
THE RESPONSIBILITY OF LOCAL PEOPLE FOR THE MANAGEMENT OF FOREST RESOURCES IN NORTH SENEGAL

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The responsibility of local people for the management of National Forests

In the valley of the River Senegal, National Forests often appear to have more dense vegetation than the State Forests. These *Acacia nilotica* (gonakié) forests used to grow thickly all along the river from Waoundé to Rosso, a result of the specific soil and hydrological conditions of the location. While the Forest Service's mandate is to manage all forests, these National Forests actually grow on Public Lands managed by local people – rural communities and communes.

In practice, such forests are very often cleared to make way for agricultural activities. The timber cut during operations has occasionally provided material for dendrology studies, thus protecting timber in reserves where remaining stands can be conserved as 'natural museums'. But the biomass resulting from felling is otherwise mostly used for wood-energy.

In the upper part of the same valley, on National Lands, there are many beautiful natural *Acacia nilotica* forests in existence. PROGONA¹ works for the conservation, protection and rational management of these forests by the surrounding communities. These forests are given a 'moderate conservation' status – social and administrative recognition as a community forest. This encourages all concerned (local authorities and local people) to view them as a common heritage to be looked after by every individual in the community. Each forest may be the responsibility of a group of villages, one or many rural communities, one or many districts. As the operational unit is the village, each village sets up a 'supervisory committee' which guarantees the protection of mature trees and of young growth against metal tools, fire, and browsing livestock.

These forests provide people with firewood and everyday timber needs. *Acacia nilotica* is preferred for these because of the intrinsic density and durability of its timber. A series of controlled management blocks, drawn up in consultation with villagers by the Forest Service, are planned for them in much the same way as in Forest Reserves.

Non-timber forest products (NTFPs) such as the fruits of *Zizyphus mauritiana* (jaapi), of *Balanites aegyptiaca* (murtoki) and of **pagri** (?) are important sources of income for the vulnerable groups of women and children who collect them. **Sideem** (?) from the Senegal valley is highly valued in the urban markets of Dakar, as observed in a study carried out in 1993, perhaps because it is sweeter than other fruits. *Zizyphus mauritiana* bears fruit only once a year after winter, *Balanites aegyptiaca* is a double-fruited species which can be harvested both before and after the rainy season.

Graze and browse is very important for farmers, who like to provide forage by lopping branches of *Acacia nilotica* bearing pods, flowers and leaves simultaneously. (A need for better training in tree pruning techniques has been identified).

¹ The name PROGONA is coined from PROtection and GONAKié, the local name for *Acacia nilotica*.

Since 1985, with help from the project, the people of Fouta have established multi-purpose gardens which are a mix of fruit trees, market gardening and fodder crops, with a wind break around the perimeter. They have usually found this agroforestry model preferable to village woodlots. All the planting material is produced *in-situ* and training takes place throughout the process.

Controlled areas in both Community and State Forests have been established by local people, supported by the project. The term 'local people' refers above all to dynamic women's groups with some help from men, and school children. The men have begun to plant trees in irrigated areas around the villages. Conscious of the shortage of trees, women have adopted energy-saving techniques such as solar energy.

The responsibility of local people for the management of State *Acacia nilotica* Reserves

Acacia nilotica forests played an important role in the colonisation of the Senegal Valley by the French, in fuelling the steam boats which went up the river.

The colonial power designated thirty *Acacia nilotica* forests State Reserves, in order to ensure sustained management of the resource. Because sites with this species growing at them were much sought after, until then they had belonged to powerful families. Reservation was carried in a spirit of consensus and compromise, even though the colonial power held control. The principle of protection was retained for all forests in general, but in practice each forest had a specific owner which the forestry department accepted.

Thus some forests have enclaves right inside them where exploitation is in the hands of local people – for example the Forêt Classée de Diamel. These enclaves were never properly demarcated, leading to an uncertainty which still exists today.

Other forests have areas which flood temporarily each year, and allow flood-retreat cultivation: the area covered by these sites varies by flood volume and season. Even the demarcated boundaries of the protected forests have changed because the boundary stones have frequently been shifted.

