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PREFACE

The Forestry Association of Nigeria and the Department of Forest Resources Management, University of Ibadan, (Publishers of Journal of Tropical Forest Resources) have enjoyed a fruitful working relationship dating back to the inauguration of the former in 1970. Indeed, key academic staff of the Department initiated the idea of a national umbrella association for foresters in Nigeria. The present Editor-in-Chief of this Journal was in fact the first registered student member of the Association at its inauguration. Perhaps it was in furtherance of this relationship that the FANCONSULT, which is the consultancy unit of the Association, decided to publish the proceedings of its first National Workshop in the Journal of Tropical Forest Resources in spite of the fact that the Association has its own journal, the Nigerian Journal of Forestry, which is also internationally subscribed.

The theme of the workshop which proceeding is being published was "**Forest Industries, Environment and Sustainable Development**". Eleven papers including a keynote address presented are published in this Volume of the Journal. The keynote address by Emeritus Prof. S. Kolade Adeyoju gives an overview of the forest industry and development in Ondo State and Nigeria generally. Though he submits that as result of the mismanagement of the forest estate the industry has been compounded and compromised, he recommends some strategies to redeem the situation. In their individual papers, E.S Udo; T. Adetula and O. Omiyale dwell on ethics/professionalism as well as the problems and impacts of encroachment in forestry development in Nigeria. On the other hand S.O Akinde addresses the importance of forest assessment for sustainable development while L. Popoola and J. Akande provide an insight into integrated approach to forestry sector impact assessment. Papers by J.E Olawoye, S.O Jimoh and S.O.Bada; and B. Ajayi treat various aspects of the forest industries and how they impact sustainable development. Finally, B. Olufermi rep-up the technical presentations with a paper on occupational safety and ergonomics in forestry. In all, the papers address the problems facing forest industries and the environment in Nigeria and proffer solutions for sustainable development.

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PRIVATE PARTICIPATION IN FOREST PLANTATION DEVELOPMENT IN NIGERIA

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ABSTRACT

Nigeria's endowment of natural forest was so vast that it was thought to be inexhaustible. Today the resource base has been badly eroded. Only about 5% of the nation's land area is under forest cover. The current situation is that the nation can no longer meet its domestic wood need and has thus have to rely on wood importation to supplement domestic production. Though series of efforts have been made to bridge the gap via plantation establishment; the results of these efforts have not been good enough to achieve the objective. This paper traces the history of forest plantation establishment in Nigeria from the early part of the 19th century to date. It is observed that the level of private participation in forestry development in the country is still very low. This is contrary to the contemporary global trend in which private participation in plantation development is growing rapidly. It is suggested that public enlightenment, legislative reforms, provision of technical and financial assistance, funding of relevant research targeted at the private sector's needs and provision of clear definition of property rights be embarked upon by the government in order to stimulate the interest of private investors.

INTRODUCTION

The main objective of forest management in any country is usually the attainment of self-sufficiency in forest produce particularly wood. In Nigeria, organised forestry started in 1897 (Adeyaju 1975; Bada, 1996). The broad policy objectives then included sustainable forest management; forest conservation and environmental protection subsequently other issues became important including: Efficient utilization of forest produce; development of non-wood forest products that play significant roles in rural economy thereby creating

employment and income; creation of alternative source of energy other than wood and; international cooperation or forestry development etc.

In order to achieve these policy objectives Nigeria set a target of keeping 25% of its land base under forest cover although FAO (1979) reported that only 9.8% of the country's land area was under reserved forest. This has since decreased by 3.48% between 1981 and 1985 and 3.57% from 1986 to 1990 (FAO, 1991). Effectively the remaining forested land area in 1997 - 1998 was only about 5.1% (Eedy 1997; FORMECU 1998). The current indications are that the domestic demand for timber and non-timber products (especially fuelwood) is well in excess of the supply and will continue to increase with the rapidly growing population in the coming decades (FORMECU, 1999). Furthermore, Lowe (1997) has observed that none of the country's high forest reserves were being managed under a working plan. Over-exploitation has thus destroyed the recuperative capacity of the forests including non-timber produce such as chew sticks, medicinal plants, wrapping leaves, spices etc collected from the forest. The obvious fact is that the remaining natural forest cannot cope with the rapidly increasing wood demand from the fast growing population. It has since dawn on forest managers and government that the only viable alternative was to supplement the production from natural forest with artificial forest plantations and this marked the beginning of plantations forest development in Nigeria.

