

ROLE OF COMMUNITY FORESTRY IN SUSTAINABLE FOREST MANAGEMENT AND DEVELOPMENT: A REVIEW

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ABSTRACT

This paper attempts to evaluate the various ways community forestry can help to ensure sustainable forest management and development in Nigeria. It stresses that local communities have a mutual relationship with forests and could be partners in forest development efforts if the needs, desires, aspirations and perceptions of the various participants are accommodated in the planning and decision-making process. It is posited here that no strategy to conserve or manage the forest ecosystem on a sustained basis would be successful unless the needs of the least advantaged and most vulnerable sections of the society are considered. This paper emphasizes that with community forestry, the local inhabitants could be made to know that continuous expansion of human enterprises is out of balance with the shrinking forest resources and the diminished environmental services of forests is an immediate global problem. The challenges of communal forestry in ensuring sustainable forest management as highlighted in the paper include lack of expertise, funding, conflicts, and un-preparedness of forestry commission and staff to change. Others include lack of commitment to goals of partnership by stakeholders, inadequate support from community leadership as well as the present globalisation of the world economy; liberalisation and privatisation of national economies negatively impact on natural resources. The paper however, concludes among other things that the way forward include security of long term rights of local communities, adequate funding, effective conflict management, research and capacity building in community forestry as well as the establishment of community forestry development project unit at both Federal, State and Local Government levels that will mobilise and create awareness in the communities.

Keywords: Community forestry, participatory management, sustainable development.

INTRODUCTION

Local community has a symbiotic relationship with forests and could be partners in the forest development efforts. A balanced approach to conservation and management of forests with the sole aim of development of indigenous people can help to alleviate poverty (Tewari and Tiwari, 1997; Chijioke, 2003; Ikojo *et al.*,

2003), promote sustainable development (Agbogidi *et al.*, 2005) and environmental protection (Kirishnaswamy, 1995; Agbogidi, 2005).

Participation is the cornerstone of community forestry because communal forestry was developed in part as a response to the recognition for effective sustainable forest

management to occur (Udo, 1999). Community forestry with its focus on participation supports the empowerment of communities and the inclusion of all groups in the community (minorities, youths, women etc) in the decision-making. This participatory approach provides the platform for sustainable rural development. Participatory forest management (PFM) is considered as one of the viable alternatives for the restoration of degraded forests and their sustainable management (Agbogidi and Okonta, 2003). The basis of PFM is the handing over control of local forests to forest user group (FUG), that have locally recognised rights to use a forest.

The review is an attempt to evaluate the role of community forestry in sustainable forest management and development.

Community Forestry and its objectives

Community forestry is a collective name of a variety of forestry management strategies, which gives attention to the participation of local communities in forest and tree resources management and their use in meeting their daily needs for food, fodder, timber, employment, income and environment (Sharma, 1992; Agbor, 2002). It is a people participation exercise that involves an active partnership between policy-makers, planners, officials and the target beneficiaries of a programme (Udo, 1999). Community forestry according to King *et al.* (1990) and Agbogidi and Okonta (2003), involves grass-root initiatives, leadership building and rural level organizational capacity building. It is centred on the primary concept of local control and decision-making in the management of the forest surrounding the

community. It is a form of social forestry that helps to promote well informed decisions as the decision makers are familiar with the forest and land base in question as well as the concerns and goals of the local population (FAO, 1978). Community forestry entails the empowerment of the local people to take part in the management of the natural biological diversity. Forests constitute a major natural resource in the tropics and subtropics on which a large number of people depend for their survival (Salim and Ullsten, 1999). For forests to continue to give their multiple benefits directly or indirectly to the people who live near them and also to those who live far from them, participatory forest management, which lays emphasis on fulfilling the needs of the local people and on ecological maintenance must be advocated. To achieve this true participation, the needs, desires, aspirations and perceptions of the various participants need to be accommodated in the planning and management. Tewari and Tiwari (1997) posited that no strategy to conserve the forest ecosystem would be successful unless the needs of the least advantaged and most vulnerable sections of the society are considered and met. For participatory social/communal forestry to be enhanced, the design has to be based on the people's needs, priorities, economic opportunities and constraints. In the same vein, an appraisal of the socio-economic situations of the targeted beneficiary would help the planners to examine whether the social objective of the programme has been achieved.

