

ATTAINING SUSTAINABLE RURAL DEVELOPMENT IN NIGERIA THROUGH EFFECTIVE MANAGEMENT OF FOREST BASED RESOURCES

Adebayo, A. A.

Department of Economics

Michael Otedola College of Primary Education, Lagos State, Nigeria

E-mail: mayowa2000us@yahoo.com

ABSTRACT

In some communities, the prospect of social and economic well being of the people is invariably tied to the efficiency with which the forest is managed. This review considered the imperatives of managing forest resources in a manner that is consistent with sustainable development in the rural areas. This paper identified poverty, population pressures, ineffective policies and the failure of the market to work properly as some of the factors that are promoting the unsustainable exploitation of tropical forest resources. It was recommended among others that the government should take into consideration the effects of macroeconomic policies as it concerns subsidy, land tenure, privatization etc. Such policies should be designed to have positive effects on forest owners, users and communities.

Keywords: Forest management, sustainable development; rural development

INTRODUCTION

The forest is vital to man's existence because of the many ecological and economic functions it performs. It assists in the global cycling of water, oxygen, carbon and nitrogen and lend stability to hydrological system. It ensures a regular supply of fresh water, prevent flooding, soil erosion and siltation of river beds down stream. It also assists in improving air quality, stabilizing global climate condition and soil protection (Sharma et al, 1992). It supplies many products in form of wood (basic material for construction, furniture, paper etc.) and non wood items (extractions, bark, dye, fibre, gum, incense, latexes, oils, resins, waxes, shellac, tanning compounds), food, bush meat, flowers, fruits, honey, nuts, leaves, seeds, spices etc. as well as decorative, ceremonial and medicinal items. The forest serves vital roles as raw material provider for furniture, paper, food and health industries, source of employment and stimulant of entrepreneurship especially in the logging, saw milling wood based industries (Olayide, 1975; Sharma et al, 1992).

About 2.5 million people in the tropic rely either directly or indirectly on forest resources for food and other consumable goods (Kramer, Sharma and Munasinghe, 1995). Many rural communities in Africa depend on medicinal plants from the forest for their primary health care delivery. Many forest trees are also used for fuel and charcoal which constitute sources of heat energy for small scale processing enterprises such as bakery, palm oil production and fish smoking. Others are used as browsing leaves for animals, household utensils and farm implement handles (Adebisi, 2001; Brown et al, 1995).

It is within this broad view of the importance of the forest that the "Forest Principles" which was adopted at United Nations Conference on Environment and Development (UNCED) held in 1992 noted that: "the subject of forests is related to the entire range of environmental and development issues and opportunities, including the right to socio-economic development on a sustainable basis" (United Nations, 1992). This implies that, in forest dependent communities, close interaction exists between the forest and the prospect of the society for sustainable social and economic well being.

Notwithstanding the above, the contribution of the forest sector to the economy of many developing nations remains marginal. In Nigeria, for example, the forest sector accounted for only about 1.4% of the Gross Domestic Product between 1988 and 1993 and 2.5% by 2002 (Adebisi, 2001; Amiebonomo, 2003) despite her relative abundance of forest resources. The output of forest product in the country falls far short of national demand. While the level of demand for wood in the year 2000 was projected at 180 million metric tons, the sustainable level of supply was estimated at less than 100 million metric tons (Omoleye, 2002).

In addition, forest resources are being destroyed at an alarming rate; the rate of deforestation in the country being estimated at 2.6% - 3.5% per annum (Food and Agricultural Organisation, 2005; Federal Department of Forestry, 2001) leading to the suggestion that the "remaining forest areas of Nigeria would totally disappear within the next three decades" (World Bank, 1992; Omoleye, 2002) and implying the need for measures that can help to improve the management of forest resources in the country and thus promote development, especially in the rural areas, which are most near to these resources.

Table 1: Some Statistics on Nigeria's Forest Resources

Forest Land Designation	Area (m' ha)
Estimated Total Forest Area, range (m' ha)	9.700 - 13.500
Total Closed Natural Forest (m' ha)	4.456
Planted Forest Area	0.375

Source: ITTO (2005)

This paper, thus, considers the imperatives of managing Nigeria's forest resources in a manner that is consistent with sustainable development in the rural areas. It reviews the factors that are promoting the unsustainable exploitation of tropical forest resources, using Nigeria as a context. It also explores the opportunities that the sustainable management of the nation's forest resources can create for rural livelihood enhancement and poverty reduction.

