

Recognition and Affirmation of Women's Rights in the Management of Community Forest Associations: A Case of the Mt. Kenya and Aberdare Ecosystems, Nyeri County, Kenya

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Abstract

The role and participation of women in the management of forests through Community Forest Associations has a significant impact on Sustainable Forest Management (SFA). In Kenya community involvement in the forest sector has been through the Participatory Forest Management (PFM) approach implemented by Kenya Forest Service (KFS) and the Community Forest Associations (CFA). Study methodology involved data collection from 110 participants in the year 2014, sampled across the Mt. Kenya and Aberdare ecosystems. The purpose of the study was to determine the effectiveness, participation levels and the role of women in asserting their rights in forest management. The study explored women participation in implementing decisions about how conservation and development needs are balanced across their landscapes. Data collection methods included the use of questionnaires. Key findings of the study stated that the majority of CFA leaders are male at 37.0% while the females form the minority at 4.5%. Women however, enjoy considerable influence and support at the user group level. It was noted that 89.7% of respondents preferred women to be put in leadership positions in CFAs since they believed the majority of women are honest, committed and less corrupt. General poor leadership (36.7%) was most frequently cited by the respondents, followed by selfish leaders (26.6%) and this affected their ability to perhaps work effectively for their rights. The study notes that the key obstacle to increased women's leadership is being denied positions by existing men leaders. The study recommended that all CFA members including women should undergo capacity development in leadership and natural resource management. The Kenyan constitution has created a rule of maximum threshold of two thirds of either gender to elective and appointive offices which must be respected. Future research should look at the strategies to advocate for gender equity in forest management which includes institutional reforms.

Key Words: *Women Rights, Community Forest Associations, Assertiveness, Leadership*

Background of the study

The concept of Participatory Forest Management (PFM) has been in use in Kenya since 1997 to refer to forest adjacent communities' participation in forest management. According to Ongugo *et al.*, (2008), it is a multi-stakeholders approach in which the private sector, forest management institutions and communities are involved in the management of forests as well as sharing the benefits that come from the forest. Morgera and Tsioumani (2010) underlined the importance of state and community benefit sharing and notes the increasing emphasis on rights to access and use of natural resources for sustainable forests conservation and utilization.

The reason for the inclusion of women and local communities in the management of forests is to make them support forest sustainability as well as biodiversity conservation efforts so that in the process they can also achieve socioeconomic benefits (Ngece, Kakuru & Kimani, 2007). The socio-economic objectives targeted through PFM are sustainable forest resources exploitation, forest conservation awareness, conflict resolution, forest production, equity, and so on (Kallert *et al.*, 2000; Ongugo *et al.*, 2008; Koech *et al.*, 2009;). The extent of influence on forest adjacent communities to engage in forest protection and conservation is however dependent on their level of participation in the PFM implementation process (Koech *et al.*, 2009).

The framework for forest adjacent communities' participation was first laid down in the Forest Act of 2005 (Witcomb & Dorward, 2009). The Act requires "the local community, through a legally formed entity referred to as the community forest association (CFA), to enter into an agreement with the Kenya Forest Service (KFS) to assist in the management of forest resources through protection and conservation activities" (Government of Kenya, 2007). Mogoi *et al.*, (2012) however noted that the level of women participation and benefits sharing in Kenya is limited to protection and monitoring, with little involvement in decision-making power in sustainable forest management.

Problem statement

The inclusion of women in forest management is, in essence, an approach towards achieving forest sustainability and biodiversity conservation with socioeconomic objectives. These socio-economic objectives include gender inequity, conflict resolution, awareness, forest production, poverty reduction and sustainable utilization.

The positive results of implementing PFM process is demonstrated through a change of attitude to the forest resource by the local forest adjacent communities and hence, a change in the level of forest conservation. But such results are highly influenced by the mode of participation adopted by the PFM implementation process.

