

DEVELOPING STRATEGIES FOR SOCIAL FORESTRY: A CONCEPTUAL APPROACH

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Introduction

During the past decade it has been increasingly recognized that in tropical countries professional forester should adjust their role as a “guardians of the forest” to a more people-oriented role, in which proper attention is given to the forest-related needs of the local population living in or near the forests (FAO, 1978; World Bank, 1978). This has resulted in an increasing number of forestry projects that incorporate more active participation of local people in forest establishment and management. Most of these projects aim also at diverting part of the forest products to local people. This changing pattern of forest resources management by incorporation of the needs of local people. This changing pattern of forest resources management by incorporation of the needs of local people and grass-roots level support has been given labels such as forestry for local community development, community forestry, social forestry, extension forestry, and village forestry. It has been stated often that these are synonyms referring to any forest management practices based on the perspective and needs of local populations. With increasing attention being given to such practices, however, it has become clear that several distinct strategies are possible. For operationalizing the concept of social forestry, therefore, it is necessary to understand the different strategies in more detail. This paper presents some conceptual approaches for a better understanding of different strategies for social forestry in tropical countries and the possibilities for their application for one or more specific purposes in a specific region.

Developing Social Forestry Strategies

A strategy can be defined as a careful plan or method that provides the base for effectively implementing a goal. Thus, in a social forestry strategy all essential factors should be identified to ensure its successful implementation under specific societal and ecological conditions (Departments of Forestry Hinkeloord, 1984). The main factors to be considered in developing a social forestry strategy are depicted in Figure 1. These factors will be discussed briefly in connection with the following questions that have to be answered in developing a well-adjusted strategy:

- What are the specific objectives of a certain social forestry program; that is, what are the main outputs aimed for and who should benefit from them?

- ❑ How will the forest and tree resource ownership be arranged and who will supply the necessary inputs for the forest management activities?
- ❑ What is the role of professional foresters in social forestry?
- ❑ How can active participation of local people be ensured; who should participate, in which activities, and in what manner?

Social Forestry and Professional Forestry

Of all factors to be considered in developing social forestry, that most important may well be a proper understanding of the role of professional foresters in such endeavors. Two factors are important in analyzing this role: (1) the often-ambiguous meaning of the word forest, and (2) the distinction between forestry as a professional discipline and as a practical activity.

Confusing elements in discussing forestry are the various meanings of the word forest. On the one hand, it may refer to any vegetation type whose structure and functional processes are dominated by trees. On the other hand, it may be understood as a legal term (i.e., all areas officially designated as forests).

The second point to be recognized is the often-implicit assumption that forest management can only be accomplished by professionally trained people. While in agriculture there has always been a rather clear distinction between agriculture as an activity and agriculture as a professional discipline, this is less the case in forestry. In agriculture it is well accepted that actual production practices for either subsistence or commercial needs are most often carried out by farmers. The task of scientifically trained agricultural professionals is mostly to assist in developing new, more effective, more economic practices and seldom the management of actual agricultural estates. In forestry the distinction between activity and professional discipline is generally not made; it is mostly assumed that forest management can be accomplished only by a professionally trained people. The activities of these professionals normally have been directed toward public forest lands, the management of which was based on central planning and control and on the protection of commercial goods and protective services.

Because the technical ability of professional foresters has been limited to such a specific set of management conditions, the foresters have lacked an awareness of the various interactions between rural population and forests. Mostly, foresters recognized only a destructive influence of farmers on public forests when it resulted in a loss of the ability of these forests to produce commercial products or environmental services. Consequently, the task of foresters became one of counteracting such forest destruction. As indicated already, this led to a situation of professional forestry agencies regarding forests as their specific domain to be guarded against local one and outside

interventions of nonprofessional foresters. Furthermore, the resulting lack of communication with local people resulted in many cases in a neglect for the forest-based needs of these people.

A second result of the equation of forest management activities with the activities of professional services on legally designated and centrally controlled lands has been the assumption that forestry refers to the management of concentrated tree stands on specially designated tracts of land and that no distinction has been made between forest resources and tree resources. This has led not only to a disregard for forest-like vegetation situated outside legally declared forest lands, but also to a disregard for the presence and functions of trees on agricultural lands and the importance of their management by local people.