CONCEPTUALIZING SUSTAINABLE RURAL DEVELOPMENT

The World Commission on Environment and Development (1987) defines Sustainable Development as "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs". It refers to the process of continuous improvement in human well-being, without undermining the natural resource base upon which future generations will have to depend for creating their welfare. The concept of sustainable development is paramount to the conservation of nature and protection of natural resources. The whole concept is anchored on the fact that since many of our natural resources or environmental assets cannot be replaced by man-made resources, sustained development will occur only if the irreversible loss of such natural resources is avoided. The concept therefore implies that the present generation should ensure that its activities do not have a negative net effect on the environment since it is such environment that constitutes the natural capital that will be needed by the future generation for their own development.

Sustainable development thus aims at maximizing the net benefits of economic development subject to maintaining the stock of all environmental and natural resource assets (physical, human and natural) over time. Although the concept of sustainable development evolved as an environment-indexed development in which concerns over environmental quality and the services performed by the environment are integrated into development planning and economic management, modern conception of the philosophy recognizes three mutually reinforcing dimensions namely: ecological, economic and socio-cultural.

Rural development is concerned with developing political, economic and social projects relevant to the vision of where the rural regions are expected to be in the future. The concept has however changed significantly during the last five decades. Until the 1970s, it was synonymous with agricultural development and, hence, focused on increasing agricultural production with the key objective being to promote smallholder agriculture. By the early 1980s, it became more concerned with improving the economic and social life of the rural poor. In this wise, it focused on the issues of poverty (especially the non income dimensions of poverty) and inequality.

The concept now encompasses concerns that go well beyond improvements in growth, income, and output. These concerns include an assessment of changes in the quality of life, broadly defined to include improvement in health and nutrition, education, environmentally safe living conditions, and reduction in gender and income inequalities. This is based on the realization that the ultimate objective of rural development is to improve the quality of life of rural people. Thus, rural development now covers three dimensions of rural life; economic, social and political.

Today, sustainability has become a planning concept and has been widely applied in rural development. The concept of Sustainable Rural Development thus embraces the natural, economic and the socio - cultural aspects. Sandham and Van der Walt, (2004) indicated that rural development sustainability is best attained through well-planned and properly implemented initiatives that address the social, physical and economic facets of the environment in an integrated and participatory approach. Ellis and Biggs (2001) indicated that the phases in rural development practice can be classified as follows:

- (i) from community development (1950s) to emphasis on small farm growth (1960s)
- (ii) continued emphasis on small farm growth within integrated rural development (1970s)
- (iii) from state led rural development (1970s) to market liberalization (1980s)
- (iv) process, participation, empowerment and actor approaches (1980s and 1990s)
- (v) emergence of sustainable livelihood as an integrating framework (1990s)
- (vi) mainstreaming rural development into Poverty Reduction Strategy Papers (2000s)

CAUSES OF UNSUSTAINABLE EXPLOITATION OF FOREST RESOURCES

Many factors have been adduced for people's unsustainable practices as far as the forest is concerned. Such factors according to Eckholm (1979), Swanson and Barbier (1992), World Bank (1992), Kramer et al (1995) and Salami, Akarakiri, Ojo and Akinwunmi (2000) include:

1. Population pressures combined with poverty and in some cases land shortages. These factors force people and government to harvest forest resources and convert forest areas to agricultural uses to meet increasing food demand of the population. It is believed that 60% of all deforestation worldwide is due to expansion of agricultural settlements.
2. Inefficiency of administrative and regulatory divisions/institutions related to forest management such as the Forest Department and subsequent poor enforcement capacity.
3. Corruption and uncontrolled profiteering. Politicians, forestry officials, timber merchants and land owners tend to overexploit forest resource as regulatory and legal requirement can easily be bypassed. In Nigeria huge sums of potential revenue are being lost annually due to poor administration, monitoring and control system. For example, the Sakpomba Forest Reserve in Edo State of Nigeria was reported to have lost about 125,000 cubic metres of forest trees worth over five billion naria to illegal tree logging due to neglect by concerned authorities (Adisa, 1999).
4. Failure to involve local communities and indigenous people in forest policy formulation and implementation process for forest management. Community involvement is either non existing or exists only in names. The entitlement of concerned communities to benefits accruing from participation in sustainable management activities are rarely remitted thus discouraging participation.
5. Low importance placed on environmental issues and consequent poor funding of same by government vis-à-vis other more visible social and economic problems of the society. Budgetary allocation to the forest is usually very low and actual disbursement is often a marginal proportion of budgeted fund.
6. Extensive firewood collection to meet local fuel needs due to the high cost of alternative fuel resources. In Nigeria, fuel wood account for between 50-80% of the overall energy in the domestic sector (Ogbuagu, Ogburubi and Nwosu, 2001; Amiebonomo, 2003) especially in the face of rapid increase in the prices of petroleum

products including kerosene which many rural people rely on as alternative to fuel wood. Fuel wood and charcoal account for about 50% of the national primary energy consumption. It is estimated that about 90% of the rural households in Southern Nigeria and up to 98% in the rural part of Northern Nigeria depend on fuel wood as their source of domestic energy. The per capita consumption of fuel wood in rural Nigeria is 393.43 kg/annum while the urban households consume 255.75 kg/ annum (FDF, 1988).

