

Building a community forestry framework in Mozambique: local communities in sustainable forest management

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SUMMARY

Community forestry has been adopted as one of the strategies, possibly the key strategy, to guarantee the sustainable use and conservation of forest resources in Mozambique while contributing to improving local livelihoods.

By observing similar processes in the region and beyond, and learning from local experiences, Mozambique is designing a framework to consolidate and disseminate community forestry initiatives. A project launched in 1997, with financial support from the Government of the Netherlands and technical support from FAO, is playing a major role in this design.

This case study summarizes the main findings and constraints of this ongoing process. It is encouraging to see that in the last five years national legislation has been updated and adapted to recognize local communities' rights, roles and responsibilities in natural resource management. Some instruments, such as the Community Land Tenure Certificate and the Participatory Forests and Wildlife Management Plans, are in place to help recognize communities' rights over land, forests and other natural resources. Local communities in pilot areas are eager to support the enforcement of forest and wildlife law and natural resource management whenever they can anticipate benefits from their efforts. The academic curricula of forestry education institutions have been adapted to include community forestry, which is also institutionalized as a technical support unit, a Community-Based Management Unit (UMC) at the National Directorate of Forests and Wildlife (DNFFB), as well as in four of the ten Provincial Forests and Wildlife Services (SPFFBs). Despite the significant number of methods, tools and arrangements being developed, and the growing number of initiatives in the field, community forestry models are not yet ready for full replication. The paper discusses the evolution of community forestry in Mozambique, and some opportunities and constraints related to its further advancement in the country.



People and forests in Mozambique

About 70 percent of Mozambique's 17 million inhabitants live in rural areas¹ (INE, 1997). Most of them live near natural forests, which supply many of their basic needs. In some cases, such as that of the 200 families of Djabula village in Matutuine District near Maputo, forest products represent 93 percent of their average yearly income of about US\$500 per family (63 percent from charcoal, 30 percent from traditional drinks made from the palm *Hyphaene sp.*) (Pereira and Cossa, 2001). Local communities are well acquainted with forest resource management as a basis for their subsistence agriculture, health care, soil and water conservation, recreation, food security, cash generation, house construction and other uses learned over centuries of close relationships between people and forests. This ancient pattern was not drastically changed during the colonial period or during the system of centralized economy that followed independence in 1975.

So far, areas with relatively low human density have allowed the system of extensive use of natural resources to prevail without many consequences for the conservation of the forests, in spite of the strong depletion of the wildlife resources during the decade-long war that ended in 1992.

As a consequence, in 1992 almost 77 percent of the country was covered by natural vegetation (Saket, 1994), distributed in high forests (0.8 percent), low forests (13.7 percent), thicket (43.3 percent), wooded grasslands (19.4 percent) and mangroves (0.5 percent). Forests and wildlife resources are the property of the state, which recognizes the traditional rules for their use. Approximately 48 million ha, or 60 percent of the country, has good potential for forest and wildlife management (PROAGRI, 1997). About 19 million ha (39.6 percent of the forests) can be classified as valuable for timber production; of these 12 million ha have the potential to be used as logging concessions. About 10 million ha (12.6 percent of the country) are gazetted as protected areas: 2.75 million ha have been declared national parks,² 1.95 million ha have been declared game reserves, 450 000 ha have been declared forest reserves, and about 5 million ha have been declared hunting areas

(*coutadas*). The remaining forests are undesignated, and are used for multiple purposes (see Figure 1).

The most serious problem in Mozambique is poverty: The average per capita income is about US\$134 per year,³ among the ten lowest in the world. In this scenario, natural resources, and forests among them, are inevitably seen as a major resource with which to fight poverty. A challenge for private investors, the government, local communities and civil society as a whole is how to use Mozambique's forest resources without destroying them. The main threats are overexploitation of the few commercial timber species, illegal logging, fuelwood and charcoal production for urban supply, shifting cultivation and fires. According to Matakala and Mushove (2001), the largest portion of the forest resources is in fact subject to a regime of open access, as neither the state nor the traditional institutions are at present exercising effective control. In this situation, it is easy to understand that collaboration between government authorities and local communities may be one of the few reasonable options for converting a *de facto* situation of free access into a higher degree of control over the use of natural resources.

When to apply community forestry?

Whenever local people use the forest resources of their neighbourhood for the maintenance and/or improvement of their livelihoods, some arrangement for community forestry (or *maneio comunitário*, as it is called in Mozambique) must be applied to guarantee a sustainable use of the resources, the conservation of ecosystems and local cultural values, and a fair distribution of the benefits generated, without excluding the various stakeholders involved. Using this interpretation, community forestry applies almost anywhere in Mozambique where forest resources are being used and local people intervene or are affected by their utilization. It is implicit that a community forestry initiative will proceed only when it generates benefits of some kind for the local communities involved.

Community forestry is also understood as a subset of rural development activities (see Figure 2). It should

1. INE (National Institute of Statistics). 1997. Basic Data, Population Census of 1997 at <<http://www.ine.gov.mz>>www.ine.gov.mz.

2. Includes 1 million ha of Coutada 16, which has recently been declared a national park as part of the Limpopo International Park, or the GKG Transfrontier Conservation Area.

3. According to the United Nations Statistics Division, 1999, at www.un.org/depts/unsd.

FIGURE 1 • Forest cover in Mozambique

Total country area: approximately 80 million ha • Forest cover (60%): 48 million ha

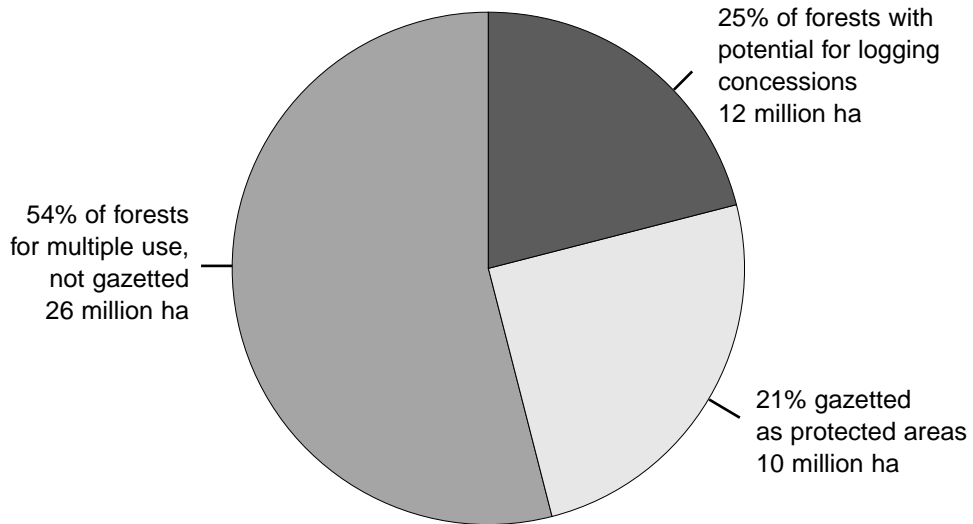
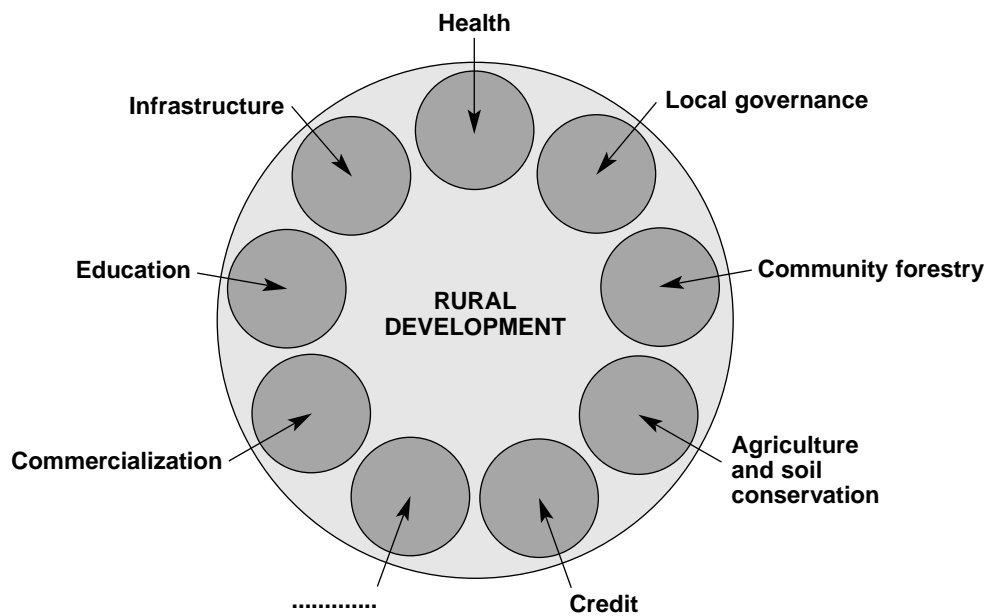


