, thus beginning an informal allocation of common land among themselves. Within the traditional institution of brotherhood, which allowed each one of a number of peasants linked together by common ancestry to have individual separate possession of the land cultivated, the plots of partitioned farming land were not necessarily equal. Strong group entitlements were gradually eroded by recurrent individual use, and recurrent use evolved into privileged use. In the process, the more remote and smaller farms were excluded from this informal gradual partitioning.

Aggressive Appropriation

Although the land laws formally forbid co-sharers of shamilat to encroach on it for private and exclusive use[2], powerful village households or farmers with land adjoining shamilat nevertheless began to illegally take over segments of community lands and even to cultivate them. Power played a role in the use, control and appropriation of the jointly held land, as it did in reinforcing and expanding inequality in the ownership of disproportionate shares of farming land.[3] Informal entitlements to shamilat were customarily transferred through inheritance or sale of fractions of the privately owned (malkiat) adjacent areas. Thus, these malkiat lands carried with them more or less recognized rights to proportionate fractions of shamilat plots.

While this *de facto* appropriation advanced, shamilat kept its formal status as community land and was not entered in the revenue records as belonging to private households. As a result, the benefitting households did not have to pay land taxes on `their' shamilat plots.

Formal Privatisation

Since 1974, when the tax on land was abolished in Pakistan, the pressure has grown to have shamilat plots formally entered in revenue records in the names of the households who appropriated them. The goal of these households was, and is, to have such lands validated as privately owned lands. The interested households resorted to various means, many illegal, to change the formal registration of

[2] Land Revenue Act, Sect. 150 A. In principle, according to the law, when a co-sharer of shamilat encroaches upon it and includes it in his cultivated areas, he can be ejected at the request of another co-sharer. However, such grievances and particularly their enforcement, have been rather infrequent.

[3] W.H. Moreland quotes the following description from the revenue records of 1822-1833: The strong and crafty too frequently in past and present times have got the better of the weak and simple: the absence of those entitled to share, the incapacity ... of some of the resident proprietors, has enabled others, on pretence of deposit or management, to obtain and keep possession of shares very disproportionate to their hereditary rights.

pieces of both shamilat and khalsa lands.

Through such processes, the nature of the commons as a property regime has been considerably changed in large areas of Azad Kashmir, with villages progressively losing control, *de jure* or *de facto*, over land resources they previously owned and used. The physical extent of the commons has shrunk, even though the historical process of partitioning, appropriating, and privatizing community land has advanced at uneven speeds in various areas of Azad Kashmir.

The historical cycle described above appears to be continuing. Its creeping advancement is facilitated by regulations and by backdoor influence or corruption which allow the transfer of khalsa (unallocated) land to villages so that it becomes community land.

Against the backdrop of such incremental but profound historical changes in the land-tenure systems, it becomes understandable why the staff of the HFTDP was not able to identify genuine community land for project financed reforestation. On close inspection, it was found that planting reported by project staff to be on shamilat land turned out in fact to be on land under individual private control. Social analysis revealed that tracts of shamilat land that had been offered for planting - and assumed by the project staff to benefit the communities - had surreptitiously changed their tenurial status to become private land. The de facto owners hoped to get `their' shamilat lands planted at government expense, without making repayment commitments. No community decision-making was involved, and no community woodlot was established. Wherever there were still some genuine communally used plots of land, the communities did not come forward to offer them in support of reforestation, but preferred to save them for other uses.

The community forestry component, based on inaccurate assumptions and lacking from the outset a social structure to sustain it, could not accomplish its `community' objectives, even though overall the first pilot (HFTDP) did stimulate reforestation work.

Further analysis of the farmers who offered their private (malkiat) land for project reforestation and of the farmers who were in control of the nominally shamilat plots revealed that larger landowners tended to take advantage of the project. The wealthiest landowners, who have the resources to contribute to the costs of establishing and protecting tree stands, had not done so, nor did they intend to do so in the future. At one of the reforestation sites, the main part of the 100 acres planted in the first year belonged to one influential household of six brothers, only one of whom was `almost' a full-time farmer, while the others were absentee landlords operating shops and small enterprises in Muzaffarabad. Another landowner, who offered about 125 acres of land for planting in the second project year, flatly refused to contribute any payment; he justified his position by arguing that `the government of an Islamic country should provide for its citizens'. A third large farmer, who wanted his 56 acres planted, asked for government-paid guards to protect the plantation and to restrict the access and customary rights of smaller farmers to collect grass and tree branches.

