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APPLICATION OF GOVERNANCE SYSTEM ANALYSIS IN EVALUATION OF PERFORMANCE OF PARTICIPATORY FOREST MANAGEMENT. A COMPARATIVE STUDY OF URBAN AND RURAL FORESTS IN KENYA

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ABSTRACT

Over the last two decades, there has been a shift from command and control to community participation in natural resource management with two major goals of fostering sustainable forest management and alleviating poverty. In Kenya, participatory forest management was introduced in the late 1990s but took full effect with the enactment of forest Act 2005 where forest adjacent communities were required to form Community Forest Associations (CFAs). The law mandates the CFAs to enter into a management agreement with Kenya Forest Service (KFS) to co-manage the forests. Since its implementation, there remains a debate whether the system has yielded the intended improvements in livelihood and good governance. With the aim of providing a platform for developing strategies that promote successful implementation of PFM in Kenyan urban and rural forests, this study using governance system analysis framework examines and compares how PFM has been implemented and its performance in Ngong' Road Forest representing urban forests and Kiptuget forest representing rural forest in Kenya. In conducting this study, quantitative and qualitative data was collected administration of questionnaires to sampled CFA members, interviews with key informants and review of gray literature. In analyzing data, summaries of qualitative data was done while cross tabulation and frequencies of quantitative data was done by use of SPSS. From the study, it was realized that even before enactment of forest act 2005, community around Ngong' Road forest association was already engagement in managing the forest. GSA framework analysis revealed that in all the three domains of decision making, connectivity and knowledge use, Ngong' Road forest association was performing better than Kiptuget forest association.

KEY WORDS: Governance, Performance, Participatory Forest Management, Community Forest Association.

INTRODUCTION

Natural resource governance and management has been and continues to be a challenge (Potts et al 2016). Forest resource not being an exception, it is observed that across the globe, institutional arrangements have and are moving towards more holistic approaches that focuses on wider community and stakeholder involvement (Wakjira et al 2013). It is suggested that this idea emerged from recognizing the need to not only consider the state but the community as well in the equation of resource management. It is based on the view that despite the fact that State agencies have some capacity to manage the resources, communities have enduring knowledge and unique capacity to sustainably use and manage natural resource (Coulibaly-lingani, 2016).

According to Ongugo et al, 2008, it is widely believed that participatory forest management is very key in achieving equity and efficiency that results from the democratic processes and procedures that come with the involvement of the forest adjacent community. This is because, it is believed that the process encourages local institutions and local authorities to serve and deliver not only relevant but also responsive services to the community (Bartley et al, 2016). As a result of this, the system has been adopted and implemented in several diverse ways in different countries. The models adopted in co-management efforts range from de-concentration to devolution in many references such as participatory forest management (PFM), joint forest management (JFM), community forest management (CFM) and Community Based Forest Management (CBFM) (Mogoi et al, 2016).

BACKGROUND

According to Thygesen et al 2016, engagement in forest management in Kenya finds its history in the colonial era when the colonial government established Forest Department in 1902. This was a state institution that majorly focused on soil and water conservation. Amongst the major milestones of the Forest Department were the gazettement of forests (Mogoi et al, 2016). This exercise did not only alter the traditional and indigenous forest use and management but also led to eviction of people leading to unprecedented cases of landless Kenyans and squatters scenarios that endures to date (Ogada 2012). After independence in 1963, the command and control approach of forest management continued until when the approach started losing support occasioned by growing concern on forest destruction that came as a result of illegal and politically motivated forest excision in 1980s (Potts et al., 2016).

In the early 1990s, there was unprecedented pressure from individuals, civil society and donors that

played a key role in the adoption of Kenya Forest Plan which was the genesis of the shift from command and control approach to community participation approach in forest management in Kenya (Mogoi et al., 2016). This was further followed with other reforms in the sector that later on culminated with the enactment of Forest Act 2005 thus making PFM a central pillar in the governance of Kenya's forests (Koech et al, 2009). There has been further reviews in this legal framework that culminated to the Forest conservation and management Act 2016 whose main aim was to give effect to Article 69 of the Kenyan Constitution 2010 with regard to forest resources where it was expected that the legal framework will provide for the development and sustainable management, including conservation and rational utilization of all forest resources for the socio-economic development of the country and for connected purposes (Government of Kenya, 2016). This legal framework provides that Forest Adjacent community may register Community Forest Associations (CFAs) under the Society's Act. After due registration, the CFA is authorized to apply for permission to participate in the forest management with the KFS. It is further provided that this application must be accompanied by a forest management plan specifying the proposed use and conservation measures of the area (GOK, 2005, GOK, 2016). After the management plan is approved, the CFA must enter into a management agreement with KFS. The agreement highlights CFA user rights as well as the responsibilities of the CFA in respect to the management and conservation of the forest.