For a good understanding of the possibilities for social forestry, one should recognize the limited scope of these presuppositions about the role of “classical” forestry. In agriculture, a much wider set of management conditions normally are being taken for granted, either with regard to the technical ability of private farmers, the communal enterprises or public agencies to produce subsistence or commercial goods, or the land ownership conditions. Consequently, in agriculture there is no need for a concept of “social agriculture. As a result of the historic emphasis of professional forestry, however, the concept of “social forestry” helps to emphasize that local people well may be directly involved in the management of forest or tree resources and that more attention should be given to their forest-related needs.

To operationalize the concept of social forestry, it is important to recognize that in forest management, as in other forms of land-use management, it is possible to distinguish two analytically different types of basic strategies-- professional interventions and indigenous adaptive strategies (CF UNESCO, 1978). In addition to the professional interventions of foresters on public lands, in many countries at least some local farmers have been managing forest (or tree) resources successfully for either subsistence or commercial production, especially on private lands. Some of these practices have been in use for a long time, but others have been developed only recently as an adaptation to local shortages of natural forest resources or in response to market forces (Olofson, 1981; Ben Salaam and Van Nao, 1981; Peck, 1984). These tree-farming activities often take the form of agroforestry techniques with multipurpose trees more or less individually scattered over agricultural lands. In areas where such indigenous tree-farming practices exist, there is often no need for professional foresters to take a key executory role in establishing new forests. Instead, their role should be one of learning from such successful local strategies about the relation between trees and the rural population and about the possibility of extending forest management practices from the management of concentrated tree stands on specific sites to the management of scattered trees on more varied and dispersed areas. Professional foresters should support the further development of such indigenous strategies (Molnar, 1981) rather than introduce alien interventions (Wiersum and Veer, 1983).

Thus, in social forestry it often will not be professional foresters who are the key actors in executing tree management activities, but rather the local people in communal or individual actions. The role of professional foresters often will have to be a supportive one rather than an executory one.

This distinction between local people and professional foresters having prime responsibility in the management of tree resources is a basic factor in the development of social forestry strategies. The following definitions may be applied to clarify the basic strategies involved:

Social Forestry refers to all professional forestry activities that aim specifically at the participation of local people in forest management and at the fulfillment of the forest-related needs and aspirations of these people. It is a generic term and may involve the stimulation and development of the following specific activities:

- Participatory forestry relates to forest management activities planned by professional forestry services in which popular participation with the management of centrally controlled forest lands is encouraged, but in which the prime responsibility for management still rests with forestry professionals
- Village forestry relates to the small-scale management of forests and tree resources practiced by nonprofessionally trained people, either on private or public forest lands. In such village forestry professional foresters may have an advisory role but not an executory one. The planning and execution of forest management can be carried out either by private persons or by some forms of cooperative or communal effort
- Communal or community forestry is a form of village forestry in which forest management practices are carried out as a communal effort
- Farmer's forestry relates to a form of village forestry in which the management of tree resources is the responsibility of private farmers

Sometimes the term agroforestry is interpreted as referring to social forestry. This concept should not be defined in a prescriptive way as referring to a management objective, however, but in a descriptive way referring to a special set of management techniques incorporating trees, agriculture, and/or animals.

Objectives of Social Forestry

Primary Objectives

The primary objectives of all forestry activities are to realize a sustained output of one or more of the three major functions of forests--environmental services, production for local community needs, and production of industrial resources (World Bank, 1978). Although these objectives are well accepted, it is sometimes not recognized that the

different functions are not all related to the forest per se, but rather to different attributes of forests. For instance, many environmental functions of forests are related to the entire forest as a well-functioning ecosystem and not just to the trees. But wood as well as fodder and fruit production takes place individual trees, even if they are standing alone. Although many types of tree stands have multipurpose functions, in social forestry it is especially important to recognize that a combination of functions is not possible under all circumstances. Thus, when denuded and impoverished lands are reforested for land amelioration and environmental protection, the production of tree products will often be limited by poor growing conditions. Such sites are often unsuitable for providing a livelihood for private forest farmers.