The smaller farmers hesitated to accept project planting on their private lands. They were fearful of losing possession or control over their land to the government once it was planted by the Forest Department, or of being deprived of rights to collect fodder and graze their cattle. Most of the smaller farmers interviewed

indicated that they might offer small plots for project planting, provided they could be convinced that the Forest Department would not alienate their lands and that they would be able to cut grass for their cattle.

In significant contrast, the larger landowners did not regard tree planting by the Forest Department as a threat to their ownership of land and trees because they were confident of their political power. They tended to manipulate available project opportunities and resources to their own benefit. This was facilitated by the absence of a legal framework that defined the obligations, not merely the rights of the large farmers whose land was being reforested through government contribution. The absence of a **contract** left a huge loophole that enabled large landowners to avoid making contributions[4].

The findings of the sociological analysis led to midstream changes in the forestry component of the Project and generated several lessons of broader validity. The project's management was asked to reexamine the areas identified for fuelwood planting and to stop planting on fictitious shamilat land. During the following year the project reexamined the 800 acres of allegedly community and private lands that had been identified initially for planting and retained only 400 acres, of which only 25 acres were shamilat land. The intent was to prevent the slide of the pilot project into a full `giveaway' programme, before a cost-sharing system could be designed. The funds that remained were redirected in the short run to planting on khalsa land. The project's selection of private (malkiat) plots for experimental planting with fast-growing species was oriented toward smaller farms. However, it proved impossible in midstream to maintain priority for reforestation on communal lands. According to the ex-post evaluation report, the fuelwood plantations on shamilat land ended up being the smallest fraction (15%) compared to planting on Khalsa (30%) and on malkiat (55%). Moreover, due to various delays the pilot project initially planned for three years took some six and a half years to complete.

When the follow-up Integrated Hill Farming Development Project (IHFDP) in Azad Kashmir was appraised in 1983, an attempt was made to avoid the earlier errors. The IHFDP appraisal report stated that in the new project `overcoming the **social** constraints to systematic hill development programme would constitute the real challenge'. It recognized that most hillsides were controlled under various tenure systems of private land, government forests, and community land (shamilat), and that the land plots under these systems were intermixed. Since a hillside is a natural ecosystem, the new project concluded that it was of little use to implement conservation measures on one part of the hill when runoff from another part remained unchecked at the same time. Consequently, the new project began to pursue agreement (contracts) between the individual owners in each catchment area (or relevant communities) and the government, regarding the definition, acceptance and implementation of `Hill Management Plans' with some cost-sharing and benefit-sharing arrangements.

The IHFDP has been implemented mainly by government departments, since strong sustaining structures within the farming communities were neither identified nor established in the available time. Some 9,000 acres were to be planted with fuelwood species on hillsides and additional land has been planted to coniferous

[4] In a neighbouring province of Pakistan, the N.W. Frontier Province, the Hazara Forestry Act (1936) provides an interesting example of contractual relationships that ensures legal protection for the ownership rights of the farmers, while vesting the right to manage their forests in the Forest Department. This Act also institutionalizes a contractual mechanism of cost recovery, whereby government costs for forestry management and commercial exploitation are covered by a fraction of the proceeds from sold timber.

species within demarcated state forest areas. In parallel, IHFDP under its farm forestry programme, has encouraged farmers to plant trees on their farms. The project has financed the distribution of 12 million seedlings free as an incentive for such planting.

Summing up, the sociological analysis discussed above brought three sets of social variables into the limelight: the complex land tenure system and the processes affecting it; the community as a cluster of non-homogeneous groups, with differential access to `common' goods and limitations on consensual action; and the behavioural patterns of individual farmers. It bears repeating that no social forestry project can be conceived and prepared without in-depth and timely recognition of at least these three sets of social variables.

DESIGNING STRATEGIES AROUND SOCIAL ACTORS

One of the most critical factors in designing the social strategy of forestry programmes is the adequate identification of the unit of social organisation able to carry out the programme and the definition of the conditions under which this unit can act effectively. Many recent or ongoing forestry projects have lumped together, under the broad umbrella of `social' or `community' forestry, different objectives with vague or unfocussed appeals to various heterogeneous or undefined populations.