It is observed that the established legal framework does not give explicit directions on the membership and governance of the CFA apart from registration as community forest association in accordance with the societies act. It is further observed that the Act is silent on principles or guidance on what rights and/or benefits that should be devolved to the CFA but leaves this to the discretion of the government agency however the Act is explicit on the obligation of the CFA in so far as management of the forest (Thygesen et al, 2016).

The existing guidelines for implementation of PFM were prepared by the Ministry of Environment and Natural Resources. It is clearly stated that these are guidelines and not regulations and matters of CFA membership and governance thereof is left at the discretion of the constitution of the CFA (MENR, 2007). Guiding principles of the Forest conservation and management 2016 highlights the government's commitment to PFM and reiterates the need to further entrench community participation in forest management by strengthening CFAs and introduction of benefit sharing arrangements. Further to this, the

forest policy 2014 that gave lead to forest conservation and management act 2016 recognized the need to put focus on establishment and management of urban forests (MEWNR 2014). On this premise, this study sought to compare PFM implementation and resultant practices of urban and rural forest.

THEORETICAL FRAMEWORK

Several scholars of governance and related studies have proposed numerous frameworks for evaluating governance systems (Kenward et al. 2011). The application and use of these evaluative frameworks vary widely depending on the system in question. It has however been observed that although they play a key and critical function in problem identification at the policy, plan, or program level, most do not address governance systems in its entirety. In evaluating performance of CFA as a system of forest resource governance, this study adopted the governance system analysis (GSA) framework as postulated by Dale et al 2013. GSA is a framework that was developed to systematically address systems of governance and to inform reforms using structural and functional factors of organs of governance in combination with planning and systemic approaches. It is based on the view that governance is a social systems. It works and can be understood in the context of interactions of system components and in this case it involves a system of interaction between people, Community Forest Association (CFA), Kenya Forest Service (KFS) and other stakeholders (Fisher 2010). According to Potts et al, 2016 structural and functional considerations in GSA helps in identifying weakness and focus on improvement of governance system.

In deployment of this framework, key components of policy making process are considered as governance structural and functional variables which include vision and objective setting, research and

assessment, strategy development, implementation and monitoring and evaluation (Potts et al, 2016). Vision and objective setting entails conception of the capacity to envisage the future of the governance system and the aims, goals and targets set for achievement by the system within time. Research and assessment relates to capacity to gather and make use of relevant information while strategy development involves relates to a plan of action (Besley, Montalvo, & Reynal-Querol, 2011). These three components are heavily deployed in the development of forest management plan by Community Forest Associations. Implementation involves execution of the plan while monitoring and evaluation involves keeping the process under systematic review (Ongugo, Mogoi, Obonyo, & Oeba, 2008).

According to (Brondizio, Ostrom, & Young, 2009), most scholars and policy analysts are aware that the ecosystems like forests are embedded in different levels of social organization with diverse forms of natural capital which exist at multiple levels on a spatial scale ranging from very small to global that has led to the growth of interdependence in the resource management systems. This phenomenon has resulted to complex intersection between institutions and economic chains that operate at different levels. The vertical and horizontal interplay of institutions representing groups competing or cooperating for authority over natural resources requires one to look at the three critical components of decision making, connectivity and knowledge use in management of natural resources (Brondizio et al., 2009).

In analyzing the performance of CFA therefore, a 5 point scale scoring system ranging from dysfunctional to highly functional as shown in the table below is applied as shown in table 3.2

Table 1: GSA 5-Point Scoring System

SCORE	DESCRIPTION	REMARK
1	Dysfunctional	Unable to deliver the goals
2	Poorly functioning	Poor and likely to deliver on its goals
3	Somewhat functioning	Could fail or succeed
4	Functional	Good and not likely to fail to deliver on its goals
5	Highly functional	Excellent and cannot fail to deliver its goals

STUDY AREA

In view of the urban and rural forests dichotomy, two forests were purposefully selected. Ngong’ Road forest in Nairobi City County was purposefully selected from among the urban forests in Kenya while Kiptuget forest in Baringo County was purposefully selected from among the rural forests in Kenya.