The increasing emphasis on rights to access and use of natural resources is critical for sustainable forests conservation and utilization. In Kenya, and more specifically with regard to the forest sector, community involvement has been through the Participatory Forest Management (PFM) Approach with two principals being at the center of the adoption and implementation of the Approach: the Kenya Forest Service (KFS) and the Community Forest Associations (CFA). A major product of the process has been the preparation of Participatory Forest Management Plans and to a smaller extent Forest Management Agreements signed between KFS and CFAs.

CFAs are now performing key forest related governance functions almost autonomously, including the crafting of resource harvesting rules, the choice of leadership and conflict resolution. The involvement of communities in the management of forests and other natural resources in Kenya is anchored and elaborated in several statutes including the Constitution of Kenya 2010, Forests Act 2005 and Forests (Participation in Sustainable Forest Management) Rules, 2009. The paramount CFA resource in the implementation of PFM under the Forests Act 2005 is its core constituent - the larger membership. Yet this constituent is slipping away (Lideki *et al.*, 2006). The main reason is the wide perception of marginalization; misrepresentation is due to limited benefits emanating from the CFA.

The current situation is complicated by the fact that despite CFAs being responsible for diverse management activities in forest protection, monitoring and management, access to decision making, revenue streams, and overall resource control, rights are still vested in KFS. This is a function of weak internal controls of CFAs and waning support of their constituent and this influences women participation in leadership. The perceived disconnect between CFA and their constituents has encouraged the forest managers to take less cognizance of women, who are the overwhelming majority of forest users according to Coleman & Mwangi (2013). This results in a further decline in community support. As communities enjoy tenure rights over a large and increasing percentage of the Kenyan forests, it is essential to ensure the protection of their rights in regard to their relationship with the Government and the CFA. This will make the community more effective in asserting their rights to negotiate and implement decisions about how conservation and development needs are balanced across their landscapes.

Objectives of the study

1. To examine the nature and composition of the leadership of CFAs in relation to benefit sharing of forest resources.
2. To analyze the participation and the role of women in the leadership and management of CFAs.
3. To assess the role of women in the increasing emphasis on rights, on the access and use of natural resources and its relevance in sustainable forests conservation and utilization.

Theoretical Framework

The study used Adam Smith Economics theory of Value - Supply and Demand. The theory discusses the perceptions of peasants in relation to livelihood and basic needs. It talks about the value of goods and the factors that dictate the relative price, level of prices and the best measure of welfare. 25% of rural income is obtained from environmental resources in developing countries (Shackleton, 2006). This creates competition for resources for economic gain and management aspects are critical in determining benefit levels.

The study used systems theory as developed by Ludwig and provides an analytical framework which can be used to describe the dynamics of inter group relationships. System theory talks about groups of things which have something in common and in this case the CFAs who operate as a cluster can be seen as a system whereby each community comprises an even greater system - the region or territory in which they all are located. The forest sector operates under a series of interlinked systems. Communities operate under social systems named Community Forest Associations which is an umbrella system that now forms the user groups which are involved in the exploitation of timber and non-timber forest products. KFS, as the custodians of the forest, operate under a system governed by the national government. The KFS operates as a parastatal which generates revenue that goes to the national treasury. Forest functions are not yet devolved under the new constitution.