Operationally, it is not only a challenge but an absolute necessity to disaggregate the broad term `people' and to identify precisely **who** and **how**: what units of social organisation can and will do afforestation, and which social units and definable groups can act as sustaining and durable social structures for long-term production and management activities.

Such units of social organisation can be either:

(a) natural (existing) social units, such as the individual household or a tightly knit kinship group/subgroup;

(b) groups organized purposively to plant, protect and cultivate trees; and

(c) groups established for other purposes than forestry, but which are able to undertake forestry-related activities as well.

Forming enduring units of social organisation is particularly important in the case of social forestry strategies, given the long duration of a production cycle. Even small self-managing groups enhance the individual productivity of their members; they increase the cumulated impact of the individual contributions and enable members to perform works and achieve goals that might not be attained by each acting separately.

In forestry, self-managing groups acting as economic agents can achieve for their members significant economies of scale in several respects: (a) primarily (but not only) with respect to labour required for tree planting and cultivating; (b) in labour for harvesting and transporting; and (c) groups usually can bargain more effectively than individuals when selling the harvest or when negotiating with authorities. Furthermore, some specific technological needs or constraints may be more easily solved by groups, particularly watching and protecting tree plantations against theft, fire, or destruction by animals. Small, self-managing groups can also act as psychological motivators for the consensual action of their members.

The need to identify or establish social units capable of collective action introduces one more sociological dimension in forestry development projects and into the work of forestry departments. If properly conceived, social forestry projects can become a mechanism for encouraging and forming groups, thus building up the social capacity for development. Helping users to organize themselves into groups and to undertake production and management functions in forestry would in fact restore the balance of the `participation equation': the users of forests and forest products act as **the** primary producers and decision-makers, and the forest department will `participate' in their activities, rather than the other way around.

Establishing a functional social group means, of course, much more than simply lumping individuals together into an artificial entity given the label `group' on paper. It implies a process of selection or self-selection of the members, the willingness to associate, the members' perception of both self-advantage and co-responsibility, and the establishment of an enduring intra-group structure with well-defined functions.

At the same time, however, social forestry modeled on groups has to address certain complexities resulting from the actor being a group of farmers, rather than an individual farm household: namely, issues of joint dependence over a piece of land and, sometimes, group tenure over trees; issues of group management, labour allocation, and monitoring; and, probably the most sensitive, the issue of benefit **distribution**. Therefore, organizing and promoting **groups** as units of social organisation for social forestry programmes means designing clear social arrangements for tenure, management and distribution, arrangements that are known, implemented and adhered to consensually.

The range of different social actors apt to get involved in forestry projects is broad: communities, village governing bodies, farm households, groups of farmers, cooperatives, schools, private companies, public agencies, non-governmental organisations, and so on. Some of these potential actors are analyzed below in light of their sociological advantages or disadvantages for social forestry.

COMMUNITY WOODLOTS: PROGRAMMES WITHOUT PARTICIPATING ACTORS

Many planners and foresters assumed that massive planting of fuelwood could best be induced on communal lands by involving large numbers of people in planting, tree protection, and in sharing the benefits. Therefore, it seemed at first natural to introduce this innovation through the community as the support group. The term `community forestry' became a buzzword, even though very few bothered to define the community's composition. The emphasis was put on establishing woodlots either on communally owned lands (or lands

assumed to be owned communally, as we saw in Azad Kashmir), or on certain state owned lands.

The apparently plausible social assumptions were that communities would influence their members to plant, would mobilize labour and promote self-help, and would collectively protect the young plantations on `their' land. It was also assumed that they could ensure the wide distribution of benefits among the small farmers who make up the majority of the community. Successful village woodlots in countries such as Korea and China, which had been supported authoritatively by the government, lent credibility to this approach and were assumed to be valid models for other social contexts.

However, when replicated in other countries the community woodlots fared much worse than expected. Azad Kashmir is but one example. Results in Uttar Pradesh, Karnataka, Gujarat and other Indian States, in Niger and other African countries, and elsewhere have been, and continue to be, similarly disappointing.