Ngong’ Road forest was purposefully selected because it is one of the few indigenous urban forests in Kenya gazette in 1932. It is the largest forest blocks within the Kenyan Capital, located in Dagorreti and Lang’ata Sub-counties, 6Km to the west of Nairobi Central Business District as shown in figure 2.1. In addition to the vibrant CFA activities and PFM, this forest is endowed with environmental education Centre

that plays a key role in building the capacity of CFA. The forest lies at an altitude of 1670 meters above sea level with latitude of 36°50' and longitude s1°17' South (Moss, 1988). It is a forest rich with biodiversity, a home to many wild animals and birds which include monkeys, baboons, antelopes, dik diks, hyenas, ant-bears, buffaloes, among others. There are several

species of flora in Ngong' Road forest but the main vegetation types include but not limited to *Croton megalocarpus*, *Olea Africana*, *Brachylaena huillensis*, *Calodendrum capensis*, *Warbugia ugandensis*, *Juniperous procera*, *Eucalyptus spp.*, among many others (Ogwen et al, 2008).



Figure 1: Map of Ngong Road Forest, Nairobi City County

Kiptuget forest is a block of the Mau Forest complex situated in Koibatek sub-county in Baringo County as shown in figure 2.2. It was purposefully selected because it is one of the rural indigenous forest that has had long history of community deriving livelihood. In addition to this, it is a section of Mau complex that very

little or no research has been done on. The forest lies between latitude 0°4'S and 0°9'S and longitudes 35°41'E and 35°45'E. It was declared a forest area under proclamation no.44 of 1932 and covers approximately a total area of 850 ha (KFS, 2015).



Figure 2: Map of Kiptuget Forest, Koibatek-Baringo County

METHODOLOGY

To respond to study objectives both primary and secondary data were used. Primary data involved mostly was collected over a period of 2 months. The first author trained one research assistant who helped in data collection under close supervision. The questionnaires were pretested before the actual data collection exercise. Secondary data involved review of published journals, books and gray literature including CFA management plans and management agreements constitutions of CFA, minutes, reports and other relevant materials. Primary data was collected through scoring of GSA by CFA members, interview with key informants and observation. The key informants were CFA leaders, KFS officers and community leaders. A total of 83 and 125 members of Ngong Road Forest Association (NRFA) and Kiptuget Community Forest Association (KICOFA) respectively participated in the study. This sample was selected through the following process

- The CFA list was obtained from CFA officials and the active members' purposively sampled. From this exercise, it was realized that NRFA had 165 members while KICOFA had 249 active members respectively

- The sample was further stratified according to gender where men and women were further systematically sampled to arrive at a total of 83 members in NRFA and 125 in KICOFA.

Data collection was done through observation and recording, semi structured interviews with key informants and scoring of GSA framework in the questionnaire by CFA members. This was done through guided interviews where the participants were asked to apply a 5-point scoring system. In analyzing data, summaries of qualitative data was done while cross tabulation and frequencies of quantitative data was done by use of SPSS.

RESULTS AND DISCUSSIONS

Discourse and institutional arrangement

The study found out that the Ngong' Road Forest had a rich long standing history of community participation in forest management even before the coming into place of the system as a law in 2005. The Ngong' Road forest as gazetted in 1932 originally covered 2,926 ha but due to excisions and Illegal land grabbing this area was greatly reduced prompting the establishment of Ngong Road Forest Sanctuary in 1990. Establishment of the sanctuary marked the beginning of community involvement in management of Ngong' Road forest. In

its own wisdom, the Board of the Sanctuary considered the need for the FAC to participate in management of the forest. This research established that prior to the establishment of Forest Act 2005 and the coming into place of CFAs, Ngong Road Forest had a concept of community participation in the management of the forest. It was further established that the trust even before enactment of the law on community participation, the forest has made several milestones among them;

- Participated in the protection of the Forest by erecting an electric fence around the Sanctuary and employing private rangers to assist the KFS rangers in patrolling and protecting the forest.
- Constructed an Education Centre facility and providing environmental education to school children and basic adult literacy courses for the community
- Participated in poverty alleviation among local communities by encouraging formation of self-help groups and hosting community projects like bee keeping and tree nurseries.
- Publicized the Forest by hosting recreational activities like; forest walks, bird watching, cycling, horse riding, team building and picnic sites

With the advent of new Forest Act 2005, Ngong Road Forest Sanctuary engaged the Community wider with a view of formally establishing CFA. The Ngong’ Road Community Forest Association was formed in 2008 fully constituted and registered with Registrar of societies. The key objectives of the established CFA were to conserve the forest, protect the forest’s resources and to raise the socio-economic standards of the community members through sustainable utilization

of the forest resources. At the time of this research, it was established that the CFA was fully registered, with a certificate of registration. It was also established that the CFA had signed a management plan with KFS that guided the process of community participation.