7. Agricultural stagnation; unequal land tenure; rising unemployment and rapid population growth which creates incentives for the degradation of forested areas. In Nigeria, compliance with forestry laws and regulations remains low even though level of awareness about them is high (Salami, Akarakiri, Ojo and Akinwunmi, 2000).
8. The open access nature of most forest resources, which makes uncontrolled harvesting easy and also leads to high cost of monitoring and securing forest property rights.

Considering these factors, it is obvious that people basically engage in unsustainable forest practices because they find it profitable relative to sustainable practices which tend to have long term horizon. The apparent profitability of unsustainable practices from the private point of view however hides its huge social cost. The disparity between the private and social cost emanates from the fact that market, policy and institutional failures distort or subsidize the direct private cost of unsustainable resource exploitation making them look attractive and thus encouraging their exploitation in an unsustainable manner.

STRUCTURE, OBJECTIVES AND PROBLEMS OF FOREST MANAGEMENT IN NIGERIA

Active forest management in Nigeria dates back to 1937 with the establishment of regional forestry authorities whose main function was the constitution of forest reserves that are managed primarily for the production of timber and non-timber forest products. The Federal government through the Department of Forestry has monitoring but no executive authority in the management of forest reserves and forestlands. A lot of the forest reserves have since been deforested due to poor management by the states upon whom this function falls. Even though under state control, most

forestland in Nigeria are open access in nature and property rights are poorly established while monitoring is poor.

Government, private individuals, wood based firms, communities and NGOs are all involved in the management of Nigeria's forest resource. Government manages forest reserves with limited contributions from local communities. Some individuals and timber firms also have tree plantations and in some cases, the timber firms pay for replanting where they carry out logging. However, the private sector is not well involved in the management of forest resources in the country and private forestry are few (about 1280ha) (Amiebenomo, 2003). About 218,900 ha of plantations have been established in the country but no reserve has been created since independence. Also, about 4,992ha of forest land are under conscious natural regeneration systems in the arid zone (Amiebenomo, 2003).

The overall objectives of forest policy in Nigeria are to prevent further deforestation and to recreate forest cover, either for productive or for protective purposes, on already deforested fragile land. Specifically, the National Agricultural Policy of 1988 in which the Forestry Policy is subsumed, provides for: consolidation and expansion of the forest estate in Nigeria and its management for sustained yield; regeneration of the forests at rates higher than exploitation; conservation and protection of the environment viz: forest, soil, water, flora, fauna, and the protection of forest resources from fires, cattle grazers and illegal encroachment; development of forestry industry through the harvesting and utilisation of timber, its derivatives, and the reduction of wastes; and wildlife conservation, management and development through the creation and effective management of national parks, game reserves, tourist and recreational facilities, etc (FAO, 2002). However, sustainable management practices exist in the country largely on paper. In reality, very little of the required measures are carried out.

It has thus been noted that the main obstacles to forestry development and its sustainable management in Nigeria are: forest ownership system which limits federal government's capacity to intervene for sustainable purposes; unlimited powers of state chief executive to de-reserve and/or exploit the forests; weak or non existing legal backing of forest policy;

poor financing of forest development, management research and training by both the state and the federal government; non-availability of reliable data base for forestry planning and development; obsolete, inadequate, deficient and unenforceable forestry laws and legislation; multiplicity of forest agencies which are often duplicative and non-collaborative; very low forest tariffs and forest product prices which encourages over exploitation; natural disasters such as drought, flooding and fires often due to bush burning practices, extensive agricultural farming and over-grazing of forest lands; high prevalence of poverty in the rural areas; little or no collaborative forest resources management among stakeholders and the local communities; and obsolete methods and equipments in use in the saw-milling industry which leads to large scale wood waste (FAO, 2002; Amiebenomo, 2003).

IMPERATIVES OF FOREST BASED SUSTAINABLE RURAL DEVELOPMENT

Two main issues emerge concerning the impact of proper forest management on sustainable rural development. The first relate to the contributions that forest resources make to productive activities and to poverty reduction, and the second concerns the role that the forest can play in promoting democracy and good governance in rural communities.

With respect to the first issue, the forest when sustainably managed can facilitate reduction in poverty by creating opportunities for livelihood enhancement. Such opportunities include: income generation through trading in timber and non timber forest products from common property forest resources under government regulation; sustainably managed private and community forestry for livelihood support and Small and Medium Forest Enterprises (SMFEs) in logging, tourism (nature parks), fuel wood, agro forestry etc.; employment opportunities in forest extension and information services; opportunities for the private sector in the financing of forest sector productive activities; linkages with other sectors and industries via raw material provision and resource transfers; compensation earnings by local poor for participation in conservation programmes and protection of the environmental service values that the forest offer through employment generation, investment in social infrastructures, revenue sharing etc.