Evidence about community woodlots documents that they are not what their name suggests them to be and do not achieve their stated objectives. Over the last 10-12 years, considerable financial resources have been channelled by both international donor agencies and national governments in many developing countries to social forestry programmes that use the community woodlot model. Between 1977-1986, about 50% of World Bank's lending for forestry went to 27 projects which included some form of community forestry. The Bank's lending for social forestry tripled in the 1987-89 period compared to the previous decade. Major funding came also from bilateral donors like USAID, CIDA, ODA, SIDA and others. Yet in most cases, according to evaluation reports, the actual planting accomplished under the `community' model fell below targets and did not justify the investments made.

The analysis of these projects reveals that their initial assumption - namely, that communities (villages) would be effective actors for implementing `community forestry' - was not confirmed. This assumption was sociologically naive, lacking understanding of the nature and structure of village communities. Strong empirical evidence supporting this conclusion emerged in the mid-1980s from three large social forestry projects assisted by the World Bank in India (in Uttar Pradesh,[5] Gujarat[6] and West Bengal[7]). None of these three projects managed to achieve or to come close to their targets regarding the establishment of community woodlots. However, they were effective in other approaches and - to some planners' surprise - even surpassed their targets in farm forestry.

In Uttar Pradesh, for instance, village woodlots could be established only on a total of some 136 ha (2 ha woodlots on average) against a project target of 3,080 ha of community woodlots planting. In Gujarat the self-help village woodlots component achieved only two-thirds of the 9,200 ha targeted, while in West Bengal, because of similar low performance, some of the project allocations for village woodlots had to be shifted at mid-term to farm forestry. Summarizing the causes of such failures, a Bank report on the Uttar Pradesh project noted: `poor villagers proved unwilling to contribute their labour as expected by the project in exchange for rather limited potential benefits from a small woodlot, after many years of protection and maintenance ... The social forestry organisation lacked relevant know-how and resources to deal with the sociological and technical problems associated with densely cultivated areas and very small farms' (World Bank, 1985).

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[5] World Bank, Uttar Pradesh Social Forestry Project, Staff Appraisal Report, May 1979, processed.

[6] World Bank, Gujarat Community Forestry Project, Staff Appraisal Report, processed.

[7] World Bank, West Bengal Social Forestry Project, Staff Appraisal Report, processed.

At the time these unsatisfactory results became known, a new National Society Forestry Project for India (covering four Indian states: Himachal Pradesh, Rajasthan, Uttar Pradesh and Gujarat) was already advanced in the appraisal process; it included again a significant component of village woodlots (85,000 ha), although this component represented only a relatively small fraction of the total projected planting (708,000 ha). On account of the little interest shown by community members, the model was modified to give considerable management authority over village woodlots to the village panchayats. Of course, this was an administrative substitute for user/producer responsibility, wholly missing the crux of the social forestry strategy.

The slippage of community woodlots into panchayat woodlots did not remedy anything. Subsequent mid-term assessments in 1988 and 1989 again confirmed earlier conclusions. Many of the newly established village woodlots are beset with social, management and distributional problems that prevent the accomplishment of their community fuel supply and poverty alleviation objectives. A Bank staff sociologist concluded in 1989 that no user-supported management system for the protection and maintenance of `community' woodlots has emerged so far (Salem, 1989). Communities as a whole are not getting involved; instead, the village panchayat (or the state forestry department) takes over the administration of the woodlot, often commercializes the products outside the village, and invests the revenue in other assets (World Bank, 1988). Disappointment among the subsistence farmers with the distribution of benefits from these woodlots saps future interest in maintaining or expanding them.

A 1987 evaluation of the Orissa Social Forestry project found that 82% of the villagers 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 and looked upon such woodlots as another category of reserved forests (Arnold & Stewart, 1989). It is therefore not surprising that in such social forestry programmes `on village commons and wastelands ... villages have proved most reluctant to manage trees planted as a corporate resource' (Shepherd, 1986).