Unlike Ngong’ Road forest, Kiptuget forest was under command and control system of management prior to the enactment of laws allowing community participation. The study however found out that even during this time, members of the community used to access the forest either on permission by forest department or illegally to obtain products from the forest. During this time hunting, firewood collection, charcoal burning, honey harvesting were very rampant. Unlike was the case in Ngong’ Road forest, the process of formal constitution of CFA in Kiptuget Forest was driven by KFS. In response to the provisions of Forest Act 2005, this research established that KFS initiated community sensitization that led to the formation of Kiptuget Community Forest Association (KICOFA). KICOFA brings together various CBO’s, User Groups and individual community members from the villages adjacent to Kiptuget forest.

CFA Membership and User Groups

The study found out that the Ngong’ Road Forest Association had a total number of 212 registered community members, two registered CBOs, Msitu Raha and Miotoni Wetlands and five corporate bodies. The membership was drawn from various categories of interested stakeholders. This membership constitutes community user groups and self-help groups that had an interest in the management of the forest even before the enactment of the Forests Act, 2005, registered CBOs and corporations as highlighted in Table 2

Table 2: Ngong’ Road Forest Association User Groups

Category	Name	Location	Major Activities
Community Group	Gatwekera Self Help Group	Kibera	Firewood
	Ngando Group	Ngando	Bee Keeping
	Nuclear Handcraft Group	Rirura	Tree Nursery
	Mutuini Group	Kibera	PELIS
	Mazingira Self Help Group	Dagoretti	Tree Nursery
Registered CBO	Msitu Raha	Ngong Karen	Recreation
	Miotoni Wetlands	Karen	Lobby
Corporations	Ngong’ Rd Sanctuary	Ngong Rd	Conservation
	Wildlife Clubs of Kenya	Langata Rd	Environmental Education
	Bomas of Kenya	Bomas	

Ngong Jockey Club	Ngong Road
Kenya Scouts Association	Kibera

The Kiptuget Community Forest Association on the other hand was constituted by members drawn from five sub locations. The total number of registered

members at the time of study was 600. The five sub-locations had organized themselves into three CBOs which jointly form the umbrella KICOFA. This is as highlighted in table 3;

Table 3. Kiptuget Community Forest Association User Groups

CBO	Number of Villages	Major Activity
Sinendet	6	PELIS & Pastoralism
Tabora/Big 15	4	PELIS
Mlima/Koige	8	PELIS & Bee keeping

From the findings above, it can be noted that NRFA has a diverse composition of membership. Besides the individual households of community surrounding the forest, it was observed that the CFA has membership from corporate bodies and other registered organization. Thus the CFA in urban forest has heterogeneous composition of participants. On the other hand, it was observed that KICOFA was composed of a more homogenous group of members made up of local community members who are dependent on the forest and majorly involved in agricultural activities. It is noted that unlike NRFA, KICOFA has no corporate bodies, registered organization or other institutions as members of the CFA.

From the study it was realized that the heterogeneity and homogeneity factor in the CFA membership determines the diversity of the user groups both in terms of registration and the level of engagement. The study found out that NRFA had more than 10 both registered and active user groups. These include honey collectors, firewood collectors, tree nursery, briquette making, PELIS, fodder collectors, Sanctuary area with grounds and nature trails, horse race course, Wildlife clubs of Kenya where there is nature trail, environmental education center institutional establishments, Bomas of Kenya and Kenya Scouts Association. On the other hand, it was noted that KICOFA had one predominant user rights i.e. PELIS. The difference in the membership of KICOFA and NRFA in terms of diversity impacted on how the CFAs and its leadership are composed. In NRFA, it was realized that, the local community who were deriving benefits from the forests elected one representatives from among them to be member of the CFA board. All the other bodies include corporations' seconded individuals to join the board. It was this level that the members elected the office bearers while the rest remain as members of the board. On the other hand it was realized that members of KICOFA elected there members at grass root community based organizations

level who then met at the CFA level where the executive committee was elected. From these observation, it is evident that composition of members in both NRFA and KICOFA determines how the CFA board is constituted marking one of the differences between CFAs in Urban and Rural areas.

