SOCIAL FORESTRY IN 1985:
LESSONS LEARNT AND TOPICS TO BE ADDRESSED

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Social forestry, as a term and as a type of project, has been with us now for about ten years. As a style of activity, on the other hand, it probably has a genealogy of two thousand years or more in some parts of the world. This overview will confine itself to the first, more narrow definition of the subject, since it was only from this more recent flurry of activity that the Social Forestry network was born.

Social Forestry is proving more difficult to institute than was at first hoped. The desired marriage between willing foresters and willing villages for the growing of trees has been very difficult to arrange to the satisfaction of all parties.

Yet the reasons for dissatisfaction are becoming clearer as the same problems recur over and over in different geographical locations. Villagers' priorities and problems have not always been elicited; the village, and within that the household, have often not been sufficiently disaggregated, so that conflicting goals or exploitative relationships go unobserved. Foresters often lack the training for the human and social science skills which Social Forestry demands of them, since they have been taught to try to keep trees and people separate, and agriculture and trees separate. Villagers may be reluctant to grow trees, or to have trees planted on their behalf, for reasons which become obvious as they are teased out.

All in all, it is a good moment to look back at lessons learned, and forward to an investigation of the large number of knots still waiting to be untangled.
The paper will deal first with villagers, the given of village life which must be understood before there is any hope of success in Social Forestry. It will then turn to foresters and the institutions they work for. Finally a section on suggested solutions will be put forward. Each section will set out a research agenda, and will try to indicate the topics on which there is now broad agreement.

VILLAGERS

Villages all over the Third World are experiencing changes of a similar kind. Wealth differentials within them are increasing; their old political and economic self-sufficiency has become a thing of the past, and they are increasingly dependent on authority structures, markets and employment opportunities over which they have little control, and whose loci of power are situated elsewhere.

The population growth rate is high in many places, so villages are going through other rapid social changes, too: increased pressure on local resources, increased out-migration perhaps. Such changes affect agriculture by intensifying production, or by withdrawing agricultural labour and making certain kinds of mechanisation more attractive.

It is into such changing social and physical landscapes that Social Forestry has to be fitted, if it is to succeed. But herein lies a central paradox: trees take five or ten years to mature yet who can say what the village will be like after such a period? What institutions will still endure? What commons, or pieces of wasteland, will still exist? It is only on the very strongest certainties that Social Forestry projects can be built.
This section examines the following as key village variables: land tenure; common property resources and wastelands; the sexual division of labour and the position of women; social stratification within the village; and the village level institutions which might be expected to handle tree-growing.

(i) Land tenure

The creation of tenure

Often first 'ownership' of land goes to those who first change its natural condition by clearing it (of bush or forest) or by planting trees on it (open savannah). The creation of some tenure rights through the investment of labour in land is reported in Africa, Asia and Latin America. The land ceases to be a common good, and passes into a secondary stage. In the Amazon it may now pass straight to private tenure, but the more common situation has been that it becomes part of the property of the group of which the individual clearer is a member. Valuable trees already on the land may be the prerogative of chief or king and the land itself reverts to the group when the individual dies or ceases to use it. Planting trees as 'tenure-markers' is widely practised, especially by shifting cultivators who plan to return to the land when its fertility has revived.

The formalizing of private tenure

Land tenure arrangements are progressively tightened everywhere as pressure upon the land increases. The pattern is as observable among Indian tribals as it is in the land adjudication and registration procedures which are now happening all over Africa.
At earlier points in the tenure process, the norm is for diverse use-rights of the same piece of land and no overall exclusive owner, though there is usually a major user. When land is registered, the major user takes all, and a plethora of secondary use-rights are extinguished, often to the detriment of the poorer members of society.

At the same time, the many types of tenure found under traditional systems often carry over to some extent into the post-adjudication period. Some tracts of land are designated tribal land or common land; local law-givers may continue to uphold some subsistence usufruct rights because of the moral force of customary law even when it no longer exists formally.

Security of tenure

As land itself becomes short, security of tenure becomes more important. No long-term activity - especially tree-planting - will be undertaken without it. Shadowy usufruct rights on others' land are too uncertain over the long term, so that tree tenure without land tenure gradually becomes an impossibility.

Areas where more understanding is needed

Many of the problems which have arisen over tree-planting have sprung from the difference between theoretical and actual land tenure arrangements in a particular site. Are these confusions the fault only of donares or government, or were villagers themselves unclear about the implications of tree planting, until it had happened? Are there cases of the successful maintenance or strengthening of usufruct rights, against the odds?
(ii) **Common Property Resources**

Some fruitful thinking has gone into the subject of Common Property Resources (CPRs) over the last year or so, particularly at the BOSTID conference held on the subject in Washington in Spring 1985. This section relies in part on papers written for that conference and reports by participants, and in part on ODI work on CPRs carried out this year (see the Newsletter for details). Since so many rural dwellers still depend, or expect to continue to depend, on CPRs, it is very important for planners to understand the peculiar fragility of these institutions. The outlook for their future is not promising.

