Incentives are the key

ITTO projects use innovative strategies to secure the support of communities for forest restoration

by Jorge Malleux

ITTO consultant
jmalleux@gmail.com

Beats pit-sawing: Portable sawmill in Asháninka community, Peru (PD 14/96 Rev.1 (F)). *Photo: A. Gaviría*

When forest ecologists discuss the rehabilitation of degraded forest they tend to talk about a science-based process to restore the forest's original ecosystem functions and biodiversity. They might also mention the various technical guidelines and criteria and indicators that are available to help achieve and assess such ecological objectives.

Among rural communities the concept of ecosystem rehabilitation is completely different. For them it has always been, and will continue to be, an opportunity to generate and regenerate economic options for short-to-medium-term benefit—that is, ecosystem rehabilitation is part of an ongoing search for alternative or complementary sources of income with which to balance household budgets. It could involve the planting of trees or the management of natural regeneration for future harvesting.

The private sector is often unwilling to cover the cost of forest rehabilitation

Nevertheless there is often some merging of the objectives of ecologists and rural communities. The ecologists' vision of the total or partial rehabilitation of biodiversity corresponds to a community vision of a forest that will once again produce fruits, timber, protein, resin and fiber that can be used to improve livelihoods.

The time horizon of an ecologist in such a situation might be the medium-to-long term, while that of a rural community is more likely to be the short-to-medium term. The question arises: how can these two differing horizons be accommodated in a cost-effective manner? The private sector is often unwilling to cover the cost of forest rehabilitation, while the public sector may be willing to assume the responsibility but ecological projects are rarely a priority. Communities usually have the most urgent need to engage in rehabilitation but lack the resources to do so.

Community participation

In September–October 2009 the author led a small team[1] in the ex-post evaluation of five ITTO-financed projects that aimed to rehabilitate degraded forest. Two of the projects were in Togo, with one each in Ghana, Ecuador and Peru.[2] The aim of the ex-post evaluations was to assess, 4–5 years after project completion, the effectiveness and impacts of these projects.

Although the five projects were located in different geographic regions and ecosystems, and involved rural and Indigenous communities with very different backgrounds, organizations and cultures, they all had as their main objective the rehabilitation and sustainable management of degraded forest ecosystems. Baldly stated, such an objective is unattractive to the communities, whose priority is daily subsistence work to meet their basic needs. Even though the main aim of the ex-post evaluations was to assess project efficiency and effectiveness in forest ecosystem rehabilitation, the team also paid attention to the strategies used by the projects to address community issues, to capture the interest of the communities, and to gain their

1 *Jorge Malleux, ex-post evaluation mission leader, Benedict Fultang, regional expert for Africa, and Alfredo Gaviria, regional expert for Latin America.*

2 *PD 30/97 Rev.6 (F): Rehabilitating degraded forests through collaboration with local communities (Ghana).*
PD 51/99 Rev.2 (F): Support to grassroots forestry promotion initiatives in the Yoto area (Togo).
PD 122/01 Rev.1 (F): Support for the establishment of a cuttings propagation unit for the production of samba and other local species (Togo).
PD 14/98 Rev.1 (F): Sustainable use and reforestation of Amazon forests by Indigenous communities (Peru).
PD 49/99 Rev.2 (F): Pilot plan for the sustainable management of 10 000 hectares of secondary forest in San Lorenzo, Esmeraldas (Ecuador).

commitment to a medium-term and even long-term vision for forest restoration.

The Latin American projects were fully implemented within the territories of Indigenous communities. The Peruvian project was located in the lands of the Asháninka, the largest ethnic group in the country's highland forests. The Asháninka still use traditional organizational structures in their social and community work—the land belongs to the community, which decides the allocation of plots among individual families for the growing of subsistence crops, and there is no concept of private land ownership. Although the project proposed a management, rehabilitation and plantation strategy, the communities ultimately decided how they would be involved and what crops they would grow or what trees they would plant.

The project in Ecuador was based in an Afro-Ecuadorian community; each family that decided to participate in it was assigned its own well-defined plot of secondary forest, which the project called a 'pilot farm'.