In addition to this, the presence of corporates and other entities in NRFA, played a key role in enhancing the profile as well as the capacity of the association. This is evident in how the association had established networks and partnerships that were very critical in realizing the goals and objectives of the CFA. According to Poteete and Ostrom 2004, heterogeneity and homogeneity in community involvement comes in different dimensions including political economical interest, culture etc. that have huge impacts on outcomes of the process of participation. It is worth noting that this factor plays a key role in the performance of PFM because the more the user rights the more the level of engagement which leads to more interest in the operations of CFAs. It was evident in this study that the CFA members in NRFA were engaged in more diverse ways as compared to members of KICOFA where they were majorly engaged in PELIS. From the interviews with members of KICOFA, the members expressed fears of the future of PFM due to the fact that the arable land within the forest available for PELIS was decreasing over time as plantations take over. The dominance of this ne activity has become such that it is synonymous to PELIS. From this finding, it is evident that there is need to build capacity of members of CFAs in rural areas so that they can be able to diversify their livelihoods and make use of the opportunities available in PFM.

Performance of Community Forest Associations

The study employed the Governance System Analysis (GSA) to evaluate the performance of PFM and the results are as shown in table 4. This table contains a comparison of the means of scoring done by CFA members regarding the CFA decision making

capacity, connectivity, and knowledge use of CFA structures in the two case study regions. The table shows that cumulatively, Ngong’ Road forest participants believe that their CFA structures are more likely to perform better in delivering their intended outcomes in all facets of decision making, connectivity

and knowledge use as compared to their colleagues in KICOFA by scoring an average total of 10.6 out of possible 15.0 compared to KICOFA with average total score of 4.6. In general this means that NRFA has capacity to perform better than KICOFA in realizing the objectives of PFM.

Table 4: Level of Performance of CFAs

STEP	DECISION MAKING		CONNECTIVITY		KNOWLEDGE USE		TOTAL	
	NRFA	KICOFA	NRFA	KICOFA	NRFA	KICOFA	NRFA	KICOFA
Vision and objective setting	3	2	2.5	1	4	2	10.5	4
Research and Assessment	4	1.5	3	2	3	1.5	11	4.5
Strategy and development	3	2	3	2.5	3	2	9	5.5
Implementation	4	2	3	1.5	4	2.5	12	5.5
Monitoring and evaluation and review	3.5	1.5	3	1	4	2	10.5	3.5
TOTAL	17.5	9	14.5	8	18	10	53	23
MEAN	3.5	1.8	2.9	1.6	3.6	2.0	10.6	4.6

Decision-making Capacity

The study found out that despite the fact that both NRFA and KICOFA had implemented PFM, it was realized from GSA that the capacity of CFAs to deliver desired decision-making outcomes is different. In all the five areas of Vision setting, research and assessment, strategy development, implementation and monitoring and evaluation, NRFA exhibited higher capacity for decision making as compared to KICOFA. It was realized that having had a longer history of engaging community in management of forests, NRFA had developed very clear and concise mechanism setting the vision and objectives for the CFA. Additionally, it was realized that thinking strategic was not a new concept in NRFA as they had developed strategic plans before and thus the process and mechanism of going about the exercise was well established and elaborate. On the other hand, KICOFA was yet to fully comprehend the process of effective engagement of community into having a clear vision, thinking strategic as well as monitoring and evaluation. The study revealed that this was partly because of low level of awareness as well as the capacity of the leadership to mobilize and bring all the members to the point of thinking as part of the system.

Research and assessment is very fundamental in decision making. The study realized in NRFA, the average rate of capacity to make decisions in research

and development was 4.0 points out of the possible 5.0 in the scale as compared to 1.5 of KICOFA. It was observed that members of KICOFA had access to established Environmental Education center that was very fundamental in building capacity of CFA members and leaders. It was realized that the facilities and materials available at the Centre had enhanced the research and development capacity of NRFA. On the other hand, KICOFA had not facility to guide and to facilitate the process of research and assessment that will help in decision making. In addition to this, the study realized that there was very minimal research and information on Kiptuget Forest.

In general the study realized that the mean capacity for decision making for NRFA was 3.5 out of the possible 5.0 while that of KICOFA was 1.8. This findings implies that NRFA has a higher decision making capacity as compared to KICOFA. With this in mind, it can be postulated that by virtue of the enhanced capacity of decision making, the performance of NRFA in achieving the objectives of PFM is higher than that of KICOFA. It can be argued that the historical context and discourse of establishment of CFAs in both NRFA and KICOFA is by far determining the level of decision making. The study found out that NRFA had a rich history of community participation even before the legal framework was put in place.

