

# Briefing

Institutions for Natural Resource Management

MZ06

## Individuals and innovations

### **Key Points:**

- **1** Beekeeping, fish farming and improved agricultural techniques were introduced to reduce pressure to cut forest
- 2 Initial uptake of these projects was very low
- 3 One innovating family which was displaced during the war – has participated in all of these programmes
- 4 Positive experiences of this family have led to uptake amongst neighbouring farms

This Briefing is one of a series produced jointly by the Forum for Social Studies (Ethiopia), Centro de Experimentação Florestal (Mozambique) and the University of Sussex (UK). Each is designed to summarise research findings and encourage feedback. The Briefing is part of the 'Marena' research project, funded by the UK's Department for International Development.

#### Introduction

When a CBNRM project was started in the Forest Reserve of Moribane in 1996, agriculture was the only subsistence activity. It is normally practised on mountain slopes and on river banks, and no measures are taken against erosion. According to government technicians, this leads to shortterm soil exhaustion (2-3 years); this is the main cause of natural resource degradation.

The same technicians have always believed that, in order to involve the community in NRM, it is essential to promote income generation. Besides gaining community involvement, this would allow the community to be less dependent on agriculture.

In 1997, a preliminary study was carried out on existing problems and potential solutions. This study enabled the project to define intervention priorities and programmes that were feasible. Consequently, in 1998, a beekeeping programme was initiated in partnership with AMRU.<sup>1</sup> Also, in 1999, fish farming was introduced in partnership with GTZ.<sup>2</sup> Besides these programmes, an extensionist from DDADR<sup>3</sup> was stationed in the area, who has already started introducing methods for soil protection and vegetable production.

#### Beekeeping

The introduction of this programme met with several difficulties. Because of AMRU's objectives, the programme was initially set up for women. However, the activity was quickly limited to only men, due to local beliefs regarding gender divisions of labour. Another problem was that the communities in *saguta* Sutcha's and *mambo* M'punga's areas refused to participate; these communities live within the reserve. However, it was accepted in *saguta* Mukwayaia's area, where 15 beekeepers were trained and given the necessary materials.

Each beekeeper received four improved beehives and other equipment and material. The material was given as a credit of 1,200,000.00 Mt (approx. US\$80), repayable from honey revenue (50% to go to paying off the loan). Two beekeepers have already sold about 50kg to AMRU. After this sale, some others have shown interest in joining the programme, including some from the areas that had originally turned it down.

#### **Fish farming**

This programme started after some members of the M'punga community visited the area of Penhalonga, where fish are raised for sale and consumption. A feasability study was made in M'punga, and it concluded that some lowland areas with watercourses had excellent potential for fish farming. With GTZ's cooperation, training was organised for about 31 community members. However, after the training, only four agreed to dig ponds.

These four individuals formed a group that dug the ponds on a rotation system. However, on the third day, three of them quit, apparently because the work was quite demanding. The one who remained finished his first pond (12x8m) two months later. GTZ offered him 200 fingerlings.



Because the fish multiplied, he decided one month later to dig another pond. He did this in eight days, and filled it with 410 fingerlings. He then had the same problem of overcrowding and decided to start another pond in April 2000.

In May, a neighbour visited the ponds and showed interest. He asked for help in choosing an appropriate site and for other necessary instructions. A week later, the neighbour started a pond and went with the original farmer to buy 200 fingerlings. Another neighbour came in June to ask for instructions; he started a pond with help from his mother and sisters. Another followed, and four more have shown interest and are currently in the process of choosing a site and marking where the pond will be dug.

#### **Vegetable production**

This has started very recently, in cooperation with local extension workers in Sussundenga. About ten families are currently involved. The same individual who started the fish ponds (who also joined the beekeeping group) was one of the first. He is currently selling some of his produce.

#### **Fires**

Besides these programmes, the same individual is also involved in an awarenessraising campaign regarding uncontrolled bush burning. His son has been helping neighbours in clearing fire breaks and in other methods of preventing and fighting fires. The neighbours claimed they were initially interested because they wanted to protect their beehives, home gardens and farming plots, as well as grass that is used to feed the fish.

#### The innovating family

Faced with a range of interventions to reduce dependence on farming, very few locals in M'punga have been willing to participate. In contrast, one 'innovating' family has become involved in all the activities. This family was originally from M'punga, but when the war started they sought refuge in Chimoio, where they stayed for ten years. When the war ended, and because they were unemployed, they moved back to their home area. When the CBNRM project started in the Moribane Reserve, they decided to join because, they claimed, 'the project technicians told us we could do many things with the existing resources, based on the experience of other areas. They brought in other technicians who trained and gave us some materials.'

They additionally said it was a way to generate some income; agricultural products don't have much of a market 'because everybody produces and the prices are low.' They also wanted to improve their diet, as 'the fish that comes from Chimoio is very expensive, and the technicians told us that fish heads are good for school children.' However, a full explanation of their participation may go beyond this.

#### Conclusions

There is always some resistance to novelty, and it is not clear even now whether the interventions in M'punga have genuinely responded to people's needs. It is especially difficult to introduce new things in areas like Mpunga, where over 90% of the community was totally isolated during ten years of war. Those who live within the reserve may also

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Richard Black (r.black@sussex.ac.uk) or Elizabeth Harrison (e.a.harrison@sussex.ac.uk) suspect that their participation might be a first step to being moved from the area.

In this case, it appears to have worked out easier and cheaper to work with small groups and particular individuals. These groups and/or individuals can introduce new ideas to friends and neighbours. They may serve as disseminators (trainers), but also as practical examples of the benefits of these programmes. In a situation where there is a general distrust towards what might be regarded as another political promise, a strategy of working with individuals who have returned to the community after a period outside may make a difference – but only if the results can be seen, and believed.

<sup>1</sup>Mozambican Association for Development for Rural Women

<sup>2</sup>German Agency of Technical Cooperation

<sup>3</sup>District Directorate of Agriculture and Rural Development

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