Convergent conclusions result from observing community woodlots in other geographical contexts. In West Africa's `bois de village' (village forests) the community system was also found `ill-suited ... to serve as a vehicle for reforestation' (Thomson, 1980), and in several other Asian countries its adequacy was questioned as well (Noronha, 1980; Rao, 1984). Often forestry departments were asked to set up the village woodlots and then to hand them over to the village committee. It also appeared in numerous cases that the village committees were uninformed and unaware of what they should do with the woodlots. Referring to several non-Bank financed social forestry projects in India, Sen and Das (1987) concluded:

> One of the most vital problems being faced by the community forestry programme is lack of people's participation. The very mechanism of raising, maintaining and protecting the community plantation ... should be examined carefully ... Villagers are rarely consulted at the preplanting stage .. and selection of site and species is generally done by the local forest officials. The village panchayat or similar agencies offer the land (often with no or half information to their members) for plantation activities by the forest departments.

Similarly, synthesizing the findings of numerous evaluations of woodlot projects on communal lands in India during the 1980s, Arnold and Stewart (1989) provide a description replete with references to the missing social arrangements:

> 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 ...

rather than a user group or a body selected by a village specifically for managing the woodlot...

... Mechanisms for direct consultation by the forest department with villagers have generally not been put in practice ... (Forest Committees) have been formed in an ad-hoc manner, without much if any prior consultation among the various groups in the village about their composition and in many cases were not functioning at all actively ...

The literature reports an almost universal failure to precede woodlot establishment with public discussion. Repeatedly reports record villagers being unaware that the woodlot has been established for the community; it was a [government woodlot] ... Benefit sharing agreements are frequently neither finalized nor formalized ... Most of the people did not expect any share from the final output.

The absence of the basic sociological knowledge needed to guide social forestry policies and project work is of more consequence than the bureaucratic hindrances that have appeared during the implementation of induced development programmes. However, the weaknesses or distortions during project execution are not the primary cause that renders community woodlots ineffective. In many cases, community woodlots **cannot** be effective because woodlot schemes inspired by the romantic myth of homogeneous communities are misconceived from the outset and because appropriate social actors and social arrangements have not been put in motion.

There are seven basic sociological reasons for which `communities' as population clusters cannot and should not be treated as ready-to-use corporate actors (units of social organisation or economic agents) for afforestation programmes:

1. Communities and villages are geographical residential units, not necessarily corporate organisations. Physical vicinity alone is not sufficient to engender the type of long-term collective action required for community woodlots.

2. The interests of community members often differ to such an extent that the kind of collective unified action required by a long-term afforestation programme is generally not possible. Usually, communities have become heterogeneous population clusters, stratified and split in factions and subgroups with fragmented socio-economic interests. What is advantageous for one subgroup in not necessarily advantageous for another.

3. Community land is limited and often there is reluctance to make it available for tree planting. Tree block sites are small, costs are high. The poorest households have an interest in not allowing the commons, which to them are a continuous even if meagre source of products, to become closed, inaccessible woodlots. As Jodha's research in India has demonstrated, poor households are more dependent on products from the commons than those that are better off (Jodha, 1986).

4. The tenure status of the common lands is often uncertain and engenders uncertainty about the tenure of planted trees; it is similarly unclear which social body has jurisdiction over the allocation of common lands[8].

5. Authority systems have uneven power over community subgroups. Local community leaders often appear reluctant, or not strong enough, to mobilize the individuals belonging to different subgroups to work for establishing woodlots, or to enforce restrictions to protect the trees.

6. Distributional arrangements to ensure that the products of village woodlots reach those entitled to receive them are usually not thought through at the outset and have not worked in practice. Usufruct rights on commons are often blurred. Clear intra-group rules and guarantees for distribution commensurate with labour contributions are lacking, and this alone is sufficient to doom the community approach. Exclusionary rules against non-contributors are absent as well. The long production cycle for trees weakens the confidence of those planting today that they will get wood eight or more years later, and it favours the lingering suspicion that the authorities will appropriate the wood.

7. Many communities are not organized as joint producers in other respects and thus do not offer a matrix on which additional activities can be grafted. Externally designed programmes, which do not bother to establish grassroots organisations, cannot foster by decree the kind of close interdependence of members required by community schemes.

Because such characteristics tend to be widespread, the poor results have also been virtually general. Results are likely to be poor in the future as well whenever such corporate woodlots are expected to be sustained by non-corporate communities. Positive results with community woodlots tend to be occasional exceptions linked to the exceptional nature or circumstances in a particular community.[9] It is important to identify the structural, cultural or political conditions that make them possible or replicable.