The nature of CPRs

CPRs arise in areas of moderate demand for semi-available resources. Where resources are amply available, there is open access to a free good. Where they are very scarce, CPRs break down into private ownership. CPRs may be land, labour, water, wood, grazing etc.

CPRs should be understood as resources which only have meaning within a cultural group's particular management of them. The CPR draws its meaning from the nature of a relationship particular people have with one another. If this relationship has broken down, so has the CPR, even if the tract of land or water is still there.

CPRs are typically small in size. They might be particular areas of grazing in a desert environment, but not the whole desert itself. However, they are larger than the sort of resource a property-holding unit like an extended family might control.
The management of a CPR consists of regulation of the point where shared property such as water or wood becomes private property as it is taken for individual use. Ownership is often created by labor investments such as the chopping up of wood or the drawing of water from wells.

The reason for CPRs

Most societies choose to do certain activities—such as the growing of subsistence food, or the raising of children—as individual households. Why then regulate other resources in larger groups? What are the advantages?

In some cases, an economic activity, such as the herding of cattle or the provision of irrigation water, calls up social units larger than the household, who in turn manage communal resources needed for the activity. Even here, conflicts often occur and powerful mediators may be needed. But there are strong reasons to attempt resolution because vulnerability is greater alone than in a group. These are examples of highly complex CPR exploitation.

In other cases, the resource is actually exploited in a simpler, individual way. This tends to be true of the gathering of wood and bush or forest products including food, and of fishing. The CPR rules merely give permission for the members of particular groups to use the resource, and protect its sustainability with close seasons, bans on the cutting down of live trees, bans on particular fishing methods, etc. The rules are designed to ensure a resource in perpetuity, and to earmark it for a particular group. In this case, the agreement to share the resource gives everyone reasonable, though finite, amounts of products which would be far costlier in time or money to grow or buy.
The management of CPRs

A CPR must be managed by the people directly involved in using it. If it is not, then it effectively becomes something else. If CPRs become State land, for instance, as a protective measure, it is but a short step to government profiting from erstwhile CPRs itself.

Management systems for CPRs vary widely in detail, but probably all have in common the fact that powerful, senior individuals manage them on behalf of the broader community. Their incentive to do so justly, if it exists, grows out of the extent to which they need local goodwill to prosper.

Sanctions

It has to be assumed that individuals are tempted to break CPR rules whenever it is to their own advantage. Infringements test the effectiveness of the management system for the CPR and, if it is weak, destroy it. They also throw the nature of current CPR property rights into relief. Infringements may be noted disapprovingly by those whose rights are being imposed upon, but if they or their leaders are unable to impose sanctions on wrongdoers because they are weak and the wrongdoers are strong, then the rights are becoming a fiction, and the CPR is ceasing to exist.

Group use of a CPR - what a preceding section referred to as 'complex CPR exploitation' - is more difficult to organize, perhaps, but the incentives to succeed are high. CPRs which can be individually used, which invite 'simple CPR exploitation', would seem to be far more vulnerable.
CPRs should not, therefore, be lumped together: they vary in their nature and in their vulnerability according to the type of social organisation needed for their use.

Change and breakdown in CPRs

'The law pursues the man or woman
who steals the goose from off the common.
But lets the greater thief go loose
who steals the common from the goose'
(English folksong, 1820s, (about the enclosing of common-lands)

CPRs function best where they are shared by individuals who are relatively socially undifferentiated. They also tend to endure in remote areas where District or State level power is weak, and truly local political power still flourishes.

But there are inexorable processes which tend to break down CPRs, and perhaps they should always be seen as a transitional stage between open access resources, and private property.

Firstly, when the value of the CPR rises, so does its vulnerability. Such a rise may be occasioned by population increases, increased land hunger, the creation of a market in CPR produce, or the introduction of technology (e.g. tractors) which makes it easy to cultivate more land.

Secondly, the greater the degree of wealth differentiation among members of a CPR-using group, the greater the likelihood that the CPR will change its nature.
Thirdly, the State tends increasingly to undermine the authority of local leaders in many countries. As the ability to enforce recognition of CPR rules fades, cheating and bad CPR use increases. Eventually wealthier individuals appropriate portions of the CPR unchecked.

