



Hit-and-run agriculture: A farm in the Philippine highlands.

THE POVERTY OF SLASH & BURN

A study conducted by Silliman University reveals a vicious circle of poverty among upland Filipino farmers. Their slash-and-burn techniques produce barely enough food for them to live on and are leading to an environmental catastrophe.

By DENIS MARCHAND

For the past 20 years the forested slopes that make up 60 percent of the Philippine archipelago have been savagely denuded. Need, even survival, has been the spur. The agricultural lands on the plains have become impoverished and hunger is driving thousands of migrant farmers to virgin land on the mountainside.

As Rowe Cadelina, the Director of the Research Centre at Silliman University, admits, there has been a sizeable increase in migration to the mountain regions from the lowlands in recent years. There are many reasons, but they all originate in the poverty of small farmers. They include such things as desperate overpopulation, an unfair land-holding system, and the difficulty of finding either a job, a piece of land to farm, food, or lodging. These "kaingineros" or "upland swiddeners", as they are called in the Philippines, have been pushed out into marginal mountain land. They go further and further up the mountainside to clear tiny plots for farming.

Equipped with rudimentary implements, these settlers cut down the trees and burn the branches, roots, and surrounding vegetation. Some of the peasants, lacking suitable tools, simply set fire to live trees. As soon as they have eliminated all unwanted vegetation, they plough the land and grow crops for domestic consumption, usually corn, squash, sweet potatoes, bananas, papaya, and Manila hemp.

ABANDONED PLOTS

After a few years, their patch of land becomes less productive because of over-intensive monoculture, the lack of organic fertilizers, and the uncontrollable growth of cogon, a tropical weed. So the peasants move on to another location. The mountain slopes are dotted with abandoned clearings.

Agricultural practices of this kind lead to ecological catastrophe. Mountain soil is washed away by torrential rains. The resulting floods deposit silt over the fertile plains, ruin crops, and destroy homes, often killing people. Fishing communities are also affected since huge quantities of mud and garbage spill into the sea, driving the fish farther out.

The peasants themselves blame these disasters on the big logging companies, pointing to the practice of clear-cutting the slopes. Mr Cadelina blames farmers for a good part of the deforestation. His view is supported by the results of a Silliman University study on the behaviour and impoverishment of slash-and-burn farmers in the highlands. The research project was financed by IDRC.

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According to Mr Cadelina, the inefficient agricultural practices of the migrants and the ecological disturbances they create are explained by the fact that most of them do not have any tradition of farming. They migrated into the highlands simply to escape unemployment and survive. It is significant that 80 percent of the "upland swiddeners" occupy the land illegally.

Most of these migrant farmers consume the greater part of their own produce, selling any surplus in the market for a few cents. During the harvest they enjoy a brief period of self-sufficiency, but during the off-season

they have to spend up to 80 percent of their budget on food.

'Our standard of living scarcely improves at all' is what most migrants say. 'We can't set aside the money we need to make improvements or invest in something more profitable.' In the past, one hectare (ha) provided enough to feed an average family; now they have to cultivate four 1.5 ha plots to eat. If the peasants hope to survive, they have no choice but to clear new plots constantly, which perpetuates the cycle of poverty.

The Silliman University study showed the need for an agroforestry program designed to avert the ecological and economic catastrophes that accompany the deforestation of the mountain slopes and to secure an adequate food supply for the Filipinos. Reforestation and soil restoration must be integrated with the process of clearing and farming the uplands, Mr Cadelina says.

Clearing the wooded slopes must be strictly regulated, he adds, so as to oblige peasants to respect the environment and plant trees. It should be the responsibility of the government to determine which land may be farmed, to restrict the size of lots, and to reforest some of the land.

"Protecting the natural environment and the ecosystem is the business of everybody, including the government and those who use the land," says Mr Cadelina who would also like to see training and educational programs set up for the peasants.

SOCIAL COSTS

The second phase of the Silliman University study, currently in progress, will attempt to shed light on the social repercussions of migration into the uplands.

"At first glance it looks as if these itinerant slash-and-burn farmers get some financial advantage, but at what price do they get it?" asks Virginia Disco, who is leading this part of the study. "What effect does this constant migration have upon marriages and family and social life? What does it do to the women and children? Don't these endless wanderings further harm the prospects for the younger generation which already has little to hope for?"

Although it isn't yet possible to give accurate answers, Miss Disco has raised a number of issues that directly affect the welfare and living conditions of these people. The problems include the geographical isolation brought about by the absence of passable roads and communal transportation, and the inaccessibility of health services, education and social resources. □

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