



**CLIMATE CHANGE AND
SUSTAINABLE RENEWABLE
NATURAL RESOURCES MANAGEMENT**

**Proceedings of the 32nd Annual Conference
of the Forestry Association of Nigeria
held in Umuahia, Abia State, Nigeria.**

20th - 24th October, 2008

**Edited by
L. Popoola**



FORESTRY ASSOCIATION OF NIGERIA

PROMOTING COMMUNITY FORESTRY AND WILDLIFE MANAGEMENT IN NIGERIA

Ogogo, A. U.; Nchor, A. A. and Omulagah, I. O.

**Department of Forestry and Wildlife Resources Management,
University of Calabar, Calabar, Nigeria.**

Abstract

The trend of forest and wildlife management worldwide is towards community participation in the management of forestry and wildlife resources. There is an urgent need to stem the rate of deforestation and extinction of wildlife species in Nigeria. Benefits from community wildlife that makes it appealing include the maintenance of a healthy ecosystem in line with the Clean Development Mechanism of the Kyoto Protocol, production of wildlife species including insects for food and for cash, production of birds, reptiles and fish for sale as pets, the use of wild animals as tourist attractions, the production of luxury items such as pictures, fans and musical instruments and the use of wild animals and their products for medicinal or magical purposes. Inadequate consultation and bad leadership structures in the community may hinder the implementation of community forestry and wildlife projects in rural communities. It was recommended that Federal and state governments should collaborate with NGOs within and outside the country to promote community forestry and wildlife management in Nigeria.

Introduction

In recent decades, it has been increasingly recognized that centralized forest and wildlife management regimes have often failed to manage resources in a sustainable way because they have been rigid (Raufflet and Barrigan, 2006) and have deprived local people of motivation to use and manage resources in a sustainable way. The focus today is on shared management, with the local community having partial control over management of protected areas and their benefits. The most important mechanism for forest in developing countries is the Clean Development Mechanism (CDM) of the Kyoto Protocol, which allows developed countries to meet a part of their green house gas reduction obligations through offset projects in developing countries. Projects may include agroforests or urban forests and must be undertaken by low-income communities and individuals. The forest and wildlife resources are being depleted at a fast rate all over the world. Nigeria lost a staggering 55% of its old-growth forest (FAO, 2007). Policy and legislation alone have proved ineffective in controlling the situation. There is an urgent need for practical steps to be taken in order to mitigate climate change. Community forestry and Wildlife management options have been found to be very effective in the sustainable management of forest and wildlife resources. This paper reviews the practice of community forestry and Wildlife Management in Nigeria with a view to drawing attention of all stakeholders to its huge potential benefits and thus promote the practice.

Unsustainable Uses of the Forest and Wildlife Resources

There are numerous cases of bad agricultural, forestry and wildlife practices that necessitate an urgent change in policy and strategies of forest and wildlife management in Nigeria.

Bush meat trade

The trade in bush meat (the flesh of wild animals) is still booming especially in the high forest zone of Nigeria. Daily, large numbers of fresh and dried flesh of wild animals are hawked along the high ways and the streets in the urban areas in addition to the permanent stands in the markets. The wild animals killed and sold include those that are on the endangered species list such as monkeys, roan antelope and bush pigs.

Deforestation

There is a high rate of deforestation in the mangrove, high forest and derived savanna zones of Nigeria. In the coastal areas, various species of mangrove trees are cut for timber and fuel wood. Red mangrove (*Chizophora mangle* and *Rhizophora racemosa*) are in hot demand for fuel wood because they burn very well even when wet and are known locally as "Kerosene fire wood". In the savanna and derived savanna zones of the country, a large volume of wood is harvested and sold as fuel wood. Women and children carry bundles of fuel wood from the villages to the nearby towns for sale. Traders go to the villages and buy large volumes of dried wood which they convey with Lorries and pick up vans to the urban centers for sale. Some of the trees are felled green and allowed to dry before being split into pieces and stacked for sale. This has hasten the advancement of the savanna southwards into the forest areas. In the high forest zone, timber merchants who are desperate to make money cut down trees in disregard of the forest laws and regulations. They carry arms while on their illegal mission and are ready to kill any forest department official that confronts them.

Encroachment into the forest reserves and national parks

Large hectares of forest reserves and national parks land have been lost to people who encroach into these areas illegally. They clear the forest and build their houses especially in areas that the forest or wildlife resource is close to residential areas. Some clear the forest and plant their agricultural crops.

Unsustainable agricultural practices

Shifting cultivation is still the dominant cropping system being practiced in the forested areas of Nigeria. Large hectares of the forest are cleared and burnt for cultivation. The area is used for two or three years and abandoned for a new area.

Bush fires

Annual bush burning is still a common practice in the savanna areas of the country. The bush is burnt for farming and hunting. The removal of vegetation through bush fire exposes the land to wind and rain erosion in addition to changing the vegetation structure from forest to savannah.

The Status Of Community Forestry And Wildlife Management In Nigeria.

The approved National Forest Policy in Nigeria has provided for innovative approaches to community participation in and outside forest reserves and game reserves (Approved National Forest Policy, 2006).