Connectivity

PFM operates in a complex system connected stakeholders and institutions. This thus involves collaboration, partnerships and close engagement between stakeholders. It can be observed that institutional fragmentation was evident in KICOFA as compared to NRFA. The study found out that the mean for connectivity in the five policy processes of GSA in NRFA was 2.9 while that of KICOFA was 1.6. It was observed that although the formal and informal relationships between the stakeholders are somewhat fragmented, there is a strong underlying and demonstrated capacity to mobilize effort and coordinate effort at the CFA levels. This was evidenced by heterogeneous stakeholders, consistency and success of conducting meetings and diversity of players including donor agencies.

In KICOFA it was realized that the CFA engagement in PFM both in planning and implementation is fragmented and lacks responsive connectivity that is key in decentralized governance system. This was evident by the nature of meetings conducted and the attendance, numbers of partners and diversity of users. It can also be argued that the homogenous nature of the CFA membership is evidence of elaborate connectivity capacity.

Connectivity also speaks to the nature and kind of networks and partnerships established. Key among the observations made was the diversity of the CFA membership. It was established that NRFA was more heterogeneous with more diverse nature of members as compared to KICOFA. Secondly, the study realized that NRFA has established networks and partnerships with several other local, international government and private entities. This networks played a very fundamental role in funding, building capacity and enhancing the profile of NRFA. On the other hand, the study realized that KICOFA had not established any other partnership apart from the working relationship with KFS.

In general the low levels of collaboration between CFA and other stakeholders in PFM could be argued as the most significant constraint on the capacity of the system to deliver its desired livelihood and environmental outcomes. While the study found the evidence of relationship that included signing of management agreements with KFS, inclusive management plans and memorandum of understanding, it was noted that existing relationships, activities, power balance and processes and procedures are themselves less collaborative. These include unequal power dynamics, ambiguity in CFA rights, elite capture and lack of clear benefit sharing structure. In a study done by Mutune and Lund, (2015), it was noted that how the policy has been drafted, adopted and

implemented can be argued to explain the outcomes of PFM whereby Kenya Forest Service has remained in control of decision-making and access to forest resources a fact that is contrary to the goals of the community participation policy (Mutune & Lund, 2016).

Knowledge Use

PFM is premised on the fact that the local community will make use of its traditional and other relevant knowledge in ensuring sustainable use and management of the forest. This is in particular in cases where the community makes use of sustainable methods of production and livelihood that is deep found in the traditional knowledge and practices. This study found out that the mean capacity of knowledge use in NRFA was 3.6 while that of KICOFA was 2.0.

The study found out from interviews with key informants that since the changes that happened in forest management sector in the past one century, the local communities in Kiptuget had lost important indigenous knowledge, practices and values that informed their traditional way of living that supported sustainability. It was observed that there was very little social, economic, cultural and environmental data available to support the CFAs and other decision makers to develop visions, objectives, or strategies for PFM. The long history of PFM in NRFA coupled with donor funded research had made the situation better in terms of how best to engage the local community to achieve the twin objective of conservation and livelihood support.

CONCLUSIONS AND RECOMMENDATIONS

The dynamics surrounding rural and urban forests in Kenya are not the same. Primarily, the research found out that the CFAs in rural areas are homogenous whereas those of urban areas are heterogeneous in terms of membership. It can be argued that this is as a result of differences in primary occupation, income levels, education levels, ethnicity and other socioeconomic and cultural factors that come into play in rural and urban dichotomy. In consideration of decision making, connectivity and knowledge use, the study found out that members of Ngong road forest Association, was perceived to have capacity to perform better in achieving the objectives of PFM as compared to Kiptuget Community forest association.

In light of the findings of the study, it was realized that there is need to develop tailored capacity building programmes that are responsive to the different social characteristics of urban and rural communities in regard to participation in forest management. The programmes should include both technical and managerial skills. This will be key in

enhancing the capacity of rural CFAs to diversify their livelihoods and optimize on available opportunities. In this regard it is recommended that KFS and other stakeholders need to move with speed to organize trainings for members of CFAs. It was also realized that there is need to reinforce CFA membership willingness to participate. It is recommended that the legal framework should exemplify and increase incentives. For instance, forest conservation activities should be improved through allocating part of the management fund to the remuneration of actively participating members.

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