In identifying the objectives of social forestry, it is not only essential to indicate the outputs aimed for and to relate them to specific forest attributes; specific target groups who are to enjoy the forest outputs also should be identified.

Several studies have indicated that such identifications must be done with considerable care (Hoskins, 1982; Noronha, 1982). Too often, it has been assumed by professional foresters that local populations have equal forest-related needs. In practice, however, there are always diverse and often conflicting needs within rural villages. There are the richer versus poorer, landless versus landholders, herders versus farmers, and women versus men, for example. Consequently, it is important to identify clearly to whom the forestry project should be addressed: general individuals, the community as a whole, or to specific groups.

Societal Objectives:

The identification of target groups for social forestry will not be based only on the specific needs of different rural population segments, but also upon more general societal objectives. In developing social forestry from a societal point of view, not only are the direct outputs of importance, but also the degree to which social forestry can directly or indirectly assist in achieving human objectives such as fulfillment of basic needs, sustained economic growth and equity, employment generation, and self-reliance. Indeed, social forestry has often been claimed as a means to foster rural development and to contribute to such general societal objectives. To substantiate these claims, planners have given much attention to developing communal forestry schemes requiring collective action. Such collective action was often favored as a way to allow democratic participation even of poor, landless people and as a way to distribute benefits equally. In addition, several other assumptions seem to have underlain these communal strategies. Some of those may be based on lingering presuppositions from "classical" forestry--that forests are to be managed as a public resource. More pragmatic assumptions may have included the idea that it would be possible to improve land use on underutilized communal or other common lands, or that communal efforts would allow more efficient management practices and economies of scale in managing small or fragmented private landholdings for commercial production.

Although there have been several successful communal forestry projects, such as the village forestry programs in Korea (Gregersen, 1982) and the panchayat forestry program in Nepal (Pelinck et al., 1984), experience in other projects has indicated several constraints to this strategy (Noronha, 1982; Skutsch, 1983). Several failures were caused by an insufficient understanding of conflicting local needs of different population groups or a misunderstanding about the exact nature of so-called communal resources (Hoskins, 1982; Noronha, 1982). It has now been recognized that farmer's forestry based on individual action is sometimes more successful than communal forestry for fulfilling the primary objectives of forest management (Arnold, 1984). It has also been pointed out, however, that such individual actions may fail to aid significantly certain population groups such as the landless poor (Kirchhofer and Mercer, 1984). These groups even may be adversely affected, especially if the private efforts are directed toward the output of industrial wood resources at the expense of local food production (Shiva et al., 1982). Such negative consequences, however, might not occur if small holder forestry activities are directed toward the production of subsistence products for basic community needs. Or social forestry projects may provide the needy segments of the community with special assistance in obtaining the critical inputs that they lack for private action forestry. The stimulation of private forestry by individual farmers for commercial purposes without any redistribution benefits for the less-well-off population segments should not be considered as social forestry. However, it may be a legitimate form of extension forestry.

Evidently, under several conditions there may be a trade-off between the effective and efficient creation of specifically needed forestry outputs and the achievement of more general socioeconomic development objectives. And different social forestry strategies may contribute to different ideologies in rural development. Care must be taken that such strategies choices are well analyzed and that specific strategies are not based on a restricted and ill-founded assumption as to the nature of forestry.

Inputs for Social Forestry

In organizing a forestry development project four basic inputs have to be considered: land, labor, capital, and technical knowledge. These inputs may take several forms (Table 1) and may be supplied by different parties. Consequently, different forestry development strategies can be characterized by the way in which different parties contribute specific inputs to a project (Palin, 1980).

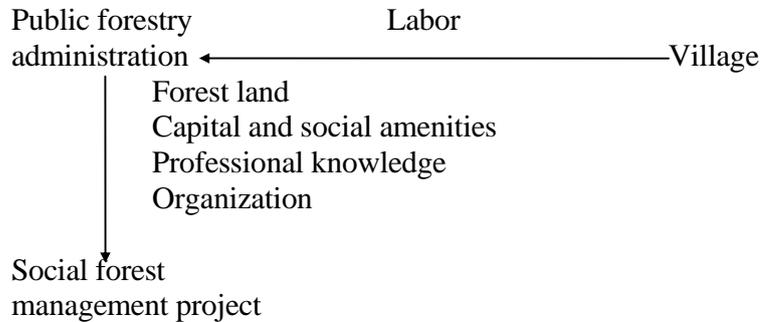
In most social forestry programs some inputs will be supplied by villages (either as a communal or private input) and others by the public forestry administration. Sometimes a third party may act as an intermediary between villagers and professional foresters to help overcome difficulties arising from a lack of mutual confidence. Such agents of change often consist of volunteers or other non-governmental organizations. An example of such approach from India is given by Basu (1984). It may also be possible