FIGURE 2 • The set of rural development activities, Mozambique



Source: PROAGRI, 1997.

be complemented by other initiatives to provide comprehensive support for local proposals and a more holistic approach to community empowerment. When a community forestry initiative tries to cover too many of the other areas of rural development, it runs the risk of dilution and loss of focus. As Gilmour (2000) states, there is a temptation to help the communities with whatever they request, as they surely need that help. But a rule must be adopted to define the scope of activities in which to become involved. They should be those that contribute directly to sustainable and participatory management of natural resources. Community forestry initiatives should establish precise limits of intervention and search for (or assist the community organizations to search for) further support from other partners and institutions.

Building an enabling environment

For community forestry to endure, a policy and legal framework is required that provides secure access to resources, and transfers authority, decision-making and benefits to the local level. In Mozambique, this framework has evolved positively over the last five years, as shown in Table 1, but it has not yet been completed.

This is a broad, recent and still-evolving framework that incorporates modern visions of participatory management of natural resources and recognizes local communities as valid entities for land tenure and benefit sharing from forestry operations. However, it is too early to draw significant lessons from the limited experiences. In addition, regulations are still required to clarify certain issues, such as the sharing of revenues with local communities involved in sustainable forestry and the provision of incentives to motivate local communities to engage in it (see Box 1).

The case described in Box 1 is a clear example of government transfer of responsibility, without delegation of authority or decision-making capacity and benefits to the local community. In this situation, it is quite likely that community forestry will fail.

Capacity building is required at both the government and the community levels. In the last four years, about 600 technicians and extensionists and 800 farmers have benefited from short-term training through courses, field practice, exchange visits and study tours on themes such as gender analysis, appropriate technology and monitoring and evaluation. In addition, curricula of the formal forestry education institutions – the Eduardo Mondlane University and the Agriculture Institute of Chimoio – have been updated to include a discipline on community-based natural resources management (CBNRM). Lecturers

TABLE 1 • Policy and legal instruments relevant to the participatory development of the forestry and wildlife sector in Mozambique

INSTRUMENT	APPROVAL
Policy and Strategy for Development of Forestry and Wildlife	April 1997
Land Law	October 1997
Environmental Law	October 1997
Forestry and Wildlife National Programme (in the scope of PROAGRI)	April 1998
Land Law Regulations	December 1998
Forestry and Wildlife Law	March 1999
Technical Appendix of the Land Law	December 1999
Decree 15/2000 – Articulation of local government and traditional authorities	June 2000
Forestry and wildlife regulations	In elaboration

Source: PROAGRI, 1997.

BOX 1 • Benefits for community scouts in Mozambique

The community of Senhote, in Monapo District of Nampula Province, organized a voluntary group of 14 community scouts, men and women, to assist in law enforcement and controlling the use of their 3 000 ha of natural forests, which have been neglected by government law enforcement officers in the past. In the scouts' first intervention, about 12 logs of valuable tree species *Pterocarpus angolensis*, *Millettia stuhlmanni* and others were confiscated from outsiders who had been exploiting these resources without licence. The scouts immediately informed the local government authorities, who arranged the transfer of the apprehended products to the District Directorate of Agriculture (DDA) in Monapo. According to the present regulations, confiscated products are the property of the state, and funds resulting from their auction must revert entirely to the state. Thus the community scouts were left in possession only of the hand tools taken from the illegal loggers. Knowing the value of the logs (estimated at approximately US\$1 000) but not benefiting from them, the community scouts lost all motivation to continue supporting law enforcement in their forest area.

and government staff have received scholarships for further training abroad in community forestry.

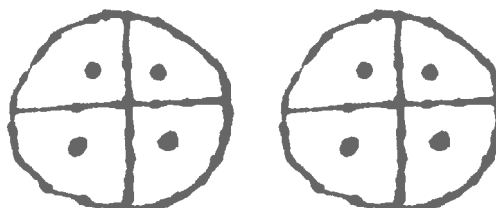
The impact of training activities is measured through the change in attitudes of the personnel involved in forestry and wildlife management, as well as through the establishment of a critical mass to advance the process of action-learning that is required in community forestry development.

It is also necessary to guarantee that community forestry is included in the government agenda, and planning exercises must reflect this. In the case of the Ministry of Agriculture and Rural Development (MADER), the Agrarian Investment Programme (PROAGRI) explicitly identifies community forestry as one of the four key components of the forestry and wildlife subsector.⁴ It means that DNFFB and all ten SPFFBs must include community forestry activities every year in their planning exercise, the Annual Plan of Activities and Budget (PAAO). To support the planning, implementation, monitoring and evaluation of activities, DNFFB has established a technical unit at the central level, UMC, with multidisciplinary technical expertise and assistance from FAO. The unit has gradually been replicated at the provincial level, and is already established in four SPFFBs. Through the PAAOs, the government assures the availability of funds for the community forestry activities that it is promoting, which has represented about 11 percent of the total annual investment made by PROAGRI in the forestry and wildlife subsector.

Seminars and thematic workshops are also good opportunities to share experiences on community forestry, to learn from one another and to promote partnerships. The benefits of such events became evident during the two national conferences on CBNRM organized by DNFFB, FAO and the World Conservation Union (IUCN) in November 1998 (see Dias, Filimão and Mansur, 1998) and May 2001. Altogether, 70 papers have been debated among 350 participants, and very relevant lessons have been gathered.

Methods, tools and arrangements for community forestry

In the last few years, much effort has been dedicated to the development and testing of participatory methods, tools and possible arrangements to advance community forestry in Mozambique. Some of the methods, tools and arrangements presently being used are discussed in Tables 2 and 3.



4. The four components are: 1) strengthening of the state institutions for forestry and wildlife; 2) rehabilitation of state-protected areas; 3) developing community-based management of forestry and wildlife; and 4) developing the productive forestry estate.