Conclusions on CPRs

Many well-wishing outsiders would like to help CPRs to maintain or even improve upon their original function. They would like to see natural resources nurtured and sustained, or the poor given better rights through the use of CPRs.

This is an area in which much inventive thinking is required. If we define a CPR as "a resource held in balance by the equitable relationship with one another of its users", then plainly there is a problem. Natural resources are becoming degraded because the human balance has gone: the poor will only be allowed to keep control of a natural resource allotted to them until the altruistic development worker's back is turned. They will then be ousted from it as they were the first time. Their tenure is likely to be even more fleeting if the value of the resource has meanwhile been increased through tree planting.

Experience, comment and innovation is badly needed in this area. Can the poor be helped to defend CPRs against the rich, with the help of public concern, or not? Are their chances better under complex rather than simple CPR exploitation patterns? The ODI is continuing to pursue CPR issues within both its Pastoralism and its Social Forestry networks, and will report findings regularly. Contributions of any kind from this network would be of great value.
(iii) **Wastelands**

Wastelands are usually a category of CPR. They are mentioned separately here because they represent an important category of land in India at the present time.

Wastelands are hard for users to afforest for the usual CPR reason: weak rights only create a weak sense of duty. And any change which gets a wasteland planted with trees will also change its tenurial status. As the wastelands increase in value by virtue of the trees planted on them, wealthy villagers, or the State itself, will take a greater interest in them. Careful social engineering is required to make sure that such tree products pass to the poor.

Finally, some authors argue that Indian villagers want wastelands for grazing their cattle more than they want increased fuel supplies. Wasteland management which does not require an either/or choice might be the answer. Comments from those involved in wasteland development would be much valued.

(iv) **Social stratification - the sexual division of labour**

Women are doubly disadvantaged in many ways in the village situations we are examining. Firstly, they are almost always relatively poor. They have all the disadvantages that poor men experience - of weak land rights, a weak political voice, and poor access to benefits such as extension advice and credit. They may, as Kenyan women put it, be no more than "tenants on their husbands' land".
Secondly, the woman's economic sphere is distinct from the man's. In ideology, the two are complementary - agriculture for women and livestock for men, for instance; or gathering for women and hunting for men; or the subsistence economy and the cash economy. In practice there is tension between these overlapping but not congruous economies, for the male sphere always generates more wealth, more prestige, and more leisure. When external factors change the terms of trade between the two, the in qualities may become even more striking.

Women as poor people

Rural women work very long hours - 16-19 hours a day - on tasks which include a high degree of physical toil. They are occupied above all with the growing and harvesting of food crops and their transformation, with the help of fuelwood and water (which must also be collected) into sustenance for the family. Yet this fundamental task is rarely performed on land which women own. They may not have decision-making rights over land use - except that inside the compound - and they cannot use the land they farm as collateral for credit. They work as unpaid servants or poor relations.

While there are, of course, richer and poorer women, women as a category are overwhelmingly disadvantaged. For instance, at least a third of the world's households are headed by a woman, but these households tend to be clustered among the world's poorest households.

The women's economy

A persistent failure of donor agencies, and of Third World governments, has been their undervaluing of women's productive activities and their vagueness about what, and how much, women actually do. The assumption that their
time will be available for work on cashcrops their husbands are interested in, for instance, often betrays real ignorance about on- and off-farm subsistence activities and the amount of time they take up. On-farm activities usually proceed as a backdrop to cashcropping, and off-farm activities are likely to be completely invisible to husbands and extensionists alike. Yet often women's sole opportunities for income generation are to be found here. They may rely on forest products for basket and rope making; they may gather and sell woody products as fuel, medicine or food; they may collect roots in order to make and sell beer.

Any of these modest forms of economic independence come under threat as externals change. New technology or new demand for particular products may make men decide to farm more actively themselves, causing forest or bush areas to come under threat. A population increase may encourage men to register individual title to land, and if husbands and wives come into conflict about the crop to be grown on such land, or the destiny of trees growing upon it, the woman will find it hard to make her voice heard.

Alternatively, urban migration may become more common for men, and women may be unable to sustain subsistence agriculture because labour is unavailable for some key task such as terrace maintenance.

Conclusion

From the point of view of Social Forestry planners, the position of women, and the status of the women's economy, is important for three reasons. Women are the very category who have most to gain from tree-growing for subsistence purposes, and arguably for cash too. Yet it is they who are likely to lack the land and the labour to
allocate to the task. Secondly, it is often knowledge from inside the women's economy which foresters now need. It is they who are aware of the growing properties and the diverse uses of the trees they regularly gather from. It is only they who could explain what the losses will be in income and the abilities of households to sustain themselves, if bushland, commons, 'wastelands' or forest are turned over to the production of quick-growing, commercially valuable tree species. Thirdly, the fact that women cooperate for subsistence purposes with one another already, and tend to be far more permanent village residents than their husbands, means that they often constitute the very categories of villager that Social Forestry projects could most rely on.

