# SUSTAINABLE DEVELOPMENT OF NON – TIMBER FOREST PRODUCTS FOR ECONOMIC REHABILITATION AND RELIANCE

**J.S. Alao**

**Abstract**

Non-timber forest products (NTFFs) are major contributors, not only to the economy at large but also to thy lives of vast majority of people, especially the rural dwellers because of their versatility encompassed in their value added products (VAP) for food, medicine, forage, industrial raw material, religion, culture and income generation among others. It has been shown that majority of people - 70% are engaged in NTFPs extraction for sustainable livelihood and that rate of return on investment (U.ORI) between 9.4-34.2% is positive thereby showing mat investment in NTFPs as a business is viable. This therefore calls for their sustainable development in order for them to continue to contribute meaningfully to economic rehabilitation and reliance.

## Introduction

The humid forests in Nigeria are rich in Horn and fauna, but they have traditionally been managed exclusively for limber production. These forests arc also sources of oilier products which were hitherto regarded as minor forest products but now arc mostly known as Non-Timber Forest Products (NTFPs) or Non-Wood Forest Products (NWFPs).

Food and Agricultural Organization of the United Nations (FAO, 1991) defined Non-Wood Forest Products as subsistence goods and services for human or industrial consumption derived from renewable forest resources and biomes, bearing promise for augmenting real rural household incomes and employment. The products include the use of plants for food, forage, fuel, medicine, fibre, biochemicals as well as animals, birds, reptiles and fishes for food, fur and feathers. Wood used for handicrafts is included, as are services derived from the standing forest that generate such benefits as tourism revenues and preservation of biodiversity. Wickens (1991) also defined non-timber forest products as all the biological material (other than industrial round wood and derived sawn timber, wood chips, wood based panels and pulp) that may be extracted from natural ecosystems, managed plantations and be utilized within the household, be marketed, or have social, cultural or religious significance.

The non-timber forest products are many and diverse. They include oil, resins, sponge, herbs, medicinal plants, fibre, bush meat, spices, chewing sticks, leaves etc. The parent sources of some of the non-timber forest products are Mitragyna stipulosa this has broad leaves which are used for the preservation of Kolanuts, Calamus deratus is used in the cane industry, Irvingia wombolu has its seeds used as soup thickener while Garcinia kola is medicinal and its fruits edible.

Alao (2000) has shown that Garcinia kola no doubt has socio-economic benefits that arc accruable to the people not only in the locality of production but also in the place of consumption. These non-timber forest products contribute not only to the national economy but also to the global economy because of their value added products (VAP) thereby enhancing economic rehabilitation and reliance.

It is a known fuel, however, that mankind has depended more on limber than mm- timber forest products for a very long Lime. He neglected non-timber forest products because he was yet to grasp the importance and impact of these products. This paper therefore is to draw attention to the socio-economic importance of non-timber forest products and the need for their sustainable development.

### Non-Timber Forest Products and Sustainable Livelihood

Non-timber forest products are veritable tools for sustainable livelihood. This has been corroborated in studies by Alao (2000); Odcbiyi and Ogunjobi (2003) who showed that NTFPs arc means of generating income, source of food, medicine and in socio - cultural usage. Campbell, Chattopadbyay and Das (1995) pointed out that NTFPs play vital economic role in the lives of the vast majority of people. Studies have shown that about 70% of people are engaged in NTFPs extraction (Odebiyi and Ogunjobi, 2003).

Alao (2000) has shown that all the component parts of Garcinia kola (a NTFP) are useful in medicinal application (Table 1)

Table 1: Medicinal Application of Garcinia kola

| Part | Ailment / Treatment |
|---|---|
| Seed | Cough, dysentery, Fever, Stomach, pain, gonorrhea |
| Root | Dental hygiene |
| Stem | Dental hygiene |

Source Alao (2000)

The social and cultural importance of Garcinia kola as revealed in a study by Alao (2000) showed that socially, the seeds are used in celebrating apprenticeship, graduation and marriage ceremonies while culturally, they are used in the worship of a traditional god (Sango - A Yoruba deity).

The vital role of NTFPs in income'generation using Garcinia kola as an illustration has been aptly demonstrated by Alao (2000) who analyzed the rate of return on investment (RORI) for both Kwara and Osun states. The rate between 9.4 - 34.2% is positive thus showing that investment in NTFPs as business is viable (Table 2).

Table 2: Rate of Return on Investment (RORI) fur Kwara and Qsun States

| S/NO | LGA | TC | TR N | 7l N | RORI N % |
|---|---|---|---|---|---|
| Kwara Stale | | | | | |
| 1, | ilorin West | 48,493.16 | 53,035.67 | 4,542,51 | 9.4 |
| 2. | Oke - Ero | 4,277.56 | 5,432.06 | 1,153,59 | 27,0 |
| 3. | Ekiti | 5,887.46 | 7,013.28 | 1,125.82 | 19.2 |
| Osun Stale | | | | | |
| 1. | Irewole | 16,237.95 | 20,878.35 | 4,640.40 | 28.6 |
| 2. | Aycdadc | 18,505.63 | 24,825.88 | 6320.25 | 34.2 |
| 3. | Atakumosa West | 20,116.66 | 24,838.70 | 4,722.04 | 23.5 |
| 4. | 1 fe - East | 18,912.79 | 24,454.20 | 5,541.41 | 29-3 |

Source Alao (2000).

