

SUSTAINABLE FOREST MANAGEMENT IN NIGERIA: LESSONS AND PROSPECTS

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HARNESSING FORESTRY POTENTIALS IN ACTUALIZING NATIONAL ECONOMIC EMPOWERMENT DEVELOPMENT STRATEGY

By

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Abstract

National Economic Empowerment Development Strategy (NEEDS) is a development plan that integrates economic development efforts at the Federal, State and Local Government levels. Its vision, values and principles are encapsulated by four goals: Wealth creation; Employment generation; Poverty reduction; and Value reorientation, with the "modus-operandi" for achieving these goals being anchored on three main strategies; viz; empowering people, promoting private enterprises and changing the way government does its work.

The Nigerian forestry sector which has the responsibility to sustainably develop and manage about 25% of Nigerian land mass, to meet the diverse needs of the teeming urban and rural population; no doubt has a salient role to play in achieving the goal of NEEDS. Some of these roles include provision of comprehensive databases, promotion of forest based small scale enterprises, crafting institutional framework for boosting wood production and biodiversity conservation, restructuring the forestry- industrial sector, establishment of ministry of renewable natural resources and crafting institutional framework for sustainable urban forestry development.

Collaborative efforts of FDF, FAN and other stakeholders to garner political support and networking for effective advocacy, are essential for forestry optimal contribution to NEEDS.

Introduction

Current challenges for economic change and vigorous remarkable economic growth to meet the Millennium Development Goal (MDG) of reducing by halve the number of people who are food insecure and living in extreme poverty by the year 2015, compelled the Federal Government of Nigeria to institute a reform

programme tagged "National Economic Empowerment Development Strategy"(NEEDS). According to National Planning Commission (2004), NEEDS is a development plan that integrates economic development efforts at the Federal, State and Local Government levels. It does not confine itself to specific sector or limit itself to addressing only the major challenges identified. Instead, it looks at the big picture, examining how the challenges identified in each sector affect one another. NEEDS seeks to consider "inter alia" the critical importance of improving infrastructure, more and more reliable electricity and a new and better maintained network of roads. NEEDS also aims at giving special support to agriculture, industry, small and medium scale enterprises and oil and gas. Under the plan, the government will seek long term capital for investment. NEEDS also envisages forging stronger links between educational institutions and industry to stimulate rapid industrial growth and efficient exploitation of resources.

The vision, values and principles of NEEDS are encapsulated by four goals: Wealth creation; Employment generation; Poverty reduction; and Value reorientation. The "modus-operandi" for achieving these goals is anchored on three main strategies; viz;

- (i) Empowering people which encompasses jobs creation, creating affordable housing, improving health care services, strengthening the skill base, protecting the vulnerable and promoting peace and security;
- (ii) Promoting private enterprises which consists of improving infrastructure, promoting industry, improving agriculture and promoting other sectors;
- (iii) Changing the way the government does its work.

The Nigerian forestry sector which has the responsibility to sustainably develop and manage about 25% of Nigerian land mass (which is made up of 15% forests and 10% other wooded land) (FAO 2003), to meet the diverse social, (dietary, medicinal, cultural, and recreational), economic (income and employment) and environmental (sustenance of ecological life-supporting processes) needs of the teeming urban and rural population; produces over 100 million cubic metre of wood annually; contribute between 1.3% and 3% of GDP as well as major proportions of domestic energy, food and medicinal supply which are not fully reflected in formal national statistics; generated an export earning of US\$33.4 million earnings in 1999 (FAO 2004); no doubt has a salient role to play in achieving the goal of NEEDS. It is therefore, very crucial to critically examine the ways by which the forestry sector can optimally contribute to achieving the goals of NEEDS.

OVERVIEW AND CHALLENGES OF FORESTRY DEVELOPMENT IN NIGERIA.

Nigeria's natural vegetation is broadly divided into four main zones running across the country from south to north. These are: lowland rain forest, guinea savannah, sudan savannah, and sahel savannah. In addition, there are also small areas of montane forest in the centre of the country and mangrove forests along the coastline. According to FAO (2003), Nigeria's land area is about 91 million hectares out of which about 14 million hectares are forests. This implies that forests cover approximately 15% of the land area (while other wooded land covers a further 10%).

Forest administration in Nigeria started in 1887, and by 1970 about 10% of total land area had been constituted as forest reserves. The National Forest Policy (1988) provides for an increase of this figure to 20%. Nigeria has 693000 ha of forest plantations and the highest rates of deforestation in Africa, at 2.6% per annum. Nigeria is gradually becoming a wood-deficient country because of urban and rural population pressure, which has greatly increased the demand for wood and wood products. The wood deficit situation is worsened by livestock grazing, soil erosion, drought and desertification as well as growing demand for cropland. These factors have collectively placed the forest estate of Nigeria under great threat (FAO, 2004).