**TABLE 2 • Some methods and tools used
in Mozambique for community forestry**

<p>IRAPISMu</p>	<p>IRAPISMu stands for identification (of the area), rapport (built between technicians and community members), self-diagnostic (or rapid rural appraisal), participatory (planning), self-evaluation (or self-evaluation) and multiplication. The acronym was proposed by Mansur (1997) as a set of steps to guide field workers or extensionists engaged in community forestry. The methodology has been useful in training sessions, and in testing and adapting participatory tools (such as design and debate and participatory mapping). A video film has been produced (Carneiro, Mansur and Nhantumbo, 2000) illustrating the application of IRAPISMu in Goba pilot area.</p>
<p>SIPSA</p>	<p>The acronym SIPSA derives from the Portuguese for Integrated Planning, Monitoring and Evaluation System. IPSA was developed by FAO GCP/MOZ/056/NET to assist steps “P” and “S” in IRAPISMu (Mansur and Sande, 2001). It introduces a basic planning and monitoring tool, the group notebook, where interest groups can plan, register and control their activities, including accountability. The group notebook is a valuable tool for extensionists as well, as it can be used to feed the planning system with a bottom-up approach, and it provides information for monitoring and evaluation.</p>
<p>RESOURCES ASSESSMENT</p>	<p>An assessment of forests and related resources is a key to community forestry planning. It can be done in a very participatory way (Costa, 1998; Mushove, 1999) to analyse local communities’ perceptions of the existence, abundance and use of natural resources. When forest resources can be used for logging, a more precise assessment is desirable to determine sustainability levels and allowable cuts. In this case, forest inventories are an option, with the maximum participation possible from local community members. However, technical abilities are required, even for simplified forest inventory methodologies (Pereira, 2001a).</p>
<p>ZONING</p>	<p>Participatory zoning has been used as a key instrument for community participation in natural resource management. The methods used vary from sophisticated satellite imagery and digital mapping to simple consultation with local communities in order to document their perceptions of and aspirations for local land use. A combination of good but simple base maps, soil information (e.g. from soil maps at a manageable scale) and local information (e.g. using participatory mapping; Mansur, 1997) has produced the most useful results.</p>
<p>GENDER APPROACH</p>	<p>Despite the fact that rural women are often at a clear disadvantage in the decision-making process (Kuchenreuter, 2000), their role in natural resource management is usually more important than that of men. A study being carried out in Licuati area, near Maputo, demonstrates that about 60 percent of the resident women are originally from the region, while only 40 percent of the men are locals (Pereira, 2001b). Gender analysis is a basic entry point to understanding of local people’s relationship with their natural resources, and to designing intervention strategies in community forestry that will benefit local women without increasing their workload.</p>

**TABLE 3 • Some arrangements used
 in Mozambique to promote community forestry**

<p>PARTICIPATORY MANAGEMENT PLANS</p>	<p>Once the resource assessment and zoning have been completed, and sufficient socio-economic information is available, a participatory management plan can be prepared. The plan documents the main rules to be observed for the use of natural resources over a certain area in a given time frame (Pereira <i>et al.</i>, 2001). It is produced through a negotiation process involving the different stakeholders in the area (e.g. women, charcoal makers, traditional leaders, fishers, students and teachers, local government authorities, the private sector). Official regulations for forest use are, as much as possible, combined with traditional rules (by-laws) for local management of the resources. The plan is summarized in a very simple, illustrated document (called a management agreement) that presents its major recommendations in very accessible language. The management agreement is approved, adopted and signed by local community authorities, forest user groups and the local government authorities, and it is reproduced and widely disseminated in the area. It is also useful to have this summarized information in a flip chart to facilitate dissemination, debate and adjustments. The existing participatory management plans and agreements are proving to be useful instruments in various situations, to support the process of obtaining the land tenure certificate (as the community can demonstrate they have a “plan” for the sustainable use of the resources), to promote law enforcement, to maintain forestry production within sustainable limits and to support negotiations with potential partners from outside the community.</p>
<p>LAND DELIMITATION AND CERTIFICATE OF TENURE</p>	<p>A key aspect of community empowerment is to guarantee community members tenure over the natural resources needed for their sustainable livelihood and development. In Mozambique, the land occupied by local communities is automatically recognized as common property, and this recognition can become official, either through a land title issued in the name of the community (based on the Land Law of 1997), or through a land tenure certificate (based on the Technical Appendix of the Land Law). The latter, an easier and cheaper document to obtain, was created through a Ministerial Decree in 1999. For a land certificate to be produced, a participatory delimitation is required. This is done by confronting the territorial limits of communities in formal meetings <i>in situ</i> between neighbouring community representatives. The meetings are facilitated by government officers, who assist in producing a minute stating the agreed limits. For cost-effectiveness, the delimitation exercise can be combined with the production of zoning and the management plan, as some steps are similar (Pereira <i>et al.</i>, 2001).</p>
<p>COMMUNITY SCOUTS</p>	<p>Community scouts, sometimes designated community “agents” or “promoters” of nature conservation, or also community “guards” (Magane and Banze, 2001), can be any men or women selected by the community in a participatory way, chosen among members of the community who are voluntarily interested in nature conservation. Their main task is to sensitize other community members regarding the natural resource management rules, and to alert government law enforcement officers when abuses – by both local people and outsiders – are committed. The key instruments that guide community scouts are legislation and the local management plan. However, as shown in Box 1, there is still a vacuum regarding some aspects related to incentives and benefits to motivate the scouts. Some projects decided to pay salaries for community scouts, using outside funds or donations. This is unsustainable in the long term, and does not build a real sense of local ownership of the resources. The arrangement currently used in Tchuma Tchato, where community scouts are remunerated from a share of the taxes collected from sports hunting, is preferable (FAO, 2000).</p>

Table 3 continued

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">INTEREST GROUPS</p>	<p>The concept of communities as homogeneous, uniform groups in terms of interests, wealth, landownership, natural resource perceptions, occupations, etc. is of little use for community forestry development. This aggregated concept loses the understanding of the heterogeneity inside every local community (Gilmour and Fisher, 1992). More useful is the identification of interest groups, such as the charcoal makers of Goba, the pit-sawyers of Monapo, the mushroom collectors of Mecuburi, the beekeepers of Pindanyanga and the fisherwomen of Licuati. These groups share a common interest in natural resources management that, in fact, can be very different from the interests of their fellow community members. The interest groups can be assisted in their organization, for instance, using the SIPSA methodology, to engage in participatory forest management. One of the challenges of assisting interest groups is to motivate a large membership. Usually the number of people engaged has been small, unless there are clear benefits to working in a larger group (such as licensing of charcoal makers in Goba).</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">CREDIT</p>	<p>Credit for local initiatives is a basic instrument of rural development. However, the existing credit schemes either are so bureaucratic that they inhibit rural people's participation or, when credit is available from alternative financial sources such as rural development non-governmental organizations (NGOs), they charge very high interest rates (about 70 percent per annum, compared with 26 percent per annum at commercial banks). As an alternative, FAO GCP/MOZ/056/NET is testing a system of self-credit, or a local revolving fund mechanism. Some interest groups receive material inputs from the project to support their activities, such as hand tools for loggers or carpenters, or adequate cloth and equipment for beekeepers. These inputs are usually provided during training sessions. Once the group accepts the materials, their cash values are registered by the group as a debit. Then the group establishes a period over which it will pay back the money in interest-free instalments. However, the payment is not returned to the project. The instalments are directly paid to the local community-based organization, usually a local committee or association, which has previously been trained to run revolving fund and credit mechanisms. Once the cash is in the committee's hands, this organization can start providing credit with soft interest rates to promote local community initiatives.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">NEW TECHNOLOGIES</p>	<p>Tests have been made to introduce new and appropriate technologies for water transport, improved stoves, paper-waste briquettes, guinea fowl domestication, production of various seedlings, wild mushroom collection and trade, production of native fruit jams, improved pit-sawing and log transport and improved charcoal making. Even when the initial results are promising, there has been little adoption of these new technologies on a broader scale. Improved beekeeping is the only exception so far. Some lessons learned in this process are that: a) technology improvement tests should first be discussed and agreed with the potential beneficiaries to avoid false expectations; b) field visits and study tours are valuable means for motivating the introduction of new technologies, but their adaptation to local realities is usually a big challenge; c) market-oriented production is more likely to succeed; and d) beyond training and visits, substantial time must be dedicated to monitoring and assisting interest groups in the establishment, testing, adaptation, administration and marketing of the new or improved products.</p>

Table 3 continued

STRENGTHENING LOCAL CULTURAL VALUES	<p>Local culture and traditions are an excellent partner for community forestry development. Introducing traditional dances after the group meetings in Goba pilot area has been the only way to attract young men to community forestry debates. Traditional authorities are usually more motivated to engage in community forestry initiatives if they notice full respect for, appreciation of and linkage with local cultural values and traditions. Many of the local art initiatives are related to nature and natural resource management. Hence, local art and culture can easily become a vehicle for dissemination of community-based natural resource management messages. It can also contribute to income generation. In Goba, nine community members formed a theatre group, after two months of training in dramatic arts from volunteer professional actors interested in nature conservation. The group developed a play, <i>The charcoal makers</i>, which has been performed about 15 times for different audiences over the last 18 months and has generated a net income of about US\$950 for the group. The play has also been a good vehicle for the community to use to pass on its message to other stakeholders and to decision-makers.</p>
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Most of the methods and tools developed so far are directed towards extensionists or other field workers, to facilitate and guide their work with communities. This is not wrong, but has proved to be insufficient to guarantee a solid community involvement in forest management. Only a few of the instruments developed are handled directly by the communities themselves. One of them is the group notebook, used for improving

the collective planning, monitoring and administration of the interest groups. None of the instruments discussed in Tables 2 and 3 can work independently. For instance, without a management plan, a community land tenure certificate has little impact on natural resource management. On the other hand, a management plan for an area where tenure is not secured runs the risk of never being implemented.