Anthropologists and sociologists have long called attention to the processes that have changed the internal structure of village communities as social units. As settlements, villages are, of course, units of social organisation. But that is not synonymous with saying that they are units capable of undertaking collective or

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[8] Michael Horowitz, analyzing rural afforestation alternatives in Zimbabwe, pointed out that the 'important issue where communal lands are involved is correctly identifying the locus of authority over land use allocation.' See Michael K. Horowitz, **Zimbabwe Rural Afforestation Project**, Social Analysis Working Paper, Binghamton, N.Y.: Institute for Development Anthropology, 1982, p. 51.

[9] Matthew S. Gamser reported on an interesting community forestry project in Sudan (Um Inderaba) where the village community (some 600 families) was effective in planting, hand-watering and maintaining the trees against extremely adverse conditions: complete lack of rain and large transient animal herds. It appears that the village committee and the local sheikh were able to aggregate effectively the villagers' activities, while incentives and protection payments were provided together with technical advice from foresters. (See Matthew S. Gamser, *Letting the Piper Call the Tune: Experimenting with different Forestry Extension Methods in the Northern Sudan*, **ODI Social Forestry Network Paper 4a**, June 1987.

coordinated action. Although historically various forms of corporate villages have overlapped with kinship units of a corporate form, Eric Wolf noted already a quarter of a century ago that `corporate peasant villages are growing fewer in the modern world' (Wolf, 1966). Louis Dumont has similarly emphasized that, in India, given its caste system, the very expression `village community' is not adequate because it conceals the existence of factions and the omnipresence of hierarchies.[10] Dumont did not see the village as a significant unit for social action in India and stressed that what is generally called a `village panchayat' is actually a `caste panchayat' (Dumont, 1980).

More recently, in an excellent field study of Indian community-based irrigation systems, Robert Wade engaged Dumont's above point in discussion, defending the opposite view - namely, that the community can act as a unit of social organisation. He argued that what the panchayat does is as important as the panchayat's composition (Wade, 1988). However, even if and when a specific panchayat proves able to mobilize the totality of the village's factions for a certain activity, this would indicate more the particular organisational, administrative or coercive capacities of that panchayat rather than indicating that the village is intrinsically a homogenous unit of social action.

ALTERNATIVE UNITS OF SOCIAL ORGANISATION

The increasing awareness that the community-centred approach is less effective than assumed has led to a perceptible shift in thinking and strategies among foresters and planners. They began to focus on the individual household unit as an alternative to the community-based programmes in social forestry. This is not to say that all interest in promoting village woodlots has now disappeared, or that promoting tree-planting on individual farms is a totally new departure.

Various World Bank-assisted forestry projects - in Karnataka, Kerala, Haryana, and other Indian states, as well as in Mali, Tanzania, Nigeria, Nepal, Haiti and elsewhere - now provide support and incentives for tree planting on small farms. Farm forestry is now a substantial part of the follow-up IHFDP in Azad Kashmir. In the design of India's Jammu and Kashmir and Haryana social forestry projects, village woodlots represent only 11.3% of the total planting programme, while farm forestry represents about 43%, supported by a distribution of about 47 million seedlings free to individual farmers (World Bank, 1982); a similar approach was taken in the Kerala Project (World Bank, 1984). Some of the most spectacular results in farm forestry are being obtained in Gujarat and Himachal Pradesh, demonstrating a receptive response by farmers to project-provided incentives (free seedlings, etc) and technical assistance. During the first three seasons of the National Social Forestry Project in India (1985-88) farmers have planted approximately 500 million seedlings, the equivalent of over 325,000 ha on their private lands, exceeding the already high target by some 18%.

Farm forestry replaces broad joint (community) responsibility for planting with individual (household) responsibility. It moves from promoting joint tenure and ownership of trees to promoting individual ownership. It also vests the management authority over the tree plantation in an individual rather than in a diffuse non-

[10] Dumont wrote: `The overall point is that within the village and within the dominant caste itself there is division into units which spring from no traditional principle, and in which each man's adherence is mainly or to a large extent governed by his interests.'

homogenous entity. Land tenure on individual farm holdings is unambiguous. Of great importance is that the divisive problems of intra-group distribution of benefits are eliminated. Thus the correlation between farmers' inputs (labour and cash) and outputs become direct and clear to farmers, understandable, proportionate and less risky.

