Designing a Functioning Community Forest Association: A Case of Muileshi, Kakamega County, Kenya

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ABSTRACT— Participatory Forest Management was introduced into law with the passing of the Kenya Forest Act of 2005, which provides a legal basis for communities in Kenya, to participate in forest management. In Kenya Participatory forest management entails the involvement of the forest adjacent community members through formation of Community Forest Associations, which participates in the management of the forest with the Kenya Forest Service (KFS) and other stakeholders. This paper examines the design and functioning of Muileshi community forest Association in Kakamega Kenya to answer a key question in current participatory forest management literature on how one can design a functioning community forest association that can conserve the forest resources as well as provide sustainable livelihoods to the poor forest dependent communities. The study utilized documents and a focus group discussion with Muileshi community forest association to answer this question. All the data collected was qualitatively analyzed by putting the key themes together from both the documents and focus group discussion and using them to answer the study objective. It is conclude in the study that a well designed community forest association can contribute significantly to the conservation a community based forest as well as deliver livelihoods to the communities adjacent to the forests that depend on them for their livelihoods. It is recommended that there is need to strengthen the community forest association arrangements to enable them operate efficiently.

Keywords- designing; community forest association; Muileshi, Kakamega, Kenya

1. INTRODUCTION

The inclusion of communities in the management of state-owned or formerly state-owned forest resources has become increasingly common in the last 25 years. Almost all countries in Africa, and many in Asia, are promoting the participation of rural communities in the management and utilisation of natural forests and woodlands through some form of Participatory Forest Management (PFM) [30]. PFM has been recognized over the past two decades as a potential approach for achieving forest sustainability [13, 10, 30, 23,17 and 18]. It focuses on improving the livelihood and welfare of rural people and conserving natural forest systems through local participation and cooperation [3, 23, 17 and 18]. In Nepal and India community forestry programmes were initially conceived to reverse degradation of national forests, which could not be managed and protected effectively by state forestry services [26]. This was also one of the motivations for the establishment of the first village-owned forest reserves in Tanzania [30, 21]. Rural poverty alleviation was a further motivation behind Leasehold Forestry in Nepal and Joint Forest Management in India [29].

In Kenya, the idea of Participatory Forest Management (PFM) was as a result of the government's recognition of the critical role that can be played by the local adjacent communities in ensuring that tree cover in the country increases to the internationally recommended 10% [8, 20, 17 and 18] and to reduce forest destruction and degradation [7,17 and 18].

The Kenyan scenario of community forest management entails involvement of the forest adjacent community members through formation of Community Forest Associations, development of forest management plan and formalization of the partnership through a Forest Management Agreement (FMA) between the CFA and the state through Kenya Forest Service (KFS) [9, 15, and 14]. The formation of CFAs started in 1997, and currently there are over 40 forests where communities participate in forest management [28].

In PFM, local community groups negotiate, define, and guarantee among themselves an equitable sharing of the management functions, entitlements, and responsibilities for a given set of common pool natural resources [23, 17 and

18]. Common pool resources refer to a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use [22 and 24]. The efficiency and equitable benefits of common pool resources are derived from democratic processes that encourage local institutions and local authorities to serve and deliver relevant services to local people through their institutions [12, 25 and 21].

We thus in this paper follow the common property resource theory to understand the institutional design of Muileshi forest association to address one significant question in the current literature on how one can design a functioning community forest association that can deliver significant livelihoods of the poor forest-dependent communities [19 and 27], by emphasizing on the design of the institutional arrangements or the rules a CFA [22]. Current literature has confirmed that it is not clear on how one can design long lasting institutional arrangements for a functioning CFA that are appropriate for governance of tropical forests in a way that they can deliver significant livelihoods to the poor forest-dependent communities [17,18,19 and 22]. The exploratory research hypothesis in this paper is that a well-designed CFA with functioning institutional arrangements will conserve community forests and deliver significant livelihoods of the poor forest-dependent communities. Such an hypothesis is based on an assumption that the Muileshi is well-designed and operating effectively. Thus the key question that the study seeks to answer is how one can design a function CFA that can conserve forests and deliver sustainable livelihoods to communities depended on those forests?

