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# WHY DOES POLICY IMPLEMENTATION FOR COMMUNITY BASED NATURAL RESOURCES MANAGEMENT REMAIN A CHALLENGE IN MALAWI AND WHAT STRATEGIES CAN IMPROVE THE SITUATION?

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# **ABSTRACT**

This paper ponders the case of Malawi and explores how despite having an enabling policy and legal framework for community based conservation, implementation failures have stifled Community Based Natural Resources Management (CBNRM) and delivery of benefits to local communities. It assesses the underlying issues that prevail within the context of CBNRM sectoral policies which pose some challenges in the implementation of CBNRM activities. The paper provides a general overview of CBNRM implementation in Malawi. It also gives a brief outline of the status of natural resources and natural resources management in Malawi. The paper has also revealed that the impact of CBNRM varies within and among the various sectors. In addition, a number of challenges affecting CBNRM sector policies have also been described. Finally, a list of suggestions as strategies to counteract the challenges faced in CBNRM implementation has also been outlined.

KEYWORDS: CBNRM, Community Participation, Institutions, Design Principles, Community Rights

#### INTRODUCTION

Many countries in the Southern African region have embraced principles and approaches of Community Based Natural Resources Management (CBNRM) as they realized the need to let the resource users manage the natural resources upon which to derive their livelihoods (Rout, 2013). The fundamental goal sought by all these countries, including Malawi, is to make an effective transition from traditional resource policing methods to working with communities (COMPASS, 2000). The aim is to increase local communities' responsibilities and rights over the management of their resource base while increasing their incomes and livelihood support from the same natural resources (Russell and Dobson, 2009).

Malawi has made tremendous efforts in making broad-based reforms and institutional restructuring to ensure effective implementation of CBNRM activities. Such reforms and institutional restructuring provides a platform for local communities to participate in natural resources management. The Malawi Government promotes community based approaches to natural resources management as a development model which eventually has contributed significantly towards fighting rural poverty. In this regard, natural resources play a very significant role in influencing social and economic development at household, community and national levels. For instance, about 80% of Malawians depend on renewable natural resources for their subsistence and household income (NSO, 2008).

# STATUS OF NATURAL RESOURCES IN MALAWI

Empirical evidence demonstrates that natural resources such as wildlife and tree and forest resources are degrading at alarming rates on account of unsustainable use largely arising from high population growth rates, poverty, agricultural expansion, inappropriate management practices, low capacities for enforcement of rules, and weak policy implementation tools (Mauambeta and Kafakoma, 2010). Although, there is no overall assessment of the current status of exploitation or level of depletion of fish resources, new trends, especially in artisanal fisheries, show a large and widespread increase in fishing efforts but declining catch rates (Malawi Government, 2007). This has led to increased use of inappropriate fishing methods. Furthermore, increasing agricultural pressure from the growing population within the catchment areas and subsequent land degradation have led to drainage of nutrients and sediment loads into the lakes and rivers resulting in a decline in the population of endemic fish whose habitats and spawning grounds have been lost (Njaya, 2009). Fisheries resources are under considerable stress in Malawi to an extent that the commercial fish catch declined by over 20% between 1988 and 1992 in Lake Malawi (Mauambeta and Kafakoma, 2010). Many factors have been found to contribute to the declining fish catch in the main lakes of Malawi. The main factors include over fishing, use of improper gear and catchment degradation which are putting serious pressures on fishery resources (Njaya, 2009; Russell and Dobson, 2009).

Institutional and legal constraints are also inevitable in the Fisheries sector. The sector faces a number of challenges in the implementation of Fisheries and Aquaculture Policy including low enforcement capacity of Fisheries Act largely due to inadequate technical staff and financial constraints; low levels of penalties for noncompliance of rules and regulations for fishing especially during off-season; breaking up of traditional systems for regulation and control of exploitation of fish resources; inadequate information on fish resources to formulate guidelines for sustainable management of the resources and inadequate institutional building of local community institutions to undertake fisheries resources management. These are the critical factors that negatively influence management of fisheries resources.