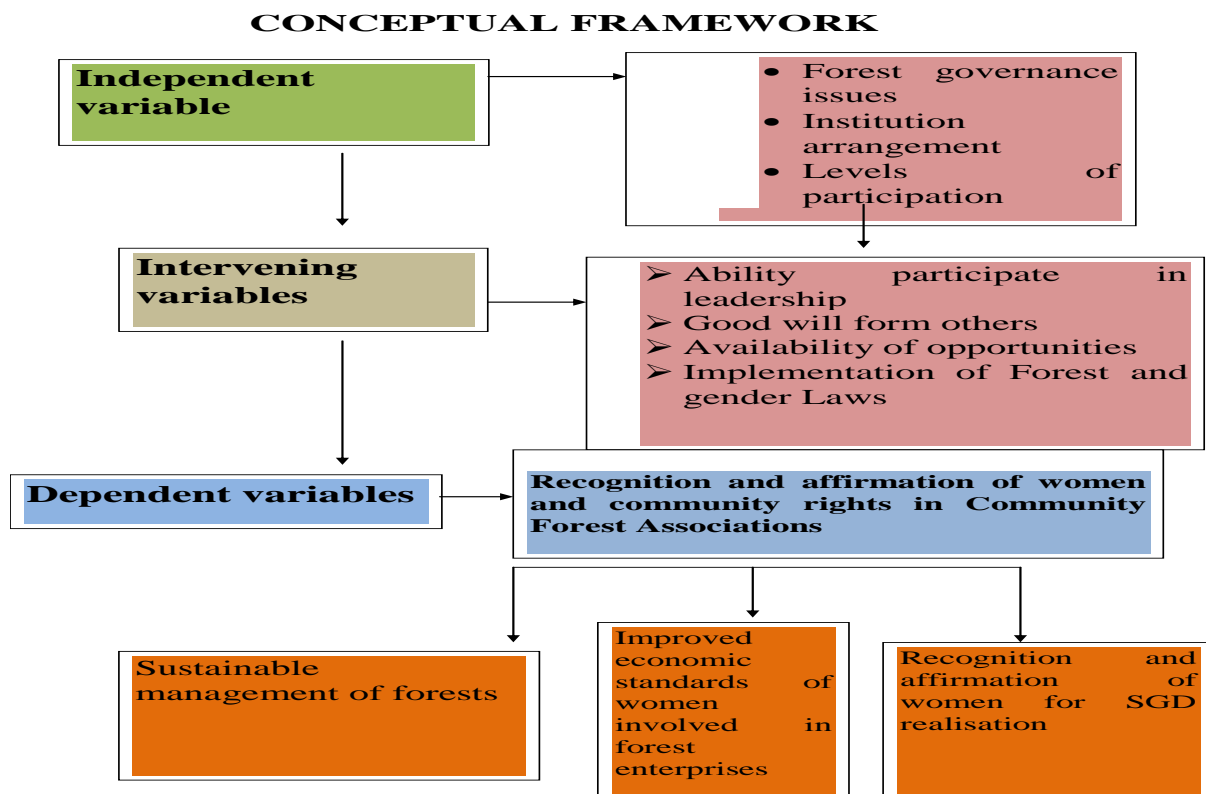
The study also explores the theory of women and leadership which argues that leadership is a process of influence and a social influence process through which new value, behaviours and ideologies are constructed and produced. (Uhl- Bien, 2012). Under the CFA context, leadership is differentiated from management where the focus is the on-going control of natural resources, tasks and benefit sharing.

Research questions

The study was based on three key assumptions:

- (i) Forests have a greater long-term economic value if the forest governance issues are implemented in consultation with all stakeholders through recognition and affirmation;
- (ii) Local communities including women will be more likely to manage forest resources sustainably if they gain direct economic benefits from their user rights
- (iii) Gender mainstreaming is significant in enhancing sustainable forest management.

