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## SUSTAINABLE COMMUNITY FOREST MANAGEMENT TECHNIQUES THROUGH PARTICIPATORY APPROACHES IN SOUTHERN NIGERIA BY

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#### **ABSTRACT**

Human activities and nature conservation can hardly be divorced from their complex socio-cultural history. In the quest for a sustainable community forest management to improve livelihoods and protect nature, conflicts and crises of varying degrees have occurred among indigenous peoples in such areas or communities. Some argue that such restrictions reduce their capacity of production systems and abuse their fundamental rights. Various national governments have not been too sensitive in this area relating to abuse of rights. It should be noted however that there are extensive literatures on how community-based conservation are increasingly merging into that of rural sustainable livelihoods. This paper takes a cursory look into the concept and meaning of community management and sustainable development, conflicts of interest in indigenous knowledge systems and in agro-livelihoods, indigenous knowledge systems and agro forestry development, participatory approaches in community forest management, environmental and social impacts of community forest management with specific examples in Southern Nigeria etc. The implications of community-based conservation of forests and the implications on youths development in Nigeria were also discussed Suggestions and recommendations were also given in strengthening the model of community-based forest management to improve sustainable rural livelihoods without any infringement whatsoever on the peoples' rights particularly the youths on means to eke out a decent living.

**Key words:** Techniques, Sustainable, Community Forest, Participatory Approaches, Livelihoods, Indigenous Peoples, Conflicts

### INTRODUCTION AND CONCEPT OF COMMUNITY FOREST MANAGEMENT

independence, most African countries have intensified efforts on nature conservation particularly in areas aforestation and reforestation programmes. The urge to ameliorate climatic changes on environment coupled with decreasing farm productivity and harvests are making various national governments to gear up for action on how to make the environment generally friendly and sustainable. Aside from climatic variations, the economic, political and human pressures on the land are ever increasing at an alarming rate. The increasing pressure on environment bv over population cultivation resulting in soil degradation has lately stimulated greater interest in agro forestry practices. Agro forestry is an activity of major global importance for about an estimated one billion people which is 20 percent of the world population that depends to a large extent on agro forestry products and services for their livelihoods (Garrett et al. 2000)

There is a steady decline in productive capacity of most farm lands in the tropics mainly due to decrease in bush fallow period. With increasing population growth and urbanization; land becoming increasingly unavailable to justify long period of bush fallow as an effective soil management strategy. The continuous degradation of the forest reserve base has major effects on other important segments of the economy. This is manifested with rapid disappearance of forest cover leading to

erosion, loss of biodiversity, degradation and unfavorable hydrological changes (Awero, 2001). Agboola (2000) affirmed that shifting cultivation (bush fallow) practiced in the humid tropics is an effective and stable method of soil management when land available is unlimited. The reduced fallow period has exposed farm lands to constant cultivation. deforestation and erosion, thereby aggravating the decline in soil fertility and stabilization. He observed further that with the reduced period of bush fallow, most farmlands in the tropics have remained poor and demand for inorganic fertilizers that are often scarce. unaffordable and unavailable is on the increase. Soil erosion, bush burning and deforestation have remained serious problems to agricultural lands management, as our cultivate even on ecosystems. Large herds of free-grazing livestock degrade the vegetation base. These practice lead to marginal rain-fed terraces being abandoned and the waste land around human settlements going on the increase.

Garrett et al (2000) defined Agro combination forestry as the agricultural and forestry technologies to integrated, create diverse productive land use system. As a landuse formula, it serves the diverse needs of individual farmers in harnessing the natural resources around them as this cannot be reconciled by the traditional crop system. It involves the combination of trees and crops that increase the

medicinal environmental and economic value of land with the much needed profit and food security.

Over the years, there is increase in human competition of activities between land for food and arable crops production, livestock grazing and for other human uses. In view of these competitions between human and animal needs, there is the need for forest management community that will involve initiatives stakeholders in such a manner that will be sustainable without any pressure on their means of livelihoods.