In the Water sector, the abundant water resources of Malawi are slowly but steadily getting degraded due to a number of factors. Water resource degradation reduces both the quantity and quality of water supply. Malawi Government (2007) reported that rapid population growth in the country has exerted great pressure on the land resource, promoting deforestation and soil erosion. Due to the increased amount of deforestation and soil erosion, there has been an accumulation of silt in the country's lakes and rivers. Silt leads to significant problems in downstream water quality, such as increased suspended solids and turbidity, water treatment costs and water flow problems. During the rainy season, virtually all rivers carry heavy loads of sediments. The turbid water is not suitable for human consumption. The majority of people in rural communities depend on untreated river water supply and chances of drinking unclean water are therefore very high which consequently affect the health of communities.

In the Wildlife Sector, WESM (2009) reports that population of wildlife and game more especially of elephants and other large mammals has been declining due to encroachment and poaching in all the Malawi National Parks and Reserves. For instance, Malawi Government (2008) revealed that elephant population in Kasungu National Park declined from 2853 in 1979 to 391 in 1995 while nationally the elephant population declined by 50% from 4500 in 1979 to 2250 in 1995. However, present data is currently not available, but WESM (2009) noted the population figures are expected to be much lower. Similarly, the rhinoceros has been drawn to extinction and is now found because it has just been re-introduced

in Liwonde National Park (Malawi Government 2001). Furthermore, due to high increase in human population and the need for land for agricultural purposes, most of the terrestrial fauna are found in protected areas such as national parks, game reserves and forest reserves. Over the years, these protected areas have been encroached and government has given in by changing some of the boundaries, thereby reducing the sizes of the protected areas. To this end, deforestation, clearing of land for farmland, illegal game hunting, consumption of birds and mammals for food, and increased human animal conflicts have placed many wildlife and game under serious threat. For instance, a survey of birds around Lake Chilwa found that 450 local hunters kill almost a million birds annually (Mauambeta and Kafakoma, 2010).

In the Forestry sector, the major issue is the ever-increasing rate of deforestation and forest degradation. More than 90% of the rural people in Malawi depend on forest resources as their source of energy for cooking and heating. This has resulted in high deforestation rate currently estimated at 2.8% per annum which is among the worst in Africa (Malawi Government, 2001). On the other hand, increased population and poverty have exerted increased demands on forest areas for farmlands and forest resources. Although various strategies have been made to reverse the current rate of deforestation including community based forest management (CBFM), their impact is negligible due to other factors relating to poor and inadequate forest resource management, regulation and governance (Mauambeta and Kafakoma, 2010).

CBNRM therefore emerged as response to the rethinking process by government after observing that there was continued degradation of natural resources in the country. Government considered its position towards participation of various stakeholders more especially communities in natural resource management. Just like many other countries in Africa, Malawi embarked on policy reforms and democratization process in the 1990s in order to embrace the paradigm shift of community participation in natural resource management. This signified the need for changing the mode of natural resources management from the conventional approaches to participatory natural resources management.

To this effect, a number of sector policies such as Forestry, Fisheries, Wildlife, Water and Land were reviewed as they are the major natural resources sectors in Malawi. Within the same period, the government approved the Decentralization Policy (1998) which aims at giving decision making power to the local people (Malawi Government, 1998). Decentralization aims at improving efficiency in the execution of government functions and making public servants more immediately and locally accountable to the communities they serve. Decentralization is therefore a fundamental concept aimed at improving the efficiency in delivery of the devolved functions in support of CBNRM. It is almost imperative therefore that for true CBNRM to occur, there is need for rural communities to participate more meaningfully in planning and decision making processes that affect them and their environment. If rights and responsibilities and therefore access to benefits are being transferred to various institutional groupings, then it is critical that such groups are both representative and accountable. One of the foundations required for CBNRM to take hold as a widespread, grass—roots development strategy; is the devolution of authority for natural resources management closer to the communities that are managing the resources and hence undertake CBNRM activities.

It is against this background that the Malawi Government has pursued broad-based adoption of the CBNRM approach in the management of its natural resource base including forests, land, fisheries, water and wildlife to improve people's livelihoods. However, despite significant contribution of CBNRM to natural resources management, its implementation has encountered policy challenges that require to be addressed to ensure its effective and sustainable implementation. This paper therefore assesses the underlying issues that prevail within the context of CBNRM sectoral

policies which pose some challenges in the implementation of CBNRM activities in the final analysis.