The proper development of these opportunities can assist in reducing the high prevalence of poverty among rural dwellers (Donovan, Stoian, Macqueen and Grouwels, 2006; FAO, 2002; and Brown, Malla, Schreckenberg, and Springate-Baginski, 2002; Brown, Schreckenberg, Shepherd, and Wells, 2002). With respect to the second issue, community involvement is increasingly being advocated as a means of improving the management of forest resources in developing nations. Brown, Schreckenberg, Shepherd and Wells (2002) suggest that although it is costly, community involvement is justified on the basis of proximity of the community to the resource; its potential to impact directly on the well being of the community members; its capacity to create equity, enhance livelihood, capacity and biodiversity; its facilitation of good governance and democracy because people actually participate in decisions affecting them; its relative cost effectiveness compared to other options such as public or private forest management; and the fact that it is in itself a desirable development philosophy i.e. the fact that participation, decentralization and subsidiarity are desirable ends or outcomes of development.

Experts and empirical studies in African and Asian countries have suggested vital lessons about the management of forest resources in relation to the effects and processes of devolution, decentralization of decisions and community participation in development process (Brown, Malla, Schreckenberg, and Springate-Baginski, 2002; Brown, Schreckenberg, Shepherd, and Wells, 2002; Schrackleton et al, 2002; Amanor and Brown, 2003; Baumann and Farrington, 2003). The lessons that seem to have emerged are that:

- i. The forest sector plays crucial roles in providing safety nets for the poor and in moving them out of poverty. Participatory forest management and adoption of privately delivered forestry advisory services can be useful in rural livelihood enhancement. It is however vital that forest sector revenue be retained at their source for this to materialize.
- ii. Community forestry is costly and knowledge intensive. It however has considerable and extensive benefits.
- iii. Active local government involvement is essential. Forestry should

- be planned and budgeted for in local development plans. Strong civil society support and active donor assistance are also needed.
- iv. Despite devolution, the state has extensive roles to play in providing technical assistance, establishing policy and institutional frameworks, regulating private activities etc. Relaxation of existing regulations and regulatory reforms may therefore prove vital rather than the wholesale deregulation of the sector.
 - v. Devolution may prove harmful where expectations of the government and local communities differ significantly.
 - vi. Compensation to local poor for their roles in protecting the environmental service values that forests offer can be useful in poverty reduction in rural areas.

CONCLUSION AND RECOMMENDATIONS

Forest resources in Nigeria, like in most other developing economies, are being destroyed at such an alarming rate that it is feared that the remaining forest areas of Nigeria could totally disappear within the next three decades. This is in spite of the high opportunities that the forest can create for people involved in governance, improving their income earning potentials and ultimately stimulating forest friendly development. This paper identifies poverty, population pressures, ineffective policies and the failure of the market to work properly as some of the factors that are promoting the unsustainable exploitation of tropical forest resources. It considers the options available for the sustainable management of Nigeria's forest resources and submits that a sustainable forest management programme can create opportunities for participatory governance and livelihood enhancement in the rural areas. To further improve the system it is recommended that there should be:

- (i) the formulation and effective implementation of good forest and rural development policies which aims at making rural enterprises profitable thereby raising rural income and discourage unsustainable forest practices. Forest policies should recognize that there are diverse groups involved in forest management (e.g. forest dwellers, neighbouring communities etc.) and their diverse rights and interests

should be provided for. The establishment of private forestry should be encouraged and efforts should be made to improve Small and Medium Scale Forest Enterprises (SMFE) as avenues for livelihood enhancement.

- (ii) establishment of Village Forestry Associations which should be used to promote local participation in sustainable forest practices. Cooperation with local communities in forest planning and management should be improved through community based management options.
- (iii) improvement in the forest extension system which should be conceived basically as a public - private sector partnership. In this wise, there should be improvements in technical and administrative support for line agencies responsible for forest resource management as well as better funding and monitoring of forest agencies.
- (iv) further harmonisation of the different institutions, agencies and policies concerned with forest management and improvement in inter-agency cooperation with regard to policy formulation and implementation. The interactions that exist between the forest and related sectors such as agriculture should be taken into consideration.
- (v) appropriate incentive mechanism such as compensation for costs of specific forest management measures taken by forest owners and communities in public interest and benefits forgone by forest owners due to the adoption of sustainable management practices etc. should be used to encourage sustainable forest management.
- (vi) the effects of macroeconomic policies as it concerns subsidy, land tenure, privatization etc. should be taken into consideration. Such policies should be designed to have positive effects on forest owners, users and communities.

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