DEVELOPMENT TRENDS IN PLANTATION ESTABLISHMENT IN NIGERIA

Early work on forest plantation establishment in the country started in the early years of the 20th century. In 1906, small-scale teak plantations were established around the forestry headquarters at Ockemeji. Between 1910 and 1920, this had spread to Mamu and Onigambari forest reserves. Although species such as *Furumia elastica*, *Annogeissus leiocarpus*, *Milicia excelsa*, *Azizelia africana*, *Cedrela odorata* and *Nauclea diderichi* were included in the early trials, teak and *Nauclea* were the major species planted in large scale. According to Umeh (1992), 266 ha had been established by 1920; and this expanded to 1,032 ha within the following ten years. *Gmelina arborea* was introduced in 1932 to provide pit props for the coalmines at Enugu.

In the Northern parts of the country trials were also started at the beginning of the last century using species such as *Azadirachta indica*, *Senna siamea*;

Eucalyptus spp. etc. By the middle of the 1960s, large scale establishment of teak and *Gmelina* plantations commenced in the North-central state at Nimbia following the research findings at the Savanna forestry research station at Samaru to the effect that the fertile soils of the Guinea Savanna possessed great potentials to support large scale forest plantations. The government of the old Kano and Northeastern states also planted species such as *Acacia nilotica* and *A. seyal* for gum arabic production. In the old southeastern state, large-scale plantations of teak were also established via Taungya at Awi.

By 1973, the accelerated pulpwood production project commenced. The project involved the establishment of large scale plantations of *Gmelina arborea*. The old southeastern states; Western state; Northwestern state at Mokwa; old Kwara state around Lafagi-Pategi axis; and the old Benue plateau state around Ibaejoko. The 1972-1994 drought in the Northern parts of the country also accelerated plantation establishment in the subsequent years in order to protect the environment. The Arid Zone Afforestation Project established long shelterbelts of various species. The Accelerated Wood Production Programme of the Federal government also established large scale plantations in states such as Ogun, Ondo, Edo, Cross River, Kwara, Kogi and Niger using mainly *Gmelina arborea* and *Tectona grandis*.

Further significant developments of man - made forest were also achieved through the forestry I and II projects. The forestry I project was implemented between 1978 and 1983 with a coverage of three states namely Anambra, Ogun and Ondo states. About 12, 638 ha of *Gmelina* and 600 ha of pines were established (FORMECU 1999). The African Development Bank funded the second phase of forestry II project. This phase focused on maintaining the Plantations established during the first phase with provisions for beating up in areas where there were failures. The project was able to establish 4, 910.2 ha of new plantations, comprising of Teak and *Eucalyptus* in states such as Kaduna, Benue and Kogi. In addition, 600 ha of wood-established in the afforestation project states. Much of the industrial plantations under the forestry I and II projects were geared towards the supply of pulpwood for Okuiboku, Iwopin and Jebba paper mills.

The current situation starting from the mid 1990s to date is that poor financing, inadequacy of trained manpower, fire outbreaks and general lack of efficient management in the country. Thus the vision of meeting the domestic wood requirement is far from being achieved. It is obvious that to meet the target of sustainable wood production there is need to involve the private sector in plantation development.

CURRENT LEVEL OF PRIVATE PARTICIPATION IN FOREST PLANTATION DEVELOPMENT IN NIGERIA

Information on private participation in forest plantation establishment is still very scanty. Only very few examples are on record. The Nigerian Tobacco Company established fuelwood plantations in Oke-Ogun area of Oyo State. This involved the planting of *Senna siamea* and other species as a source of energy for curing tobacco. The African Timber and plywood also established plantations in the leased area of Sakpoba; PIEDMONT at Ologbo forest reserve and SAFA splints Ibadan also established plantations of Obeche and *Cedrela odorata* in parts of Gambari forest reserve. Other examples include the Edo state Timber Contractors Association and the heritage conservation project in Ibadan and Odogbolu. A timber contractor by name Alhaji Talat Ainkunmi, (Chief Akeweje of Ikire) has established several hectares of Teak plantation at Ikire. Apparently, there are pockets of other private and community woodlots in other parts of the country but the level is still very low. Worse still majority of government established plantations are also located within forest reserves. The implication of this is that the effective area under forest cover does not increase significantly.