#### IMPACTS OF CBNRM IMPLEMENTATION IN MALAWI

The impacts of CBNRM approach in Malawi vary across and within sectors. However, the general impression is that CBNRM has brought some significant impacts at the natural resource and economic and livelihood levels of communities. It thus indicates that CBNRM has an important bearing on the social, economic and ecological well being of the communities engaged in protection and conservation of the natural resources (Kambewa *et al.*, 2007).

Some of the tangible benefits obtained through community participation under CBNRM approach include income generation from natural resources utilization for the local communities; creation of off-farm employment; endorsement of co-management and participatory agreements in forestry, fisheries and wildlife sectors; increased access to loans by community members through collective action and collective collateral; increased access to markets for various natural resources products; contribution to GDP with revenues from selected timber products, ecotourism, fisheries products and water provision services; contribution to ecosystem management; improved catchment protection and management which contributes significantly to reduced soil erosion and enhances soil fertility; improved fisheries resources production especially in lakes in the country and increased efforts in natural resource management despite encroachment in protected areas.

# CHALLENGES FACING CBNRM IMPLEMENTATION IN MALAWI

Despite the significant positive impacts that CBNRM has shown in various sectors as outlined above, a number of challenges are reported in various sectors. This section provides an account of some challenges being faced in natural resources management and within across sectors in Malawi

#### **Slow Policy Implementation**

Malawi has a good policy environment for CBNRM. The biggest challenge is the implementation process which is slow and weak. For example, while the Forestry, Fisheries, Parks and Wildlife Acts have made provisions for comanagement, few management agreements have been approved and signed by the government. Since the Forestry Act was approved in 1997, less than 10 management agreements have been signed. Similarly, despite the Fisheries Conservation and Management Act authorizing the Director of Fisheries to enter into management agreements with Fisheries Associations or Beach Village Committees (BVCs), none of the associations have attained the legal personality. In addition, local assemblies have not provided an enabling legal framework to promote the functioning of the BVCs. There are also no by-laws, constitutions, fishery management authority, fishery management plans and fishery management agreements at district level as stipulated by the Fisheries Conservation and Management Act. The slow policy implementation process is also exacerbated by the limited investments by the government to support policy implementation especially in natural resource management. Financial resource limitation makes it difficult for sectors to provide adequate and continuous support to various community groups that are implementing CBNRM activities (Mauambeta and Kafakoma, 2010).

# Policy and Legal Frameworks Not Fully Harmonized

Policies and legal framework within the natural resources sector though conducive for CBNRM are not fully

harmonized. For example, the Wildlife Management and Conservation Act recognize Natural Resources Committees, while the Forestry Act recognizes Village Natural Resource Management Committees and in Fisheries the policy recognizes the Beach Village Committees. It was noted in Mangochi district at Cape Maclear that all these institutions exist in one area and each of them operate in isolation without regard for each other. The local councils are in a dilemma on how to recognize these structures and how they fit in the decentralized local government structure. It is expected that these structures are supposed to be subcommittees under the village development committees but in some instances they are operating independent of the village development committees (VDCs). The Water Resources Management Act recognizes catchment management committees and yet in the Forestry Act VNRMCs are responsible for the management of catchment as well. The non-harmonized policies and legal frameworks are contributing to the disjointed and uncoordinated nature of CBNRM implementation process in the natural resource management sector. Each sector is implementing CBNRM in isolation and therefore making it difficult to truly quantify the benefit of the natural resource management sector to the economic growth of the country.

# **Project Nature of CBNRM and Donor Dependency**

Various projects have been implemented in the country to support CBNRM. Studies indicate that CBNRM initiatives take off well during the project period but generally stop when project phases out. For example, the German Technical Cooperation (GTZ) Border Zone Project supported the formation of close to 100 natural resources committees (NRCs) around Nyika National Park and Vwaza game reserve. Though these NRCs are still surviving, they are not as robust as they were during the project time. For instance, the number of participants has significantly reduced while the amount of work being carried out by the group in managing the resources is insignificant. This is a common-place occurrence in various natural resources management sectors; a scenario which poses challenges to sustainability of CBNRM.

