

SOCIAL FORESTRY NETWORK

**SOCIAL EQUITY AND SOCIAL FORESTRY IN JAVA:
PRELIMINARY FINDINGS FROM FOUR CASE STUDIES**

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This paper draws on a longer report written by the authors for the Centre for Development Studies at Bogor Agricultural University. Readers wishing to obtain a copy of that report should write to: Centre for Development Studies (PSP - IPB), Jalan Widuri 5, Bogor, Indonesia.

Please note that we have chosen not to identify the names and specific locations of the four sites studied. Instead, we have identified the sites by letters (A, B, C, and D) and the provinces where these sites are located.

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ABSTRACT

Case studies at four social forestry sites in Java illustrate a range of equity problems that require further investigation.

Analysis of participant selection at the sites shows that a 1986 mandate to prioritize involvement of the landless and the land-poor was not implemented. Reasons for non-implementation include: lack of need to enforce the mandate due to lack of competition for land at the site; overriding of the mandate by longstanding performance-based participant selection criteria; and ignoring of the mandate.

Overall, there is a lack of rigour in implementing the mandate. Though forestry field personnel showed some awareness of the mandate, there were insufficient training or guidelines for its implementation and inadequate systems of accountability to assure compliance. Improvements in training, guidelines, and systems of accountability are proposed as a means to remedy these deficiencies.

Analysis of plot distribution among project participants suggests the utility of the lottery system, even in cases where it appears unnecessary.

I. RESEARCH OVERVIEW

1. Why research social equity in connection with social forestry?

In recent years, there has been a growing recognition among development thinkers of the need to consider social equity in connection with sustainable development planning. At the heart of this change is an understanding that poverty is one key cause of environmental destruction, and that in order to make significant progress toward environmental stability and sustainability, standards of living must be raised for those in the bottom strata of society.¹

The development philosophy just described applies with special force in the context of watershed and forest protection and attempts to increase forest production in developing countries. It is known that a substantial fraction of forest destruction in developing countries is caused by small farmers and shifting cultivators seeking new land for farming (Allen & Barnes, 1985).² Other forms of forest damage that may involve the rural poor include the gathering of fodder and wood for fuel at unsustainable rates, burning forests for the purpose of creating grazing land, and the pilferage of timber for sale on the market. High rates of rural population growth and the lack of employment in both rural and urban areas are also contributing factors to the process of deforestation. Perhaps most importantly, forest areas in developing countries are often de facto open access resource areas, and individual resource users have no incentive to exploit the resource in a sustainable manner.³

Rural development projects aimed at increasing employment and the social wage can help alleviate these forms of deforestation. To the extent that substitute income sources are found and living standards are raised, reliance on destructive forest uses by the rural poor can be minimized. Also, if forest resource users are given limited rights to forest products and involved in forest management decision making, they will have incentives to help protect the forest and manage it for sustainable production.

Social Forestry is one among a number of policy measures in Indonesia which embraces poverty alleviation as a means to environmental protection. Social forestry is designed to promote forest development and watershed protection on state forest lands by raising social welfare in surrounding villages. In the Java Social Forestry Programme,⁴ initiated in 1986, the increase in welfare is to be achieved

¹ Among the notable contributions to this area of thought are Leonard *et al.* (1989), Durning (1989), Blaikie and Brookfield (1987), and Blaikie (1985).

² Of course, there are other agents of forest destruction, including timber companies. The role of the rural poor in forest destruction is highlighted in this report because of its special relevance to the research.

³ See the literature on CPR management. A notable recent contribution is Bromley and Cernea (1989).