Women and children fishing in Tembe River, Matutuine District, near Maputo, to increase food supply and cash generation for rural families. (Photo: C. Pereira)

Disseminating community forestry

One of the first CBNRM initiatives launched in Mozambique, the Tchuma Tchato⁵ in Tete Province, started in 1995, inspired by the Community Area Management Programme for Indigenous Resources (CAMPFIRE)⁶ model developed in Zimbabwe. The

achievements and lessons learned from it are enormous (FAO, 2000), but Tchuma Tchato is proving to be very difficult to replicate. The model can be applied only when substantial wildlife resources are available in sufficient quantity and quality to attract a safari operator. To date, the Tchuma Tchato approach has been reproduced only once in Mozambique, in the Chipange Chetu⁷ initiative in Niassa Province, but not without difficulties (see Box 2).

BOX 2 • Benefits for community tourist guides in Mozambique

In 2001, the Chipange Chetu programme brought to the remote district of Sanga, in Niassa Province, the first 34 tourists who ever visited the area. They left about US\$6 200 in hunting fees. Even though the programme is run exclusively by the local community (with some assistance from IUCN and SPFFB), it was not authorized to retain the fees collected because, it was argued, hunting fees are, by law, to be deposited in government accounts. Sanga community was trying to mirror the Tchuma Tchato programme in Tete Province, where local communities retain approximately one-third of the fees collected. Sanga community was informed that this incentive system is exceptionally and exclusively authorized in the Tchuma Tchato area of Bawa, thanks to a special site-specific agreement signed by the Ministry of Agriculture, the Ministry of Justice and the Ministry of Finance in 1995. Working hard as tourist guides, but not allowed to retain the hunting fees, and faced with complicated mechanisms to obtain benefits, the local community in Sanga is not motivated to welcome tourists in the future.

Notwithstanding the difficulty of replicating the Tchuma Tchato experience, the name is now widely known, providing a 'trademark' for CBNRM in the country. One of the easiest ways to introduce the CMNRM debate in Mozambique is to refer to the Tchuma Tchato.

The role of pilot experiences

The relationship between local people and forests is variable and evolutionary, making it virtually impossible to produce a recipe, or blueprint, for disseminating community forestry over the whole country. Even the most developed community forestry approaches require a continuum of self-critique, analysis, adaptation and improvement. This process of learning by doing, designated "action-learning" by Gilmour and Fisher (1992), is highly recommended for community forestry implementation, where both the technical staff and beneficiaries learn and move forward together (see Figure 3).

It is difficult to introduce this approach in large projects or inside government structures, where outputs must be clearly bordered (generally using logical frameworks) and the staff are accountable for them. This requirement sometimes imposes an activity-driven approach to community forestry implementation (plan → act → plan), without the necessary reflection about the lessons learned, which should feed back into the planning system to incorporate the gains from the experiences, including the negative ones.

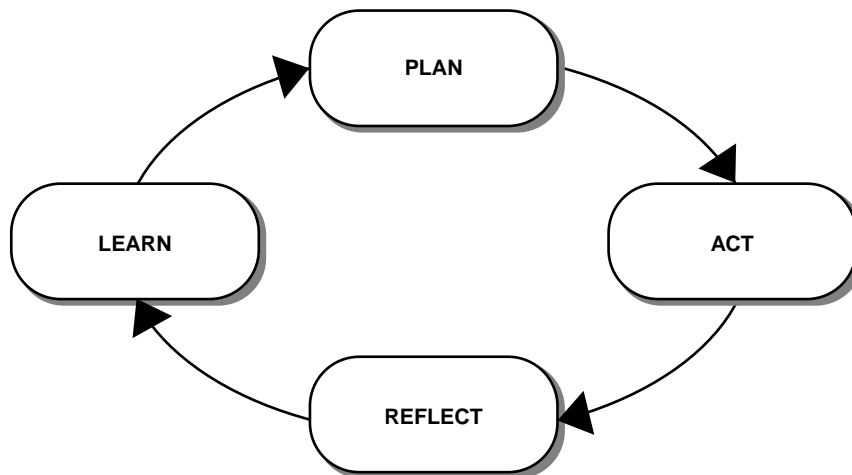
From 1995 to today, 61 new CBNRM initiatives have been identified from various projects and organizations (Magane, 2001). Forty-two experiences have been analysed by Matakala and Mushove (2001), with the assistance of a network of ten community forestry focal points based in SPFFBs. A voluntary group for systematization of CBNRM experiences was also established in April 2000. A methodology for systematization has been produced

5. Meaning "our wealth" in the local language, Nyungwe.

6. CAMPFIRE, a programme developed in Zimbabwe, is based on benefit sharing for local communities involved in wildlife management, mainly elephant hunting.

7. Meaning "our wealth" in the local language, Nyanja.

FIGURE 3 • The action-learning cycle



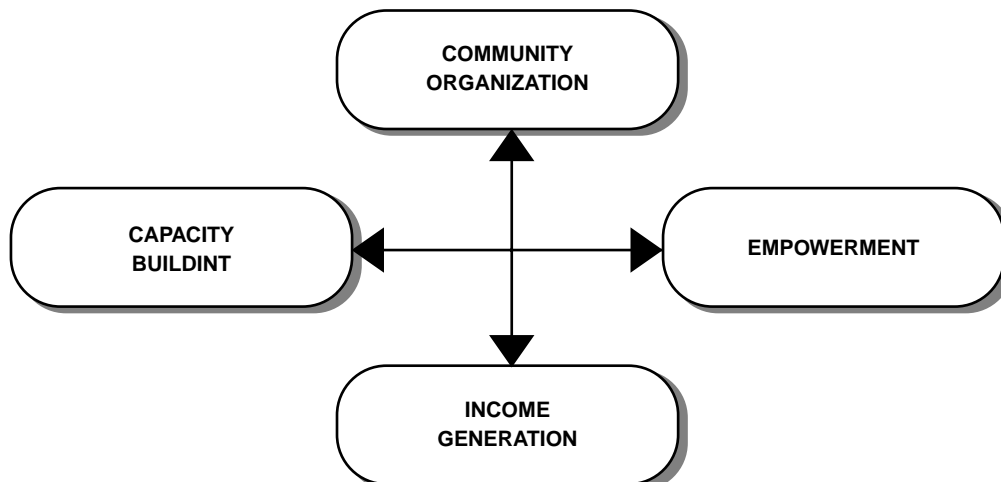
Source: Gilmour, 2000.

(FAO, 2000), and two case studies have already been systematized (Filimão, Mangué and Magane, 2000; Chidiamassamba and Rungo, 2001). The learning process is clearly ongoing.