The practice of Community Forestry and Wildlife Management in Nigeria is still in its infancy.

Only Cross River State out of the 36 states of the Federation and the Federal Capital Territory, has a well organized Community Forestry Programme. Presently, there are over 73 organized FMCS spread across the state. Seventeen of them have been recognized by the state Forestry Commission and have been given certificates of recognition. The total area of community forests in Cross River State is 98,400 hectares (Agbor, 2007). In 2007, FAO engaged the services of a number of consultants to collect baseline data on community forestry in different ecological zones of the country. Preliminary reports of the study indicate that many communities are willing to adopt the practice if they know clearly the benefits that will accrue to them (Ogar *et al.*, 2008).

Benefits Of Community Wildlife Management

Forest trees have a long gestation period. This often discourages people especially the poor from investing in forestry projects. Integrating wildlife management programme into community forestry will make forestry project attractive as the wildlife will bring in quick returns while the forest trees are still far from reaching maturity.

Biotic function values of wildlife

Wildlife plays indispensable roles in the maintenance of complex, healthy ecosystems as these ecosystems are indispensable to human well being, the role of wildlife is also indispensable. Biotic function values of wildlife are those that result from the ways in which animals interact with the biosphere and the geosphere. These include pollination, seed dispersal, nutrient cycling, pest control and many others including a wide range of forest products, water catchments, moderating seasonal flooding, carbon sequestration and serving as reserves for times of drought or other climatic stress. Local communities often are not aware of the full range of these environmental services nor the direct negative affects that losing them would have on their livelihood.

Commercial production of insects for food

Invertebrate plays a major role in the diets of many tropical people.

In Southeast Asia, attempts have been made to breed caterpillars of the tropical butterfly *Papilio polytes* for food. These caterpillars grow to harvestable size in 17 days and have a quicker food conversion rate than any other popular animal used for food production. In South Africa, caterpillar of the moparie moth (*Carrimbrasia belina*) are being reared for food. Annual sales through co-operative markets now amount to over 1.5 million kg of dried caterpillars. In Nigeria caterpillars of the raphia palm beetles (*Oryctes spp* and *Rhynchophorus spp*) are eaten to a great extent in the Niger Delta Region. Sticks of fried caterpillars are hawked along the highways especially on the Sapale-Warri express way. This market could be developed by raising the caterpillars in commercial quantities and selling them in a more hygienic way. Other projects include the rearing of snails for food and for sale. Frogs and fish can be raised in rice paddies and irrigation canals. Supporting and encouraging community integration into marketing systems through training, marketing information system, infrastructure development or development of product processing, and preservation techniques are some of the ways in which community forestry project can promote income generation through wildlife markets.

Non-food Economic Products of Wildlife

The pet market

Soft management or partial domestication of wild animal can be directed at uses other than food. For example even though parrots are frequently eaten for food, they are much more valuable as pets. In china royal pythons are produced in large numbers and sold as pets.

Wild animals and tourism

Wild animals may assume more value to local communities through tourism. Tourists are clearly willing to pay to see wild animals. It has been calculated that every male lion living free in the national parks of Kenya currently is worth US 2 to 3 million in its lifetime as a tourist attraction. He also stated that in Amazanian Peru, an adult macaw might be worth US\$22,000 to US\$165,000 in its lifetime through what tourist will pay to see it in the wild.

Wild animals and luxury products

In many cases, meat may be far from the most remunerative product that a community can obtain from a wild species. The comparative advantage of wild species may lie in the luxury products that can be made from them such as pictures, fans and musical instruments made from feathers, wings, teeth (e.g elephant ivory) bones, elytra shells and other parts of animal bodies. These might include pictures made from butterfly wings or birds feathers, pinned insects, poison-arrow frogs, and aquarium. There are already well-developed national and international markets for some of these products such as aquarium fish in which local communities could participate in their production and sale.

Wild animals and medicine

The trade in wild animal products for medicinal or magical purposes is ancient and widespread. Markets throughout the tropics are full of animal products for these purposes including skins, teeth, bones, bezoar stones, fats and live animals. In many cases, such as with rhinos, the trade in animal products has endangered the species. Such trade is not to be encouraged.

Potentials of Community Forestry and Wildlife Management In Nigeria

Ogar et al (2003) reported that Community Forestry is not a new idea because the local population had managed their forests before the colonial masters' arrival. Forest conservation by the locals, is evident in the presence of "evil forest", "sacred hills" and "sacred waters" which served cultural, social and economic values and totems that inundate the belief system of the people (Ojating, 1997, Anukwa, 2003; and Ogar et al, 2003).

Effective protection

Experience shows that local people in contrast to commercial enterprises are interested in maintaining their forest resources in the long run. Because they depend directly on the resource and have limited access to more attractive alternatives. Communities also have a continuous presence in the area.

Effective use of resources

For many communities, the harvesting of non-timber forest product is often more important than timber and can be adapted spontaneously to local needs and capacities.