⁴ Aside from the Social Forestry Programme discussed in this paper - that is to say the 'Perhutanan Sosial' programme initiated jointly by Indonesia's State Forest Corporation and the Ford Foundation in 1986 - there are other programmes in Indonesia which can be classified under the term 'Social Forestry'. For more information, see Junus Kartasubrata (1988), 'Review of Community Forestry Programmes in Indonesia', Bogor Agricultural University, Bogor, Indonesia.

by increasing the total productivity of currently degraded forest lands through reforestation, as well as increasing the share of forest resources allocated to local communities and the length of entitlement to those resources. Other key goals of the Java Social Forestry Programme are to alleviate longstanding conflicts over control of forest resources between forestry officials and forest area communities, and to serve as a means of protecting the timber revenue base of Indonesia's State Forest Corporation (SFC).⁵ The Java Social Forestry Programme is being implemented throughout the island of Java, where the SFC has jurisdiction over the management of production forest lands. In recent decades, these forest areas have become increasingly degraded, to a large part due to the kinds of socio-economic pressures described above. Java amounts to only 6 percent of the total surface area of Indonesia but is home to 60% of its population -that is, more than 100 million people. At an average of 788 people per square kilometre, Java has one of the highest population densities of any place in the world. Of Java's 13.2 million hectares, 22% are classified as 'permanent forest'.

Social Forestry in Java is carried out according to the following basic guidelines. A group of farmers is given usufruct rights to an area which they then plant with reforestation trees. The farmers are allowed to plant agricultural crops (both annual and perennial) between rows of reforestation trees with the agreement that they will nurture and protect the main tree/timber species. The SFC retains full ownership of these trees. The project participants must form into a Forest Farmer Group (FFG). Approximately monthly meetings of the FFG facilitate extension services and are designed to promote 'bottom up' planning and autonomous direction of the project by the members of the FFG.⁶

Usufruct rights are subject to renewal on a year by year basis. It is assumed that as the tree canopy closes and shades out agricultural crops, participants will either derive incomes from shade tolerant crops grown in the understorey or from horticultural crops that make up part of the canopy with the main species, or they will move to a new forest farming site if it is available. The roughly 0.25 hectare plot for each participant household is intended to provide a complementary income -that is, the plot is meant to be large enough to provide a substantial improvement in household income, but not so large as to create a high level of dependence on the project.⁷

Because the social forestry programme was in part justified as a poverty alleviation strategy, the SFC proposed guidelines in 1986 aimed at prioritizing the involvement of the landless and the land-poor in Social Forestry projects. In 1986, a 'letter of instruction' was sent to Forest District offices urging that landless and land-poor farmers be given priority access to social forestry sites. The SFC's Guide to the Implementation of Social Forestry (1988:7) states that 'candidate members from the nearby forest village will be prioritized according to the following criteria: low level of income, insufficient farmland, landlessness, ability to work in the forest, possession of special skills, and other criteria based on agreement'.

With this mandate written into its guidelines, the Java Social Forestry Programme is, at least on paper, an example of equity-minded sustainable development planning. It remains to be known, however, how well

⁵ The State Forest Corporation of Indonesia (Perum Perhutani) is a semi-autonomous, parastatal sub-division of Indonesia's Ministry of forestry. It is responsible for the management of most production and protection forest lands in Java. The Corporation derives its income from the harvesting, processing, and selling of forest resources from state lands.

⁶ The FFG is also intended as a forum for problem-solving and as a vehicle for the creation of savings and loan funds for participants.

⁷ Plot size varies considerably according to the quality of soil in a given project and to the size of the family labour force working the plot.

this mandate is being implemented, and also in what way the social status of project participants is related to fulfilment of the multiple goals of the project.

Some problems include structural or institutional obstacles to the participation of the poor. The poorest farmers sometimes depend on daily wage labour for their livelihood and thus cannot expend the time required to participate in social forestry (Bratamihardja, 1989:7). In some cases, poor farmers are not able to provide the required inputs, especially the initial labour involved in site preparation. In other cases, participation by better off farmers has impeded participation by poorer farmers. For example, research at tumpang sari projects (Peluso, 1986:32-33) showed that, in many cases, better off farmers could acquire preferred plots through economic or political power in the village, close relations with foresters, or through pay-offs.⁸ In some cases, better off farmers bought access to reforestation plots from poorer farmers.