Nigeria is Africa's largest wood producer, with an annual harvest estimated at more than 100 million cubic meters, even though the vast majority of this production is burnt as fuel. The industrial forestry sector is relatively large comprising about 1300 sawmills, 10 ply mills, 3 paper mills, 8 safety match factories and 4 particle board mills. The sector whose products are almost exclusively for local consumption is producing between 30 and 40% of installed capacity. The rate of recovery in the sawmilling sector is lower than 40% partly because of the use of old and obsolete machines which were hitherto meant for conversion of large diameter logs.

The mandate for forestry in Nigeria is currently domiciled in the Federal Ministry of Environment. Forestry sector has about 510 professionals and more than 4000 personnel in the technical and sub technical cadre. At the federal level, the Forestry Research Institute of Nigeria (FRIN) has the mandate for research in all aspect of forestry, wildlife and forest product utilization. Furthermore, the National Park Service (NPS) is responsible for the management of national parks, which are not delegated to the states (FAO, 2004).

Different aspects of sustainable management, exploitation and renewal of the national forests and plantations as well as utilization, marketing and increasing demand for forest produce continue to pose serious challenges to forestry development in Nigeria. These challenges are compounded by several other problems, ranging from shrinking forest estate through dereservation and deforestation, to declining yield, poor forest management, resulting from institutional and technical constraints, as well as poor public attitude. Some of these problems are examined briefly below;

1. Increasing Demand for Forest Produce:

Increasing population growth in Nigeria somehow has a paradoxical effect on forestry. Population increase which usually brings about urban expansion and increasing demand for land for food production and infrastructural development eventually culminate in drastic reduction of land available for forestry development. At the same time, the teeming population looks on to forestry to meet their increasingly diverse and several needs from the dwindling forest resources. Bada, (1996) argued that the federal government ban on export of wood in round form in 1976 was not just to forestall the emerging shortage of timber and other forest products, but also to meet the increasing demands for diversified forest goods and services. There is therefore a challenge on forest management to develop an intensive and multiple land use systems such as agroforestry and urban forestry, and to take over marginal lands in good time, in order to meet the demand for the several and diverse demands of the population from the forest.

2. Inefficient Wood Conversion

One of the greatest problems of forest exploitation and utilization in Nigeria is that of timber harvesting and conversion. Bada (1996) observed that the practice of timber high grading makes the wood volume of any felled tree removed from the forest to be not more than 60%. Furthermore, utilization inefficiency also abounds in sawmills and wood processing establishments, where avoidable waste in form of slabs, off-cuts and sawdust made up about 40% of wood input volume. According to FAO (2004), the forestry industrial sector is producing between 30% and 40% of installed capacity, while the rate of recovery in sawmilling sector is lower than 40%, partly because of the use of old and obsolete machines which were hitherto meant for conversion of large diameter logs. Apparently, sawmill owners are unable to replace their obsolete machines for more efficient ones because of economic constraints

3. Low Private Investment in Plantation Development:

Private investments in forestry has been at an all time low ebb partly because of lack of macroeconomic policy incentives such as tax relief, low interest on long term loan, etc, as well as facilitation of acquisition of land. Other reasons include huge capital outlay, low price of wood particularly in the domestic market, and long gestation period for the trees to attain maturity or rotational age. Plantation forestry is a salient development intervention that can bring immense benefits to the economies of the developing countries. These benefits include;

- a. Resource creation, rather than solely exploiting to meet the demand for wood and wood products.
- b. Development of flexible resource base such as village woodlot, large scale industrial plantations, or smaller plantations, able to yield many kinds and sizes of products such as fuel wood, sawn timber, veneer logs and all manners of NTFPs for internal demand or for export or both.
- c. Better use/conversion of marginal lands that are of little or no agricultural value.
- d. Creation of employment, particularly in the adjoining areas of location.
- e. High level of employment per unit of investment, since plantation establishment is labour intensive.
- f. Use of many skills already common in agriculture with little additional training on the job.
- g. Development of infrastructures such as roads, communication services, houses, shops, schools, etc, often to remote areas. This is often the case when the plantation is extensive.
- h. Optimal land use because of the possibility of integrating tree planting with other land-uses, both for improved and diversified production of goods and also for environmental consideration.

4. Inadequate Data Base:

One of the problems confronting sustainable forest resources development in Nigeria is the lack of adequate data on the various aspects of forestry, on which to base planning for sustainable development. Good planning data is a prerequisite for any sustainable forest management project. For instance, an inventory data based on improper or inadequate sampling due to inaccessibility or collected through the use of obsolete equipment as a result of lack of resources can not be reliable.