Almost everybody needs successful case histories of how to overcome the difficulties of involving women, and how to enable them to get their commitment and energies to work on tree growing.

(v) Social stratification: the poor, weak and landless

The poor access of society's least advantaged people to trees and tree products lies at the heart of many social and environmental problems, and needs much thought.

The poor, meaning poor and weak and landless, have few choices open to them. They cannot risk scarce land, or already overstretched labour, on risky innovations, so they watch what happens while richer farmers plant trees. Meanwhile, they must take wood where they can find it, or use poorer and poorer fuel sources, such as corncobs, or twigs. The preceding section, 'women as poor people', characterises their problems in a little more detail.

The safety valves which the poor had in the past usually function no more: commons pass into private hands or
remain common in name only, while they are commercially exploited by the rich. Structures for some redistribution of the surplus of the rich - the lineages of African pastoralists, or the Jajmani system in India - to clients, have been fading fast. Such distribution has certainly not been in evidence in Social Forestry projects where 'community schemes' have been dismal failures in many regions.

(vi) Village institutions suitable for tree-growing

A variety of institutions may, in particular circumstances, prove good vehicles for tree planting. Villagers have first, however, to want to plant trees.

Village attitudes to tree-growing

Though large farmers in India proved far more enthusiastic about tree-growing - when they saw how profitable it was in their particular situations - than donors and Forestry Departments had expected, a common finding has been the reluctance of villagers to grow trees.

Such lack of enthusiasm always needs investigation since it may derive from one of several very distinct causes.

Firstly, a woodfuel shortage may be perceived, but planting trees may be problematic. If the shortage has occurred on common land, no one user has a duty to replant. Decisions about the redesignation of common land for some other purpose are difficult, as every villager knows, and are likely to lead to lost usufruct rights for some. The most equitable solution may seem to be to do nothing.
Secondly, individuals are reluctant to spend their labour on tree-raising if they have doubts about their rights to the trees they grow. Such doubts are likely to stop tenants and squatters from planting, and volunteers from helping to plant-up village woodlots. In countries where, legally, all trees belong to the State and may not be cut without its permission, villagers will rationally refuse to plant trees until the law is repealed.

Thirdly, villagers may have no experience of deliberate tree-growing, as opposed to the use of pre-existing bush or forest; they may feel that tree-growing is the work of God, and that to imitate Him is to invite His wrath. Such attitudes are readily overcome when trees grown by foresters or other villagers are seen.

Fourthly, tree-growing may seem like too much trouble. Men may be reluctant to plant trees for their wives' subsistence use, and women may feel that tree-growing is more trouble than going further for wood, using wood more conservatively, or buying it. Villagers may or may not be right about the trouble of growing fuel, depending on local circumstances. It might be better to approach tree-growing through the notion of fruit, fodder or pole-growing, or land demarcation and hedging.

Finally, the fact that trees are a long-term investment means that villagers may be reluctant to tie up land for tree-growing. Delayed returns are especially unattractive to poor farmers.

The network editor would be very interested in case-studies on legal or tenurial obstacles to tree-growing, and in any other material which sheds light on the process by which villagers decide it is worth their while to grow trees.
Institutions

Part of the reason why villagers have not wanted to grow trees is that the idea was presented to them within institutional frameworks about which they rightly had their doubts. The failures of village woodlots and community schemes - sometimes very drastic failures in which seedlings were torn out of the ground by villagers, or fencing was allowed to collapse so that stock could get in to browse them - can in all cases be traced back to outsider misassessments of village corporateness.

Where payment was made to labourers planting trees, they have evinced an enthusiasm (for the money) which foresters took for enthusiasm for the project. When the project moved on a stage, it became clear that there was no group commitment, and no group plan for the distribution of products.

Villagers need to discuss, and think about, the groups they could use for tree-planting, in the light of their own experience of similar activities. In some situations, no group larger than the household can probably manage tree-growing - and even within the household there may be conflict between the husband's and the wife's priorities. In some hill areas of India and Nepal, however, villagers have been able to unite for forest and watershed protection on quite a big scale. What are the variables? Investigators should look at villagers' other activities, first of all. If they are already cooperating to manage rice terraces or other irrigation schemes, it might be that trees could be grown by the same groupings as part of terrace or canal protection. Successful co-ops might take on tree-growing.