Perhaps the most important obstacle is the orientation of forestry field personnel. Many are still not conscious of the reasons for prioritizing the poor nor of the means for doing so. Some hold the view that the poorest rural inhabitants, as a general rule, are either incapable of or unwilling to be responsible participants at social forestry project sites.⁹

2. Objective of the research project

One of the two central questions of the research project is: How does the socio-economic status of social forestry project participants compare with the status of non-participants in the vicinity of the four sites being researched?¹⁰

In answering this question, it can be known to what extent the poor have been given priority access to forest land. A key adjunct question is: How was land in the project distributed? The equity outcome is determined not just by who is chosen, but how the land available for reforestation is divided.

⁸ In common usage, 'tumpang sari' refers to an agroforestry reforestation scheme which was established prior to social forestry in Java. At 'tumpang sari' projects, usufruct rights are from two to four years and participants work independently rather than as part of a Forest Farmer Group. In the original, strict meaning, 'tumpang sari' is a forest land use technology and not a forest management programme. 'Tumpang sari' technology is known as 'taungya' in other countries. The Java Social Forestry Programme incorporates a modern version of this technology called 'integrated tumpang sari'. For information on the various versions of 'tumpang sari' used in Java since 1883, see Junus Kartasubrata (1989), "Agroforestry Systems and Technologies in Indonesia", paper presented at the Seminar on Agricultural Change and Development in Southeast Asia, Nov. 20-23, Jakarta, Indonesia.

⁹ Personal communication with Suwarno, coordinator of Central Java Social Forestry Programme, August 25, 1989.

¹⁰ The second central question of the research project is: How does the variable socio-economic status of participants relate to the fulfilment of project goals -among them, reforestation, reduction of environmental degradation, raising of living standards, and alleviation of tension between the SFC and villages near state forest areas? This report examines the first question, but not the second because much of the data related to the second question has not yet been collected or processed. Given the restricted scope of this report, the discussion on methodology, which follows, will concern itself only with the first research question.

3. Methodology

a. Site Selection

Four sites were selected to serve as individual case studies and to serve as a basis for comparison among sites. The sites were chosen according to certain contrasting features, on the assumption that this would provide insights on the key questions being investigated.

Two sites were chosen because they had relatively better soils (teak location B and damar location D) and two were chosen because they had relatively poorer soils for agricultural purposes (teak location C and damar location A).¹¹ It was assumed that the richer soil sites would attract both poor and non-poor farmers alike, whereas the poor soil sites would attract mainly poor farmers.

For purposes of having as reliable a basis of comparison as possible, it was judged important that all projects be started in the same year. All of the chosen sites were started in 1987, the first year of programme expansion beyond the original 13 pilot project sites. It was deemed important that the sites should not be more recent than 1987 so that there would be time for the projects to mature and have their strengths and limitations revealed at the time of the research.

It is not assumed that the four sites researched are a representative sample of all social forestry sites in Java. This is because four sites are too few to represent the more than three hundred sites that currently exist. Moreover, a rather large sample would be necessary to represent social forestry sites in Java because there is so much variability among sites. The four sites chosen serve merely as illustrative case studies.

b. Target Population

Because it was not possible for us to gather data on all relevant households in all relevant villages in the area of each project site, we established two levels of concentration. 'Area I' is the village sub-section, village, or villages closest to the project site, and 'Area II' is the village sub-section, village, or villages furthest from the project site. In this research, we devoted most of our attention to 'Area I'.¹²

¹¹ The two poor soil sites (A & C) are not equivalent to each other in soil quality. Likewise the two good soil sites (B & D) are not equivalent to each other in terms of soil quality. On an absolute scale of soil quality for agricultural crops, the case study sites might be classified roughly as follows: Location A - poor-fair; Location B - fair-good; Location C - poor; Location D -excellent. Two teak and two non-teak sites were chosen on the assumption that this might reveal a contrast in the amount and quality of extension services between teak and non-teak sites. Teak is the source of more than 90% of the SFC's income. This assumption was not borne out.

¹² In 'Area I', all households were interviewed with a census and all participant households were interviewed with a questionnaire; a representative sub-sample of non-participant households in 'Area I' was also interviewed with a questionnaire. In 'Area II', our aim was to interview with a census and questionnaire a sub-sample of participant and non-participant households. The representativeness of the samples in 'Area B' varied greatly among sites because of time constraints and unique local conditions.