Figure 01



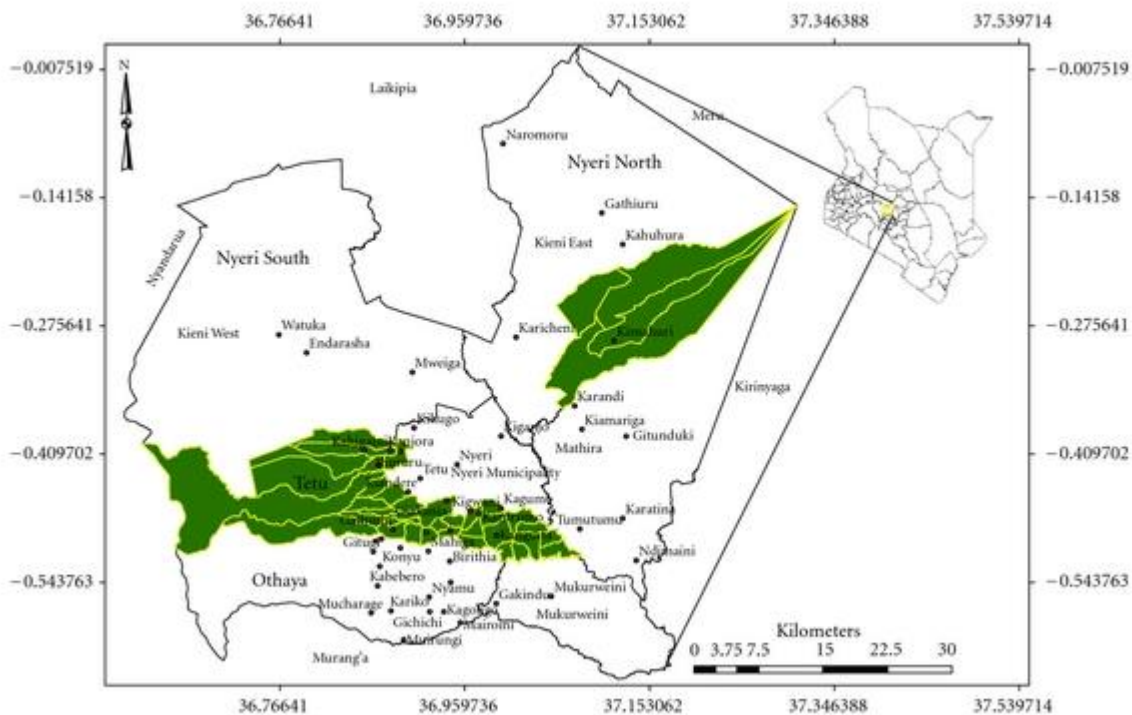
Methodology

Study area

The study involved 12 CFAs in Aberdare and Mt. Kenya Ecosystems.

A total of 110 respondents were selected using stratified random sampling.

Figure 02: Study area map: Aberdare and Mt Kenya Ecosystems



Research Design and Method

The study followed exploratory research design. Quantitative research method was adopted to collect data from the study respondents. Consistent with the principles of quantitative research method, survey research approach was implemented to collect data from the study participants. Quantitative data included open ended and closed-ended information.

Study Participants

The study targeted 12 CFAs operating in 12 Forest Reserves found within Nyeri County. These CFAs are: Nanyuki, Gathiuru, Kabaru, Naromoru, Chehe, Ragati, Hombe, Zaina, Muringato, Kiandongoro, Kabage, and Zuti CFAs. A total of 110 respondents recruited through stratified random sampling participated in the study.

Data collection method

In this study, 110 semi-structured questionnaires were issued to the respondents from Mount Kenya West, and Aberdare ranges in central Kenya. The study adopted a stratified random sampling where male respondents constituted one stratum, and their female counterpart formed the second stratum. The nature of this study required more female respondents than male respondents due to the phenomenological aspects underpinning gender parity in Africa as a whole. For this reason, the study sought to include at least 70% of female respondents and at most 30% male for the purpose of triangulating empirical results. Sample weights were applied to minimise response bias based on respondent’s sex.

Results and discussions

Respondents Demographics

Sex, age, marital status, the level of education and category of respondents were the key socio-economic indicators of respondents in this study. Since the researcher used a cross-sectional descriptive survey, the above named demographic structure becomes essential in determining the scope and the quality of data collected for the purpose of inference. Table 001 below presents a detailed description of population structure respondents in the study.