that it is not a professional forestry organization that acts as a direct counterpart of villagers in a social forestry project, but rather a local development institution. Palin (1980) has distinguished five different social forestry models highlighting the various roles that a public forestry administration can play in bringing the basic inputs in forestry development programs together. The models include the super management model, the support service model, two partnership models, and an institutional development model. Figure 2 illustrates these and some additional models as a characterization of different social forestry strategies. Because of the importance of distinguishing between professional and indigenous knowledge when developing social forestry strategies, technical knowledge has been differentiated into these two forms in the models.

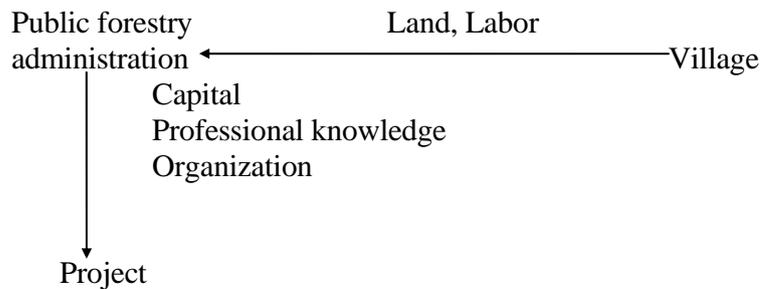
Table 1. Different Forms of Basic Inputs and Organization in Social Forestry Projects

| INPUT | FORM |
|------------------------|---|
| Land | Privately owned Communal State controlled Rented or leased by individuals or communal group |
| Labor | Self-employed or hired Voluntary or paid Skilled or unskilled Full-time or seasonal |
| Capital Finances | Private Loans Subsidies, grants |
| Capital goods | Privately owned Communal State provided |
| Technical knowledge | Indigenous knowledge Professional knowledge |
| Organization | Spontaneous private or communal project Local project stimulated by professional interventions from non-governmental or state institutions Projects directly executed by non-governmental or state institutions |

1. *Participatory forestry on state forest lands (e.g., taungya cultivation, forest villages)*



2. *Social forestry project administered by forest services on communal lands (super management model)*