#### Weak Data Collection, Monitoring and Evaluation Systems for CBNRM

The country has no strong data collection, monitoring and evaluation framework to scrutinize implementation of CBNRM and its impacts on natural resources and people's livelihoods. There are also no clear indicators for CBNRM which can be measured despite the introduction of a national monitoring and evaluation framework. Because there are no indicators in the national monitoring and evaluation framework that clearly focus on CBNRM, it is very difficult to quantify CBNRM contribution to the national economy. In the absence, of hard data on the impact of CBNRM on the livelihoods of local communities, it becomes inconceivable to lobby with government and other donor organisations on the need for increased funding into CBNRM activity implementation. This in turn poses a challenge to achieve viable and robust CBNRM in Malawi.

#### Inadequate or No Institutional Mechanism to Coordinate CBNRM Initiatives

The overall responsibility for coordinating environment and natural resource management in the country lies in the Environmental Affairs Department (EAD). However, the department is poorly funded to handle such a responsibility as specified in the Environmental Management Act. In addition, being a department within the Ministry of Natural Resources and Environment, this puts EAD in lower position to coordinate other departments which carry out natural resources management. On the part of the NGOs, Coordinating Union for the Rehabilitation of the Environment (CURE) has the

responsibility of coordinating environmental management matters, but it too has challenges of financial and technical capacity to handle such a responsibility.

#### Weak Participation of Communities in the Value Chain and Value Addition

CBNRM in Malawi more especially in the forestry sector is characterized by low economic benefits. People directly involved in CBNRM activities are not involved in value addition of their various products they harvest or gain from their initiatives. For example, most local communities have access to various non-wood forest products such as mushrooms and honey. However, they do not process these products into various products in order to increase benefits. In addition, there is limited support from the chain supporters such as private sector to promote value addition within the communities that are involved in CBNRM activities. This poses a challenge to CBNRM implementation since most community members are disincentivized by the low returns to their investment in CBNRM, a scenario which drive them to discontinue with CBNRM activities.

#### Weak Private Sector Participation in CBNRM

Since the 1990s, when the government decided to promote stakeholder participation in natural resource management, the influx of private sector organizations to the natural resource management sector has been very low. Few private sector organizations are involved in ecotourism and usually have limited interest to promote community participation. Few private sector organizations are involved or have entered in co-management agreements with the local communities to manage a particular resource even though the policy and legal frameworks in the country are supportive of such efforts. Private sector organizations focus on timber utilization for making immediate profits since natural resource management takes time to yield such profits

# **Slow Implementation of the Decentralization Process**

Most sectors associated with natural resources management face a number of technical policy and legal challenges that affect the overall progress of the decentralization process and can hinder devolution of authority for conducting resource management agreements. For example, both Forestry and Fisheries Policies clearly provide for co-management and community management of forestry and fisheries (Njera, 2013). The important decision to relocate authority for forest and fisheries management agreements reasonably relating to the district councils has already been taken. However, they cannot be implemented without the amendment of the relevant policies and regulations (Seymour, 2004). Similarly, guidelines for community based forest management and benefit sharing guidelines in national parks remain in draft form while the National Fisheries and Aquaculture Policy 2000 lacks precision concerning participatory fisheries management and is in need of revision. Associated with this, is the case where beach village committees under the Fisheries sector are not regarded as legal entities yet.

#### Conditional and Limited Rights to Engage in CBNRM

Another challenge to CBNRM policy implementation is the bureaucracy that sometimes needs to be followed for local communities to participate in natural resources management. For instance, to gain rights over wildlife and tourism, communities need to form and register community based organizations (CBOs) such as associations, trusts, village natural resources management committees and wildlife management authorities. Formation of legally constituted CBOs is time-consuming and expensive. In addition, registration requires a defined membership list, negotiated boundaries and a

constitution (Bond et al, 2004). On another note, experiences from different wildlife co-management initiatives around these various protected areas and private game ranches indicate that communities are mostly seen as beneficiaries and not as co-managers. Consequently, community participation is limited to harvesting of different wildlife products, typically thatch grass, mushrooms, medicinal plants, honey and caterpillars. Thus management decisions and the extent of 'co-management' are primarily determined by the authorities responsible for the protected areas. Close examination of various CBNRM sector legislations also shows that it has granted only limited rights to community based organizations (CBOs).