Despite the advances of community forestry in the field, calling these initiatives “community forestry programmes” would be rather exaggerated, as they are being built in a learning-by-doing environment, sometimes resulting in more errors and doubts than

certainties and achievements. But there are clear advantages in the present community forestry areas, when compared with zones where no community forestry initiatives are being implemented. Such advantages include community empowerment, some forest management, the possibility of developing and testing the methods and tools described in Tables 2 and 3, and a better relationship between government officers and local people. Thanks to these preliminary

FIGURE 4 • Relevant variables in reaching community forestry objectives

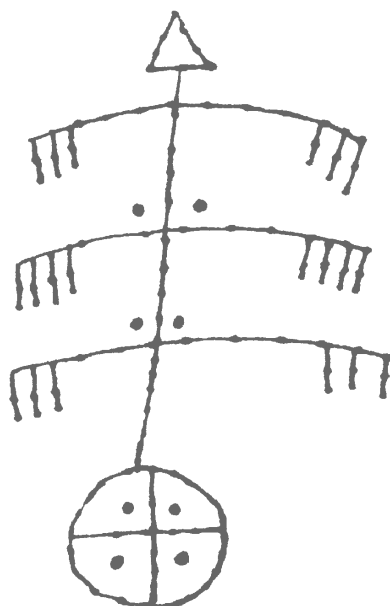


results, government and civil society are anxious to disseminate community forestry in Mozambique, jumping from the pilot scale to mainstreaming. It has been rather frustrating to recognize that the models being developed are, unfortunately, not yet complete.

Understanding the models

Figure 4 presents an adaptation of what Mansur and Nhantumbo (1999) have identified as the four basic variables for any community forestry model to be developed in Mozambique.

By “community organization”, the authors do not necessarily mean the establishment of a new institution inside the community (such as a committee), but the identification of a reasonably well-represented group of local people, known and respected in the community (e.g. from an existing traditional institution), willing to advance the dialogue on natural resource management issues, with both other community members and outsiders. The group must include men and women, even if they are in separate subgroups. For this dialogue to develop on a fair basis, communities require capacity building, mainly in management training, and information on their rights, roles and responsibilities according to the country’s policy and legal framework. They also have to be empowered. A key strategy for empowerment is the transfer of authority to the community, to secure its access and allow for local decision-making regarding natural resource management. The whole system must be economically feasible in the long term, to guarantee communities’ benefits for improving local livelihood through forest management.



Further steps must be taken to advance the development of community forestry models for the specific conditions of Mozambique. A debate about the possible models, and the opportunities and constraints they are facing, has recently been initiated. The models are understood as a set of arrangements for community forestry, trying to answer the following questions: a) What sort of benefits can be generated for local communities in each situation? and b) How can access to these resources be secured? (Fisher, Zambon and Gêmo, 2001).

In Table 4, nine possible community forestry models are identified, centred on the potential benefits they can generate to improve local communities’ livelihoods. Some arrangements are model-specific (e.g. co-management agreement for forest reserves), while others are required in various models (e.g. land tenure certificate).

It is clear that community forestry can advance more easily in the multiple forest use areas and that it is far more challenging for community forestry to succeed in protected areas. In other words, the higher the restrictions on community access to resources, the lower the opportunities for community forestry to succeed. Nevertheless, all protected areas in Mozambique and their buffer zones have resident communities, so these models are required, no matter how difficult they are to develop.

Timing

When will community forestry spread? A reasonable answer could be that it will spread when the arrangements required in the models have been developed and tested. In this case, the arrangements can be understood as the variables required in the model for its implementation. By analysing Table 4, which is still tentative and very much open to contributions, it is possible to observe that a good part of these arrangements are under development and are presently being tested. This is indeed a promising result that will lead to cost-effective investment in community forestry. However, there is still an important amount of action-research to be developed so that certain models can be applied, especially those where the leading partners are the state or the private sector.

What community forestry development has been gaining in Mozambique since 1995 is the increasing motivation of those involved. The gradual expansion of the pilot areas will continue, along with the testing and simplifying of community forestry arrangements. The easier and simpler the arrangements become, the faster community forestry will be disseminated.

TABLE 4 • Possible models for community forestry development in Mozambique

MODEL TYPES	ARRANGEMENTS	BENEFITS TO COMMUNITIES	CONSTRAINTS	POSSIBLE PILOT CASES
COMMUNITY-LED PROCESSES				
1. Area of multiple use with good forests	<p>Land tenure certificate in the name of the community</p> <p>Participatory inventory, zoning and management plan</p> <p>Stakeholders' licensing and/or community concession</p> <p>Community scouts</p> <p>Local revolving fund</p> <p>Partnership with private operators</p> <p>Business plan and marketing strategy</p>	<p>Income from timber harvesting</p> <p>Income from fuelwood and charcoal</p> <p>Strengthening local organizations</p> <p>Bargaining power to trade forest products in larger quantities</p> <p>Income from non-wood forest products, such as bamboo and honey</p> <p>Long-term forest production capacity</p> <p>Self-supply of forest products guaranteed</p>	<p>Lack of delegation of authority and decision-making to the local community</p> <p>Lack of incentives (e.g. tax benefits or tax exemption) for communities</p> <p>Lack of private investors interested in establishing equitable partnerships with local communities</p> <p>No previous experience of community forest concessions</p> <p>Communities need training and medium- to long-term support in business management</p>	<p>Pindanyanga (Manica)</p> <p>Senhote and Niviria (Nampula)</p> <p>Canda (Sofala)</p>
2. Area of multiple use with degraded forests	<p>Same as above, plus:</p> <p>Credit to interest groups for production diversification</p> <p>Afforestation, agroforestry and conservation agriculture</p> <p>Emphasis on non-wood forest products and alternative income-generating activities</p>	<p>Improved agriculture plots, soil and water conservation</p> <p>Improved pastureland</p> <p>Rebuilding of local values and traditions related to forests</p> <p>Recovery of forest stands, with gradual increase of local supply and eventual surplus for trade</p> <p>Strengthening local organizations</p> <p>Income from nurseries and non-wood forest products, such as medicinal plants, traditional drinks, grass (for thatching)</p>	<p>Same as above, plus:</p> <p>Waiting for long-term results may discourage community engagement in forest rehabilitation</p> <p>Revolving fund mechanism requires long-term training and support</p>	<p>Goba (Maputo)</p> <p>Luelele (Niassa)</p>
3. Sacred forests	<p>Declared "zone of use and historical-cultural value" (Article 13 of the Forest Law)</p>	<p>Preservation of local culture and traditions</p> <p>Strengthening of local organizations</p> <p>Conservation of forests for religious and ritual purposes</p>	<p>Communities apparently unwilling to establish official restrictions to themselves</p>	<p>Chirindzena (Gaza)</p>

Table 4 continued

MODEL TYPES	ARRANGEMENTS	BENEFITS TO COMMUNITIES	CONSTRAINTS	POSSIBLE PILOT CASES
4. Community-based game ranching	Land title or at least land certificate Strong community-based control, law enforcement and anti-poaching system in place Local capacity building for wildlife management Adequate marketing	Much higher income from wildlife resources than attained at present Increasing supply of meat and wildlife by-products Ecotourism/safari Ecosystem and cultural conservation	Knowledge of wildlife management High initial costs (fencing and other infrastructure) make partnership with private sector almost "compulsory" Pre-conditions: existing wildlife stock or possibility for restocking; low human population in a large area with well preserved ecosystem; wide community acceptance and support	Mahel
GOVERNMENT-LED PROCESSES				
1. Urban and peri-urban forests	Land tenure certificate (if possible) or agreement with land tenant Plantation forestry Recreation areas	Income from services provided in the recreation area Income from forest products for urban and peri-urban consumption Income from selling seedlings and other plants	No experience as yet Difficulty in promoting community organization in urban and peri-urban environments	Wolf's Reserve (Monapo) Matama Forest (Lichinga) FO-4 (Dondo) FO-2 (Maputo)
2. Forest reserves	Agreement for co-management between government and local community organizations Participatory inventory, zoning and management plan Community scouts Emphasis on non-wood forest products	Incentives (not yet identified) to engage in co-management Local traditional values recovered Strengthening of local organizations Self-supply of some forest products and bushmeat guaranteed Community-based ecotourism	No co-management agreements yet developed Restricted access may discourage local community participation Mecuburi and Matibane (Nampula)	Derre (Zambézia) Moribane Chimanimani (Manica)
3. Game reserves and national parks	Agreement between park management and local communities for collaborative management of the buffer zone	Some job opportunities Strengthening of local organizations Income from selling handicrafts and services to tourists Community-based ecotourism in the buffer zone	No co-management agreements yet developed Restricted access may discourage local community participation	Bazaruto, Binzo/Zinave (Inhambane) GKG (Gaza)

