

SOCIO CULTURAL CONSTRAINTS IN WORKING WITH SMALL FARMERS

IN FORESTRY: CASE OF LAND TENURE IN HONDURAS

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## IN FORESTRY: CASE OF LAND TENURE IN HONDURAS

BY J.R. JONES

### INTRODUCTION

The awakening of interest in social forestry has exposed foresters to a new set of problems and the need for new approaches to forestry activities. To a great extent, the growing awareness of the magnitude of environmental problems has made clear the importance of agricultural populations in the dynamics of forests (Eckholm, 1979); local populations have the capacity to destroy or create forests far beyond the capabilities of national or international institutions. More importantly, these same populations need forest products and the employment and income generated from forests. The challenge of social forestry is how to match local needs with technical capabilities of forestry institutions.

A first step in meeting the challenge of social forestry is to identify the special problems of peasant farming as they relate to forestry. Throughout most of its history, forestry has been oriented toward the needs and capabilities of governments and large corporations, and is now faced with a need for a basic reorientation (Westoby, 1978). Forestry for peasant farmers cannot count on high inputs of capital nor on large plantations, and require trees which produce a variety of products in relatively short rotations.

The list of socio-cultural constraints on small farmers in forestry is quite long, and this paper will only focus on one, land tenure, specifically in Honduras. Land tenure is a socio-cultural problem in the most basic sense; the judgement of who has access to what resources and under what conditions is a fundamental value judgement. It involves the perception of the social worth of different social groups, and the evaluation of the national (community) well being. It reflects the social organization of the society through the constellation of forces which form the political and economic determinants for different patterns of land use. The objective of this presentation is not to analyze the socio-cultural bases of land tenure, but rather to consider how land tenure affects the possibilities for social forestry.

## FORESTRY IN HONDURAS

Honduras has the most advanced forestry program in Central America, and one of the most advanced in all Latin America. It is in a sense an experiment, and is chosen as a case because it indicates problems and possibilities all forestry programs will face as they develop.

Forestry is of great economic importance to Honduras. Pine forest covers 1.9 million ha, which represents 51% of the forested area of Honduras and 17% of the surface area of the country (FAO, 1981). The pine forest has been the major focus of Honduran forestry, because of its accessibility and the well developed market for pine. Unfortunately, this resource is rapidly disappearing; in 1976 pine forests were reported to cover 2.5 million ha (Amilcar Cortés, 1976).

In 1974, the Corporación Hondureña de Desarrollo Forestal (CONDEFOR) was created by Decreto Ley 103. This law gave CONDEFOR jurisdiction over production and marketing of all wood, although in practice controls are focussed on pine. This jurisdiction includes control of firewood, charcoal, and all activities which affect forest areas, such as clearing and burning for agricultural production. The law puts all national forests under direct CONDEFOR administration, and gives extensive authority even over privately owned forests. This sweeping legislation was developed to begin with a massive reorganization of forest use along more rational lines and to insure the maintenance of the forest as a productive system, but to some extent these goals are not achieved, and are even impeded by this same legislation.

## LAND TENURE IN HONDURAS

Access to land is a major problem for Honduran campesinos. Only 20% of the rural population owns land, while 40% have no access to land. The rest of the population, either rents or squats on land (table 1). The problem has led to the development of a number of campesino organizations which specialize in land invasions, to force action from the National Land Reform Institute (INA) (Parsons, 1975). Most

Table 1. Number and Percentage of Rural Families in Honduras by Land Tenure, 1974

	Total	Occupied national lands	Single forms of tenure			Mixed Tenure (Own and rent)	Without Land
			Own	Rent	Other		
Number of families	325,106	72,272	65,518	44,054	2,516	10,981	129,765
Percentage	100.0	22.2	20.1	13.5	0.8	3.4	39.9

Source:

CENSO NACIONAL AGROPECUARIO, 1974

important are ANACH (Asociación Nacional de Campesinos Hondureños) and UNC (Unión Nacional de Campesinos).

