



Small projects for big problems

One of the biggest problems faced by Mixtepec peasants is environmental degradation. But this is only a symptom of a wider crisis affecting all communal life. The indigenous peasants' quality of life is determined and constrained by their unfavourable position in the market economy. *Marta Gudi* describes a small but multidisciplinary project designed to strengthen peasant identity and resilience.

Marta Gudi

The Mixteca Oaxaquena (Alta and Baja) today is one of the most eroded areas in Mexico, and has one of the highest rates of illegal migration to the USA. The San Juan Mixtepec municipality, situated where the Alta and Baja regions meet, includes 35 villages, most of them on eroded slopes. This has long been the home of a Mixtepec community which now has some 14,000 inhabitants, linked by kinship, linguistic, religious and political bonds and also through the exchange of goods and services.

Economy of extraction

The relationship between the peasants and their environment began changing radically during colonial times, when the regional economy of subsistence

and exchange was transformed into an economy of extraction of resources to Mexico city and Spain. The situation was aggravated in the middle of this century, when the community became increasingly dependent on consumption of industrialised products.

In order to produce a marketable surplus of maize and beans, the San Juan Mixtepec peasants abandoned plot rotation, cut down forest to expand their farming area, and started in the late 1960s to use chemical fertilisers and pesticides. Also for the market, they increased the number of sheep and goats which graze freely in the communal forests.

The consequences soon became visible: the hillsides were "washed", the volume of water in the rivers decreased and the forests became less dense. Mixtepec, which used to be a relatively fertile county in mid-century, is today a poor and dry region with only 3.6% of its land really suitable for agriculture.

The community depends primarily on farming. Almost all the area cropped is on steep slopes, with exhausted soils saturated with nitrate. This land is no longer able to produce even with "magic chemistry". Each year, more forest is burned and turned into new fields. The search for higher output is thus leading to more losses.

Seeking alternatives

The most common Mixtepec strategy against hunger and poverty is illegal

Barren hillside in San Juan Mixtepec, part of one of the most eroded areas in Mexico. This is now a common sight as, even on steep slopes, forests are burned and turned into agricultural fields. Photo: *Marta Gudi*.

migration to the USA. Far from improving the situation, this increases the community's dependence on consumption of imported (especially status-symbol) goods, increases women's already heavy workload and worsens the environmental degradation by encouraging more intensive agriculture and greater use of chemical fertilisers.

Adults frequently remembered that in the past "life in Mixtepec was better", "there were fewer diseases", "there was more water". But the relationship between the ecological deterioration and the community's "modern life" was not realised. To many Mixtepecos, there was no doubt that chemical fertilisers and pesticides do not guarantee the "success" claimed during the 1960s. However, they were not clear which path to take in seeking alternatives.

Skeptical of outsiders

A long history of unsuccessful projects had made the Mixtepecos skeptical of new proposals. Such proposals are linked with "modernisation", which they feel has increased the structural gap between Indian people and decision-making centres. Since mid-

century, the Mixtepecos had taken part in various governmental development projects in which their "participation" was reduced to more or less forced acceptance of technical solutions brought in from the city. These projects gave no consideration to their perception of farming, nor to the conflicts within the community. Moreover, these projects – subject to budget problems and immediate political demands – were never fully implemented.

As a result of these experiences, the Mixtepecos felt that they depended on distant and unknown spheres of power for the solution of their problems.

Building their own project

In September 1986, the Mixtepecos elected as municipal representatives a team of teachers and migrants who were concerned about local socio-economic problems. In early 1987, these new authorities – together with some members of the *Comite de Maestros* and the *Comite Voluntario* (an organisation of migrants to California) and an "outsider" researcher – worked out a proposal to address local problems. The project had a dual aim: to combine attention to environmental and production problems, and to rescue those cultural aspects most directly linked to communal identity.

Because of the negative experiences

with previous projects and the internal conflicts between the upland communities and the central village, the launching of the new project took a long time. The support given by the new local authorities was decisive in speeding up project implementation. The collaboration of the *Comite Voluntario* was also extremely important for making the proposal known throughout the upland communities.

Finally, in early 1988, some peasants and the new authorities decided to constitute the *Comite pro-Proyecto Mixtepec* to support the work of a small team (an anthropologist, an agricultural technician and an extensionist) who coordinated project implementation.

Finding themselves

This project tries to combine traditional agricultural knowledge with alternative technologies that are simple, low-cost and adapted to the local context. The peasants participate directly in diagnosing their situation, selecting and applying suitable technical alternatives, and evaluating the activities. The project respects the Mixtepecos' decision-making capacity, their organisational forms and their own concept of time. For this reason, the "outsider team" has always been kept small.