II. CASE STUDY FINDINGS

1. Location A in West Java

a. Site History and Characteristics

A social forestry pilot project was established at location A in 1986 on a 25 hectare damar site. In 1987, an additional 35 hectare damar site was established nearby. The second, 1987 site is the subject of our research.

Though there have been tumpang sari sites in the area since the 1960s, dependence on the forest for household income is rather low in comparison to the other three sites. Social Forestry was introduced not as a means to alleviate tension between the SFC and local villagers, as at many sites.¹³ Rather, Social Forestry was introduced anticipating that the low level of income in the area would eventually lead to pressure on area forests. Most area farmers have less than 0.25 hectares of farmland or no land at all. approximately one quarter of households in 'Area I' depend on income from a nearby tea plantation for their living. Wages at the tea plantation are very low -about 700 rupees per day.¹⁴

c. Distribution of Plots

The aim in the distribution of plots was for households to define the boundaries of a plot according to the size of their family labour force. There were problems resulting from the fact that this plot distribution system was conducted on a first-come, first-served basis. Those who came first tended to get the largest and most fertile plots while those who arrived last tended to get the least fertile plots and sometimes got plots that were smaller than their family labour force.

Among those who arrived late were several people who decided not to work the plots that were left to them because the land was judged to be inadequate. Among respondents who complained that the process of plot distribution was unjust, most were land-poor and landless farmers.

¹³ At Location A, there has been no serious conflict between the SFC and the community. There has been no unauthorized occupancy of forest land and damage to the forest has been relatively minor.

¹⁴ Seven hundred rupees is equivalent to US\$ 0.38 at the current exchange rate.

2. Location B in Central Java

a. Site History and Characteristics

A Social Forestry pilot project was established at Location B in 1986 on a 15 hectare teak site. In 1987, an additional 25 hectare teak site was established nearby. The second, 1987 site is the subject of our research.

The vast majority of households in the area of Location B rely on agriculture for a living. Most of these households are involved in forest farming, whether at a tumpang sari project or in a Social Forestry project. The relatively high dependence on forest land in the area results from the increasing need for agricultural land in combination with high population pressure.

Tumpang sari was introduced to the area in the 1960s as a means to alleviate uncontrolled tree felling and wood gathering. Wood was being gathered as a source of supplementary household income. From the late 1970s through to 1983, the SFC did not establish any new tumpang sari sites in the area of Location B. In 1983, the SFC resumed opening forest land for tumpang sari projects because of excessive wood gathering, an increase of wood theft and forest fires, and the failure of labour-based community reforestation projects (cemplongan).¹⁵

Social Forestry was introduced in the area of Location B in response to continuing appeals for additional forest farmland. It was felt that Social Forestry could help alleviate the forest farmland shortage by providing an extended period of forest farming in comparison with tumpang sari.

b. Selection of Participants

The selection of participants at the 1987 expansion site is closely related to the selection of participants at the 1986 pilot site. This is because - owing to the small size of plots at the 1986 site - participants in the 1986 site were offered priority access to land at the 1987 site. 56 of the 66 participants at the pilot site acquired land at the 1987 site.

The selection of participants for the 1986 pilot project must be discussed because it represents the original history of the selection of participants at the 1987 site. The 1986 pilot project site was opened as a tumpang sari site prior to its designation as a Social Forestry pilot project. As there was no equity mandate governing participant selection at tumpang sari sites, a significant number of farmers entered who neither were landless nor land-poor. Many of these farmers then became participants at the 1987 site.

With land left over after participants of the 1986 site had selected parcels at the 1987 site, 16 new participants were added. The new participants were chosen by the heads of the FFGs and an SFC

¹⁵ Cemplongan is a system of reforestation using hired daily-wage labour. The labour is used for planting and maintaining reforestation trees. There is no farming between rows of maintree/timber trees.

forester, on the basis of an agreement between the project membership and the SFC. Generally speaking, those who were chosen as participants were friends and neighbours of the heads of the three FFGs. Though most of the 16 were in fact poor, this might only be an incidental outcome of the selection process.