While the projects in Togo and Ghana attempted to involve communities they were invariably implemented through a community authority and families or individuals decided if they wanted to be involved in the project. Those who did were bound to participate in a system established by the project, albeit with a certain degree of flexibility on decisions such as which crops to grow, the areas that would be worked and the species that would be planted. In Togo, the communities opted almost exclusively to plant teak (*Tectona grandis*) in their plantations. In the project in Ghana, all activities took place in state reserves under a scheme proposed by the Forest Research Institute of Ghana (FORIG); they comprised enrichment plantings of high commercial value native species. In every case, the communities required immediate incentives to support the project objective and work plan. These ranged from financial compensation to support agricultural production, either subsistence or commercial, to the sharing of the benefits to be derived from the plantations.

Involvement strategies and benefits

A key strategy of all projects was to promote community participation through the integration of agricultural and forest activities according to a land-use plan in which fallow periods allowed the production of fast-growing timber species and non-timber forest products such as medicinal plants. In all projects there was an understanding that even if agricultural activities were inefficient and had very low productivity, and even if they caused ecological damage, it was infeasible to completely abandon or move away from them because they remained the most important livelihood activity of local farmers.

It was necessary, therefore, to integrate agricultural production into the technological package as part of the overall development plan. At the same time, improvements to those traditional systems were introduced or recommended, taking into account the capacity of the community to adopt such improvements. Improvements were also required in the management of production forests, which had been mismanaged in the past and were now under-stocked with commercially valuable species.

The model employed in all the projects under evaluation requires a land-use planning exercise based on land-use capacity and the needs of each individual community. This can be very complicated, especially—as in Africa—where the population density is high and the communities have access to only limited land areas, which often leads to conflicts over land-use. In Peru, the Asháninka have large areas of land at their disposal. Even so, land-use zoning can be difficult because the communities have their own zoning schemes, which are not necessarily based on land-use capability as they are in the professional agricultural sector. The project addressed this difficulty through a participatory approach that gradually merged differing concepts and proposals.

The sustainability of rural development projects such as the five evaluated projects is founded on the participation of the local communities, who should be able to progressively increase their involvement in the production and marketing of products. In each project, this involvement and value-adding happened to greater or lesser degrees according to the specific characteristics of the project and the end-products that were marketed. In all cases, the improved forest and land-use management systems that were introduced are contributing, albeit at different rates, to the restoration of the ecological balance and constitute models that should be considered in national policies.

The three projects in Togo and Ghana were very relevant to and have had an impact on the local communities, since they were designed with community involvement in mind and with the aim of helping the communities to benefit from project activities. Combining food crops with forest trees (taungya) has brought major benefits to the farmers involved in the projects. In addition to the various incentives offered to project participants (such as wages), all of the harvest-derived benefits from household consumption and sales went directly to the communities. In Ghana, a profit-sharing agreement designed by FORIG (as provided for in new legislation) ensured that the participating communities also received 40% of the income derived from the sale of the tree plantations. In both Ghana and Togo, the training and experience gained in forest plantation establishment is now being used by farmers to establish other forest plantations.

In Togo, the main incentive for communities to become involved in the projects was the opportunity to establish temporary subsistence crops in state forest reserves, because many community families do not possess land or have insufficient land for this purpose. Under the system

Talking trees: Briefing during the ex-post evaluation of project PD 30/98, Togo. *Photo: J. Malleux*

introduced by the two projects, the communities commit to planting forest trees and to tending them until they can survive by themselves. This approach has promoted reforestation in reserve areas, but it has not yet been fully successful on community lands. One of the reasons for this is that the communities most interested in this system are landless—that is, they are groups of migrant settlers in search of employment. Another reason is that those communities that do have land are unwilling to use a major part of their property for forest plantations because their priority is agricultural production, which is almost always their only source of livelihood. Nevertheless, after several years of experience in plantation development, some business-oriented farmers are establishing teak plantations on their farms and have set up small enterprises for the production of seedlings in on-farm nurseries for sale to other farmers.

In the project in Ghana, forest-enrichment plantations were established in state reserves. The incentive to take part in this activity was the opportunity, under provisions issued by the Ministry for the Environment, to own part of the plot or some of the planted trees. This scheme proved popular with the communities, even though it required a longer-term perspective because, according to an agreed management plan, owners must wait for the trees to reach commercial size before they can be harvested.