The drastic fall in rainfall, in the 1970s was a turning point for the management of the *Acacia nilotica* forests, which until then, had been regenerated through coppicing or naturally by cattle. As far as the eye could see, the trees stood dead.

In order to tackle this situation, the forest service brought in forestry contractors to rehabilitate the forests. The workers contracted to fell particular volumes of timber were mostly Guinean specialists, because the local labour force was too inexperienced. However, these workers also felled living trees, as it was difficult to cut through dead *Acacia nilotica* with the equipment available. Thus damage actually increased.

Damage was also inflicted by the local population, who had learnt the techniques of charcoal making. Charcoal is a reliable source of income and the drought had impoverished the social class with no access to fertile flood-retreat land and with no other source of income. For these reasons the local population practised a good deal of clandestine charcoal-making inside the protected

forests between 1980 and 1990. This led the forest service, supported by its donors the EDF and the Netherlands Government, to ban charcoal extraction in the Valley in 1987.

Over this period of increased desertification, stands of *Acacia nilotica* on 'Fondé' and 'faux-Fondé' soils continued to die, and were replaced by *Balanites aegyptica*, *Zizyphus mauritiana* and *Bauhinia rufescens*. *Acacia nilotica* has now retreated to a final stronghold in the valley bottoms. However these sites are also the only places left where farmers can continue to plant their age-old flood-retreat crops. Thus *Acacia nilotica* is now profoundly threatened in the Senegal valley.

During phase I of the PROGONA Project (1984-90), rehabilitation of the protected *Acacia nilotica* forests was carried out bilaterally under state control. The success rate of the work was estimated at 35%: rainfall was erratic and the cost of operations was high.

Phase II (1990-1994) was entrusted to FAO. Management goals had to change in response to the presence of people living in the reserves. And a problem had to be faced – since the forests had no real timber potential, how were local people to be given any incentive to take on a protection role? The solution came from local people themselves. After the tensions with neighbouring Mauritania, many returning migrants settled on the left bank of the river and requested cultivation land in the *Acacia* reserves, which were now two-thirds deforested.

The project had the idea of allowing people access to these lands in return for honouring a commitment to retain a 16-20% tree-cover at the outset, rising annually. The remaining land could be used for agriculture and livestock.

The case of the Forêt Classée de Goumel-Niandane

The project has involved constant contact between the authorities (Prefêt, Sous-Prefêt, Minister for Rural Communities) local people (chiefs, leaders and priests) and other development agents (extensionists from Agriculture, Livestock and Forests, other projects and NGOs).

After publicising the project's new approach, the first step was to document people's needs. The second was for a multi-disciplinary team to develop good relationships with the local population, and to assure them that their priorities were well understood. Wherever local people's priorities did not coincide with ours, for example in the case of pastoralism, specialists worked on changing awareness. The meaning of a 'Forest Reserve' was thoroughly explained, along with the conditions of collaboration. Between the two stages, administrative backing was obtained from the forestry authorities. Publicity continued with rural radio, a regional tree-planting day, and projections of slides and films. It continued, in particular, because people needed convincing of the value of pastoralism, and of the fact that plots of land were to be allocated.

When negotiations were concluded, work began on the ground – carried out by well-organised groups of inhabitants from the riverine villages, supported by the project: clearing, soil-working, direct sowing, the erecting of dead-fencing, and protection. Work was undertaken in partnership in the case of large-scale undertakings: for example the project installed irrigation systems and local people took responsibility for managing them.

In due course, the regeneration of the forests will be achieved by local people through an agro-sylvo-pastoral integrated system. It will be based on a management plan which takes both soil potential and legal factors into account.

Proposals for the framework of a 3rd phase of PROGONA

In the next phase, the project envisages establishing, with the direct participation of villagers and in collaboration with other partners, complete land-use plans for certain targeted village territories. This will meet the needs of local people and make it possible to ensure the renewal of forest resources through rational administration.

The ways in which the different areas in each village's territory are to be used will be determined jointly with villagers, and with local agriculture and livestock extension agents. In the areas intended for forestry (including sylvopastoral and agroforestry activities) the next goal will be a detailed management plan drawn up between villagers and forestry officials. In areas intended for other purposes, partners competent in the subject will be sought.

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