There was some displeasure at the way the additional 16 participants in the 1987 site were chosen. This was because there were some people who had tried to apply to enter the project, but were told that only participants of the 1986 project would be admitted as participants in the 1987 project.

c. Plot Distribution

For the most part, plots at the 1987 site were allocated through a lottery system. There are several people who obtained plots in ways other than through the lottery system. These people are the heads of the FFGs, the SFC forester associated with the project, the village chief, and several of the additional participants who joined because there was unclaimed land.

The heads of the FFGs, the SFC forester associated with the project, and the village chief were allowed to choose their own plots before the lottery was carried out. In the case of the heads of the FFGs and the SFC forester, this functioned as compensation for their work in the service of the project. The plots received by additional participants were allocated directly by the heads of the FFGs.

There were no reported problems with this process of plot allocation. All participants interviewed stated they were satisfied with the process as conducted. Each participant was able to get a plot with an average size of 0.25 hectare. Exceptions were the heads of the FFGs and the SFC forester, whose plots were approximately 0.40 hectare, and the additional participants, whose plots were approximately 0.125 hectare.

3. Location C in Central Java

a. Site History and Characteristics

A teak social forestry site was established at Location C in 1987 as a means to address problems of teak theft, excessive wood gathering, uncontrolled grazing, and failed reforestation efforts by other means. Trees planted through the cemplongan and tumpang sari systems had a relatively low rate of survival. Through social forestry it was hoped that the incomes of participant households could be raised and that cut and carry fodder could be grown at the site in order to limit uncontrolled grazing.

Growth rates of the fodder crop (*Setaria* grass) at the site have been disappointing, but the other goals of the project are being met. In spite of variable soil fertility among the plots, there has been, on the whole, a rise in household income for participants. The teak reforestation trees are growing well in comparison with survival rates at nearby tumpang sari sites,¹⁶ and rates of teak theft in the area have declined significantly. SFC foresters believe that the drop in teak theft is a result of several factors, among them: the success of the social forestry project in raising household incomes and overcoming past tensions between villagers and the SFC; the inclusion of people from the community in the forest work force; well-organized night patrols; and a working relationship between the SFC and the village chiefs and police.

In the area of Location C, agriculture is the primary source of income. Many area residents supplement relatively low yields on poor soil with part-time or seasonal labour. Among the more important sources of non-agricultural income are labour in the areas of oil drilling, construction, and harvest processing, and petty commerce.

b. Selection of Participants

Participants in the Social Forestry project were selected in a two-stage process. First, a decision was made that past participants in a tumpang sari project that had once existed on the same tract of land would be given priority to become participants in the new Social Forestry project. 47 participants entered the project through this offer.

Second, it was decided that those who had had plots larger than 1.0 hectare in the tumpang sari project would have their plot reduced in size in the Social Forestry project. This freed land at the site which was then made available to 11 additional participants.

As demand for land in the project was not excessive, there were no stipulations as to who could or could not become a participant in the project. All interested parties were admitted, regardless of their socio-economic status.

There were only 6 land-poor (less than 0.25 hectare of owned land) and 2 landless households in Area I that were not participants in the Social Forestry project. Three of the land-poor households had access to tumpang sari land and three did not. One of the landless households had access to tumpang sari land and the other did not. These households were interviewed, among other reasons to know why they had not sought entry into the project. The respondents said that they did not seek entry because their household needs were already met, either from tumpang sari land, their own

¹⁶ There is wider spacing between teak trees at social forestry sites (6 x 1 metres) than at tumpang sari sites (3 x 1 metres). With the wider spacing at social forestry sites, the teak canopy does not close as fast and participants are able to obtain better agricultural crop yields over a longer period of time. Because they can obtain a better income in Social Forestry, participants are more likely to cooperate in SFC-mandated tree maintenance tasks.

land, or from trade.

c. Distribution of Plots

Participants who had worked the land before, when it was a tumpang sari site, were free to choose their plots and establish boundaries among themselves. SFC foresters merely measured the plots once they had been established and marked the boundaries on a site map. The plots of additional participants were designated through a formal process overseen by SFC foresters. These additional participants later shifted boundary locations among themselves in order to adjust the area of their plot to the size of the family labour force.