In the Peru project, the main incentive for undertaking forest-plantation or agroforestry activities was a system of direct payments to participants for the production, planting and tending of seedlings. The payments were US$0.17 per seedling produced in a nursery, US$0.17 per seedling planted in the field, US$0.17 per surviving seedling after six months of tending, and US$0.17 per surviving seedling after 18 months of tending. Thus, each family that established a plantation on its land received income from it, even in its initial stages. The system was very well received by the communities: 35 000 trees of high commercial value native species were planted, and 278 hectares were also planted with species to produce non-wood forest products such as sangre de grado (*Croton lechleri*) resin. The aim was to catalyze a wider uptake of reforestation in the local population by demonstrating its benefits. Many families are now expanding their plantations of their own accord. As part of the project, intensive work was also carried out to improve natural forest management and to achieve certification.

In the Ecuadorian project, all the work was carried out on community lands. In this case, and very particularly among Afro-Ecuadorian communities, the main incentive for the community to participate was the support provided by the project for its subsistence agricultural activities through the introduction of improved crops. Another incentive was the potential rehabilitation of their logged-over forests, which were being used for agricultural purposes (e.g. cocoa, maize and cassava production), to produce products such as vegetable ivory (tagua—*Phytelephas macrocarpa*), wildlife, fish and commercial-grade timber. In some cases the timber was to be produced from trees planted as part of the project, and in others it was to be produced from existing secondary forests. In addition, the project rewarded the work done by members of the community on its pilot farms, paying wages for days worked.

Future revenue: A proud owner of a *Terminalia superba* tree in Ghana (PD 30/97 Rev.6 (F)). *Photo: J. Malleux*

The strategies used in the projects to obtain local commitment were successful because in each case they were sensitive to the community identity, vision and perspective. The greater challenge, however, was to encourage the communities to commit to the sustainability concept, even when the project ended and even if the biggest benefits would only be realized some time in the future. This longer-term commitment was achieved in the field in all five projects.

The target beneficiaries of all these projects saw them primarily as an opportunity to achieve immediate benefits in the form of jobs, goods, seeds and the improvement of basic services. Nevertheless, the projects were also able to convey the message that it was possible to improve traditional forest-based production systems through the rehabilitation of the productive capacity of the forest ecosystem, the use of soils according to major land-use capability, and the regulation of water regimes and wildlife resources. All of the involved communities quickly understood this concept, perhaps because they already possessed a similar vision but, prior to the project, had lacked the mechanisms or resources to put it into effect.

The future

A project is fully successful when its development objective is achieved, but this is subject to a number of internal and external factors and is not always in the control of the project implementers. In a broader sense, the most successful projects are catalysts for an idea that stakeholders are already interested in bringing to fruition. Relatively small projects, such as those under review here, can be successful beyond their immediate sphere of influence and have impacts at a larger scale if they are supported by clear and consistent political decision-making. If they are not, the project will be at most a successful short-term local experience but will have no major long-term impact, even for the community where it was implemented.

Project executors and beneficiaries assume great responsibility when they decide to implement and participate in a project with a long-term development objective. Thus, either as a separate action or parallel to the achievement of the immediate objectives and expected outcomes, they should develop strategies to contribute to or ensure the continuity of fundamental activities and propose relevant legal and administrative mechanisms to the government within a long-term policy framework.

In this respect, the ex-post evaluation team noted with satisfaction that the national forest reserve rehabilitation system—modeled under the two projects in Togo—is being adopted as a state forest institutional policy, and actions and provisions are being developed to this end. In Ghana, there is strong institutional support for the rehabilitation of degraded forests and secondary forest management through FORIG and the National Forest Service, and legal and administrative provisions have been developed to promote this program, offering major incentives to local communities willing to participate. In Ecuador, the Sustainable Forest Management Corporation (*Corporación de Manejo Forestal Sustentable*—COMAFORS) has developed and submitted for the government's consideration a set of guidelines on secondary forest management so that they might also become state policy. In Peru, the forest authority has recognized secondary and degraded forests as major components of the national forest estate, which should be brought under sustainable management with the active participation of rural and native communities.

The complete report of the ex-post evaluation is available at www.itto.int or on request from the ITTO Secretariat (rfm@itto.int).