Community forest management or social forestry goals most commonly include empowering 'the weaker sectors' of local communities through active participation in the management and use of forests; promoting a corporative structure to articulate the interests and voices of local people; meeting local forestry need; and promoting selfsufficiency and social equity among local communities (Rahman, 1992; Task Force, 1987). To achieve some of these goals, social forestry also (directly or implicitly) aim to empower local people to free themselves.

Forestry is the business of managing forest lands and the resources to produce economically useful goods and services. The trees and other vegetation as well as the soil which support them are important bases for forest management. The nature of the forest is diverse depending on the soil and climatic condition prevailing over a specific region of the world. Many forest types can be distinguished indicating the type of tree vegetation and ecosystem prevailing in a given area

In Bangladesh and the neighboring South Asian countries, social forestry (SF) is used rather flexibly as an umbrella term for public, private and initiatives for ensuring communal "active participation by the rural people implementation planning, growing benefit-sharing of tree schemes"(Task Force, 1987)". SF is viewed here within the broader framework of rural development. It include aforestation programmes in marginal and degraded state and communal forest lands; village strip forestry; woodlots: farm alongside railways, plantations embankments; highways and community plantations' on public or management communal joint benefit-sharing arrangements between the government and local communities; homestead forestry (home-gardens); and varied other manifestations of agro-

According to William, Massoud and Othman (1998) there is a range of community participation' approaches that have been developed in association conservation with nature sustainable resource use programmes. Although there are many variations, these approaches can be grouped as: service out-reach Community and established programmes: often protected with association management with the aim of resolving conflicts between the protected areas and surrounding communities through and community building relation development projects funded from protected area revenues. An example of such a programme is the Tanzania National Parks Community Service 'SCIP' programme.

Integrated Conservation with Development Projects: piloted in the 1980s, these projects sought to bridge conflicts between conservation and development but focusing the emphasizing the linkages while maintenance of biodiversity. The projects aim to facilitate the participation of local people in planning and decision- making processes of the protected area while simultaneously trying to address the social economic requirements of participating communities (Stocking and Perkin, 1992). There are numerous examples of ICDPs, such as those at the East Usambra forest, Tanzania and the Impenetrable Forest, Uganda.

Community-based conservation programmes: developed in Zambia (ADMADE) and Zimbabwe (CAMPFIRE) in the 1980s with variable success, these programmes sought, at least in part, to empower communities to manage their own wildlife resources as means for development and conservation. This was done by variably endowing participating communities with rights of resource custodianship. management revenue retention. A large emphasis is placed on community institution strengthening, and development of micro-economic management skills and capabilities.

### Agro-livelihoods and conflicts of interest in development initiatives

Agro-livelihoods is defined as a situation whereby the indigenous people in a particular area are engaged in a

continuous cultivation of arable crops, trees of economic values and keeping of livestock without necessarily depleting forest resources to earn daily living. On the other hand, it can be defined as a sustainable management of land, with cultivation of forest trees with available pastures or or simultaneously or sequentially with applied management compatible with the cultural pattern with local people. In Nigeria, for almost four decades now, the Taungya system of agriculture has successfully complemented the nomadic system to enhance crop yield thereby raising arable crops in agro forestry. This maximizes the use of available land on multi-purpose basis.

Conflicts emanating from appropriate use of land for arable crops cultivation, forest trees production and pastoral farming had been on the increase in several communities in Nigeria in the last decades. The increase competition of human activities between land for food and arable crops production, livestock grazing and for other economic uses and attendant crises had been sources of worry for local and state governments in Nigeria. The Fulani herdsmen of Northern Nigeria are nomadic in nature and this makes them to move continuously in search of pastures from place to place. In doing this, they encounter disaffection from local communities as their herds destroy farmlands and growing crops. This invariably creates conflicts of high magnitude in such local environments leading to loss of lives and properties as the regularly reported in daily these newspapers. In view of competitions between human and

animal needs, there is the need for community forest management initiatives that will involve all stakeholders in such a manner that will be sustainable without any pressure on daily means of livelihoods of the farmers and other stakeholders.