These methods of plot distribution caused no apparent problems among participants. However, there was a tendency for those who arrived first to get the best plots.

4. Location D in East Java

a. Site History and Characteristics

The damar social forestry site at Location D is in a mountainous, rich-soil area of East Java. In the decades prior to the introduction of tumpang sari in this area, population pressure and scarcity of agricultural land led to increased reliance on the forest as a source of income. People sold furniture made from local timber, timber, firewood, bamboo, and medicinal herbs. Over-exploitation of the area forests led to conflict with the SFC.

Tension with the SFC diminished after the introduction of the tumpang sari system in the 1970s. The income of community members improved somewhat and there was even an increased awareness toward the environment. This was all the more so, in the beginning of the 1980s, when the introduction and development of a local dairy cattle industry raised incomes.

Production on tumpang sari lands and intensification of the cattle industry were complementary sources of income. It was evident that between the two, income needs were being fulfilled because there was no need for additional forest clearings for tumpang sari sites until 1986. However, by 1986, some people in the community were selling off their cattle to meet their consumption needs.

The social forestry site at Location D was established in 1987. This was a time when over-exploitation of the forest was resulting in environmentally unstable conditions. The low socio-

economic status of the community near the forest had led once again to excessive fuelwood gathering and wood theft. The Social Forestry Programme was introduced in an effort to arrest this environmental degradation, and in an effort to increase the success rate of reforestation and increase the real incomes of area farmers.

b. Selection of Participants

At the time before the project was begun, the forest ranger announced availability of land at the site via forest overseers and several appointed community members.¹⁷ The word was spread through meetings and house to house visits. The overseers and appointed community members were designated as the pemrakarsa, that is, the group of individuals responsible for selecting participants for the project.

Participant selection was carried out in two ways. Some people declared their interest to the pemrakarsa in order to be registered as candidates for selection, and others were approached individually by him through house visits.

There were two criteria in the selection of participants. The first was the applicant's ability to pay an illegal rental fee requested by the pemrakarsa.¹⁸ The second was the applicant's willingness to plant and care for reforestation trees. This second criterion was evaluated by the pemrakarsa on the basis of the performance of the candidates in past tumpang sari projects. The closeness of the relationship of the applicant to the pemrakarsa also played a role in the selection process.

The methods and requirements in the selection of participants for the Social Forestry project at Location D were not different from those applied in the selection of participants for tumpang sari projects in the area. At the Social Forestry project, 60% got plots through rental payment, and 40% got plots without paying the rental fee.

c. Distribution of Plots

The distribution of plots was carried out by the pemrakarsa based on the participants' ability to pay. Those participants who paid a higher rental fee got a larger plot in a more favourable location at the site. On the other hand, those who paid a lower fee or did not pay at all got a plot of lesser quality.

¹⁷ The forest ranger (mantri) is responsible for a range of forest management activities, including reforestation and law enforcement. The forest ranger supervises the work of forest overseers (mandor) in his/her district.

¹⁸ Collection of rental fees for use of land by participants in Social Forestry and tumpang sari projects is strictly forbidden by the SFC.

There are thus three levels of membership resulting from this method of plot distribution:

- 1) Participants who paid a high fee (100,000 rupees) got a 0.25 hectare plot and a better location at the site.
- 2) Participants who paid a low fee (between 30,000 and 50,000 rupees) got a 0.125 hectare plot. The quality of these plots varied.¹⁹
- 3) Participants who did not pay a rental fee got a 0.125 hectare plot at an unfavourable location. Exceptions were FFG managers, who did not pay the rental fee and who got plots ranging from 0.20 to 0.25 hectares.

Most survey respondents viewed the processes of participant selection and plot distribution as bad, because they did not take social equity into account.