FORESTRY AND NEEDS

Since NEEDS aims at: giving special support to development of industry and small and medium scale enterprises; seeking for long term capital for investment; and forging stronger links between educational institutions and industry to stimulate rapid industrial growth and efficient exploitation of resources, then forestry has ample potentials and major roles to contribute to the actualisation of NEEDS' goals of poverty reduction, wealth creation, employment generation and value reorientation as well as in the implementation of NEEDS' strategies of empowering people and promoting private enterprise. In this regard, two issues are germane for forestry to optimally contribute to the actualization of NEEDS' goals and strategies. The first thing is for NEEDS to identify development interventions that will provide solutions to the challenges of forestry development in Nigeria, while the second step will be to identify how forestry can be used in providing solutions to challenges of development in other sectors of the economy. Subsequently the following issues are very essential and require serious and urgent considerations if forestry will contribute maximally to the NEEDS' goals of poverty reduction, wealth creation, employment generation and value reorientation.

1. Provision of Comprehensive Databases

Databases (numerical, cartographic and bibliographic) that group together all available knowledge about climate, soil, topography, flora fauna, information about the productivity or growth of valued species and their long term yield, prospect for the use of lesser known species, contribution of forest resources to GDP, and dynamics of demand, supply and prices of various forest goods in the international and local markets need be established. Without prejudice to the past efforts by the Federal Government of Nigeria to carry out forest inventory, and the existence of agencies like Federal Office of Statistics, there is a great need for the establishment of an agency that will be given the responsibility of establishing and maintaining such databases. The responsibility of collecting the data for this project can be given to universities, wherein different universities will be given the responsibility of collecting an aspect of the data. The advantage of this will be in two folds for the universities: an opportunity to acquire modern equipment which can also be used for teaching and practical demonstration for the students; as well as opportunities for good practical training for the students as they participate in data collection.

2. Promotion of Forest Based Small Scale Enterprises:

For forest management to have a desired effect in the implementation of 'NEEDS', there will have to be a diversification of forest resources development into forest based small scale enterprises. These enterprises include manufacture of cane products, apiculture (bee-keeping), sericulture (production of silkworm), production of 'bushmeat' (snails, grasscutters etc), and production of some NTFPs (charcoal, spices gum Arabic, etc) among others. Most of these are cottage enterprises, have shorter production cycle and most often make use of an already existing forest with little or no modification to management requirements and thus do not require huge financial outlay, compared with plantation establishment.

Achieving this requires institutional restructuring for effective funding of forest resources development. Therefore, there is a need for the establishment of a department of natural (forest) resources development, particularly in the development financial institutions such as Nigerian Agricultural and Rural Development Bank and other arrangements which have to do with financing of agricultural development. This department will be specifically mandated to fund the development of forest based small scale enterprises.

3. Crafting Institutional Framework for Boosting Wood Production and Biodiversity Conservation:

According to FAO (2004), Nigeria; Africa's largest wood producer, with an annual harvest estimated at more than 100 million cubic metres, has one of the highest (2%) deforestation in Africa. This situation calls for putting necessary institutional framework on the ground to increase wood production and conserve biodiversity in the face of increasing demand for forests (deforestation) to meet land use requirements in other sectors, and pressure on the residual forests to continue to meet the needs of the population. Therefore, the development of Trees Outside Forests (TOF) which encompasses agroforestry and urban forestry becomes very imperative. To achieve this, there is a need for the establishment of institutions and nurseries at state and local government levels, which will be providing tree care training and seedlings, particularly those of indigenous hardwoods to the public. This should be backed up by aggressive media campaign to raise the awareness of the public on the availability of the facilities and the need for the people to participate in such project.

4. Restructuring the Forestry- Industrial Sector

This sector according to FAO (2004) is producing between 30 and 40 percent of installed capacity, with the rate of recovery in the sawmilling sector being

lower than 40 percent, partly because of the use of old and obsolete machines which were hitherto meant for conversion of large-diameter logs. Most sawmill owners are unable to replace their machines. Small quantities of sawn timber are exported, with forest product exports in 1999 being put at US\$33.4 million, while imports were US\$172.3 million (mainly paper and paperboard, but also sawnwood). The situation above calls for urgent steps to stem down the unsustainable management of this sector. There is a need for investment in this sector so that higher percentage of installed capacity can be achieved. Especially investments in paper and paperboard as well as in modern machines that can work on small diameter logs are very imperative. This will help the country to reduce the trade in-balance, and consequently the capital flight. Since most sawmill owners are low scale, community based entrepreneurs, there is a need for government to facilitate a funding mechanism such as specialized cooperative, that will enable the sawmill owners to come together and benefit from the Small Medium Enterprises (SMEs) loan facilities.