The 80% of the rural population which has no land creates obvious pressure on the forest resource. While some of these farmers admit to squatting on national land, it is likely that many more occupy or exploit the forest without acknowledging this to census takers. Many of these farmers are migratory, to a greater or lesser extent. The best soils have been occupied by the first settlers in all regions, and the soils in pine forest are generally of poor quality and will not sustain a permanent agriculture. A common pattern is to fell the forest, cultivate a few years and sell the land as cleared pasture. The migratory farmer then moves on to other forested land (Murray, 1981) which will be able to sustain intensive agricultural production for a few more years.

The low number of land-owners also has the effect of encouraging "squatting" by farmers who do own land. COHDEFOR officials are preoccupied with the phenomenon of annexation of national lands contiguous to titled property. Since there are no other owners present to dispute their claim, farmers extend their fences, and claim the additional land as part of their titled parcel. This annexed land is usually part of the national forest.

Even in cases where farmers do not actively occupy forest land, they may utilize it. As in all third world countries, the firewood market presents an economic opportunity for poor, and especially landless, peasants. Nearby pine forests can be easily exploited by local farmers with a minimum risk of COHDEFOR control in most of the country. The production of charcoal is possible in even more remote areas, due to its light weight and ease of transport. A more extensive use of the forest is for grazing, where cattle are simply set loose to forage. While grazing itself causes a minimum of damage to the pine forests, fire is used to maintain the quality of the "pasture". Burning off is said to control ticks, and clears away dead (or live) vegetation so it can be replaced by grasses.

What can be safely concluded is that the campesinos, both as legal owners and as squatters, occupy and use forest lands much more intensively than COHDEFOR. This situation creates some obvious problems, but also offers important lessons and possibilities.

### THE FOREST-PEASANT CONFLICT

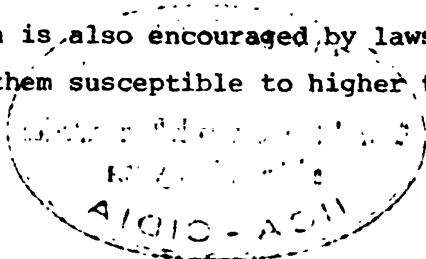
In tropical America, the relationship of the peasants to the forest has been one of antagonism. This is not an inevitable relationship from a biological standpoint, but has been promoted by the objectives and policies of economic development implemented in most countries. As pawns in the development process, peasants find themselves irresistably pushed toward programs of colonization and deforestation. Attempts to change colonization and deforestation policies and practices represent changes in the "rules of the game" for the peasants. This human dimension of the problem of forestry presents the greatest challenge to social forestry.

The mainspring of peasant pressure on the tropical forest is commercial agriculture. In Central America, one of the most successful development strategies has been the expansion of export crops. Sugar, cotton, sesame, and most of all cattle, have experienced important increases in their production areas in recent years to meet the opportunities of foreign markets, which promise good prices paid in "hard" currencies (See Nigh, R. and Nations, J.).

One unfortunate side effect of increased commercial agriculture is the pressure it puts on the production of food crops. The higher incomes generated from export crops tend to displace food crops and peasant farmers away from traditional areas of cultivation, which are in the most accessible and most developed areas of the country. The displaced peasant farmers are the spearhead of agricultural colonization, staying on cleared land for a short time only before selling out to commercial agriculture interests (Murray, 1980; Heckadon, 1978).

Colonization and deforestation have been encouraged as methods for absorbing displaced farmers, and for accomodating the increase in total (food and export) agricultural production. One of the strongest incentives for colonization is the promise of land access; most Latin American countries recognize land rights on the basis of usufruct (use rights) and do not rely on the documentation of "legal" acquisition (Clark, 1971).

Deforestation is also encouraged by laws which penalize "unused" lands, i.e. forests, by making them susceptible to higher tax rates or to expropriation.



Several Central American countries have made legal amendments to national laws to counteract the historical trend of deforestation, for example, the Regimen Forestal in Costa Rica, and Decreto Ley 85 and 103 in Honduras. Unfortunately, the reversal of present trends runs up against structural barriers created by "deforestation" laws which have not been affected by new legislation. Land tenure is an important barrier of this type, especially in Honduras.

#### PROBLEMS OF PEASANT FARM FORESTRY

There is sharp contrast between campesino attitudes and government attitudes toward forestry. Law 103 explicitly recognizes the forest as a highly valuable resource, and much of COHDEFOR activity is directed toward preserving the forest. The peasants, on the other hand, seem to have an indifferent and even hostile attitude toward this in general. The distance between these attitudes is a measure of the problems currently faced by social forestry.