In this study we are only interested in Muileshi CFA which is currently working in partnerships with the Kenya Forest service (KFS), Kenya Wildlife Services (KWS) National Environmental Management Authority (NEMA), Donors, and the County Government Administration in the management of Kakamega forest. Muileshi CFA is found in Kakamega ecosystem (Fig. 1) and it is made up of six Community Based Organizations (CBOs) namely: (1) MU-SHA – Musembe and Shamiloli (2) BU-SH – Bukhungu and Shihingu (3) SHA-MU – Shanderema and Mukomari (4) IKU-CHI – Ikuywa and Chirobani (5) KACOFA – Kakamega Community Associate (6) KEEP – Kakamega Environmental Education Programme. The Kakamega ecosystem is generally wet throughout the year, with an annual average rainfall of approximately 2,000 mm. Rainfall is heaviest in April and May (long rains), with a slightly drier June and a second peak roughly in August to September (short rains). January and February are the driest months. Temperatures are fairly constant throughout the year, with a mean daily minimum of about 110^{C} and mean daily maximums of about 260C. The geology of Kakamega Forest Ecosystem can be described by underlying rocks that include basalt, phenolites and ancient gneisses of the Kavirondo and Nyanzian Systems which are associated with gold bearing quartz veins. The rocks form moderately fertile clay-loam soils. Forest cover, with its continuous nutrient recycling activity can maintain itself permanently on these soils [9].

The Kakamega ecosystem is an important watershed for some of the rivers that flow into Lake Victoria. The forest ecosystem plays a very important role in the provision of ecological, social and economic services to the local community and the country at large [9] For instance it is valuable to the people living around it, as a source of timber, fuel-wood, herbal medicines, building materials, food, income and viewed by part of the population as new land for agriculture and settlement. The ecosystem is also a unique sanctuary for many endemic insects, plants and birds with between 10 to 20% of the animal species in the Forest that are nationally unique. The huge variety of birds, reptiles and insects make it a specialist eco-tourism attraction for bird watchers and wildlife photographers. The ecosystem has been ranked high priority by the World Conservation Union for its severe threat and unique biodiversity [9]. Despite the importance placed on this forest it has lost over 50% of its area since it was designated a national forest in 1933. It once covered most of western Kenya and was continuous with the vast equatorial rainforest of Africa. It is on this basis that Participatory forest management was introduced in the forest which led to the formation of Muileshi CFA, in 2005 and registered in 2009 with the Registrar of Societies as per Forest Act [9].

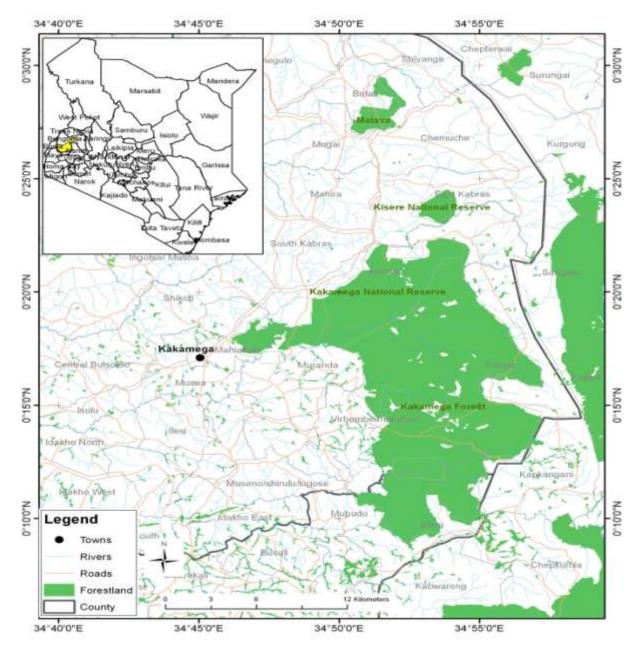


Fig. 1 The location of Kakamega Forest Ecosystem (Source Authors)

2. METHODOLOGY

The study was mainly qualitative in nature. Thus the study utilized documents namely: books and online journals, focus group discussion of the six CBO leaders that forms Muileshi CFA leaders and key informants from the collaborative governance partners namely: Heads of Muileshi CFA, KEFRI, KFS, Nature Kenya, Centre for Kakamega forest studies Masinde Muliro University, Biota Kenya (Table 1.). Content analysis was then used for the analysis of all the documents and all the information collected from the focus group discussion and key informants. All these data was organized into clear themes that were used to answer the study objective. The documents, the information from focus group discussion and key informants were examined in terms of the content contained in them and what it implied for the writing of this paper. According to Bryman, 2008 documents should be examined in terms of, on the one hand, the context which they are produced, and, on the other hand, their implied readership.

