

## A VILLAGE CONTROLLING ITS OWN DESTINY

The elders of the small Mexican village of Cheranatzicurin talk of the vast, beautiful pine and oak forests that once covered the hillsides and valleys filled with wheat, barley, hay, and corn.

Looking at the region from the town, perched at an altitude of more than 2,000 metres on the slopes of an

extinct volcano, it is difficult to believe this kind of vegetation once existed here.

Now the area seems to be perpetually shrouded in dust. Drinking water is growing scarce, farmland has eroded and become infertile. forests have disappeared. Today, even the species called "ciromo," which was common to the area, is becoming extinct. Forests, which it was believed would last forever, have given way to vast, barren tracts.

Gone with the forests are also the seemingly endless supply of fuelwood for energy.

For years, this community had little in the way of forest-management techniques. Wood consumption was characterized by indiscriminate cutting, illegal burning, diseased forests, and the uncontrolled clearing of farmland.

For want of tools and adequate transportation, people left tree trunks behind and removed only the branches they could carry with them. At night, professional loggers arrived, sometimes from far away, well-protected by armed guards and well-equipped to cut down the finest oaks that sell to building contractors. Illegal logging continues to ravage the forest.

Harvesting "ciromo," which is in demand by furniture makers, musical instrument makers, and sculptors, is an important source of income for the "campesinos" (peasants). But it didn't occur to anyone to reforest this species, which is on the way to extinction. Much of the regional economy is dependent on selling handicrafts and now faces a threat equivalent to that facing the ecosystem.

Chronic shortages of wood today are

only exacerbated by increasing population growth in the area.

An IDRC-funded project carried out by the Regional Centre for Appropriate Technology (CRETA— Centro Regional de Tecnologias Apropriadas) is trying to infuse resource management techniques into the village of Cheranatzicurin. CRETA was founded by the Grupo Interdisciplinario de Tecnologia Rural Apropriada (GIRA), is currently funded by the Grupos Universitarios Interdisplinarios (GUI), and was set up in the wake of research done by the Universidad Autónoma de México.

"True natural resource management depends on the recognition, by all members of a community, of the importance and the limits of the resources used," points out Jaime Navia, the project coordinator. "In order to slow down environmental degradation, the community must take over the project and take charge of its own development."

The formation of a forest surveillance committee is concrete evidence of the growing awareness of this situation. Patrols crisscross the nearby forest to detect tree diseases, fire hazards, identify areas for reforestation, and sensitize forest users

to the necessity of using wood sparingly and of replanting a tree for each one that is cut. The patrols also meet with campesinos who are tempted to practice slash-and-burn agriculture. To date, 17 species of trees have been identified and are being reproduced in CRETA's seed nursery.

The committee disseminates information through broadcasts over a local radio station and publishes extension pamphlets, these consist mostly of pictures as the majority

of the population is illiterate. Above all, however, it holds meetings of small groups of people and uses word of mouth to reach the villagers.

Much of the project's research was aimed at developing a profile of the population's energy consumption, identifying its needs and problems, and proposing technological innovations. The study revealed that traditional cooking systems were quite inefficient.

To remedy this situation, CRETA looked toward developing a new type of stove for village use. CRETA borrowed the design of a stove, called Lorena, from Guatemala but made several modifications to it. It burns less than half the wood consumed by the "three-stone" stoves. Fifty-eight stoves were built the first year, accounting for

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This modified "Lorena" stove under construction burns less than half the wood consumed by traditional means.

15% of households. Although the number has grown steadily since then, a great deal remains to be done as wood still provides 86% of energy needs.

Recently, a group of village women was invited to the house of Roselio Joaquin to learn how to work the stove that Roselio had built in his kitchen. While Maria boiled hot water for coffee and cooking, her daughter Rosanna mixed and rolled out the corn dough with a stone and cooked the tortillas. There was no irritating smoke in the kitchen and it was not overly hot. One hot plate was used for cooking tortillas, another for boiling hot water, and a third for keeping food hot. The food cooked quickly and Maria claimed the tortillas had better flavour. The smoke escaped through an efficient chimney.

After breakfast, the women watched a video showing how the stove was built. Then, convinced, they gathered up the rudimentary tools and building materials (nails, planks, sand, clay, and water) needed to build stoves in their own kitchens. They generally do a fairly good job with this work,

especially because they have the support of CRETA members and the young people of the village who have decided to specialize in building better

"Preservation of natural resources, forest conservation, better food, nutrition, are now part of their language and their concerns," says Margarita Carrillo Ruiz, a member of the staff at CRETA. "These women are aware that community participation is essential to the social and economic development of the village as a whole. They have always got together to solve the village's problems while their husbands were away."

CRETA acts as a source of knowledge and direction. "One of the problems was that the issues of forest management and energy waste were too abstract for many people to grasp," recounts Roselio Joaquin. "They needed some guidance so they could participate in the changes." Most of the inhabitants of Cheranatzicurin are descendants of the Purepecha Indian tribe and are often poor and illiterate.

Community participation was facilitated by integrating members of the community in the project and by the founding of CRETA.

"We must be patient," explains Jaime Navia, "we cannot change in a single year the behaviour and mentality passed down from generation to generation. These people, like people everywhere, are hesitant to change their habits. But we are beginning to see some signs of change."

With CRETA's help, the people of the village of Cheranatzicurin are becoming more knowledgeable and acting as influential agents of development in the region's other villages.

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