Community forestry can exist under private property, leased land, land trusts, community forests, wood waste utilisation, land covenants, cooperatives, tenured land from

the crown land under contract (FAO, 2001). It also includes a number of individual programmes such as household forestry, ethno-forestry, farmers' self-help organisations, demonstration households and forestry techniques (Tewari and Tiwari, 1997).

Communal forestry is being practiced in Sweden, Norway, England, Germany, India, France, Japan as well as some developing countries including Cameroon. The primary objective of community forestry according to Ogar *et al.* (2003) is to halt deforestation by maintaining or increasing forest cover. It values the role of indigenous knowledge in achieving sustainable livelihood using forests and biodiversity. Some models of community forestry practices in Nigeria are presented in Table 1.

Sustainable Development

Sustainable development has been variously defined by different authors. It refers to meeting the needs of the present generation without compromising the ability of the future generations to meet their needs (FAO, 1978; FAO, 2001). This is the basis for restoration of biodiversity loss.

Sustainable development preaches controlled hunting, lumbering, fishing etc. It is a progressive economic and social department of human society through maintaining the security of livelihood for all people and enabling them to meet their present needs together with the quality of life in accordance with their dignity and well-being, without compromising the ability of the future generations to do likewise (Wolfensohn and Fuller, 1998).

Sustainability requires that growth must not exceed the capacity of the larger system to generate resources and absorb waste at sustainable rates and without disrupting other vital natural services such as photosynthesis, nitrogen fixation, etc. Sustainable development implies integrating traditional economic concerns with often ignored social and environmental consideration (Salim and Ullsten, 1999). Community forestry allows for a sustained yield management if all the parties are well informed and actively participate in the process (Ogar *et al.*, 2003). Economies cannot remain healthy unless the resources on which they depend are sustainably managed. Economies, which degrade their environments for short-term gains are rarely stable and never sustainable (Salim and Ullsten, 1999). Salim and Ullsten (1999) maintained that sustainable development requires integrating economic viability and human development with the necessity to protect the environment and sustain indefinitely the natural resource base. Nigeria has a long history of forest management and the formal goal is to achieve self-sufficiency in all aspects of forest production. Nigeria, once a significant exporter, is now a net importer of primary forest products.

Role of community forestry in sustainable development

Localised management of forest resources is more likely to alleviate poverty than centralised management (Udofia, 2001). Many of the world's poor people are highly dependent on management of remnant wood-lands, on-farm trees and agro forestry farming both for subsistence need (fruit, fuel wood, fodder, medicinal products) and income generation. Reports by

Udo (1999), Agbogidi and Okonta (2003) and Agbogidi *et al.* (2005) indicated that local communities and small farmers have been sustainably managing forest resources and on-farm trees based on traditional knowledge over long periods of time. Collaborative forest management is seen as a way of sustaining management and protecting the forest not only as an opportunity to address poverty but also for biodiversity preservation and conservation.

With community forestry, the local inhabitants could be made to know that continuous expansion of human enterprise is out of balance with the shrinking forest resource and diminished environmental services of forests is an immediate global problem. With women as an integral component of the community forest management, sustainability in the forest biodiversity can be guaranteed. Agbogidi and Okonta (2003) noted that with women taking the lead, village cooperatives are managing tree nurseries, planting trees on what used to be barren land as well as reintroducing neglected plant species. Efforts have to be geared toward preserving plant biodiversity on a collective basis if the world's growing population is to be fed in the next century and beyond and if drastic fluctuations in agricultural production, which lead to poverty and famine, are to be avoided. The public needs to know that short-term economic growth at the expense of long-term sustainability of the resource base is counter-productive. This awareness programme can be effectively carried out when there is participatory forest management. Commitment by governments is however, a prerequisite for action on this.