Type of respondent	Source of information
Documents	Online journals and books
Key informants	Heads of Muileshi CFA, KEFRI, KFS, Nature Kenya,
	Centre for Kakamega forest studies Masinde Muliro
	University, Biota Kenya
Focus Group Discussion	One focus group discussion with heads of
	the six Community Based Organizations (CBOs)
	namely: (1) MU-SHA – Musembe and Shamiloli (2)
	BU-SH – Bukhungu and Shihingu (3) SHA-MU –
	Shanderema and Mukomari (4) IKU-CHI – Ikuywa and
	Chirobani (5) KACOFA – Kakamega Community
	Associate (6) KEEP – Kakamega Environmental
	Education Programme.

Tablal Sample size for the study

3. RESULTS AND DISCUSSION

The purpose of this paper is to answer a key question in current literature on how one can design a functioning CFA that can conserve forests and deliver sustainable livelihoods to communities depended on those forests? To answer this question the study examined, the Muileshi CFA structure, the membership of Muileshi CFA, the Muileshi community forest association agreement, Muileshi constitution, Muileshi responsibilities in the management of the forest, challenges facing Muileshi CFA and the achievements of Muileshi CFA.

3.1 Muileshi CFA Structure

In order to understand the design of Muileshi CFA, we asked the respondents to explain the structure of their CFA. It was found that an explicit attempt at a CFA has been adopted in the Kakamega forest (Figure 2). It involves the Government of Kenya lead agencies: KFS, KWS and NEMA, the donor and NGOs, County Government Administration and the Muileshi CFA. All this stakeholders have come together in the management of the forest. During meetings one member from these organizations participating in the participatory arrangement must be present. At the CFA level, the management committee consists of thirty (30) members made up by five (5) representatives from each of the six Members CBOs.

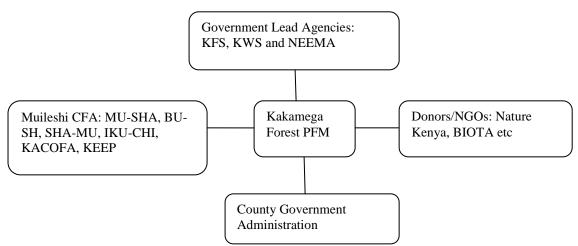


Fig. 2 The composition of Kakamega forest PFM arrangement (Source researchers)

3.2 Membership of Muileshi

The researchers were further interested to know on how the Muileshi CFA membership is designed. It was found that the Muileshi membership is open to every Kenyan citizen at the age of 18 and above from the communities living 5km adjacent to the Kakamega forest and who are of sound minds on condition of payment of registration fee of Ksh. 500 as membership fee which is paid annually and are non-refundable. There also exist other two types of membership: (1). Life membership, which is awarded to any founder members who are honest, dedicated, transparent, loyal, displayed integrity and are regularly subscribing during their tenure and in addition to being an active member for a period not less than 5 years. Life members are not subjected to annual subscription or entrance fee (2). Corporate membership is treated as a single member and shall be entitled to a single vote. The association appeals to the members for any financial

contribution other than membership entrance and annual subscription, but not exceeding Ksh 1000 as the committee may decide when need arises. However, members' contribution for special projects, such as purchase of property is treated as members' shares contribution. Official receipts are issued to members for any money paid to the society.

3.3 Muileshi community forest association agreement

We were also interested on understanding whether the Muileshi CFA design had an agreement with the relevant forest management authorities. It was found that as per the requirements for the Kenyan forest act 2005, the Muileshi forest association signed a five year agreement with KFS in 9th November 2012 for the purpose of granting the CFA permission to participate in the conservation of the forest. This agreement has provided the CFA the rights to: (1) Collect medicine (2) harvest honey (3) harvest timber and fuel wood, (3) harvest grass and graze their livestock (4) collect forest products for community based industries (5) ecotourism and recreational activities (6) scientific and educational activities (7) plantation establishment through Plantation Establishment and Livelihood Implementation Scheme (PELIS) (8) carrying out various specified silvicultural operations (9) development of community wood and non-wood forest based industries (10) Carbon trade [17 and 18]

3.4 Muilishi constitution

In our quest to understand the design of Muileshi CFA, we asked the respondents to explain if they have developed a constitution guiding them. We found that Muileshi community forest association as a CFA has a constitution that guides it in the management of the forest. The constitution has outlined its objectives, vision, mission and goals. It also outlines the membership legibility criteria. The office bears for Muileshi include the chairman, vice chairman, secretary, vice secretary and treasurer. The constitution also provides for the duties of the various community members, trustees, auditors, sources of funds for its operation, how to conduct the general meetings, the amendments to the constitution, legal advisory, dissolution election of new office bearers and conflict resolution mechanisms.