According to Warner and Jones (1998) the word 'conflict' carries negative connotations. It is often thought of as the opposite of cooperation and peace, and is most commonly associated with violence or the threat of violence. This view of conflict is not always helpful. In many settings it should be seen as a potential force for positive social change; its presence is a visible demonstration of society adapting to a new political, economic or physical environment.

'Good governance', democratic involvement and strengthening of civil society are common conflict prevention strategies. Less common but increasing interest is the use of targeted programmes of conventional community development (education, Community Based Natural Resource Management (CBNRM), etc; (Graig et al, 1998).

Conflicts can be categorized in terms of whether they occur at the micro-micro levels, among community groups or between community groups and outside organizations (Grimble and Willard, 1997). Micro-micro conflicts can be further categorized as taking place either within the group directly involved (e.g. between this group and those not directly involved (e.g. between the 'user' group and women entering the forest to collect fuel-wood) (Conroy et al, 1998). In extreme cases conflict over natural resource management can escalate into physical violence.

According to Warner and Jones (1998), in the context of conflict within CBNRM it is helpful to distinguish three broad types of ownership/management:

Community owned, community managed (e.g. rotational grazing of communal land);

Community owned managed (e.g. harvesting or processing of communally owned forests by commercial logging companies); and

Outside owned, community managed (e.g. community group management of state owned forest reserves)

Each of these regimes can be either initiated by local people themselves or by some external government, non-governmental or private organizations. According to Warner and Jones (1998) the options in conflict management

**Force** – adversarial negotiations, legal channels, some electoral systems, mass media to rally public support, public protest, threat of withdrawal, lobbying.

include:

**Withdrawal** – avoidance, opting out, deployment of delaying tactics, postponement of decision, temporary boycott, strikes

**Accommodation** – maintain relationships, goodwill' nurtured

**Compromise** – arbitration, cost-benefit analysis, trade-offs

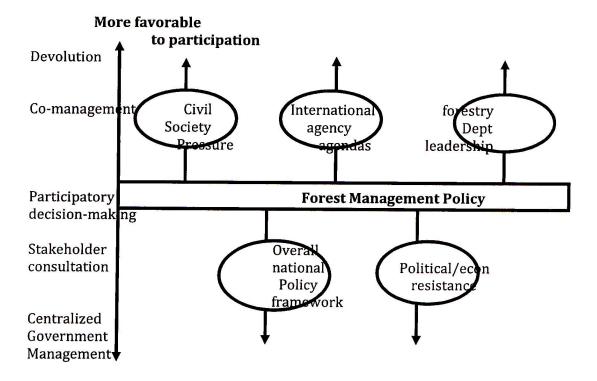
**Consensus** – direct consensual negotiation (no facilitator), third party facilitated/mediated negotiations.

## The Concept of Community Participation in Sustainable Forestry Development

Participatory approaches depend on all partners having the ability to contribute meaningfully and equitably. Community involvement in forestry development

management is fast gaining recognition in most parts of the world. Jamaica, it has supported decentralization of decision making and devolution of management responsibilities to local entities. This situation reflects a continuing debate within government and society generally on the appropriate extent of stakeholder participation management and decision-making. the country's active NGO community and international donor

agencies have effectively pushed for policies more favorable to stakeholder participation, politicians and civil servants have largely resisted the structural changes required to implement them, and this resistance acts as a 'glass ceiling' to policy reform (figure 1). The forestry sector illustrates this well (Goeghegan and Bennett, 2003).



Less favorable to Participation

Fig. 1- An adaptation of forest policy management model (Goeghegan and Bennett, 2003)

According to Omolewa (1988) participation community otherwise known as popular participation or peoples' implies the participation massive involvement of all the people in development. It is an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive benefits.

