IK Notes

No. 8 May 1999



Nurturing the Environment on Senegal's West Coast

he Natural Reserve of Kër Cupaam is situated in the "Petite Côte" region of Senegal, 45 kilometers south of Dakar along the Atlantic coast. This fragment of a former national forest covering roughly 100 hectares was set aside by government decree in the early 1980s in order to protect the wintering site of the blue grackle and the rock grackle, two endangered species, and to shelter the migratory route of birds that follow the Atlantic coast of West Africa. The cliffs that border the seashore in this region of the coast provide prized nesting and feeding grounds for many species.

Both the flora and the fauna of this area had been severely damaged over preceding years by the effects of drought, increased grazing, and firewood harvest. The coast near Popenguine nonetheless is a favorite tourist destination for people from Dakar as well as a renowned center of religious pilgrimage for Catholies. But this activity has not greatly benefited local people, and a growing population has put heavier pressure on a deteriorating resource base.

Taking up the challenge

Though constitution of the nature reserve in the early 1980s helped to stop further degradation of the environment, the vegetation of the region had already been so severely damaged that more intensive efforts

were clearly required to restore its ecology and attract the sort of tourist activity that would benefit the local population. That, in any case, was the conclusion reached by a group of women from the village of Popenguine, who decided in 1988 to create the Association of Women of Popenguine for the Protection of the Environment (Regroupement des Femmes de Popenguine pour la Protection de la Nature or «RFPPN»). The group was composed initially of 119 women and one man, who just happened to be present at the inaugural meeting. They selected as their matron deity Mame Cumba Cupaam, «the guiding spirit of coastal fisherman.»

During the following eight years, the RFPPN used first its own resources and then additional ones provided by donor organizations interested in this novel form of natural resource management to restore the vegetation of the reserve and the surrounding territory.

IK Notes reports periodically on Indigenous Knowledge (IK) initiatives in Sub-Saharan Africa. It is published by the Africa Region's Knowledge and Learning Center as part of an evolving IK partnership between the World Bank, communities, NGOs, development institutions and multilateral organizations. The views expressed in this article are those of the authors and should not be attributed to the World Bank Group or its partners in this initiative. A webpage on IK is available at http://www.worldbank.org/aftdr/ik/default.htm

Measures implemented by the association included constitution of green firebreaks around the entire perimeter, replanting of native species furnished by a nursery that the women established at the same time, and organization of workshops where young volunteers from neighboring rural and urban areas were brought in to learn nature conservation and perform much of the physical labor required.

Going to the root of the matter

In addition, RFPPN members rapidly put their finger on the leading threat to restoration and preservation of the environment: deforestation due to collection of firewood by the population of villages throughout the area. The women resolved on a series of measures to provide alternate sources of energy and make their communities self-sufficient in cooking fuel.

 First, they established a cooperative distribution network for wood, charcoal and gas to regulate consumption and help their members provide for household needs.

IK Notes would be of interest to: Name Institution Address

Letters, comments, and requests for publications should be addressed to:

Editor: IK Notes Knowledge and Learning Center Africa Region, World Bank 1818 H Street, N.W., Room J5-171 Washington, D.C. 20433 E-mail: pmohan@worldbank.org

- Second, they established a village tree nursery and a community forest to begin enhancing the supply of local combustibles.
- Finally, they organized the collection of household wastes and trash for composting both in order to stem public health threats arising from inadequate disposal facilities and to produce compost for the nursery.

In this manner, the women not only succeeded in progressively reconstituting local bio-diversity and restoring the natural vegetation of the area, but their efforts also apparently contributed materially to the reappearance of animal species not seen in those parts for years: numerous types of birds plus porcupines, mongoose, the patas monkey, jackals, civet cats, and even antelope.

Building a network

Their efforts soon reached a level where restoration of the regional environment could not be guaranteed without broader participation from surrounding villages. The program and the example of RFPPN had, in fact, awakened an increasing amount of interest among people in neighboring communities. Rather than simply expand the RFPPN, members of the Popenguine association decided to encourage women in nearby villages to start their own organizations and establish their own nurseries, work details and fuel distribution networks. Eight communities eventually affiliated with Popenguine under the guidance of a commonly-elected coordinating committee, and the overall membership grew from the 119 members initially involved to over 1500. Tens of thousands of new tree seedlings are now produced each year by this network of associations.

At the same time, the women's groups added new dimensions of activity to their program. Three complementary directions have developed, thanks in part to substantial support from the European Economic Community (EEC).

 Credit and banking: To help alleviate the pervasive poverty that led to repeated degradation of the environment, the associations began creating cereal banks, credit mutuals and small irrigated vegetable farming enterprises in each village. The last provided an additional incentive to keep up the waste collection and composting effort.

- Tourist and training infrastructure: Given the growing interest in the Popenguine experiment throughout Senegal and even abroad, the women decided to build a simple infrastructure for hosting delegations and visitors, followed by the development of a «Center for Training in Ecological Management.» They have now had groups of visitors from several foreign countries intrigued by this example of successful «ecodevelopment.»
- Youth employment: To help stem the out-migration of school leavers and remedy the lack of opportunity for productive employment of young people throughout the region, the associations put a premium on inducting youth into the various functions and economic activities created around the new reserve. Volunteers from surrounding villages and nearby urban areas have been recruited to help with restoration of the reserve and learn principles of good ecomanagement, in many cases leading to new lasting employment. Much of the recruitment is handled by Senegalese young people's clubs affiliated with the Nicolas Hulot Foundation, a French NGO dedicated to environmental preservation.

A model to emulate

The reserve and the surrounding protected areas now cover over 50 square miles and provide more economic opportunities for all the bordering communities. This coexistence between an African national preserve and its human neighbors is at the same time emblematic of a new and hopeful style of environmental conservation. The RFFPN has offered Senegal and interested groups in other African countries a model of ecological stewardship developed with and by the local population, and one that yields short-term benefits for both the environment and the people within it.

This article is based on research conducted by Senegalese researchers with the support and technical supervision of Peter Easton, Associate Professor, Graduate Studies in Adult Education, Florida State University, with the active collaboration of the concerned African communities. The research was carried out under the joint aegis of the Club du Sahel/OECD, the CILSS and the Association for the Development of Education in Africa (ADEA).