Trees can be grown on individually-owned land not just in small woodlots but also along linear landscapes such as farm boundaries, internal field borders, roads and watercourses. Tree planting technologies that maximize the use of interstitial locations and other marginal land-patches are particularly suitable for individual small farmers because they do not compete with existing land uses and other crops. Even small farmers who cannot afford to set aside an arable plot for a tree block can use their hedgerows for planting. Foresters have concluded that since farmers secure most of their fuelwood by lopping branches, trees planted along homestead boundaries can produce several times more volume per tree than those felled from plantations. This has obvious implications for mitigating tree product shortages, since it is easier to persuade a household to plant on its own farm boundaries than to persuade communities to provide scarce land for block plantations.

Since farm forestry is adopted through individual decision making, the spread process is free of difficulties such as factionalism that impede the collective adoption of community forests. Tree planting is incorporated into the farmer's own farming system rather than remaining parallel to it on a remote communal lot.

The farm household is an enduring social unit able to sustain forestry development programmes. Tapping its potential requires a deftly tailored integration of technical, sociological and economic elements as well as operational cooperation between foresters and sociologists in designing and implementing this strategy.

Small Groups

The current growing success of household-centred forestry may obscure the fact that group-centred approaches retain development potential that should not be overlooked because of the ineffectiveness of the earlier community approaches. The challenge is to find social formations between the entire community and the individual farmer which are capable of acting as supporting structures for the development of forestry or other natural resources. The problem is to have a group that is free from the inner conflicts of larger communities, yet able to generate the synergy that makes groups more effective than the sum of their members.

The limitations intrinsic to communities as social actors result from their large size and internal stratification. Homogenous groups of an easier manageable size could prove more functional. In small groups a common interest that links the members can be pursued more effectively by joint action than by individual action. A small group can also enforce rules about contributions (labour or financial) through peer pressure, so as to limit free-rider behaviour.

Coordinated and collective action does not ensue automatically when a set of individuals stand to gain from such consensual action. They must understand subjectively the commonality underpinning their objective interests and be willing to act consensually.

One successful example is a group farm forestry scheme started in the early '70s in West Bengal. A group of unemployed or underemployed villagers, landless or marginal farmers, was given a block of marginal public land for tree-planting. The members were not granted title to the land, but were given usufruct of the land and ownership of the trees they had planted and protected. Under this system there was tight group control over the temptation to change land use or mortgage the land. The area allotted and the number of trees to be planted guaranteed enough wood from lops, tops, dead trees and branches to meet a household's domestic requirement. The protection of planted parcels was organized jointly by the group. Thus the group strategy not only maximizes land use for forestry but also encourages and facilitates collective action for tasks that would be performed less effectively if carried out individually (Bannerjee, 1983).

The target group of this West Bengal scheme was highly dependent on the income generated by their labour and could not be expected to work without remuneration. Incentive payments were therefore made to help meet household consumption requirements during the early stages of the plantation. Incentives were also given for each surviving tree to encourage maximum survival rates.

The operational principle behind group farm forestry is to create a clear link between a well-defined small group and a well-defined piece of land that is converted into a woodlot. There also needs to be a clear correlation between contributions and returns, and authority and benefits must be restricted to members of the group.

Age Groups: School Nurseries

Many traditional societies, particularly in Africa, entrust to subgroups certain maintenance or service functions in the society. Some of these groups are defined by age or gender. They are accountable to appointed group leaders as well as to the overall authority structure.

One of the notable successes in recent years has been the involvement of school-age youths in establishing tree nurseries for social forestry (in Kenya, Malawi, Gujarat, and Haiti). The characteristics of such groups are propitious for certain collective actions: school children form a homogeneous age group, concentrated, organized by virtue of their main activity -going to school - and with a built in leadership system. Although the transitional nature of this age groups limits its participation activities of long duration, it is perfectly suitable for short-term collective efforts such as the production of seedlings. To formalize and expand this group's support to social forestry, it is possible to promote institutional arrangements in the form of a `partnership between schools, communities and government agencies' (Chowdhry, 1983).