In many villages, groups intermediate in size between the household and the 'community' (i.e., the whole village) exist and are capable of taking on tree-rearing. Schools
have land, water, and continuity in time even though staff and pupils change slowly. Parent-teacher associations linked to schools are sometimes good tree-planters. Women's groups are proving very successful village institutions in many areas. In Kenya, for instance, women's church groups, each containing fifteen or so members, are proving enthusiastic raisers of seedlings in nurseries, tree-sellers and tree-planters.

In areas where there is great social differentiation inside villages, India's plains rather than India's hills, for instance, then planting on an individual basis may be the only answer.

It should be remembered that institutions are rarely static for long. Some that look capable of tree-management now are clearly going to be far weaker five or ten years' time.

**FORESTERS**

The issues which have faced foresters since the accent on Social Forestry began have been new and difficult ones. Forestry activities had hitherto taken place on tenurially neutral State Land; similarly, the ownership of the trees they raised or protected was conceptually simple. Furthermore, the labour on which they relied in their task was wage-earning, and had no relationship to the land or the trees.

Foresters involved in Social Forestry have to think about tree-planting, not in a vacuum, as it were, but in competition with other agricultural or pastoral uses of land, on land whose nature is changed by tree-planting. Not only must they deal with free agents rather than employees, they must become social actors themselves: it
is common for forester-instigated tree-planting in common land to be seen by villagers as a State land-claim.

In 1985, it can probably be said that, where Social Forestry projects have been tried for some years now, there is a much increased awareness among foresters of the social constraints which must be grappled with, even if the solutions are not all clear yet. But in countries where tree-planting by and for villagers is still a new idea, it would be fatally easy for the same set of false starts to be made.

(i) **The Social Contract**

In effect, the social factors which have to be taken into account are all facets of the same thing: the importance of giving villagers' needs at least the same weight as those of the State. Given the power of the State and the weakness of the individual, it is clear that staff working on Social Forestry projects are likely to be called on to explain village needs to higher authority - to take on an advocacy role. Only when there are positive forester-villager relations have Social Forestry projects borne fruit. Problem areas have tended to be the following:

**Bad previous villager-forester relations**

In areas where villagers have been repeatedly fined or taken to court by forestry officials as part of attempts at forest protection, forging a new relationship based on Social Forestry may be difficult for both sides.

**Putting people first**

It has been very difficult for foresters - who have been trained to put trees first, as it were - to accept that
the needs which drive villagers to over-cut forests for fuel must be sympathised with and satisfied.

Benefits

There is a tendency to view forestry projects in terms of national benefits - soil conservation, environmental considerations, the provision of poles, pulp or fuel-wood to towns. But where the short-term benefits to poor villagers involved in the projects are not properly worked out, they will not respond with enthusiasm, and any wood produced will be merely yet another rural-urban subsidy. Poor villagers need help with the real economic disadvantages of growing a crop which takes several years to mature.

Institutional innovations

It has been too lightly assumed that new ad hoc groupings can be formed for tree-growing. In fact there have been far more successes where existing realities are ascertained and worked with and the only innovation is tree-growing itself.

Project vagueness

The commonest reasons for project failure are where there has been inadequate thinking through, at the start, of land tenure issues, of who the trees planted belong to, and who is to benefit.

Land tenure realities must be ascertained with great investigative precision: there will almost certainly be some divergent views on the matter.
(ii) **Methods**

This review takes technical forester competence for granted, but looks at some topics which have proved unexpectedly complex in the context of Social Forestry.

**Nurseries and seedlings**

Several obstacles to the successful implementation of Social Forestry projects have occurred at the seedling-production stage. When Social Forestry is first begun in a country, the numbers of nurseries may well be low. Very quickly, demand for seedlings may outstrip supply if expansion has not been planned for. Villagers may also complain that nurseries are too far away for them to get seedlings in the numbers that they require.

The tendency has been for nurseries to decrease in size and increase in number, to the point where villagers (or even households) can manage their own small nurseries.

Alternatively, professional nurseries can try new management styles - such as the small root trainer system of seedling production - so that the logistical problem of getting large numbers of seedlings to villagers is solved by moving large numbers of seedlings around when they are small and light. Such seedlings, however, are more vulnerable because they are small.

The relative merits of the two possible systems are not yet clear in many situations and much more case-history material is needed. Can networkers help?

A third possibility, which villagers were already doing themselves in Malawi before any Social Forestry programme began, is to transplant self-seeded seedlings of indigenous trees, and to replant them where they are
needed in hedges or around compounds. Where such a system is possible, it should be looked at carefully. It has obvious benefits, but the costs to natural bushland might be high if large numbers of people began to do it.