There is wisdom in engaging farmers in teaching, learning and scientific experimentation processes. There is a good deal of debate about the wisdom of farmers scientific teaching methods of research. The critics charge that such formality suppresses local

experimentation, contributing to the devaluation of local

knowledge systems. In particular, they argue that power relations make it difficult for researchers to enter the very different worlds in farmers' ideas and conceptions exist, effectively excluding them from the scientific realm (Salas, 1994; Van der Ploeg, 1993; Fairhead and Leach, 1994). Much of what is considered to be farmer research is embedded in daily practice as part of the craft of farming (Stolzenbach, 1994; 1997).

of promising Accounts innovations and adaptations of produced by technologies Honduran and other Central farmers are American

numerous. They include the spontaneous spread of Mucuna (a cover crop) as an alternative to burning amongst north coast maize farmers improved fallows using Gliricidia sepium and other legumes; cultivation of 'good weeds' for improving mulches; adapting in-row tillage and contour hedgerows to local conditions; and the widespread use of intercrops of beans and maize (Humphries, et al. 2000). On the other hand, innovative practices management communities and governments often serve as impetus to the local farmers. Experiences of forest community management initiatives from Jamaica indicate 1996 Forest Act the that Minister permits the responsible for forest management in consultation with the Conservator of Forests. forest "appoint a management committee for the whole or any part of a forest reserve, forest management area or protected area". The functions of these committees as defined by the Act include: Monitoring the condition of resources in the natural relevant forest reserve, forest management area or protected area Holding discussions,

public etc about these meetings natural resources

Advising the conservator on the development of the forest management plan and regulations
Proposing incentives for conservation practices in the area
Helping to design and execute conservation projects in that area. (Goeghegan and Bennett N, 2003).

# Sustainable livelihoods, forestry development and implications for youth development in Nigeria

The concept of Sustainable Livelihood (SL) is an attempt to go beyond the conventional definitions and approaches to eradication. poverty In nutshell, it refers to a balance between conservation and the utilization or depletion of natural resources (Alademerin, 2013). George (2010) in a study aforestation practices in selected secondary schools in Abeokuta North Local Government Area of Ogun state found out that 90% of the students participated in tree planting activities within the year, 80% were aware of tree planting society but only 60% were members. This calls for a more aggressive campaign in all secondary schools in the state in order to integrate young people into tree planting initiatives and sustainable community forest management in the future. The respondents in this study indicated that 25% each of the

trees were grown for shade, erosion control and school beautification/aesthetic values while 15% were grown for fuel and firewood for cooking while only 10% were essentially grown for planks in the school. In 1992 Robert Chambers and Gordon Conway proposed the following composite definition of a sustainable rural livelihood, which is applied commonly at the household level:

livelihood comprises capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, provide sustainable livelihood opportunities for the next generation; which and contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

Leading proponent Scoones (1998) proposed a modified definition of SL: A livelihood the capabilities. comprises assets (including both material social resources) and activities required for a means A livelihood of living. sustainable when it can cope with and recover from stresses shocks; maintain enhance its capabilities and

assets, while not undermining the natural resource base.

Four types of capital are identified in the IDS framework (which does not pretend to be an exhaustive list):

Natural capital – the natural resource stocks (soil, water, air, genetic resources, etc.) and environmental services (hydrological cycle, pollution sinks, etc.) from which resource flows and services useful for livelihoods are derived.

Economic or financial capital – the capital base (cash, credit/debt, savings, and other economic assets, including basic infrastructure and production equipment and technologies) which are essential for the pursuit of any livelihood strategy.

Human capital – the skills, knowledge, ability to labour and good health and physical capability important for the successful pursuit of different livelihood strategies.

**Social capital** – the social resources (networks, social

claims, social relations, affiliations, associations) upon which people draw when pursuing different livelihood strategies requiring co-ordinate actions.

The sustainability of livelihoods becomes a function of how men and women use asset portfolios on both a short and long-term basis. Sustainable livelihoods are those that are:

able to cope with and recover from shocks and stresses through adaptive and coping strategies;

economically effective;

ecologically sound, ensuring that livelihood activities do not irreversibly degrade natural resources within a given ecosystem; and

Socially equitable, which suggests that promotion of livelihood opportunities for one group should not foreclose options for other groups, either now or in the future. This relates to various cadres of workers in the forest reserves.

### CONCLUSION

The study concludes that Nigeria has the potential to readily integrate the youth and all other stakeholders into community participatory natural resources and

environmental management for sustainable products and services given more pro-active measures towards education, incentives and enforcement of appropriate laws.