STRATEGIES TOWARDS IMPROVED PRIVATE PARTICIPATION

The current global strategy for encouraging private participation in forestry is by transferring ownership of forest plantations to private individuals and industries for example; the New Zealand government has withdrawn from forestry production. The government dissolved the state forestry service and liberalized timber trade thus exposing the market to international competition, state owned plantations forest were sold to foreign companies through a lease arrangement termed evergreen. Under the arrangement, the government retains land ownership right while only the ownership of forest transferred to the buyer. The lease is renewed annually for a period of thirty-five years to allow for a full

rotation of the planted tree crops. A notice of termination of the agreement must be given at least 35 years in advance after the anniversary of the first rotation. As at 1993 the New Zealand forestry corporation was managing majority of the remaining saleable plantations in New Zealand – a profit oriented organization. According to Valentine there were moves to offer the rest for sale, which would place 93% of New Zealand forest in private sectors hands. Between 1985 and 1991, new plantings reduced from 56, 000 hectares to 16, 000 ha but after the introduction of the new policy in 1992 it increased to 40, 000 ha. Valentine, 1993).

Similarly in Australia, following legislative reforms in favour of private ownership of forest plantations, private investments in the sector increased ten folds between 1981 and 1991. According to Stanton (1999), the level of private plantation ownership also increased from 30% in 1994 to over 40% in 1998. This came about as a result of the sale of the plantation assets of the Victorian government and the significant planting programme undertaken by a range of private sector investments and industrial companies.

In South Africa, the new forestry policy since 1996 aims at transferring forestry plantations to the private sector. The policy is predicated upon the fact that government is not in the best position to manage commercial plantations and hence the responsibility should be passed to the private sector. In a manner similar to the situation in New Zealand, the land was not sold but rather the use right was transferred to the private investors. This was achieved through the mechanism of long-term leases to be entered into by the state in trust for the landowners.

Nigeria has a lot of lessons to learn from this emerging trend of forestland ownership. Lowe (1997) has proposed a review of land tenure and forestry funding arrangements in order to promote the involvement of private concerns in the forestry sector. Based on the experiences of various countries that have privatized their forestry estates the followings are obvious advantages to be gained if Nigeria encourages private forest development

- (i) Privatization will attract investment and expertise, which are necessary to revitalize the often under funded plantations under public management;

- (ii) Efficient management will lead to increased yield, which may boost the export potential of the country;
- (iii) This may be a viable way of addressing the notorious problems of illegal felling and forest encroachment;
- (iv) Privatization may also increase the extent of forest cover in the country; and
- (v) Marginal lands could be put to better use instead of leaving them as derelicts and degraded areas.

In order to achieve these, there are a number of crucial steps to be taken by the Government to encourage private investors. These include:

- (i) Effective awareness campaigns should be put in place to educate the public about the philosophy of private forestry establishment.
- (ii) Suitable lands for plantation establishment should be made available to prospective investors with little or no difficulty.
- (iii) Private individuals should be encouraged to establish forest plantations on their private holdings. Such encouragement should include provision of material inputs, technical advice, tax incentives, etc.
- (iv) Government should fund research programmes specifically targeted at the needs of private investor and the findings should be widely disseminated with improved extension services.
- (v) Innovative approaches to farm forestry should be encouraged.
- (vi) The state and Federal Government should provide enabling market environment. The business should be made attractive and security of trade ensured.
- (vii) There is need for legislative reforms to ensure that land tenure and regulatory structures do not hinder or discourage private sector participation in forestry development.
- (viii) The land / property transfer arrangement should be long enough to allow for a full rotation of the tree crops planted.
- (ix) Property rights should clearly be defined such that plantation owners may have right to transfer or exchange crops for money anytime they wish.
- (x) Large-scale monoculture plantation should not be established in existing forest reserves. The objective should be to develop systems of mixed

- forest plantations that will be environment friendly while enhancing the benefits from good natural forest management.
- (xi) Large areas of Northern and Southern Guinea Savanna are quite suitable for private forest development. Since forestry does not compete with food production, a kind of integrated land use practice will enhance food production and also protect the environment.. A shift to multi-species plantation development will mimic the natural ecosystem and reduce the risks of pests' disease.
 - (xii) Infrastructural facilities should be developed to make the rural environments habitable, while enhancing the conversion of the wood produced to useable forms.

CONCLUSION

The Nigerian high forest that had been thought to be inexhaustible is virtually gone. All silvicultural efforts such as the Walsh system; enrichment planting clear-cutting system; the group system and the Nigerian Tropical Shelterwood System have failed to redeem the situation. The introduction of exotic species in forest plantation development that would have played the vital role of bridging the gap between demand and supply has also fallen short of expectation because of the inadequacy of spread and investment by Government. If the current trend of rapid deforestation and environmental degradation is to be reversed; then government should take purposeful steps to attract private sector involvement in forest plantation development in the country.

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