#### Weak Institutional Capacity

Another challenge for CBNRM is that community support organizations such as government line ministries, NGOs and CBOs seem to possess inadequate CBNRM expertise to effectively make use of the existing favorable policies and legislation to promote CBNRM at community, NGO, government and private sector level. Malawi Growth Development Strategy (MGDS) takes full cognizance of the fact that there is a need to strengthen the legal and institutional framework for effective CBNRM implementation.

On the other hand, capacity to run the local natural resources management institutions by local communities is weak. These institutions largely depend on government and NGOs to build their capacities. In light of this, Beekeeping Association of Malawi (BAM), which was established to facilitate marketing of honey and bee wax, collapsed in 1993 due capacity problems. Unfortunately, government does not have adequate funds for capacity building. Similarly, the relationship between formal and informal institutions remains uncertain while the integration of customary with statutory norms remains a challenge. Hence community participation continues to reflect a hybrid structure which makes it difficult for harmonization to be carried out.

Threat of HIV and AIDS – HIV and AIDS pandemic continues to pose a major threat to the country's development efforts. The national prevalence rate of pandemic is 8% and 14% among the production ages of 15 – 49. Depletion of the limited skilled professionals in these sectors due to the HIV and AIDS induced absence, sickness and/or death is a significant problem. The effects of the pandemic are manifested in reduced capacities of officers involved in CBNRM (Malawi Government, 1998).

# **Challenges Affecting Local Village Level Institutions**

Formation of democratic local institutions such as village natural resources management committees (VNRMCs) has also created conflicts with traditional village level institutions such as traditional leadership in the control of natural resources. This is due to misunderstandings on the roles and responsibilities of the VNRMC in relation to the traditional leaders (Mauambeta and Kafakoma, 2010). In addition, in most cases, there has been duplication in the creation of local natural resources management organizations, each serving a particular sector within the same village (Seymour, 2004). For instance, Malawi has created the following village level structures for natural resources management: VNRMC for Forestry sector, BVC for Fisheries sector, and VNRC for the Wildlife sector. This creates confusion both for the participants as well as the governance structures of such institutions.

In some cases, there have been conflicts within the local institutions because of inequitable benefit sharing mechanisms where, revenue sharing among community based organisation (CBO) members or village members creates conflicts especially when resources are limited and decisions are varied and that some members within the local institutions

obtain lions share from the proceeds (Dubois and Lowore, 2000). This is why some protagonists for natural resources management advocate for individual benefits rather than communal benefits as an effective strategy to drive natural resources management.

#### STRATEGIES TO TACKLE THE CHALLENGES IN CBNRM IMPLEMENTATION

In a bid to promote effective participation of communities in natural resources management and consequently reduce the existing bottlenecks in CBNRM policy implementation, a number of strategies are discerned. The strategies have been illustrated in this write-up as follows:

#### **Clear Incentives for CBNRM Implementation**

Incentives have an important bearing on the involvement of local communities in natural resources management. By definition, an incentive is something that makes a person want to do something. The complex array of incentives that individuals and communities face determines in large part their interactions with the environment around them (Kayambazinthu, 2000). Community members will always weigh incentives and disincentives before deciding whether to participate in natural resources management or not. Issues on how community members will benefit from their collective efforts in CBNRM has a significant influence on their involvement in the management of the natural resources.

Economic incentive is one of the core fundamental dimensions of CBNRM. Policies should clearly stipulate incentives and benefit sharing mechanisms for CBNRM implementation through approaches like payment for ecosystem services (PES) and Reduced Emissions from Deforestation and Forest Degradation (REDD+) as compensation for natural resources conservation and management. The feasibility of CBNRM initiatives are amplified when local communities benefit from financial resources and economic opportunities generated by CBNRM, as they exercise autonomy, responsibility, and accountability in the use of CBNRM revenue.

