

MZ04

## Charcoal, hunting and fires

### Key Points:

- 1** Both charcoal production and hunting are important activities in Pindanganga, and are said to lead to deforestation
- 2** Charcoal production is a new activity in Pindanganga, mainly of outsiders to the area
- 3** At a meeting between the two groups, polarised views of the causes of deforestation were presented
- 4** This meeting helped identify a way forward for more sustainable management of resources and agreement between the groups

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.

This *Briefing* will cover the issue of degradation of forest and wildlife resources in Pindanganga, an area in the province of Manica, seen from the perspective of charcoal producers and hunters. Charcoal production and hunting are claimed by government technicians to be the primary causes of the forest degradation, due to indiscriminate cutting of trees and the setting of uncontrolled fires.

### Charcoal producers

Charcoal production started straight after the civil war (1992), and is practised mostly by outsiders who settled in the area after the war. These outsiders, said to be mostly demobilised soldiers, rely on charcoal production for income, as there is a lack of jobs, and agricultural production is insufficient to sustain their livelihoods.

There are six distinct phases in charcoal production: i) cutting and de-branching trees, ii) dragging and piling up of tree trunks, iii) covering, first with grass and small branches, then with earth, iv) burning, v) collecting and bagging and then vi) selling. This process lasts 3-4 months, and the average production is 50 to 80 bags (depending on the size of the oven).

The *carvoeiros* (charcoal producers) are normally organised in small groups without any hierarchical structure. The group comes together to do particular tasks, especially the dragging and piling up of tree trunks, which is considered the most demanding phase of the process. The groups are mostly formed according to family, religious or friendship ties.

The ovens are temporary, and are set up where resources are available. The various ovens of a group are normally close together, facilitating collective work and fire control. Fires are controlled to avoid burning the

grass (used for covering the ovens) and the charcoal. This work is done by the group members and their families; fire breaks are cleared and the people are alerted whenever there is a fire, or threat of a fire.

### Hunting

There are four main hunting techniques: i) arch traps, ii) string traps, iii) mouse traps and iv) fire, with which dogs are normally used.

The first three methods are practised by individuals. The fourth and most common method, on the other hand, is normally practised in groups of 3-8 people. These groups are organised along similar lines to the charcoal producers' groups. Fire is used to hunt rats and takes place in the winter (when the grass is dry). The technique involves burning a section of the bush, surrounding it, and then chasing the rats with dogs.

Though rat-hunting is also practised by adults, it is mostly done by groups of youths



of 9 to 18 years of age. It takes place normally in the afternoon, and serves to supplement dietary needs. After the hunt, the prey is equally shared among the group, though sometimes the dogs' owners get a larger share.

Though sometimes measures are taken to limit the extent of fires, most of the time they are not, and extensive tracts of forest are burnt. Houses and barns have reportedly been destroyed as a result of this hunting technique.

## Degradation of forest and fauna

GTZ organised a community meeting to promote their involvement in resource management. It raised the issue of natural resource degradation due to unregulated use. Uncontrolled fires and tree cutting for charcoal were identified as the main causes of degradation.

During the discussion, the hunters and charcoal producers presented polarised views. The hunters identified tree felling for charcoal production and firewood as the primary cause of deforestation, lack of wildlife and soil degradation. They argued that the charcoal producers clear-cut the areas where they set up their ovens, including trees that are not allowed to be cut. They pointed to areas that previously had forest cover but were currently completely open.

In their turn, the *carvoeiros* defended themselves. They claimed that, without the fires, the seeds of cut trees would grow into other trees. They backed up this claim by identifying areas which they protected against fires, so as to collect grass for the ovens; these areas show evidence of regeneration.

This argument was backed up by the President of the locality, traditional leaders and members of the community. They highlighted the dangers of fire, not only for the forest and wildlife, but also for fields, domestic animals, barns and homes, 'as fire isn't choosy, it burns everything...'

In the end, it was agreed that uncontrolled fires, set mostly by hunters, were the primary cause of degradation, and thus should be forbidden. To minimise risk, hunting techniques that don't use fire were recommended. Also, precautions were recommended for clearing farmland, another cause of uncontrolled fires. It was suggested that fire breaks should be cleared, based on the experience of the *carvoeiros*.

## Conclusions

The above discussion exemplified how a group like the charcoal producers, regarded by some community members, researchers and authorities as 'destructive', can become part of a solution for the conservation and sustainable use of natural resources. In

Pindanganga, the charcoal producers were strongly aware of the consequences of their activities, as well as those of other community members.

The split between charcoal producers and hunters identified here also exemplifies the importance of taking into consideration divisions within communities.

Finally, the strategy of protecting an area from uncontrolled fire, adopted by some charcoal producers to assure a continued supply of grass, could contribute to minimising forest and wildlife degradation. If well managed, charcoal production has the potential to become a 'sustainable use of natural resources,' which is an important aspect of community-based natural resource management.

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