Table 4 continued

MODEL TYPES	ARRANGEMENTS	BENEFITS TO COMMUNITIES	CONSTRAINTS	POSSIBLE PILOT CASES
PRIVATE SECTOR-LED PROCESSES				
1. Private forest concession	Land tenure certificate in the name of the community (if possible) Agreement between concessionaire and local community to secure access rights and benefits	Income from charcoal and fuelwood production Job opportunities Strengthening local organizations Trade-offs obtained from negotiations with the concessionaires	Partnerships with private sector not yet developed Restrictions to access may discourage local community participation	No case studies yet.
2. Private hunting concession (Coutadas)	Land tenure certificate in the name of the community (if possible) Agreement between concessionaire and local community to secure access rights and benefits	Job opportunities Strengthening of local organizations Some supply of bushmeat Trade-offs obtained from negotiations with the concessionaires	Partnerships with private sector not yet developed Restricted access may discourage local community participation	No case studies in <i>Coutadas</i> yet, but Tchuma Tchato (Tete) can provide valuable lessons

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Protection and participatory management of forest ecosystems of the RIF, Morocco

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SUMMARY

With the financial and technical support of the European Community, the ministry responsible for water and forestry started a pilot project targeting two forest areas, identified as particularly sensitive and representative, in an attempt to check the rapid and complex process of deforestation in the RIF region (forest clearing, delimiting of trees, removal of fuelwood, forest fires, etc.).

The project aim is to solve the technical, institutional, juridical and participatory problems that are hampering the implementation of coordinated and rational management of forest land in the RIF.

Deployment of a forest-specific approach based on the organization of users into local forest commissions and committees for specific forests and local development associations, coordination among the different partners and involvement in the rational management of forest resources, and the development of peri-forest areas, have produced the following major results:

- affirmation of a participatory and concerted forestry approach specific to the RIF;
- emergence of new coordinating entities;
- opening of dialogue and a gradual rebuilding of confidence towards administrative structures;
- general stability of forest lands and user respect of forest restrictions;
- reduced pressure on forests for fuelwood (dissemination of semi-communal improved stoves and installation of gas depots);
- improved living conditions for local populations, particularly women (less isolation, clean water, literacy).

These achievements have motivated the Ministry of Water and Forestry and the European Community (through its principal financial instrument for implementation of the Euro-Mediterranean partnership, MEDA) to finance two integrated rural development projects in the RIF area from 2001: MEDA Chefchaouen and MEDA Forest Resources Management.



The Moroccan RIF

The RIF massif forms the mountainous barrier of northern Morocco and covers an area of 20 000 km². Home to a population of about 1 million people, it has very pronounced ecological, physical and human bioclimatic characteristics and particularities that distinguish it from all other Moroccan massifs.

For the diversity and the importance of the species they contain (more than 2 000 species), the RIF forests (600 000 ha) are nationally and internationally important from the ecological and biological points of view and also from the point of view of forestry. Similarly, these forests have very important socio-economic functions among the local people.

Despite the significant advantages and potentialities, the RIF is facing a very complex problem (involving state disengagement, lack of opening outwards, poverty and deterioration of natural resources).

In order to reduce pressure on the forest ecosystems, and following the failure of a very repressive policy of forestry management, the Ministry of Water and Forestry has put a National Forestry Plan (NFP) in place since 1999. The NFP aims at the conservation and rational management of forests through the implementation of a participatory approach specific to the Moroccan forests.

Problems specific to the RIF forests

The RIF forest ecosystems are, at present, facing an increasingly critical situation because of anthropozoogenic pressures. These pressures have given rise to a decrease in the number of forest plants as well as a decrease in their density in space and time. The pressures are the result of the population increase in a mountainous region and a shortage of agricultural land.

The absence of activities other than subsistence agriculture and unproductive livestock keeping motivates people to undertake disorganized cutting and clearing of forest areas, thereby giving way to inevitable and irreversible destruction of soil. Added to all these constraints are:

- development of the cultivation of cannabis;
- lack of clarity regarding the situation of land over the entire forest massif;
- non-adaptation of modes and bodies for management of the forest heritage;
- lack of an alternative source of energy to wood.

All these factors aggravate the deforestation phenomenon.

The factors responsible for the direct deterioration of the RIF forest ecosystems are cutting of fuelwood and heating wood, cutting of timber, clearing, grazing in the forest and fires.

Cutting of fuelwood and heating wood

The cutting is done in a disorganized manner by the local people for domestic purposes, to satisfy their need for fuelwood and for heating wood, their main source of energy. The takings are estimated to be 8 tonnes/household/year for fuelwood, and 30 m³/household/year for heating wood.

Cutting of timber

Cutting of timber for commercialization of the products and realization of surplus value is practised illicitly.

Clearing

Clearing for extension of cereal cultivation

Family living space is decreasing because of the growth of population. This forces farmers to clear the forest so as to extend their fields for cultivation.

Clearing for cultivation of cannabis

The cultivation of cannabis is responsible for the spectacular advance of the line of deforestation. It has cleared away most of the oaks of the RIF and is now attacking the high plateau vegetation cover. The rapidity of the advance of the line of deforestation can be explained by the fact that the cultivation of cannabis is an itinerant one that needs good soil and considerable care. When the soil is exhausted (after about two or three years), the farmer moves on to clear fresh land in the forest.

Since 1980, about 21 000 ha have been cleared in Chefchaouen Province, i.e. an average area of 1 500 ha per year. In the same province, 1 055 ha of forest were cleared during 1994, which resulted in the writing of 1 151 reports by foresters.

Grazing in the forest

For several years, livestock breeding has declined severely because of the decrease of its profitability. This explains why there is a significant reduction of pressure on the forest from herds. This situation has promoted a spectacular natural regeneration of the RIF cedars.

Fires

Fires are very frequent in the central RIF, mainly during winter. They are caused mainly by human activities (clearing, charcoal making, collection of honey, etc.).

In Chefchaouen Province, 4 400 ha have been burned since 1980, at an average of 300 ha/year. During 1994, 45 forest fires were detected, causing the destruction of about 1 700 ha of forest. These direct factors of deforestation cause loss in terms of biological diversity and reduction of forest coverage, which are important from the points of view of ecology and forestry and have a significant impact on the environment through erosion.

In conclusion, although the forests of the central RIF cover only about 330 000 ha, or 38 percent of the provinces of Chefchaouen and Al Hoceima, they are diversified and of high quality. At present, however, that biological diversity is severely threatened by the magnitude of the problem of forest clearing; hence the necessity and urgency of intervening to preserve the forest ecosystems of the RIF.

Approach and activities of the GEF-RIF Project

Financing and objectives of the project

Addressing this problem, the European Community contributed, by subsidy, to the financing of the project aimed at the preservation of the forest ecosystems of the RIF. A basic study was carried out in 1993 to identify sites that are important in relation to ecology and/or biology and forestry (see Table 1). This was followed by the drawing up of a physical programme, and then by a financial intervention.

Fourteen sites in the central RIF were chosen to be the subject of a participatory approach to the management of natural resources eligible for line B7-5040 European financing. The 14 sites comprise all the diverse forms of vegetation of the RIF and cover an area of approximately 102 000 ha, or 31 percent of all the residual forests of the three provinces of the RIF (Al Hoceima, Taounate and Chefchaouen).

Following this study, a financing agreement for protection of the RIF forests was signed on 21 September 1994 between the Kingdom of Morocco and the European Community for a duration of three years, divided into two phases of 18 months each. After the expiry of the first phase, the second phase could be committed, depending on the progress of the implementation of the project and on the results of the evaluation mission planned for the end of the first year of the project.

Support from the European Community was initially limited to a pilot project that corresponded to a concrete implementation of programmes related to the forest sector on two sites identified as being the most sensitive and most representative (the Bab-Berred and Tanghaya-Kourt massifs in the Chefchaouen province), as well as to the search for a model of harmonious development on the periphery of the forest massifs.