The joint search for new farming options is seen as a way to encourage re-

covery of the Mixtepec social identity and to increase the community's self-confidence in their own organisational capacity.

Starting small

At first, activities were focused primarily on testing and applying simple techniques of soil conservation and reforestation. At the same time, training of health promoters and organising workshops and discussion groups about community organisation slowly began. Some assistance was also given on land tenure issues.

Because of the community's characteristics, and as agreed with the *Comite*, work began only with a few peasants in a few communities. This led to a better understanding of the issues and a better knowledge of the techniques involved. As "rumour" is an important element of social control in Mixtepec, the first small successes of the project were rapidly known throughout the municipality.

In early 1988, a few activities were started in only two villages. By 1990, numerous activities were being implemented in 20 localities. In most cases, it was the communities themselves which approached the project to arrange joint activities.

Today, the project is working in three closely related areas: conserving the environment and improving agricultural production; training health promoters; and setting up a producer's cooperative.

Environment and production

For reforesting communal land, mainly native species are used but, in some cases, the peasants decided to combine these with fruit trees. More than 500 fruit trees have been planted by families from 8 villages. The work is done through "tequio", the Mixtepec form of collective work. Each community decides independently how labour and products from forests and gardens are distributed.

To support this activity, tree and horticultural nurseries were established in four communities. Besides their educational function, these nurseries help reduce dependence on government institutions. In addition, many families have begun small nurseries on their own plots. The nurseries also serve to encourage the use of organic fertilisers and biological pest control.

With vegetables and fruit trees from the nurseries, both communal and family gardens were established. Mostly tended by women, these gardens not only stimulate confidence in local agricultural knowledge; they also increase female participation in discussions and meetings. As men are absent on migration for most of the year, it is "normal" in Mixtepec that women do all the work.

People's participation in resource management

The United Nations Research Institute for Social Development (UNRISD) is coordinating a research programme "Sustainable Development through People's Participation in Resource Management".

UNRISD defines participation as organised efforts to increase control over resources by groups previously excluded from such control. Attention is given not only to ways in which local people contribute to the success of conservation projects funded by outside donors, but also to ways in which people take sustainable development into their own hands. This may be by working to maintain their traditional resource management systems, or by acting to resist projects or policies which will adversely affect their livelihood by degrading their environment. Reports have already been published about:

- constraints to environmental rehabilitation through people's participation in the northern Ethiopian highlands
 - natural resource management by the Barabaig in Tanzania
 - social organisation and ecological struggle in northern Mexico
 - coastal overfishing and fishermen's actions in Kerala State, India.
- Studies are underway in Sudan, Tanzania, the African drylands, the Philippines, Ghana, Solomon Islands, Senegal, the Himalayas, Brazil and the Amazon region. This research is coordinated with related

UNRISD research on the environment. The programme "Social Dynamics of Deforestation in Developing Countries" analyses implications of deforestation for the livelihood and living conditions of poor people in urban and rural areas. Individual, family and group reactions and strategies to combat the adverse effects of environmental degradation are assessed, as well as interactions with other key actors such as state agencies, commercial interests, NGOs and grassroots movements.

The programme "Women, Environment and Population" is investigating the relationships of different forms of environmental degradation with women's time-use patterns and activities, as well as mortality, fertility and migration. In-depth fieldwork is underway in:

- eastern Kenya, where there has been significant loss of soil fertility, shrinking biodiversity and reduction in common property resources
- Sabah State, Malaysia, which is affected by the rapid clearing of tropical rainforest, and
- Xochimilco, an outlying district of Mexico City, which suffers from effects of sewage-borne water pollution

For more information, contact: Reference Centre, UNRISD, Palais des Nations, CH-1211 Geneva 10, Switzerland.

Terrace building did not catch on as expected. This was because of the labour demands involved – labour being a major constraint in a society where 90% of men move out in the dry season. However, those terraces that were built performed convincingly. Photo: Marta Guidi.

Yet this did not improve their social status, nor did they participate more in community decision-making. Through their involvement in the project, this situation is gradually changing.

Building contour-bench terraces with ditches and protective or reinforcing fences has had less impact than reforestation. This is because it demands long and hard work (3-4 adults working 8 days in a 0.25 ha plot) and because, during the dry season, 90% of the men and also many women migrate to the USA. However, the terraces proved to be effective in maintaining soil humidity. The increased yields from the first terraced plots have captured farmers' interest in their construction.