# **Promote Public-Private Partnerships**

On the other hand, the sector policies that are associated with natural resources management should provide a platform and conducive environment for promoting public-private partnerships in natural resources management. This may entail the establishment of co-management agreements between local communities and the government or the private sector in natural resources management. However, the expected roles and responsibilities including the institutional arrangements to be followed under such agreements and benefit acquisition should clearly be laid down at the onset.

# **Increase Investment in Natural Resources Management**

To achieve meaningful and viable CBNRM implementation, there is need to increase investment for the smooth CBNRM policy enforcement. Therefore, government and donors should increase budget allocation for natural resources management policy implementation in various sectors. However, to attain this, there is need to incorporate an Environmental Sustainability Criteria Framework and Monitoring and Evaluation Framework for the Environment and Natural Resource Management in CBNRM. This is a tool that can provide hard data on the impact of CBNRM on people's livelihoods which in turn will convince and move the would-be donors to take appropriate positive action towards CBNRM implementation. In addition, more opportunities for payment for ecosystem services and REDD+ should be explored and coordinated to ensure appropriate policy implementation. Payment for ecosystem services acts as an incentive for

communities to undertake natural resources management especially trees and forests. This could also reduce the challenges being faced in CBNRM implementation in Malawi.

#### **Capacity Building of the Local Institutions**

As we strengthen and enhance the regulatory framework for CBNRM, parallel processes that deal with organizational and local institutional capacity building and development are critical to ensure successful CBNRM. The enabling CBNRM policies have to facilitate local communities' control and management of their resources, and provide them with critical support to ensure success. In the same manner, the indigenous technical knowledge of the local communities should be fused together with scientific technical knowhow to ensure viable and sustainable CBNRM. This can also significantly assist in combating the various challenges faced in CBNRM policy implementation.

#### **Harmonization of Sector Policies for CBNRM Implementation**

CBNRM requires a governance framework that brings together social and ecological interdependencies, and strengthen local institutions and governance systems and practices with the objective of promoting sustainability. In this regard, sector policies intended to enhance natural resources management should be harmonized to avoid duplication of efforts among staff operating in the area. Of importance is also the need to strengthen the position and authority of local level organizations in line with decentralization to improve natural resources governance.

#### **Incorporation of Institutional Design Principles within Local Institutions**

Institutional design principles (IDPs) are part of the strategies for ensuring success of community organizations involved in the management of natural resources. The effectiveness of the local level organisations in natural resources management largely depend on the ability of local communities to self organise themselves into collective action groups. Ostrom (2011) define IDPs as tools used either consciously or unconsciously by those constituting and reconstituting an association of individuals about a general organizing principle. The design principles characterise most of the long enduring, effective and sustainable common property resource institutions. It therefore implies that for effective and sustainable management of natural resources, community institutions should have the following IDPs in place: Clearly defined boundaries, conflict resolution mechanisms, appropriation and provision rules, graduated sanctions, monitoring and security of resources being managed, collective choice arrangements, tenure and ownership rights and benefit sharing mechanisms. Incorporation of institutional design principles within local institutions could therefore be regarded as one of the ways for combating challenges that the institutions face in natural resources management.

#### **CONCLUSIONS**

In conclusion, despite the positive impact of CBNRM on the livelihoods of local communities, there are a number of policy challenges that negatively affect the efficiency and robustness of CBNRM implementation in Malawi. Some of the major challenges include slow CBNRM policy implementation, unharmonized policies and legal frameworks for CBNRM implementation, overdependence on donors for CBNRM, inadequate or no institutional mechanism to coordinate CBNRM initiatives, unnecessary bureaucracies involved when engaging local communities in natural resources management especially on public land and weak private sector participation. A number of strategies to counteract these challenges have also been highlighted in this write-up. These include the provision of incentives for CBNRM

implementation for local communities, promotion of public private partnerships, increased investment towards natural resources management, capacity building of the local institutions involved in CBNRM and incorporation of institutional design principles within the institutions governing natural resources management.