The main objectives of this project can be summarized as follows:

- to halt the process of deterioration of forest capital and to protect and rehabilitate the threatened, sensitive forest ecosystems;
- to achieve local people's participation in a rational management of residual natural resources, contributing to the betterment of people's living conditions.

TABLE 1 • RIF sites that are important to ecology and/or biology and forestry, Morocco

PROVINCE	TOTAL AREA (ha)	FOREST AREA (ha)	NUMBER OF IDENTIFIED SITES	AREA OF IDENTIFIED SITES	NUMBER OF SITES CHOSEN	AREA OF CHOSEN SITES	%
Al Hoceima	332 000	120 000	6	43 700	5	42 000	41
Taounate	561 000	39 000	4	19 000	3	18 400	18
Chefchaouen	435 000	170 000	7	53 500	6	41 500	41
Total	1 328 000	329 000	17	116 200	14	101 900	100

Phase 1 of the GEF-RIF project

Because of the complexity of the problems to be solved, the types of interventions to be made and the diverse levels of intervention, the project was based on two relatively independent components, in terms of technical and financial management.

Component 1

The first component, Institutional Support to the Forest Sector, consisted of four studies carried out in the RIF. These made it possible to clarify the status of and the prospects for RIF forest management, to improve the demarcation procedures and to specify the vocation of the RIF forest spaces.

The four studies addressed the following activities:

1. study of and search for modalities for the legal handling of land issues particular to the RIF forests;
2. preparation of a master plan for the development of the RIF forests;
3. preparation of a general energy programme for the RIF;
4. development of administrative procedures and enhancement of natural resources.

Component 2

The second component, Development and Enhancement of the Massifs, comprised the implementation of a financially, technically and administratively autonomous project on two pilot forest massifs of Province (Bab-Berred, of 7 000 ha, and Tanghaya-Kourt, of 13 000 ha), and consisted of a series of concrete actions involving local people's participation.

Actions to support the development of forestry included:

- support for land demarcation;
- the drawing up of a concerted development plan for the management of uses for each massif;
- the carrying out of silvicultural operations;
- reforestation;
- firebreak trenches.



The wood energy programme included:

- a programme for supply of fuelwood and heating wood;
- design of energy-saving equipment;
- construction and propagation of collective ovens and improved fireplaces;
- creation of wood and gas depots.

The ecodevelopment programme included:

- a socio-economic survey;
- sensitization and technical training;
- planting of fruit trees and development of arboriculture;
- diversification channels;
- improvement of systems of livestock development.

The infrastructure programme included:

- construction and improvement of opening-up of tracks;
- supply of drinking-water;
- small and medium irrigation systems.

Phase 2 of the GEF-RIF project

Following recommendations of the evaluation mission for the first portion of the project, funds for the second portion of the GEF-RIF project were provided by the European Community for a duration of two years, beginning in June 1998.

The second part of the project was specifically aimed at creating, at both the national and the local levels, conditions and specific actions seeking to guarantee protection and rational management of the forest ecosystems of the RIF.

The technical and institutional support component

This component included the drawing up and provision, for the Administration of Water and Forestry, of the tools (legal, technical, strategic and institutional) required for the application of measures for protection of the forest ecosystem of the RIF (also required to settle the land, forestry and legal problems caused by clearing, demarcation and use of the forests).

The development and enhancement of the massifs component

The testing of a package of measures (legal, land, technical, social and organizational) in three pilot forest massifs corresponded to a concrete application of a general strategy ("massif approach") and to a

search for a model of harmonious development on the margins of the forest massifs identified as being the most sensitive and most representative of Chefchaouen Province.

The project centres on:

- achieving maximum integration of the project with forestry so as to popularize the approach and the results (to spread the realizations progressively);
- strengthening and popularizing actions for stabilization of the field of forestry (in matters of approach to demarcation and participatory management);
- pursuing the massifs experiments initiated in Chefchaouen Province and extending them to the neighbouring natural park massif (Talassemtane);
- strengthening and continuing experimentations and initiatives relative to the enhancement of the forest resources of the RIF;
- consolidating the organizational authority of people's representative bodies around the massifs (associations, user groups, cooperatives, etc.);
- searching continuously for partnerships and committed actions.

Four results are expected from the specific objectives:

- the launching of concrete applications (statutory, strategic, technical and practical) by the Ministry of Water and Forestry based on recommendations (measures, tools and solutions) resulting from the institutional studies of component 1 of the first phase;
- the continuation of the "massif approach" followed by the two pilot massifs in Chefchaouen province (Bab-Berred and Tanghaya-Kourt);
- the launching of a similar approach on the third massif (Talassemtane) in Chefchaouen Province;
- the continuation and strengthening of the focus of competence and experience in the development of RIF forests and the promotion of various forest products.

The main activities undertaken during this second phase are:

- continuation of forest demarcation work and consolidation of land inside the forest (ratification) and outside the forest (registration of private land);
- application, with local people's involvement, of plans for the management of uses;
- ecodevelopment actions with direct and indirect impact on the preservation of forests (improvement of livestock and production systems, opening up, wood energy, improvement of living conditions, etc.);

- promotion and consolidation of local and collective organizational structures;
- provision of training and of technical and statutory pedagogical documents (textbooks, guides and instructions) for administrative officials;
- continuation of experimentation and promotion of initiatives on the enhancement of forests and natural resources of the RIF (aromatic plants, beekeeping, mushrooms, cork, handicrafts, heather, ecotourism, etc.).

Follow-up and coordination bodies

In conformity with the specific implementation conditions laid down in the financing agreement, before the beginning of the project the Administration of Water, Forestry and Soil Conservation formed a National Follow-up and Coordination Committee, and a Provincial Project Follow-up Committee.

The project approach in organizational and participatory terms

The organizational approach to users

Starting from the general approach adopted by the project, based on the organization of user-communities and their participation in rational management of forest resources, the project adopted a progressive approach in order to form responsible and efficient legal consultation structures and to involve these bodies in a sustainable development process.

For this reason, a committee was constituted for each forest massif in order to develop progressively a collective conscience on the notion of the interdependence of actions and solidarity among the local douars around each forest massif.

Elsewhere, local forest committees were constituted, each consisting of users of the same forest space (extent of land, collection of fuelwood, agriculture, clearing, etc.).



To carry out all project actions successfully and to move towards the empowerment of local communities in the preservation of forest resources and their use, on the one hand, and towards a better consideration of the social factor in forestry development plans, on the other, two types of body were formed:

- Massif committees bring together all the actors and users of the forest massif.
- Local committees, are more targeted in space, and take into consideration the specific needs and local interests of the user groups, and utilization of their forest space to contribute to a rational management of space over the whole massif. Those committees also play the role of project interlocutors for the various actions to be undertaken.

The phase of constitution of the massif committees was preceded by an awareness raising campaign and by the presentation of the pilot project and its objectives to the douars and the headquarters of the Bab-Taza, Bab-Berred and Bouhmed circles.

The meetings organized by the pilot project team were intended to present the pilot project and its objectives, and also to present the project plan prepared by the project team concerning the organization of the people and the constitution of the massif and local forest committees. Discussions with local authorities and elected representatives were successful; this provided more information for the proposed project plan and answered the questions of the composition, functioning and duties of the massif and local forest committees. At the end of each meeting, a calendar of meetings with the local people of the two massifs was drawn up.

The meetings were held with the local douars of the two massifs (94 communities) from 27 September 1995 to 23 October 1995 and aimed at:

- presenting the pilot project, objectives, composition and duties of the massif and local forest committees;
- mapping the forest space utilized by the people of each douar in terms of dimension and supply of fuelwood and heating wood;
- designating, with the people of each douar, two male forest delegates, one elderly and one young, and a woman delegate to sit on the massif and local forest committees.

All the information received from the douars during the project team's tours and surveys was used as the basis for the subdivision of the two forest massifs into homogeneous zones, each consisting of a certain

number of douars. A local committee was constituted in each homogeneous zone. The subdivision was approved by the massif committees.