Since late 1989, after an assembly decision especially supported by the women, bee-keeping development was started in two communities, primarily with women.

Local health promoters

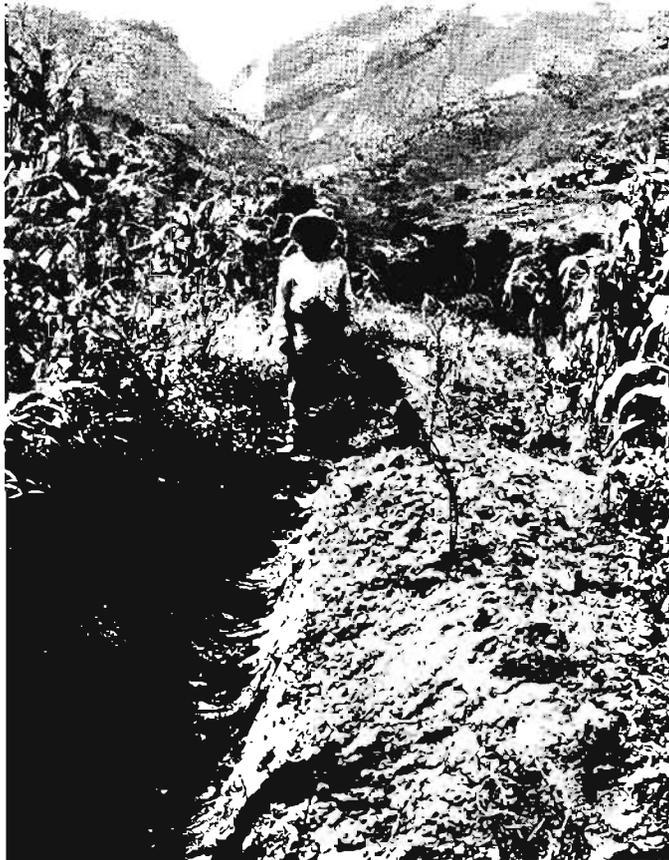
The women are also involved in health-related activities, as promoters and participants in courses and workshops. The health activities involve, among other things, the joint recovery of communal knowledge about medicinal plants and traditional healing practices.

The promoters are trained to diagnose and provide basic treatment for the most common illnesses in the area. They are able to prepare tinctures and syrups and have started to make gardens for medicinal plants. By taking part periodically in regional meetings of indigenous doctors, they not only enrich their knowledge; they also have a chance to exchange experiences and strengthen their self-confidence.

Creating a cooperative

Setting up a cooperative was a slow process. The cooperative is made up of 11 local farmers. Agricultural products and honey are produced on a small scale, for both consumption and sale at regional markets. Cooperative members contribute with minimal fees, a plot and their work.

The project supports the cooperative with training courses and ongoing advice about operation, production and marketing. Two cooperative members take part in regional meetings of peasants' cooperatives in southeastern Mexico. This exchange with other groups has also proven to be an important element for increasing the self-confidence of the cooperative.



Owned by the people

The project has had its ups and downs. Plans often had to be readjusted to the changing circumstances, such as conflicts among communities and increased migration. Work was expanded in some areas (eg. health) while other activities lost their importance, depending on the communities' interests. Great effort was required to maintain the independence of the project, as it aimed to maintain links with different NGOs and governmental agencies, but did not want to be subordinated by such institutions. At times, this made it difficult to acquire external funding. But, because the project managed to remain small, independent and focused on the community, the participation of peasants and local authorities remained high.

From the beginning, the project had aimed to demonstrate that development can be achieved through small projects which are not costly, do not require sophisticated machinery, avoid as much as possible the invasion of "outsiders" and involve local people without pressuring them. A related objective was to demonstrate that such projects can grow from the community and can even achieve some resonance outside the community.

The project had to be evaluated according to its ability to be "owned" by the local people, and not according to predetermined time limits or conventional cost/benefit calculations. Today,

the initial stages of promotion and organisation are passed. It is now time for project staff to reduce their managerial functions and delegate these responsibilities to interested farmers.

Just beginning

Yet it could be said that the project is still at its "beginning", in view of its long-term objectives. Both the ecological deterioration of the Mixteca and the subjection of the indigenous people to the politics of the State are the result of a complex process that has lasted almost 500 years. This cannot be reversed, nor can spectacular results be expected in a short time. Yet it is felt that the experience of the Mixtepec project – and of other similar projects in the region – demonstrates that small projects can be effective in offering indigenous people opportunities "to take their lives into their own hands". ■

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