# **REFERENCES**

- 1. Bond, I, Davis, A, Nott, Nott, K, and Stewart-Hill, G (2004). Community Based Natural Resources Manual. WWF-LIFE. Windhoek, Namibia.
- 2. Dubois, O. and Lowore, J., (2000). The Journey Towards Collaborative Forest Management in Africa. Lessons Learned and Some Navigational Aids. An Overview. International Institute for Environment and Development (IIED). Forestry and Land Use Programme. London. United Kingdom. pp 11-24.
- 3. Kaarhus, R., Jorgensen, I., Kamoto. J., Mumba, R., Sikwese, M., and Ferrar, S., (2003). Nkhalango. A Social Forestry Model. Experiences from Blantyre City Fuelwood Project in Southern Malawi. Agricultural University of Norway.
- 4. Kambewa, P., Mataya, B., Sichinga, W.K. and Johnson T.R. (2007). Charcoal: the reality a study of charcoal consumption, trade and production in Malawi. COMPASS II, Lilongwe, Malawi.
- Malawi Government (2007). The fish sector and its importance in Malawi. Paper prepared for the Commonwealth Secretariat and presented at the meeting on Trade and Sustainable Approaches to Fisheries Negotiations under WTO/EPA. Port Louis, Mauritius.
- Malawi Government, (2003). Community Based Forest Management. A Supplement to the National Forestry Policy of Malawi. Forestry Department. Ministry of Forestry, Natural Resources and Environment. Lilongwe, Malawi.
- 7. Malawi Government, (2001). National Environmental Action Plan. Department of Environmental Affairs, Lilongwe, Malawi. <a href="http://www.sdnp.org.mw/enviro/action\_plan/">http://www.sdnp.org.mw/enviro/action\_plan/</a>
- Malawi Government (2000). Sustainable Management of Indigenous Forests. Mwanza East Community Based Natural Resources Management. Evaluation Report submitted to USAID/Malawi. GTZ-SADC/FSTU Project. Lilongwe. Malawi.
- Malawi Government (1998). The Malawi Decentralisation Policy, Lilongwe, Malawi. Malawi Government, (1996). National Forestry Policy of Malawi. Forestry Department. Ministry of Forestry, Natural Resources and Environment. Lilongwe, Malawi.
- 10. Mauambeta, D. and Kafakoma, R., (2010). Study Report on CBNRM Stocktaking in Malawi. Development Alternatives Inc.
- 11. Mwabumba, L., (2000). Guidelines for Co-management of Forest Resources between Local Communities and the Department of Forestry. Project Promotion Training Document. Forestry Research Institute of Malawi. Zomba, Malawi
- 12. National Statistical Office (2005). Malawi Second Integrated Household Survey (IHS-2) 2004-2005. Zomba,

Malawi.

- 13. Njaya, F., (2009). The Lake Chilwa fishing household strategies in response to water level changes: migration, conflicts and co-management; A thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy in the Faculty of Economic and Management Sciences, University of the Western Cape. South Africa.
- 14. Njera, D., (2013). Local communities' efforts to combat deforestation: Sendwe Village Forest Area in Lilongwe, Malawi. In Breen, C. (2013) (edit.) Community-Based Natural Resource Management in Southern Africa. Center for African Studies, University of Florida. ISBN: 978-1-4817-5763-8 (sc).
- 15. Ostrom, E., (2011). Background on the Institutional Analysis and Development Framework. The Policy Studies Journal, Vol. 39, No. 1, 2011 p 7-23
- 16. Seymour, T. 2004. Framework for a review of progress, challenges and opportunities. Decentralization and CBNRM. Occasional Paper No. 3. COMPASS II. USAID. Malawi.
- 17. Rout, S. (2013). Social Change. Collective action for sustainable forestry. Institutional dynamics in community management in community management of forest in Orissa. Council for Social Development. SAGE. <a href="http://socialchange.sagepub.com">http://socialchange.sagepub.com</a>.
- 18. Russell A.J.M and Dobson, T. (2009). An adaptive organisational learning framework for resilience in fisheries co-management: Based on analysis of fisheries regimes in Malawi.
- 19. Wildlife and Environmental Society of Malawi WESM (2009). Lengwe Annual Animal Counts (1967-2009, Blantyre Branch, Blantyre, Malawi.