The giving out of seedlings from nurseries free to the public has generated some abuses, and has also made some villagers suspicious. There are many instances of villagers preferring to pay for seedlings so that it is clear that ownership rests with them, not the government.

Tree species

Before their most recent involvement with Social Forestry, foresters' main concerns, in selecting trees to be grown, were with the commercial rates of return from particular species. Most forestry research has been done on commercially important trees, and it is for these that annual yields under particular conditions are best known. Fast-growing trees which grew straight trunks were generally the most saleable.

Villagers, on the other hand, know a lot about very different types of trees. They will have strong preferences, from among the trees locally available to them, for those that yield the best fuelwood, poles, fodder, fruit or nuts, and the products used in craftwork and small-scale village industries such as carpentry or tanning. Villagers will vary in their assessment of what is most useful to them, it being commonly found that women are most interested in useful fuel, fodder and fruit trees, while men are more interested in polewood, and wood suitable for agricultural implements. If there is a local market for wood, men may make this their primary interest, while women see the generation of cash as secondary to subsistence needs.
When villagers and foresters are to interact for the purpose of Social Forestry, the divergent skills and knowledge of the two groups can throw up serious problems when it comes to species selection.

Foresters need to be familiar with the trees they are offering villagers: germination methods, seedling raising, growth rates, water-requirements and so on. This information they are unlikely to have for most of the indigenous tree-species with which villagers are familiar. On the other hand, the trees about which they know most may fit poorly into village economies, which see the cash benefits from such trees as an imperfect substitute for the multiple products available from their preferred species.

There are two distinct problems here, and both require more attention than they have had so far. Firstly, more thought needs to be given to the tree species which are truly suitable for household forestry as well as for cash sale. Probably more trials need to be made of these species so that foresters can choose to use them with more confidence in the outcome. Much more familiarity with good agroforestry species is needed. Secondly, and for the first to be most effective, an analysis of the existing village situation needs to be made. Trees chosen for planting should, between them, have at least as many uses as those upon which villagers relied before. They should mix well with crops or livestock if that is required by villagers. They should enhance the soil or leave it as it was, but not have a deleterious effect.

To encourage villagers to plant trees, seedlings available at local nurseries should offer them not only the chance of growing trees as a cash crop, but also of choosing species suitable for living fencing, fruit, fodder, etc. Individuals can then choose the balance
between subsistence needs and investment most attractive to them.

Harvesting

Foresters in plantations, and villagers in bush or forest, harvest the wood they need in completely different ways. Failure to appreciate this superficially small fact has led to many wrong assumptions. Foresters use saws and fell whole trees (which may coppice again from the stool remaining). Villagers collect dead wood if they can, or cut branches with axes or slashers, from trees which have the capacity to grow back again. Their tools are not ideal for hacking through thick trunks or branches, and they tend to prefer trees with many thinner, bushy branches. Such wood can be further chopped for firewood without much difficulty. Villagers' methods are well suited to the tools they possess, and the trees they are keenest to exploit. 'Plantation' trees such as pine or eucalyptus present them with much more serious harvesting problems.

(iii) Institutional arrangements

The move into Social Forestry has thrown into relief various as-yet-unresolved problems about the way in which the activity may best be organised.

Which Ministry?

Social Forestry has logical links not only with Forestry, but also with Agriculture (agroforestry), Soil and Water Conservation, Land Use Planning, Energy and Local Government. Different countries are organising matters in different ways, and a network issue will be devoted to this topic. It is one on which networkers' experiences badly need collecting.
So far, it would seem that there is a need to set Social Forestry off from Industrial or Commercial Forestry, and this is variously done by placing it within a different Ministry, or creating a Social Forestry Unit in an existing Forestry Department. Some countries are encouraging various ministries to interest themselves in Social Forestry, and forming inter-ministerial committees for the exchange of ideas and experience.

The link with Agriculture is very important, since agricultural extensionists are often the front line in Social Forestry activities, and because of the importance in the future of agroforestry. The natural tensions which have in many countries existed between the Forestry service and the Ministry of Agriculture need addressing and resolving.

The local level

Whatever the national-level Ministry(ies) responsible for Social Forestry, the importance of co-operation at local level is great. The various extension agents should all be well-briefed in the topic, and there should be regular chances to meet for both governmental and non-governmental agencies involved in Social Forestry in the area for information exchange, and the chance to visit one another's projects. So far, such cooperation seems to be rare, for district-level forestry officers may not be closely attuned to new thinking in the higher levels of the forestry service.