A comparison of Central American countries shows a surprisingly low incidence of trees on Honduran small farms. In most countries, trees planted in agroforestry combinations are an important component of farm activities. Prunings from living fence posts provide posts to renew fences or for sale. Fruit and timber species are scattered around the farm, or concentrated in home gardens, and provide fruits, wood, shade, etc. These agroforestry systems allow a diversification of farm activities without competing directly with other crops, and are common in most Central America (Budowski, 1981). Nevertheless, Honduran farmers are involved in these systems to a very limited extent (Table 2), which is provably a reflection of the land tenure situation. Since farms are generally temporary due to the migratory farming pattern, and lack land titles, the plantation of slowly maturing crops is less likely (Sellers, 1977), despite the potential for economic benefits.



Table 2. Land Use in Central American Small Farms

Tree use	Costa Rica (%)	Panamá (%)	Nicaragua (%)	Honduras (%)
Living fences	84	87	50	19
Fruit trees	98	94	78	53
Timber	40	44	42	16

Sources:

Jones, J.R., 1982; Jones, J. y Otárola, A., 1981; Jones, J. y Pérez, L.A., 1982; Lemckert, A. y Campos, J., 1981.

Of course, the principal motivation for deforestation is land acquisition by campesinos who are landless, or who find their soils exhausted. Such clearing activities have a double motivation. They present the opportunity for farming for several years, and may be closer to new forest areas for exploitation. Another motivation is the cash from the sale of "improvements" when the land is abandoned, which represents a capital reserve built up by the farmer's own work. It may represent one of his few possibilities for capitalization of his farm activities.

At a more profound level, the lack of campesino interest in the forest reflects the low level of benefits they are likely to obtain from it. The control of all forest exploitation by COHDEFOR is a disincentive. Burning off forest to improve pasture, or cutting it down to create cropland are the activities which promise the highest return to peasant farmers.

A similar pattern of wasteful exploitation is found in peasant resination activities. Careful resination offers the possibility of multiple use of trees; they can be resinated for years, and finally harvested for lumber afterwards. COHDEFOR has formed peasant resination cooperatives, to which it gives technical assistance, as part of its Social Forestry Program (Servicio Social Forestal). The most recent technique promoted by COHDEFOR is to cut a shallow groove in the tree bark and apply acid to prevent scarification. The campesino technique, however, involves slashing the tree with a hatchet which damages the trunk quite extensively, and finally leaves 2 to 3 meters of the trunk unusable for lumber (Amilcar Cortes, 1976).



The wasteful pattern of resination can also be linked to the lack of benefits flowing to the peasants from the harvest of the trees. Whatever wood is harvested for lumber by COHDEFOR at best will give a return of some percentage of the stumpage free, which in any case is less than the value of the wood cut up and sold as firewood. From this perspective, the trees that are damaged to the point where they are not harvested for lumber represent a positive gain for the peasant. Under the present system, the wasting of lumber is rational for peasant producers.

### CONCLUSION

This analysis demonstrates the need for analyzing patterns of peasant forest use to plan a rational exploitation of the forest resources. By understanding peasant activities and motivations it is possible to identify structural and institutional problems which impede an effective use and protection of the forest.

In the case of Honduras, patterns of land ownership and current forestry laws combine unintentionally to discourage an optimal forest use by the peasants. The lack of security of land tenure discourages improvements such as fruit trees or plantations. Furthermore, since peasant use rights are based on clearing the forest, reforestation diminishes the value of the improvement they might otherwise sell.

The natural pine forest offers the best returns to peasants only when damaged to the extent that COHDEFOR does not find its exploitation profitable. The result is a net loss in the value of forest production. As noted by Mantilla (1979) an increase in the degree of peasant control over the forest, and an increase in the peasant share of forest products make the preservation and rational management of the forest an objective of peasant activity.

The success of forestry programs which involve small farmers depends on an accurate understanding of the peasants' adaptation to the ecological and socio-economic situations they face. The extent to which program designs address the peasants' adaptational needs will determine the degree of peasant support and cooperation in these programs.

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