¹⁹ One hundred thousand rupees is equivalent to US\$ 55.55 and 30,000 to 50,000 rupees is US\$ 16.66 to US\$ 27.77 at the current rate of exchange.

III. ANALYSIS OF FINDINGS

1. Location A in West Java

In order to carry out a meaningful analysis of equity in participant selection, we must establish whether there are participants of adequate means occupying plots that might have been worked by non-participants who are poor and who sought entry into the project. Our analysis of this kind shows the following result.

- i) At one of the sites (Location C) the process of participant selection was equitable in spite of the fact that farmers of adequate means were admitted. The number of farmers seeking membership in the project was in balance with the amount of land being offered at the site. As such, all applicants could be admitted, regardless of socio-economic status. There was no need to prioritize the poor.

Location C is one of the sites in the study with comparatively poor soil for agricultural purposes. From this we make the tentative observation that at relatively poor soil sites, interest in farming at the site may be at such a low level that the equity mandate need not be applied.²⁰

- ii) At Location A, there are some farmers of adequate means in the project, whereas there are some poor farmers in the community who had been interested to join the project but were not able to, due to deficiencies in the process of plot distribution.

Plot distribution at the site was conducted on a first-come, first-served basis. The process of plot distribution thus functioned as a de facto process of participant selection. Several landless and land-poor farmers were unable to farm at the site because they were among the last to arrive and received plots that were judged to be inadequate. This outcome illustrates the importance of making a sound decision as to whether or not equity criteria should be applied in the process of participant selection.

- iii) At Location B and D, there are some farmers of adequate means in the project, whereas there are poor farmers in the community who had been interested in joining the project but were not accepted as participants.²¹

²⁰ This observation is tentative because soil quality within a given social forestry project is not the only factor influencing farmers' interest in joining that project. It is known, for instance, that at some poor soil sites, there are many applicants because soil quality in the community outside the site is even poorer than within the site.

²¹ As the data has not yet been analyzed, we cannot yet supply the number of farmers in each of these categories.

At Location B, the equity mandate was not observed, largely because of the carry-over of pre-existing participant selection criteria. With the promise of new forest land having been made to participants in the 1986 site, before the equity mandate became policy, the prior 'performance' criterion for entry into the project took precedence over the equity criterion. Sixteen of the 1987 site participants were to have been admitted on the basis of equity criteria, but they were admitted largely on the basis of their relationships to people responsible for selecting new participants.

At Location D, illegal rental of reforestation plots at the social forestry site prevented the participation of poor farmers who would have liked to join. Rather than seek participants according to their socio-economic status, those responsible for participant selection prioritized farmers who were most able to pay rent.

Although SFC field personnel at each site showed some awareness of the equity mandate, there was no evident commitment to its implementation, nor sufficient training and guidelines for those responsible for its implementation. Nor did there appear to be any widespread knowledge in the community that the poor were to have priority.

In order to remedy these deficiencies, it is recommended that the following steps be taken:

I. Devise a system of participant selection that includes:

- a. systematic and widespread notification of the availability of forest land and of the intent to prioritize the poor in participant selection, if necessary;²²
- b. formal registration of people applying to participate;²³
- c. guidelines for deciding whether the equity mandate should be applied, based on the number of applicants and a formal survey of the land available at the site;²⁴
- d. public notification of whether participant selection will be based on equity criteria, or not;²⁵
- e. participant selection guidelines which assist in determining who are the poor and which instruct forestry field personnel how to combine equity criteria and performance criteria.²⁶

²² At Location A, a number of respondents complained that they would have applied to participate but found out late about the availability of land at the site.

²³ At most of the case study sites, the practice is to make a verbal declaration to SFC field personnel. There is the risk of error if participant selection depends on memory or informal record keeping.

²⁴ The experience at Location A demonstrates that this practice may be necessary even at sites with relatively poor soil.

²⁵ People at Location B objected to the process of selection of the 16 additional participants not because equity criteria were not applied, but rather because they thought only participants at the 1986 site would be allowed to participate. Public awareness of the equity mandate would assist the goal of accountability.

²⁶ Performance in the care of reforestation trees at past project sites is being retained as a criterion, but is secondary to the equity criterion.