At the outset of a social forestry programme in Gujarat in 1980 there were less than twenty schools with tree-nurseries. The Forest Department decided to encourage schools and private farmers to raise seedlings rather than to expand the state's nurseries. In three years about 600 schools opened nurseries in which schoolchildren, with guidance from foresters and teachers, produced several million seedlings a year. The persuasion/motivation required to generate such action was combined with one economic incentive: a guaranteed price for seedlings; when ready for transplanting, the state forest service buys the seedlings for distribution to local farmers. This economic incentive was backed by technical advice from extension workers to help schools construct and operate small tree nurseries. In addition, many schoolchildren took the seedlings

home and planted them around their family homestead, thus extending the educational outreach of the programme from school to the home (Spears, 1983).

Women's Groups

Experience with women's groups in forestry is expanding every year. Since in many cultures women are the direct users and gatherers of fuelwood, they would appear to be the ones most directly interested in producing it; women also possess a good knowledge of the growing requirements of various tree species. Recent evidence from a number of social forestry programmes points out the major contribution women could make to them (Hoskins, 1979; Molnar, 1988).

Although women have been organized for different productive or household related activities in many countries, little has been done to involve them in group action for the cultivation of woodlots. Even in a country such as Kenya, where women's groups are widespread and effective, a field study reported that out of 100 women's groups active in one district (Mbere), none was directly involved with tree planting (Brokensha *et al.*, 1983). In other districts, however, women's groups have started planting some woodlots for their own use. In Himachal Pradesh in India, multipurpose women's groups called Mahila Mandals frequently include tree planting among their activities (Dioman, 1989).

Establishing women's groups that induce mutual help and cooperation for forestry-related activities is likely to be a more effective social device than if each woman spent the same amount of time and labour on individual farm forestry.

CONCLUSIONS

The alternative type of social units examined above do not exhaust the list of potential social actors for afforestation programmes. The same line of thinking can be continued in order to spotlight other kinds of social units and thus multiply the array of social actors able to involve themselves in forestry development.

In a broad sociological sense, the forest departments themselves are also a form of social organisation created to perform, by using state investments and resources, the functions of conversing, managing and developing forests. As administrative bodies, forest departments are of a different organisational nature than the type of social units - organized population groupings - that have been discussed in this study. But forest departments may play a critical role in fostering and encouraging the formation of such groups among users of fuelwood and in providing them with silvicultural, organisational and economic assistance to produce trees. Foresters, by and large, are still far from knowing how to accomplish the social side of their task, but they must learn to work with people as well as with trees.

In turn, the many nongovernmental organisations that make forestry and environmental conservation their own agenda, may become also the organizers of people's productive **organisations** and help users to act and

structure themselves as producers. Identifying or creating social units is a task that requires both informed sociological understanding of what is to be done and methods and skills for social organisation. The point is that such social forms need not necessarily pre-date the development intervention, nor should they all be created from scratch. In order to grow trees on the gigantic scale necessary now, people's capabilities must be enhanced through organisational strengthening, adaption and innovation. Such enhancement itself is part and parcel of the development process.

In conclusion, it may be adequate to stress that social forestry carries with it the connotations of both a philosophy of development and a pragmatic operational strategy. The philosophy postulates the centrality of people in forestry, of users becoming producers. It breaks radically with the stereotype that forest growth is the business of professional foresters alone. The practice of social forestry is wide open to multiple approaches, open to the creation of diverse patterns of social organisation as matrices for action. It is open to imaginative and informed innovations in land tenure, of various forms of ownership or usufruct, of tested or unorthodox tree growing techniques, and of age-old or novel social structures from the household to all kinds of purposively created groups.

There is no single `best' social strategy available as a universal key to all development approaches in forestry; such strategies span a broad spectrum. Sociological knowledge is therefore instrumental and indispensable for conceiving, designing and implementing any effective approach to forestry development.

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Credits

Network Coordinator: Dr Gill Shepherd

Newsletter and Network papers edited by:
Dr. Gill Shepherd, Social Forestry Research Fellow
Dr. Mary Hobley, Social Forestry Research Fellow
Edwin Shanks, Social Forestry Research Associate

Design, typing and layout by:
Ingrid Norton, Social Forestry Network Secretary