Household forestry, a component of community forestry sub-project incorporates a number of discrete activities such as establishment of economic plantation forests, afforestation on barren hills suitable for tree planting, improvement of low-yield forests, conservation of forest resources and prevention and control of pests and diseases in economic forest thereby contributing to the maintenance and improvement of biological diversity (Ekeke, 2003). This is not unconnected with the fact that community forestry has shifted from afforestation to the management of forests for conservation and development. Hence, the rights to manage and enjoy the benefits are important to communities that are highly dependent on the forest resources.

Challenges

The challenges of community forestry in ensuring sustainable forest management and development include the following:

- Pre-commencement challenges (un-preparedness of forestry service to change probably for fear of loss of jobs)

Funding: Adedayo (2003) presented data (Table 2) on the level of government funding of community forestry programmes in Kwara State, Nigeria and reported that it is poor (less than 30%). Adedayo (2003) maintained that in most cases, budgeted funds for forestry sub-sector to carry out community forestry programme were not released and when it was released and when it was released, it was often inadequate and unnecessarily delayed hence poor funding of forestry activities has a devastating multiple effects on community forestry strategies.

Land use policy in Nigeria which does not empower individuals to own land permanently. The best conditions for the supply of domestic needs of wood and other forest produce are necessary situations where individuals or communities own their land. States governments are solely responsible for the management of forest resources and the coordination of forest development activities with local programmes. This is because, according to the constitution of Nigeria, the forestry sector is administered at the federal, state and local government levels. There is, however, a lack of clarity in the mandates of the three levels; there is an over-lapping of responsibility among the federal, state and local governments and excessive bureaucracy. This results in lack of a coherent forest policy, including the following:.

- Prevalence of illegal logging and harvesting of non-wood forest products.
- Incidence of environmental hazards such as fire outbreak.
- Lack of forestry extension services
- Long gestation period of trees before they are ready for harvesting.
- Lack of expertise leading to absence of reliable data on which to base forestry planning and development.
- Inadequate support from the community leadership e.g. lack of change from land tenure system and people's negative attitude.
- Implementation – The task of integrating conservation and development objectives is not an easy one as the discretionary power of government to de-reserve or harvest the forest.
- Participation by both the local

communities and forestry officials may pose a problem.

- Lack of commitment to the goals of partnership.
- Lack of sustained communication for enlightenment.
- Lack of mutual understanding and transparency.
- The present globalisation of the world economy, liberalisation and privatisation of national economies, which are having impact on the management of natural resources may affect total decentralisation without which, community forestry may not ensure sustainable management of biological resources.

THE WAY FORWARD

There is a growing recognition that forests have a key role to play in addressing the environmental challenges of the 21st century-global climate change, the conservation of biodiversity and the reversal of land water resources degradation. Yet forests continue to be lost and degraded, and opportunities for reforestation to address these key environmental issues are unrealised, largely because the value of environmental services provided by forests is not remunerated. The following should be considered if community forestry must play its role in sustainable development:

- There should be security of long-term rights as communities may feel reluctant to invest their labour and time in activities for which future benefits are unclear
- Research and capacity building in community forestry training should be organised for forestry staff, local communities and other stakeholders

- Adequate, improved and sustained funding should be provided. A proportion of revenues from forests should go to local communal land owners but in practice, funds are diverted, reducing the incentives or local people to protect forests.
- There should be effective conflict management as well as an enhancement of adequate rapport and interaction between forest officers and notable community leaders.
- The services of forestry extension officers for the provision of tree planting guidelines and other services to the rural populace should be employed.
- There must be sustained communication for enlightenment, review of forestry legislation, re-organisation of forestry commission and establishment of community forestry support unit. The establishment of community forestry development project (CFDP) which can further form a community forestry unit in the forestry department both at the Federal, State and Local Government levels is advocated. Such a department will define the legal and Institutional framework, seek to improve understanding of traditional natural resource management systems, raise awareness of the implications of the project as well as pilot community-based planning and management. This also includes community mobilization/awareness creation.
- Provision for other stakeholders to take part in forest resources management apart from the traditional forestry organisations.
- More communities and individuals should be encouraged to engage more in tree planting with incentives like supply of tree seedlings, free advisory services, access to credit facilities, market for output and favourable price incentives for farm produce.