**Development Strategies for Non-Timber Forest Products**

Wild supplies of food comprise much more of the diet of the subsistence populations than is often realized (Hoskins, 1990) and because these wild supplies come from the forest usually as NTFPs, there is therefore the need for their sustainable development.

For instance local people in the south - south geopolitical /.one of Nigeria have a tradition of cultivating and / or maintaining species such as calamus deratus (Cane) and Anaestrophvllum secondiflorum among others. These are used along with bamboo for furniture construction. According to Ikojo et al (2003) a number of other commercial species can thrive under natural forest conditions whose cultivation, if intensified and expanded, revenues generated might exceed N2 billion annually while employing large labour force. There are dozens of other NTFPs which could be harvested on a sustained basis to generate gainful employment and appreciable income among the rural community.

One of the key factor in the development strategies is in enhancing commercial and valuable NTFP production through natural forest manipulation (Fofferbergcr, 1992). Commercial valuable NTFPs arc often threatened by over exploitation and since their availability in natural forests is often limited, it would be useful to examine the possibility of enhancing their availability through manipulation of the forest ecosystem. This can be achieved through enrichment planting and various selective felling techniques that will increase space and light availability. This will definitely improve the productivity of many NTFPs.

Agroforestry is another important programme thai can boost the development of NTFPs. In addition to its long-term advantages of soil erosion prevention, provision of shelter and enhancement of soil fertility, long term species can be inter planted with Irvingia spp, Citrus spp, Paidium spp, Carica papaya and Mangifera indica as mid-term

intercrops. For the short term species, vegetables such as Cowpea, Gnetiim xpp, Telfera spp etc can be planted. The implication for the agroforestry sector is that long, mid'and short term species arc planted and this has the advantage of earning some income from the short term seasonal vegetables while the mid-term trees take time to fruit.

**Conclusion**

Non-limber forest products are already assuming local and national economic importance with the realization of their enormous potential. This paper has highlighted that NTFPs arc sources for income generation, employment, medicine, food, forage, raw material, culture, religion, etc. It is therefore very imperative that all hands must be on deck in order to ensure their continuous availability on a sustainable basis considering their very crucial role in economic development.

**Recommendations**

Government at the Federal, State and Local levels should ensure that there is a well coordinated enlightenment campaign so as to sensitize the people and improve their knowledge on the over whelming importance of the forest and the need for its sustainable management. Individuals, NGOs and corporate bodies should also be partners in these campaigns.

The management of the forest should involve members of the community. This will go a long way in maintaining the state of the forest. Exploiters should be encouraged to participate in cultivation by giving them incentives. There should be adequate provision of infrastructural facilities such as good access roads, electricity and potable drinking water. Good roads will reduce cost of transportation, reduce waste and hence increase returns,

Adequate room by the government should be created for the monitoring, assessment and evaluation of the biological components of our forests. Regular inventory of the timber and non- timber forest products is necessary in order to monitor and keep abreast of exploitation trend. This will ensure their continuous contribution to the economic well being of the people.

**References**


Alao, J.S. (2000). Valuation and Marketing of Garcinia kola Linn in Osun and Kwara Slates. Unpublished M.Sc thesis, University of Ibadan, Ibadan.

Campbell, J.Y; Challopadbyay, R..N; & Das. C. (1995). Income Generation Through Forest Management in India. A Case Study of the Participatory Forest Management Project in Nayagram, West Bengal. Proceedings of a Seminar on Income Generation Through Community Forestry. 18-20 October, 1995. Bangkok, Thailand. RECOFT Report 13.

FAO (1991). Non-Wood Forest Products; The Way ahead. FAO Forestiy Paper 97. Hoskins, M. (1990). The Contribution of Forestry to Food Security. Unasylva 41 (1):3-13.

Ikojo, H.A; Udofia, S. & Azeez, A. (2003). Community Forestry Approach to Poverty Reduction in Rural Areas. Proceedings of (he 29'" Annual Conference of the Forestry Association of Nigeria held in Calabar, Cross River State, Nigeria 6'" - II'" October, 2003.

Odebiyi, J.B. and Ogunjobi, M. (2003). Role of Non-Timber Forest Products (NTFPs) in Alleviating Poverty in Odeda Local Government Area of Ogun State, Nigeria. Proceedings of the Forestry Association of Nigeria 29'" Annual Conference held in Calabar, Cross River State, Nigeria, 6" -11'" October, 2003.

Pofferberger, M. (1992). The Importance of Sustainability, Effectiveness and Equity in Community Forestry Management. In Sustainable and Effective Management Systems for Community Forestry. Proceeding of a Workshop Held in Bangkok, Thailand. 18'" - 20[l]'" October, 1995.

Wickens, G.B. (1991). Management Issues for Development of Non-timber Forest Products. Unxaylva M5(42):3-8.