3. *Forest service as extension agent (support service model)*

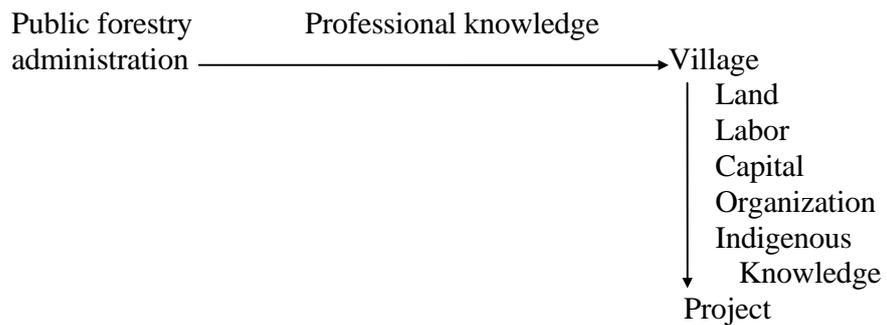
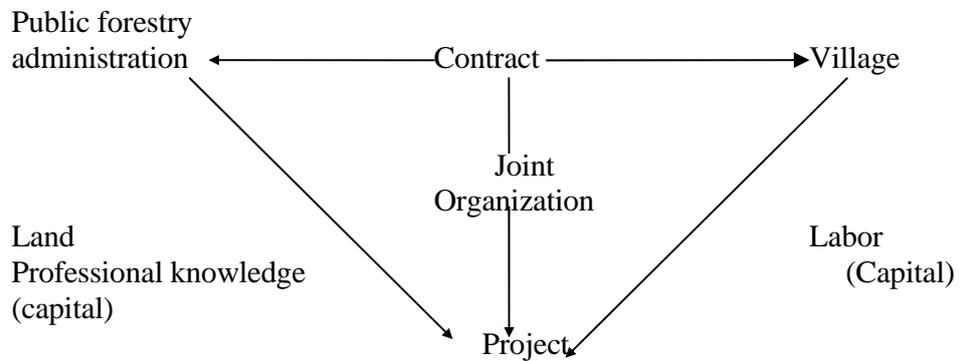
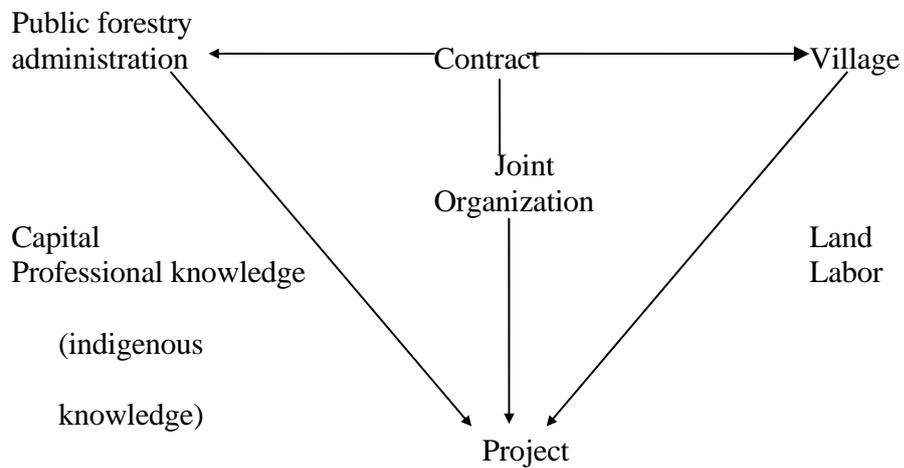


Figure 2. Some organizational models for social forestry projects.
(modified after Palin, 1980)