Barriers to Successful Community Forestry and Wildlife Management

According to Sarre (1992), barriers to successful forestry and wildlife resources management include the following:

- Communities may lack the technical skills to manage the existing forest or to plant new ones.
- Communities may not have sufficient capital to establish viable processing facilities.
- The outside agency that is promoting community forestry may be doing so with a particular outcome in mind, an outcome not necessarily in tune with the wants and needs of the community in question.

According to Pokorny and Johnson O. (2008), efforts to put community forestry into practice in the Amazon region especially in Peru, Bolivia, Ecuador and Brazil have achieved only modest results. It was revealed that considerable external resources are needed to overcome the technical, legal and financial barriers inherent in the current community forestry framework.

- Land conflicts destroy both human and natural resources in the communities that continually experience border classes. They halt developments in the affected areas, retard progress and cause famine through farm lands and forest lands destruction (Ukpaka et al 1995).

Akintele (2005) identified common sources of conflicts in community forest estates to include:

- Inadequate consultation with the community before project execution.
- Bad leadership structures within the community.
- Breach of agreements and unequal sharing of resources benefits and employment among the potential beneficiaries.

Despite these and other obstacles, community forestry also offers opportunities. Local people who are often blamed for the destruction of the forest, have the opportunity to establish a long-term source of income. Foresters have the opportunity to rediscover the grassroots of their profession and the nation has the opportunity to develop a forest-based industry which has widespread community support.

Conclusions And Recommendations

Conclusions

There is urgent need for the introduction of community forestry and wildlife management in many communities in Nigeria. This will check the unsustainable uses of forestry and wildlife resources in the country. Benefits that could be derived from the practice of community forestry and wildlife include production of bush meat for food and for cash, pet market trade, production of luxury items for cash and promotion of tourism. Barriers to community forestry implementation are not serious enough to discourage the introduction of the practice in Nigeria.

Recommendations

Government should collaborate with Non governmental organizations (NGOs) within and outside the country to promote community forestry and wildlife management in Nigeria. Capacity building programmes should be organized for all stakeholders in order to increase knowledge of community forestry and wildlife management.

References

- Agbor, C. O. (2007). Tropical Rainforest Deforestation, with Special Reference to Cross River State Nigeria. Invited paper presented at the Maiden conference of the Nigerian Ecological Society, Vom Plateau State, Nigeria.
- Akande, S. O. (2003). Conflict Management in Community Forestry. Proceedings of the 29th Annual Conference of FAN Calabar, Cross River State, Nigeria. pp 239-247.
- Anaka, E. B. O. (2003). Gender Issues in Community Forestry. Proceedings of the 29th Annual Conference of FAN, Calabar, Cross River State. pp 101-111.
- Approved National Forest Policy (2006). Federal Ministry of Environment Abuja, Nigeria.
- Anukwa F. A. (2003). Community Forestry for Improved Livelihood: Experience from Cross River State, Nigeria. Proceedings of the 29th Annual Conference of FAN, Calabar, Cross River State. pp 22-29.
- Bisong, F. E. (2003). Participatory Land Use Planning for Community Based Forest Management in Cross River State, Nigeria. Proceedings of the 29th Annual Conference of FAN Calabar, Cross River State. pp 333-340.
- Food and Agriculture Organisation of the United Nations (FAO) Annual Report 2007.
- Ogar, D. A.; Ojating, I and Aya, D. A. (2003). Community Forestry and Forest stakeholders' participation in Sustainable forest Management. Proceedings of the 29th Annual Conference of FAN Calabar, Cross River State. pp 178-183.

- Ogar, D. A.; Ogogo, A. U. and Agem, D. I. (2008). Preliminary Report of Baseline Information Study on Community Based Forest Management in the Mangrove/fresh Water Ecological Zone of Nigeria. National Forest programme facility of the Food and Agriculture organization (FAO). 92pp.
- Ojating, I. (1997). Folklore and Conservation in Nigeria. Using PRA to learn from elders. Journal of PLANotes 28. pp 22-24.
- Ojating, I; Ogar, D. A. and Aya, F. A. (2003). Beekeeping, Community Forestry and Poverty Reduction in the Southern Guinea Savanna zone of Okuku, Nigeria. Proceedings of the 29th Annual Conference of FAN Calabar, Cross River State. pp 40-46.
- Pokorny, B. and Johnson, J. (2008). Community Forestry in the Amazon: The unsolved challenge of Forests and the poor. National Resource Perspectives 112, February 2008.
- Raufflet, E. and Barrigan, P.M (2006) Organizational Dimensions of Decentralized Forest Management: lessons from a farmers' co-operative in Central Mexico. International Journal of Forestry and Forest Industries. FAO Unasylva vol. 57: 223.
- Redford, K. H.; Godshalk E. and Asher. K. (1995) Wildlife animals in Community Forestry in the tropics. Community Forestry Note 13: "What about the Wild Animals" www.fao.org/docrep/96pg3 1st March 2008.
- Sarre, A. (1992). What is Community Forestry? Journal of the International Tropical Timber (Ed).
- Ukpong, M. E.; N. U. Ntia; A. E. Obot and E. N. Usang (1995). Influence of Environmental Hazards on Community Development, Lagos. McMillan publishers ltd.