#### Recommendations

The following are recommended as techniques for sustainable improving community forest management through participatory development environmental approach in Southern Nigeria: Communities and educational should institutions encouraged to develop interests and educational initiatives in forestry development and tree multiplication seedlings projects. This was practiced during the civilian regime of late Chief Olabisi Onabanjo in Ogun state, Nigeria.

The National tree programme initiative in which inhabitants are encouraged to plant trees in and around their vicinities should be pursued with much zeal and vigor by all tiers of governments. Communities should be encouraged to form local vanguards to effectively monitor the development.

The indigenous people in the communities should negotiate with government to ensure that their sources of livelihoods are well protected by the by-law relating to forest conservation. Forestry policy should be reformed to admit donor communities into forest reserve for participatory exploitation the forest of reserve or sustainable yield.

Cooperation and support should be sought from the villages as the local authorities implement their new by-laws. In addition, support by government should be continuous by helping the local people to resolve legal and administrative problems as they arise. A critical area here is the enforcement of by-laws. It is necessary to commit individuals and the community in both the planning and executive stages of forestry projects.

Build the management and local training capacity of various stakeholders in the forestry sector so as to further promote and strengthen their cultural ties to the resource base. Governments at all tiers should continue conservation education work with rural and urban communities on regular basis so that it becomes part of their culture. To achieve self sufficiency in the supply of fuel wood, pole timber, food etc it is recommended that government motivate should or give incentives to farmers to encourage them to plant forest trees.

Forestry departments need to work in partnership with communities and rural resource users to derive appropriate systems for ten co-management of owned land in line with Shackleton, et al; (2010a).

Indigenous or traditional knowledge of customary laws, norms, beliefs and practices relating to the use and management of specific dry forest and woodlands species needs to be included in any efforts to improve forest and species management (Sambou, et al; 2002).

#### REFERENCES

Alademerin, E. A. (2013) "Perspectives of Millennium Development Goals (MDG's): initiatives and wider scale implementation in Africa-how feasible?" 3<sup>rd</sup> Scramble for Africa conference and Africa day Expo 2013 organized by the African Institute of South Africa. 18<sup>th</sup>-25<sup>th</sup> May, 2013.

Adeyoju S. K. (2005): Forestry and the Nigerian Economy. Ibadan. University Press

Agboola A. A (2000): Organic Manuring and green Manuring in Tropical Agricultural production system. "A paper presented at the 12<sup>th</sup> International Soil Symposium University of Ibadan Pp 26 – 30.

Allison C. E. Umeh L. I. Omoluabi A. C. and Fanusi A. (1986): Handbook of forest plantation techniques for Nigeria for Project Monitoring and Evaluation Unit, Federal Department of Forestry. Ibadan Pp 100 – 104.

Aweto, A (2001): Impact of single species trees plantations on nutrient cycling in West Africa. International Journal of

Rural extension services need to include greater attention to NWFPs, their management and potentials for intensified production and domestication (Shackleton, et al; 2010b).

sustainable Development and World Ecology 8:356-368.

**Badejo S. O.** (2000): Quantitative and Qualitative survey of generated wood residues in Lagos. 12<sup>th</sup> Biennial Conference of Science Association of Nigeria.

Dada G. O. B. (2001): Personnel Communication Forestry Research Institute of Nigeria. Ibadan

Ekpo J. O And Etukudo I. G. (2002): Community participation in forest resources development and management in Lagos State. Paper at the proceedings of the 24<sup>th</sup> Annual conference of the Forestry Association of Nigeria. November 2002.

Enabor E. E. (2000) Manpower problems of forest resources development in Nigeria. The Nigerian Journal of Forestry 7 (1) 26-33.

**Fairhead, J. A. and Leach, M. (1994)** 'Declarations of difference 'in I. Scoones and J. Thompson (Eds.) Beyond Farmer First: Rural people's

knowledge, agricultural research and extension practice.
London: Intermediate Technology Publications.

Garrett H. E., W. J. Retrieved and R. F Fisher (Eds.) (20000). North American Agroforestry. An integrated science and practice. American Society of Agronomy. Inc Madison WI.