- II. Have training sessions for SFC personnel on the system for participant selection, including consciousness-raising on reasons for prioritizing the poor.
- III. Improve systems of oversight and accountability with the aim of ensuring that illegal rental of Social Forestry land and favouritism do not take place in the process of participant selection.

In comparing participant and non-participant populations at each site, we avoided basing our analyses on landownership data alone. Landownership data is not always a reliable indicator of wealth and it is not necessarily a reliable indicator of success or failure in fulfilling the equity mandate. For example, a disproportionately high percentage of landless and land-poor at a site does not mean that the high percentage results from an attempt to recruit the landless and the land-poor.

At Location C, there was no effort to recruit the landless and the land-poor, and yet at that site, there is a much higher percentage of landless and land-poor among participants than among non-participants. This higher percentage reflects the dependence of the landless and land-poor on access to forest land.²⁷ At Location C, the high percentage of those with less than 0.25 hectare of land in the project is an indicator of high dependence of the poor on forest land in that area.

2. Distribution of Plots

There was variation among the sites in the method of distributing reforestation plots to participant households. In summary:

- (1) At Location B, plots were allocated through a lottery system.
- (2) At Location C, most participants had worked the land in the site previously when it was a tumpang sari site. These participants, generally speaking, worked the same plots that they had worked before. Those participants who had not worked land at the site before were allowed to choose plots from the remaining land on a 'first-come, first-served' basis.
- (3) At Location A, participants chose plots on a 'first-come, first-served' basis.
- (4) At Location D, plots were allocated by decree of foresters responsible for plot distribution, and through the transaction of plot rental. Rental prices varied according to the size and quality of the plot.

²⁷ At the four sites researched, households (both participant and non-participant) which relied on forest land for most of their income were mostly those owning less than one quarter hectare of land or those having no land at all.

At all social forestry sites, there is variation in the attractiveness of plots depending on plot size, distance from the farmer's home, level of exposure to sunlight, soil fertility, the presence or absence of rocks and stones, soil compaction, drainage, and slope. The lottery -the system used at Location B - is often spoken of by forestry officials and farmers as being the best method for assuring fairness in plot allocation.

Participants at Location B expressed satisfaction at having used the lottery system to allocate plots. It may be that at Location A and C, the lottery system was not deemed necessary because of the relatively low quality of the soil in the sites and because of the relative absence of competition for entry into the projects. However, there was dissatisfaction expressed at both sites about the 'first come, first served' method for plot allocation. Perhaps the lottery system could have been used to good advantage at Locations A and C in order to avert tension.

IV. SUMMARY

We found that prioritisation of the poor in participant selection did not occur at any of the four sites researched. This was either because such prioritisation was deemed unnecessary (Locations A and C), because other rules of participant selection were in force (Location B), or because the equity mandate was ignored (primarily at Location D and to a limited extent at Location B).

SFC officials at each site were aware of the equity mandate but in some cases did not appear to be committed to the mandate. In all cases, they had insufficient training or guidelines for implementing the policy. It is recommended that training and guidelines be improved upon to remedy this problem. Adequate systems of oversight and accountability would promote compliance with the equity mandate.

Soil quality apparently played a role in determining the relevance of the equity mandate at each site. At the two sites with comparatively poorer soil (Locations A and C), equity criteria for participant selection were deemed unnecessary because of apparent low interest in joining the project. At the two sites with relatively better soil (Locations B and D), there was abundant interest in joining the project and for that reason, equity criteria for participant selection were necessary.

At Locations A, B, and D, negative consequences resulted from not applying equity criteria in the selection process. We deduced this from the fact that there were relatively well-off participants in the projects who were farming land that might have been farmed by poorer members of the community. (These poorer people had had an interest in joining the project at the time it opened.) In reaching these conclusions, we were mindful of the limitations of relying exclusively on land ownership data.

The lottery is a useful means of assuring fairness in the distribution of plots. It was used only at Location B. If it had been used at the other locations, some disappointments might have been averted and it might have helped assure an equitable distribution of land at the site.

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