Non-governmental organisations

The strength of NGOs is that they operate on a small scale and may be experimental and innovative in what they do. They tend to be in close touch with villagers' needs
and fears. They lack the funds to sustain a commitment over long years, however, and for the same reasons their ability to influence large areas is small. They may need technical assistance. In many areas they complement government services very well, perhaps by taking responsibility for a particular area.

Much of the Social Forestry work done with women's groups, and with forest and hill-dwellers, has been non-governmental. And stove-programmes are usually at their most successful when NGOs take them on.

The ICRAF Land Tenure conference, with participants from many countries, made it unexpectedly clear that government/NGO cooperation was improving all the time in Asia and Africa such that there was no need for artificial either/or choices. In Latin America, however, participants averred that only NGO activities were leading to the possibility for Social Forestry or Agroforestry.

Extension

The most successful arrangement for Social Forestry extension seems to have been that where forestry personnel (who are in short supply) train groups of agricultural extensionists several times a year, and then visit them informally in their villages while they teach village groups.

In this way, villagers are not receiving conflicting messages from different extension agents, and are encouraged to see trees as part of other agricultural activities.

Weaknesses which need addressing are those which tend to be there in all extension work: extensionists spend too much time with wealthier farmers and not enough with the
poor; they do not involve women sufficiently - a particularly damaging oversight in the case of Social Forestry; they should try to work with schools and other newer village groupings; they should listen to villagers' views and be alert to possible problems, rather than merely teaching what they have been taught.

Training

Training for work on Social Forestry programmes has hardly begun as yet. Gradually, there will be more social content in university-level forestry qualifications, and graduates with such training will begin to hold key posts. In the shorter run, the urgent need is for appropriate training for middle level personnel, and as much practical village-level instruction as possible. This last is an area where many networkers must have experience, yet where little has so far been published.

How can Social Forestry/Agroforestry knowhow be spread most quickly and easily? Do the best results occur where villagers are trained directly, or where extensionists are trained to work with villagers? How successful has the training of an 'animateur' for each village been?

Unless higher-level training leads to increased knowledge of and enthusiasm for tree-planting in villages, it must be deemed to have failed.

Monitoring and Evaluation (M and E)

There has been much good M and E of forestry projects and much good writing about the subject as well.

Most of those working in Social Forestry projects have been highly aware of the need for monitoring project outputs, seedling survival rates, and so on.
Perhaps what is needed now is more examples of the entire M and E cycle, from original goals and assumptions, villager participation and so on, through to the cropping stage several years later and beyond.

Evaluation when the project is over is particularly important. It is only at that point that the long-term effects on land tenure, farmers' incomes and the environment itself, can be assessed.

WORKING TOWARDS SOLUTIONS

This section tries to suggest fruitful lines of enquiry, and a few solutions to Social Forestry problems.

Networkers' comments on any topics - those appearing here or those which ought to have been included - will be exceedingly welcome. Brief indications of direct experience of particular problems would be particularly valued. The network editor can then write to particular networkers for more details as required.

Finally we need to prioritize. Suggestions for topics on which early network mailings should concentrate are solicited.

Land tenure

- How much do villagers understand land tenure changes, as they are occurring?
- Is there any way of legally maintaining usufruct rights?
- What are the best ways of tackling conflict between customary land law, and statutory law?
- In many areas, there are laws inhibiting tree planting which ought to be campaigned against and
repealed. State protection of forests ought to be distinguishable from freedom to plant and harvest trees on private land.

- Forest land laws need thought in many areas. Protection against forest dwellers - who are potentially forest guardians - is much less important than protection against commercial interests.

Common Property Resources

Exploitation of CPRs by the wealthy can be a problem. Systems need devising such that exploitation is costly to them and, perhaps, thereby made less attractive. Depending on local circumstances, it might be possible to institute penalties for the use of certain types of equipment or machinery; or fines for the sale rather than consumption of CPR resources.

Any comment on CPRs would be greatly welcomed, as would information from those involved in wasteland upgrading.

Social stratification: the division of labour

Women's interests and economic activities must be taken more into account if Social Forestry is to be successful. The following are key points:

- Land on which women rely for subsistence gathering should not be lightly converted to other purposes. Change should only be contemplated if benefits foregone will be outweighed by benefits received.
- Women must be involved at the planning stage of Social Forestry projects. Their economy will be much affected, and men are not sufficiently knowledgeable properly to represent their wives' interests.
- If women are to have a strong involvement with project implementation, their time budget needs close scrutiny, and they may need to have help with another task.
- Train women for participation in forestry, and as extensionists. Plan training sessions at the village or, if they must be at a centre, bring several women from each village.
- Schemes for strengthening or creating women's land rights are urgently needed. Bilateral land inheritance is the obvious solution, though it runs quite counter to received wisdom in many cultures.