CONCLUSION

Historically, forestry in Nigeria has played a subordinate role to agriculture and the idea of forestry having any function in agricultural productivity would have been dismissed some years ago as an idle speculation (Kio, 2001). With the rising emphasis on environmental values, increasing attention is being focused on the conservation of diverse natural forest resources including the preservation of biodiversity and the prevention of the loss of forest cover. It is known that in some developing countries of Asia and Latin America, among others, community forestry has become crucial in rural development strategies because they provide direct subsistence as well as cash returns to rural people.

To achieve the goal of sustainable forest development and output, forest communities must be participants in the management process of forests. The involvement of forest communities is crucial to sustainable forest management and development. This is due to the fact that they are best acquainted with the forests and are in the best position to identify the problems related to forest management, in relation to their needs and aspirations and will always

feel elated when given the opportunity to participate. This creates in them, the sense of recognition and belonging. To get the attention of the forest communities towards this direction, security of their long-term rights, adequate funding, effective conflict prevention/management, research and capacity building in community forestry and the establishment of community forestry development project with a unit at both Federal, State and Local Government levels need to be assured. This will help in no little means to create awareness in the communities and mobilise them towards achieving the goal of sustainable forest management and development.

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Table1. Some models of community forestry practices in Nigeria

No	Types	Description	Area where feasible	Derivables
1	Agroforestry	The incorporation of trees with agricultural food crops pastures and animals on the same piece of land	All ecological zones	Food crops, timber and fibre wood, soil fertility
2	Afforestation programmes	Planting of trees on vacant land, marginal lands and degraded areas.	All ecological zones	Land reclamation, establishment of forest cover, timbers, poles and fuel wood.
3	Taungya system	A system in which new forest plantations are established with food and cash crops, which continued to be inter-cropped until shaded out by the matured plantation.	Forest zones	Timber, fuel wood, poles
4	Wood lot	Stand of trees planted and managed to produce various tree products, associated plants or services.	Savanna zone of the country and degraded forest areas	Poles, fuel wood and fodder in addition to soil protection and conversation
5	Forest home stead	A complex collection of woody and herbaceous plants deliberately grown in small plots on or near home gardens, often associated with the production of small domestic animals	All ecological zone but very common in S.E. and S.W. part of the country.	Vegetables, fruits, food crops and domestic animals.
6	Shelterbelt or wind break	Strips of trees or shrubs planted to protect fields, homes, animals and other areas from wind and blowing soil or sand.	Savanna zones where wind blow is very prevalent.	Poles, fuel wood, soil protection and conservation
7	Silvipasture	The incorporation of trees with domestic animals	All ecological zones	Fodder, fuel wood poles
8	Urban forestry	Planting of trees around place of residence or strategies places in and around urban centres	All cities and towns	Aesthetic value, environmental protection
9	Joint forest management	Collaborative action between communities and government agencies in the sustainable management of forest estates and reserves.	All ecological zones	Conservation of biodiversity; revenue from timber harvested, fuel wood, non-timber forest products like wild animals, honey, mushroom etc.

Adapted from Idumah *et al.* (2003).

Table 2. Government funding of community forestry programmes

Zone	Level of funding							
	Poor (<30%)		Fair (30-49%)		Good (50-70%)		Very Good (>70%)	
	Freq.	%	Freq	%	Freq	%	Freq	%
Forest (Y)	7	100	0	0	0	0	0	0
Derived Savanna (Y)	6	86	1	14	0	0	0	0
Guinea Savanna (Y)	5	71	2	29	0	0	0	0
Guinea Savanna (N)	7	100	0	0	0	0	0	0
Guinea Savanna (B)	7	100	0	0	0	0	0	0

Y= Yoruba, N = Nupe, B = Baruba

Source: Adapted from Adedayo (2002).