Constitution of the massif committees

A massif committee, consisting of a whole set of social, administrative, technical and institutional actors concerned with the use of the same forest massif, is a consultation and coordination authority for the definition of use modalities of a homogeneous and geographically demarcated forest massif. The massif committee has the following objectives and aims:

- to establish a permanent dialogue between the local people and the technical experts and authorities;
- to make known the multiplicity of functions and management forms (and therefore, the status) of the forest space;
- to recognize an uncontested space where there are modalities for harvesting forest products and managed uses to be redefined in terms of local needs and in the framework of a plan for the general development of the forest massif;
- to bring out progressively a collective conscience regarding the notion of the interdependence of actions, and to promote solidarity among the local douars around each forest massif;
- to promote user groups so as to obtain better management of the whole massif and reduce forest deterioration.

Local forest committees

Although the massif committee is a consultation and information body seeking to harmonize the interventions and sensitize the many local douars (and rural communes) to the necessity of a general approach for the development of the massif and satisfaction of their long-term needs, it is clear that, by virtue of its level, the committee does not constitute an authority for discussions and resolutions of local problems and particularities.

In addition, to take into account the problems experienced by the douars, their own specific needs and the characteristics of their land and forest space, it was envisaged that local relays should be created nearer to the douars and in the form of committees representing a fraction, an ethnic group or several douars using the same forest space, and that at this level consideration must be made of the current uses.

The forest massif (Bab-Berred, Tanghaya-Kourt) could thus be subdivided under several local forest

committees, more or less along the line of the subdivision of rural communes (into parts) and/or fractions, when the former is representative of a division of forest spaces and of uses between the douars and fractions.

The local forest committee, represents a group of users in the same use-space and with similar needs. It could enrich discussion for the drawing up of a general development plan by introducing its particular problems for consideration.

Local development associations and production

With the advancement of the project and implementation of the actions in the douars, together with the participation of the people and the establishment of a climate of confidence between the two parties, the informal authorities (local forest committees) were substituted by local development associations, which are now considered the main interlocutors of the project and other players in the rural environment.

Forty-four local development associations have been formed, bringing together 92 douars.

Partnership and participatory approach

The GEF-RIF project team adopted a progressive participatory approach as implementation of the identified actions proceeded, vertically and horizontally.

Vertically, participation progressed from dialogue and consultation to the assumption of management, conservation and rehabilitation of the collective infrastructures through negotiation of terms of agreement, and financial or physical participation in the implementation of the actions and in the follow-up and monitoring of the work. The rate and modes of participation vary from action to action and from zone to zone.

Horizontally, the project team tried to extend participation in the implementation of actions to other local partners: rural communes, provincial departments, non-governmental organizations (NGOs) involved in rural development, ministerial departments and international organizations.

Implementation of the first phase of the GEF-RIF project (September 1995 to March 1998) made it possible to capitalize on a satisfactory experiment in terms of the preservation and participatory management of the forest ecosystems of the RIF. The

results obtained and the tools developed can be summarized as follows:

- creation of new consultation and dialogue bodies (massif communities and local development associations);
- preparation of strategic studies for the whole RIF, ad hoc studies and development research pilot actions;
- concrete results in the field with the participation of people and rural communes;
- constitution of technical, legal and institutional references specific to the RIF region.

Thus, the funding of the second phase of the GEF-RIF project enabled the project team to further that experiment and to prepare other tools and strategies to feed the integrated rural development (IRD) project, the management of natural resources (MNR) and the project for the development of forest and peri-forest areas of Chefchaouen Province.

It was with this perspective, and with the aim of seeking to popularize the general strategy adopted by the project, that the project team tried to involve civil society in the local development process by signing partnership agreements with local NGOs, which serve as links between the local development associations formed within the action area of the project and the provincial department, ministerial departments, international organizations, etc.

Conscious of the roles played and tasks carried out by the local NGOs as a necessary link for the implementation of a general strategy for the development of a very restricted area, the management of the project signed partnership agreements with:

- the Talassemtane Association for Environment and Development (TAED) on 15 January 1999;
- the Association of the National Union of Women of Morocco, Bab-Taza branch, on 10 February 1999;
- the Association of Young Promoters of Chefchaouen Province on 21 April 1999;
- the Association for the Advancement of Women (ZAINAB) on 27 December 1999.



The terms of those agreements are aimed mainly at:

- organizing and carrying out sensitization campaigns and recognizing problems concerning the safeguarding of the environment and preservation of the resources of the project area for the benefit of the local development associations;
- participation in the creation and management of local development associations from the three forest massifs;
- supervising training of members of associations on the basis of the expressed needs and in accordance with the action programme drawn up jointly;
- participation in the follow-up and supervision of work.

Results and recommended tools

The results at the Ministry of Water and Forestry include:

- affirmation of a forestry strategy specific to the RIF;
- progressive change in the conduct of foresters;
- application of forest area demarcation procedures adopted by consensus and consultation;
- coherence and improvement of supervision and management of the forest massifs.

For the people of the RIF project intervention area the results include:

- the opening of dialogue among the RIF people and progressive re-establishment of confidence *vis-à-vis* the administrative bodies;
- the birth of new collective authorities for consultation and discussion (massif committees, local committees and local development associations) recognized by the administration and the people;
- the launching of a blueprint for development dynamics through the realization of actions that meet the needs expressed by the people;



- satisfying the demand for forest products, while meeting the requirements for the management of forest domain.

For the forest heritage, the results include:

- a halt in the clearing of wood on the forest massifs covered by the project, and effective and respected demarcation of the forests of those massifs;
- an institutional, legal and technical framework tailored to the RIF forests;
- a technical benchmark for the development, protection and regeneration of forests, as well as for the enhancement of the natural resources of the RIF;
- people's participation in the management of forest uses in the framework of the development plan (plan for the management of harvests).

Impact of the GEF-RIF project

The GEF-RIF project has had the following impacts on the preservation of forests:

- stability of the forest domain and a significant decrease in wood-clearing offences, thanks to the method of demarcating forest domain by consensus;
- decreased pressure of livestock herds on forest space as a result of the availability of commercialized livestock feed in the douars opened up by the project;
- decrease of at least 50 percent in the consumption of fuelwood and heating wood by households that have benefited from the wood-energy programme;
- tree planting and enhancement of forest resources in the framework of the concerted development plan for forest and peri-forest areas.

At the socio-economic level, the GEF-RIF project has had the following impacts:

- improvement of the users' environment (opening up, drinking-water supply, improvement of sanitation, improved ovens, access to gas, literacy, learning, etc.);
- improvement of the revenue of users (increase in fruit growing, PMH, beekeeping, natural saffron, creation of employment, etc.);
- increased farmers' purchasing power (reduction in the cost of transport, stability of price of inputs and foodstuffs all year round, significant reductions in forest fines, etc.).

Conclusions

This implementation of programmes planned for the first phase (September 1995 to March 1998) made it possible on the one hand to carry out four strategic studies in the RIF. The results and proposed scenarios of those studies were the subject of sub-programme No. 1, MNR (financed by the European Community, 1999) and the implementation of a strategy for integrated participatory development of forest and peri-forest areas specific to the RIF zone. That development model was to be generalized on all of the forest massifs of Chefchaouen Province from 2001, in the framework of the project for integrated development of forest and peri-forest areas of Chefchaouen Province, financed by the European Community.

If one takes into consideration the specificities of the zone, particularly the intense clearing of the forest domain considered as land reserved for the cultivation of cannabis, the stakes for intervention aiming at safeguarding the ecosystem can only be controlled by a participatory approach. Despite the difficulties encountered initially, the GEF-RIF project has succeeded in establishing a climate of confidence, thanks to dialogue with users and to actions effected in the field. These factors made it easy for the project to create partnership institutions that have facilitated the implementation of several socio-economic projects, having a direct impact on the improvement of standards of living and the sensitization of the people regarding the issue of the safeguarding of natural resources.