B.Y George, (2010): Aforestation **Practices** in selected secondary Schools in Abeokuta North Local Government Area of Ogun State. A Post Graduate Diploma in Education Project Submitted to Tai Solarin University Education, 50pp.

Goeghegan T and Bennett, N. (2003): Risking change: Experimenting with local forest management committees M Jamaica Gatekeeper series No 110. IIED, London.

Humphries, S., Gonzalves, J., Jimenez, J., and Sierra, F. (2000): Searching for sustainable land use practices in Honduras: Lessons from a programme of participatory research with hillside farmers. AGREN: no 40. London. ODI.

Krantz, L (2001): The Sustainable Livelihood Approach to Poverty Reduction: An Introduction. An Introduction. Swedish International Development

Cooperation Agency: Division for Policy and Socio- Economic Analysis

Niaz Ahmed Khan (2001)
Social Forestry Versus Reality:
Patronage and Community
based forestry in Bangladesh
Gatekeeper Series no 99 London
IIED.

Salas, M. A. (1994) "The technicians only believe in science and cannot read the sky": the cultural dimension of the knowledge conflict in the Andes'. In I. Scoones and I. Thompson (eds) Beyond Farmer First: Rural people's knowledge. agricultural research and extension practice. London: Intermediate Technology Publications.

Sale, F.A and Shomkegh, S.A (2014): Promoting Community Forestry for improved Livelihood and Natural Conservation Resources in Nigeria. In Forest and Forest Products: Key to sustainable livelihood (Adedire, M.O., Onyekwelu, J.C., Oke, D.O., Adekunle, V.A.J., Jayeola, O.A Oladoye, and A.O.-Editors). Proceedings of the Fourth Biennial Conference of the Forest and Forest Products Society, Federal University of Agriculture, Abeokuta, Nigeria, 23-26, April, 2014, pp 555-561.

Sambou, B., Goudiaby, A., Ervic, F., Diallo, D. and Camara, M.C (2002): 'Palm wine harvesting by Bassari threatens Borassus aethiopum populations in the north-west Guinea', Biodiversity and Conservation, Vol. 11, pp 1149-1161.

Shackleton, S; Cocks, M; Dold, T; Kashula, S; Mbata, K; Mickels-Kokwe and Maltitz, G.V (2010): Non Wood Forest Products: Description, Use and Management. In: The Dry Forests and Woodlands of Africa, managing for products and services. (Chidumayo, E.N and Gumbo, D.J; Editors), pp 93-129.

Shuaibu, R.B and Alao, J.S (2014): Significance of Forestry Practices and Forest Products in livelihood of the the communities in Idah Local Government Area of Kogi State, Forest and Forest Nigeria. In Products: Key to sustainable (Adedire, M.O., livelihood Onvekwelu, I.C., Oke, D.O., Adekunle, V.A.J., Jayeola, O.A and Oladoye, A.O.- Editors). Proceedings of the Fourth Biennial Conference of the Forest and Forest Products University Society, Federal Abeokuta, Agriculture, Nigeria, 23-26, April, 2014, pp 555-561.

**Stolzenbach,** A. (1994) 'Learning by improvisation:

experimentation in farmers' Mail' in I scones and (Eds.) Beyond Thompson Farmer First: Rural people's agricultural knowledge, research and extension practice. Intermediate London: Technology Publications International Swedish Cooperation Development Agency. Division for Policy and Socio-

Tosanwumi J. 0. (2000). for community Motivation participation in forestry development in Nigeria. Paper at the proceedings of 24th Conference of Annual the forestry Association of Nigeria, November 2002.

Van der Ploeg, J. D. (1993) 'Potatoes and knowledge' in M. Hobart (ed) An Anthropological Critique of development. The growth of ignorance. London: Rout ledge.

Warner, M and Jones, P (1998) Assessing the need to manage conflict in community Based Natural resource projects Natural Resource Perspectives No35, ODI.

Williams A, Massoud, T. S and Othman, W.J (1998)
Community Based
Conservation: Experiences from Zanzibar Gatekeeper series no 80 London, IIED