Social stratification: the poor, weak and landless

India is experimenting with allotting tracts of government wasteland to poor families for tree plantation. The families will get all the usufruct, in return for establishing and managing the trees. Such a scheme can be environmentally as well as socially attractive. However, there remain queries. Is the land really available for this purpose? How will poor families survive while they wait for the trees to mature? Will they be allowed to grow food on the land as well? Must they grow trees which do not allow mixed land-use?

There is a great need for further case history material which addresses schemes and contracts for the landless. Schemes which give poor people employment on environmental protection and improvement schemes are better than nothing, but ideally they need some tenure rights too.

The destitute and the incapacitated are a category who need particular help. For many, it is no longer possible to beg fuelwood from the rich, or from relatives. State or charitable provision are possible solutions; Church,
mosque or temple woodlots for destitute parishioners perhaps even better ones. The efficiency schools display in tree planting could perhaps be harnessed for the benefit of the poor.

The legal and human rights dimensions of Social Forestry, including the rights of forest dwellers, can be tackled with network help.

Village institutions for tree growing

Many lessons have been learned in this area in the last few years. Strip planting is difficult and expensive; private investment forestry is exceedingly popular, especially with absentee landlords; village woodlots only work in rare circumstances, and have all the disadvantages of other Common Property Resources caught up in rapid social change.

If villagers are to have access to their own fuelwood in perpetuity (45 trees per person, or 300-400 for a household is the common estimate), not to mention other needs, other ways must be found of growing them. There is still a lot of room for new thinking here, for not all individuals have the land available for trees.

The Social Contract

The ways for foresters and villagers to work successfully together are increasingly well understood in academic and agency circles, and in the higher echelons of forestry services. The need is for socially appropriate technical solutions: the technical cannot work without social consent. Gradually, too, as foresters trust village competence more, they can devolve some activities such as nursery activities to them.
The main need in this area now is for newer working styles to percolate down to more lowly forest employees, or for the recruitment of a new cadre if the policing approach is too entrenched among older employees.

Methods

- Methods of collecting social information necessary to projects must be devised in such a way that junior forestry officials can carry them out.
- More research is needed, or more information gathered at least, on the most successful nursery systems for Social Forestry.
- Much more research and trial of villager preferred tree-species is required (see tree-species section). The network would be keen to publish accounts of the analysis of trees in social context.
- Linked to the previous point, we are interested in accounts of agroforestry practices devised by rural populations themselves. While we do not want to duplicate ICRAF's work, we can properly address social aspects of agroforestry systems. A particularly interesting topic, which has human rights implications as well as Social Forestry interest, is the transformation of shifting cultivators into agroforesters, with accompanying strengthened land tenure rights.
- For foresters to become involved in agroforestry, they will have to redefine the trees they are interested in, work with agricultural extensionists and keep in close touch with research initiatives in their country or elsewhere. Logically, it has the potential to become the most important Social Forestry activity.
Institutional arrangements

- How are inter-ministerial links best to be forged and maintained?
- Cooperation between government departments and NGOs at local level should be planned. Reports of such interaction already in existence would be very welcome.
- Where extension is not working properly, a review of extensionists' tasks needs to be carried out. Is there too much desk work? Is supervision poor? Are there transport problems and what is needed to overcome them? Until the existing system is streamlined, there is little future in adding forestry tasks to the extensionist's workload.

However, as soon as agriculture and forestry can be taught to villagers by the same cadre, or by cooperating parties, the better. Agroforestry will follow as villagers and extensionists address the problems.

- Staff retraining and reorientation for Social Forestry work is needed by forestry employees in most places.
- In order to facilitate this, and for consultation in the future, social scientists with land tenure and forestry expertise ought to be employed in forestry training institutions and ideally in ministries involved in Social Forestry.
- It would be useful to hear others' experiences of successful strategies for the rapid teaching of Social Forestry to villagers.
- Cases of monitoring and evaluation carried out throughout a project's duration and after, together with results, would be of great interest to many networkers.
CONCLUSION

It is hoped that most readers will find something of interest here. But it has been written with the intention of provoking response, and the writer hopes very much that a large and diverse mailbag will come her way as a result of it. The current Social Forestry literature is already out of date, for new experiments are being conducted all the time. You, we hope, can supply the lack.

Note:
This review is very long, and would have been longer if I had referenced every statement properly. In the interests of setting the ball rolling, and encouraging debate, I have left such statements to stand alone. Several networkers will see their ideas or research glimmering through here and there. To them, my grateful acknowledgements. I hope they will feel that their work is being aired in a good cause.