5. Establishment of Ministry of Renewable Natural Resources:

The sheer number and multiple-use nature of forest resources have put the administration of forest resources to be subsumed under one sector or the other. As a department in the ministry of agriculture, forest management was being largely perceived from production (mostly exploitation of timber) point of view, and now its being moved to ministry of environment tends to undermine the production aspect of it. The hitherto institutional arrangement for forest administration has jeopardised sustainable forest resources development in Nigeria. Therefore, there is a need for the establishment of Ministry of Renewable Natural Resources Development and Conservation which will take care of all aspects of production and preservation of forest, wildlife and fisheries resources. Only then will our natural resources contribute optimally to sustainable development.

6. Crafting Institutional Framework for Sustainable Urban Forestry Development

At 5.3%, the rate of urbanisation in Nigeria is among the highest in the world. Since manufacturing is stagnant, there are few jobs for the growing urban population and the urban unemployment is currently estimated at 10.8% (National Planning Commission; 2004). Aside rising unemployment with its concomitant consequences, urbanisation also carries along with it increasing demand for basic needs such as fuelwood, low cost construction materials, drinking water and

water for household use (Carter 1994). These are in addition to huge and growing social and environmental problems such as air, land and noise pollution; non-conducive local microclimatic conditions; and a stressful social and living environment, resulting from inadequate, dilapidated, and overstretched infrastructure, degraded urban physiognomy, increasing levels of unemployment, crime, insecurity and other social vices inherent in many urban areas of the world (Ajewole, 2005).

Urban forestry offers a variety of benefits capable of mitigating these problems. These benefits include; providing the urban dweller, (especially the urban poor) with some essential forest produce, mitigation of the ecological effects of urban sprawl, improving the living environment in urban areas, attraction of tourism, provision of avenue for recreation and solitude for spiritual activities, encouragement of investment, as well as creation of training and employment opportunities. Urban forest changes the mood of the urban landscape and makes it a place where beauty and grace become public values. It can also serve as a means of educating and improving social behaviour among the lower classes, and providing a peaceful outlet for the tensions of working class life. Therefore, introducing trees into built-up areas fulfils varied environmental, social and economic functions as well as satisfies an innate human urge to be with his natural partners. Hence, nurturing of greenery could be equated with the provisions of essential urban infrastructures (Ajewole, op-cit).

The foregoing benefits no doubt requires that necessary institutional framework needs to be put in place for urban forestry development to be incorporated into the physical and social fabrics of our urban landscape planning, so that our cities and towns can be better places to work and live in. Multi purpose urban forestry development can be used as a development intervention to create employment, improve income earnings, supplement food and medical needs, reduce poverty, conserve biodiversity, achieve value reorientation and consequently improve the overall socio-economic wellbeing of the Nigerian public. Therefore, sustainable urban forestry development is a major potential forestry strategy critical for the actualisation of the current National Economic and Empowerment Development Strategy (NEEDS) of the country.

Conclusion

Forestry and NEEDS can have a very profitable symbiotic relationship if the opportunities presented by the two are well articulated and harnessed, wherein NEEDS will provide the institutional viz. policy, administrative, legal, informational

and funding- frameworks and empowerment for forestry to achieve its mandated goal of providing for all manners of human needs in a sustainable manner. If this is achieved forestry as a sector will have aided NEEDS to achieve its goals by providing opportunities to create wealth, generate employment, reduce poverty and reorientate values, while forestry in turn will have succeeded in turning over most of its challenges towards the journey of sustainable development.

For forestry to avail itself the opportunities that NEEDS presents, it will have to identify and harness very strong political support and networking, which must be transformed to a loud and efficient advocacy. With due recognition to the laudable efforts of the Federal Department of Forestry (FDF) and the Forestry Association of Nigeria (FAN) (the apex forestry professional body in the country) in forestry development in Nigeria, FAN still has a very prominent role to play in facilitating the approval of the reviewed National Forest Policy (NFP) without further delay. This reviewed NFP which is a major paradigm shift to enhance the contribution of forests in Nigeria to poverty alleviations, environmental protection, sustainable wood production (Oyebo, 2004), protecting the vulnerable and promoting peace and security, also proposes some concrete development interventions that are geared towards achieving NEEDS' goals. FAN will also need to pursue vigorously the other aforementioned suggested ways which forestry can contribute to achieving NEEDS' goals. No doubt some of these are long term development issues that will require fundamental institutional changes, time and resilience on the part of FAN, yet it will be a worthwhile venture and of great value both for sustainable forestry development in Nigeria and posterity.

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