3.5 Muileshi responsibilities in the management of the forest

The researchers then asked the respondents on the responsibilities of Muileshi CFA in the management of the forest [23, 17 and 18]. Muileshi CFA has a number of responsibilities in the co-management arrangements: (1) protect conserve and manage the forest as per the forest management agreement [21, 22] (2) formulate and implement forest programmes consistent with the traditional forest user rights of the community concerned in accordance with sustainable use of the forest (3) protect sacred grove and protected areas [21] (4) assists KFS in enforcement of the provisions of the 2005 forest act [21] (5) Keep the KFS informed of any developments, changes and occurrences within the forest which are critical for the conservation of biodiversity (6) help in fire fighting (7) do any other thing that is necessary for efficient conservation and management of the forest [23, 17 and 18].

3.6 Challenges facing Muileshi CFA

According to [11] the major challenges that face CFAs include: lack of transparency among officials, failure of some members to contribute funds, sharing of benefits, and a dictatorial tendency among some of the leaders. In our study thus we asked our respondents to explain the challenges facing their CFA. Even though the study found that the CFA has greatly advanced in the management of the forest, there is lack of financial resources necessarily to assist the CFA to effectively implement its programs for the management of the forest by starting income generating activities to reduce pressure to the forest, The CFA also faces some conflicts between Kenya Forest Service and the Kenya Wildlife Services on who to take lead in the management of the forest [11 and 21]. It was not clear on how the proceeds from the forest could be shared between the stakeholders [11 and 21]. Meetings for advancing the participatory approach were found to be scanty. It was noted that there was failure to sensitize and capacity build the communities to be independent in conducting the affairs of the association [11]. Lack of facilitation and provision of upkeep to the scouts involved in the forest patrols to control theft and the CFA staff and finally facilitation on communication and network was found to be deficient.

3.7 Accomplishments of Muileshi CFA

As hypothesized in this paper that a well-designed CFA with functioning institutional arrangements will conserve community forests and deliver significant livelihoods of the poor forest-dependent communities. We were interested to understand if the design of the Muileshi CFA had contributed any livelihood to the communities and if it is well-designed and operating effectively [30, 21]. To answer these questions we asked the communities to explain the accomplishments of Muileshi CFA. The study found that the Muileshi CFA has made several achievements namely: (1) signed an agreement with United States Agency for International Development (USAID) to facilitate a camp site and a Guava juice factory (2) they have bought facilities for camp activity namely: kitchen utensils, tents, amusement park for children, 200 chairs and 12 plastic tables with garden umbrellas, public address system, fruit pulper and sink to process fruit juice especially guava (3) signed a participatory forest management agreement and a community forest agreement with Kenya Forest Service on 9th November 2012 (4) has made exchange visits to other CFAs for conservation education. For instance the Muileshi CFA has already visited the upper and lower Imenti CFAs in Mt Kenya and Arabuko-Sokoke forest

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reserve in the coast regions respectively (5) installed 46 bee hives in the Kakamega forest (issued by KFS) for the communities' benefits in three out of the six CBOs forming the CFA (IKUCHI, SHAMU and BUSH) (6) bought a piece of land where it has built a CFA office and intends to build a cooperative soon to serve the members [30, 21]. The cooperative is already registered with Ministry of Cooperative Development and Marketing (7) introduction of Plantation Establishment and Livelihood Implementation Scheme (PELIS) to members adjacent to the Forest. Where, members cultivate foodstuff for their families hence reduce pressure to the forest as well as tend for the young trees grown in the forest (8) establishment of tree nurseries in every community based organizations and private homes for planting and selling tree seedlings [30].

3. CONCLUSION AND RECOMMENDATIONS

The study set out to understand on how one can design a functioning community forest association. It was hypothesized that a well-designed CFA with functioning institutional arrangements will conserve community forests and deliver significant livelihoods to the poor forest-dependent communities and it assumed that the Muileshi CFA is well-designed and operating effectively. From the results it has been confirmed that a well designed community forest association can contribute significantly to the conservation of a community based forest as well as deliver livelihoods adjacent to those forests [2, 4, 17 and 23]. The study has also confirmed that community based organization responsible for forest management can come together and form a functioning CFA. Also for a CFA to function well there is need for signing a participatory forest management agreement with the relevant government agency responsible for forest management and establish different income generating activities, the design for ways of improvement of financial resources [17], creation of conflict resolution approaches among CFA stakeholders [19], improving meetings for advancing the participatory approach, sensitize and capacity building of the communities to make them independent, provide facilitation and upkeep of the scouts involved in the forest patrols to control theft and the CFA staff [6] and finally facilitation of the communities on communities on communication and networking if an established CFA has to function.

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