4. *Provision of public forest land for community forestry (partnership model)*



5. *Community forestry project supported by forest services (partnership model)*



6. *Community forestry project with assistance of intermediary*

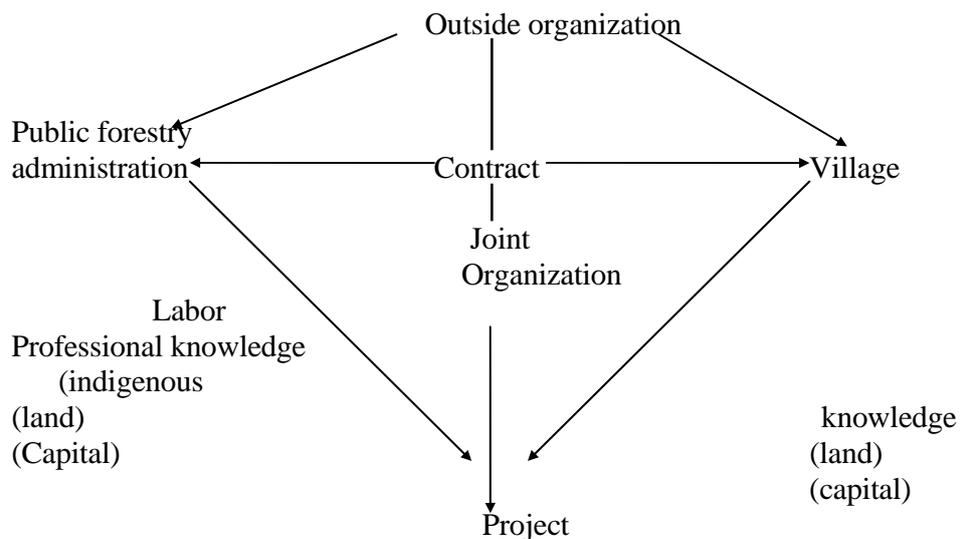
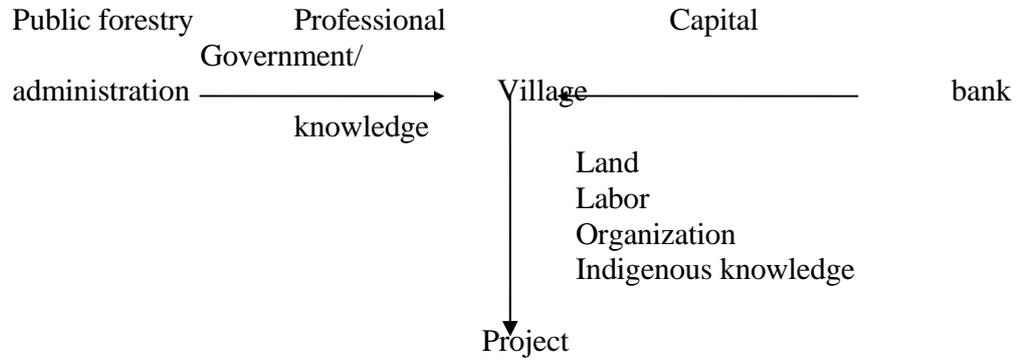
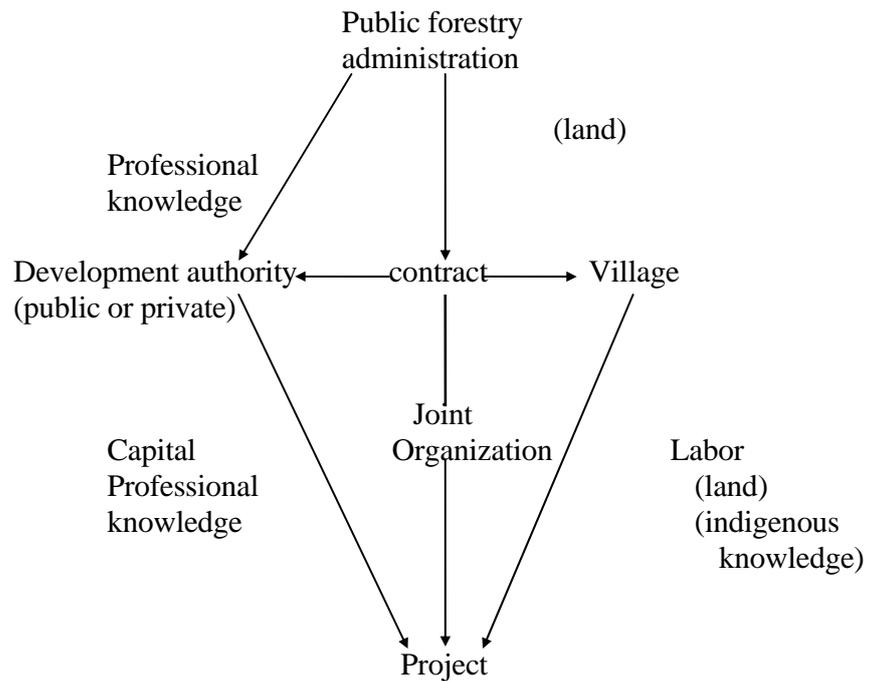


Figure 2. Continued

7. *Financial incentive program for community forestry*



8. *Community development project supported by forest administration (institutional development model)*



Land as an Input in Social Forestry

In addition to the nature of the input of technical knowledge, the nature of the land input is of most importance in deciding the nature of a social forestry strategy. The land tenure factor is closely related to the question of who has the prime responsibility in the execution of forest management activities. In distinguishing various categories of land (see Table 1) care must be taken to recognize the de facto situation rather than just the de jure situation. For example, in several regions so-called communal lands are in fact controlled by individuals, e.g., in proportion to their political or economic power or the size of their animals herds or private landholdings (Cernea, 1981). Also, in many regions local people perceive themselves as having historic rights to legally designated state lands and continue to use these lands accordingly.

A further distinction has to be made between land tenure arrangements and tree tenure arrangements. In many areas, ownership of land does not necessarily coincide with ownership of trees (Noronha,; Weinstok and Vergara, in press). For instance, trees planted in communal lands may be owned by the planter rather than be a common property. In many traditional tenurial systems the planting of trees on common lands may even be taken as a sign of beginning land ownership and bring about a gradual privatization of tenure. In some areas such as local customs have resulted in local people perceiving the social tree planting programs of forest administrators as a means to gain control over common lands.

In contrast, in many social reforestation projects on state forest lands, the trees are still considered to be state owned. In such programs the benefits to local people in addition to wages may take the form of agricultural crops or fodder derived from inter-cropping in the plantation. Gradually, however, there are undertaken pilot projects undertaken to hand state forest lands over to communities or to lease these lands to cooperatives or private persons. Such arrangements allow the cultivator to profit directly from the trees they have planted. Gradually it becomes recognized that if commercial enterprises are trusted with forestry concessions for wood harvesting on state lands, the same trust could as well be extended to local people by providing them with concessions for forest management (Vergara, 1984, pers.comm).

It is clear that several possibilities exist for arranging the ownership of land and trees in social forestry schemes. Table 2 identifies some arrangements that are being applied in some Asian social forestry programs. A clear-cut and well-understood organization of the forest resource ownership, be it land or tree product, is one of the main preconditions for successful social forestry projects (Cernea, 1981; Burley, 1982; Noronha, 1982).

Activities in Social Forestry

A last consideration in developing social forestry strategies is the choice of activities to be included. In forest management several activities can be distinguished in the cycle of

regeneration, maintenance, and harvest. These activities include site and species selection, site and seedling preparation, tree planting, weeding and plant protection, and inter-cropping. In social forestry, the attention of professional foresters may be directed at either some selected activities, or a more comprehensive approach that includes all activities (Barnes et., 1982). In some social forestry programs the tasks of the professional foresters are restricted to campaigns to increase public awareness. In others, they may assist in each activity as seedling distribution, tree planting, forest maintenance, harvesting and distribution, and processing of tree products.

Up till the present, most social forestry projects in tropical countries have been concerned with reforestation activities. In many cases official support in such projects has been restricted to seedling distribution and tree establishment activities. Often the local people were left on their own after planting, without any assistance in management of the plantation for sustained yield of desired products and for possible processing and distribution of the products. Also, not much attention has yet been given to the possibility of extending social forestry schemes to the management of assisting (natural) forests. There is a definite challenge to extend social forestry projects from dealing with tree establishment only to a more comprehensive approach to forest management. The stages of product harvesting and distribution especially deserve much more attention than they have received up to now.

Table 2. Arrangements of Forest-resource Ownership in Asian Social Forestry Projects

| Project | Land Tenure | Tree Ownership |
|---|------------------------------------|------------------------------|
| Pungya cultivation | State lands | State |
| Panchayat village forestry program, Nepal | State lands handed to community | Communal |
| Communal tree farming, Philippines | Individually leased state lands | Private |
| Dendrothermal project, Philippines | State lands leased to cooperatives | Cooperative members |
| Supervised village woodlots, India | Village common lands | Joint village/forest service |
| Self-help village woodlots, India | Village common lands | Communal |
| Small-holder tree farming, Philippines | Private | Private |

As indicated earlier, the assistance of professional foresters in social forestry projects may be either in an executory or a support service role. The roles of farmers in social forestry project activities may also be identified according to different stages of project formulation, planning, implementation, and evaluation. Up to now, the formulation and planning of most social forestry projects have been carried out by professional foresters with popular participation being restricted to implementation only. Several studies have indicated however, that popular participation also should be allowed in project formulation and planning (Hoskins, 1982; Barnes et al., 1982; Noronha, 1982). Active participation is especially valuable in the stage of project design. Such design preparation develops an abstract strategy that will become an operational project by providing elaboration of both the processes and structures needed to overcome ecological and human constraints for locally specific social forestry schemes (Department of Forestry Hinkeloord, 1984). Only with such participation will the needs and aspirations as perceived by local people be properly assessed and incorporated into social forestry projects. If such an approach is taken, it may well become apparent that the local priorities are not directed toward the fulfillment of forestry-related needs, but rather to different aspects of rural life. Indeed, in many cases social forestry projects may be most effective if carried out within the scope of multipurpose rural development project addressing the combined needs of rural people rather than the needs for one specific resource only (Barnes et al., 1982; Kirchhofer and Mercer, 1984).

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