Table 001: Respondents’ Relation to Community Forest Association by sex, marital status and level of education

Characteristics		CFA Leader	Ordinary CFA Member	Leader User Group in CFA
Sex	Male	37.0%	33.3%	29.6%
	Female	4.5%	77.9%	17.6%
Marital Status	Single	0.0%	83.3%	16.7%
	Married	13.9%	67.1%	19.0%
	Windowed	0.0%	80.0%	20.0%
Level Of Education	Lower Primary	1.9%	88.7%	9.4%
	High School	21.3%	48.9%	29.8%

Table above shows that majority of CFA leaders are male at 37.0 % while the female is the minority at 4.5% only. It is also noted from the table that single people, the majority of whom are the youth, widowed men and women are not represented in CFA leadership. However, women enjoy considerable influence and support at the user group level but there is no female CFA Chair in all the 13 CFAs under review in the study. 21.3% of CFA leaders have completed high school education and 1.9% has completed primary school. It was observed that none of the respondents had completed post-secondary education.

The participation and the role of women in the management of CFAs

There is a general consensus that to a large extent accessing benefits from the forest has improved the standard of living of CFA members. However these benefits have not been equitably distributed across gender. Women's benefits are mainly in form of firewood collection and Tree Nursery Establishment. From the previous section, we noted that only 4.5% of women are in CFA leadership compared to 37% male, 17.6% of women are leaders of user groups in the CFA compared to 29.6% male. The majority of women (80.9%) are ordinary members of CFA.

The interest of key players in this industry, therefore, affects forest management. The findings of this study show that there is a significant difference in the benefit of men and women in various aspects of forest utilization due to their involvement in leadership and decision making. Figure 2 below presents the advantage of men and women in different forest incentives such as overall administration of forests, economic motivations of forests, scientific and technical aspects of forest and passion for forest protection and regulations. There seems to be a consistent exponential trend for both male and female participants. To examine the role and participation of the management of CFAs, a null hypothesis was put forward that there is no difference between in the interests of men and women in various forest incentives.

To test this hypothesis, a chi-square test was used as a measure of independence between sex of interviewees and preference on the high forest concessions. **Error! Reference source not found.** below details the summary of chi-square tests statistics. All the three steps; Pearson Chi-Square, Likelihood Ratio and Linear-by-Linear Association are statistically significant as indicated by $P = 0.001 < 0.05$. Based on the sample data in this study, we reject the null hypothesis and conclude that the preference of women is significantly different from the preference of men at 5% level of significance.

We can safely conclude that the role and participation of women in the management of CFAs has a significant impact on forest conservation. The increasing emphasis on rights to access and use of natural resources is critical for sustainable forests conservation and utilization. In Kenya, and more specifically with regard to the forest sector, community involvement has been through the Participatory Forest Management (PFM) Approach with two principals being at the center of the adoption and implementation of the Approach: the Kenya Forest Service (KFS) and the Community Forest Associations (KFS). Involvement in the PFMA negotiations with KFS enables one to participate in forest management and increase efficient participation in CFAs. Findings from this study indicate that majority of people (76.7%) in Nyeri County have been involved in PFMA negotiations out of which 69% were female while only 31% were male.

To effectively mobilise people to participate in forest management, sharing of forest benefits should be articulated accurately and exhaustively. This is because 84% of respondents indicated that benefit sharing for livelihood improvement is a major concern for them. On the contrary, the need to protect the forests against illegal logging was of least importance in mobilising community participation in forest management. It was noted in **Error! Reference source not found.** above that 97% of women are drawn into the involvement of forest management by economic aspects of forests as opposed to 50% of the men. Nevertheless, the leadership of CFAs is dominated by men as women constitute only 1.5%. Given a chance, the economic incentives women have can translate into effective management of CFAs due to a higher correlation between women's passion for participation and community's attraction to participate in forest management and conservation.

Nature of CFAs Leadership

Optimal benefits of decentralisation are derived from democratic processes that encourage local institutions and local authorities to serve and deliver relevant services to the local people. This study sought to examine the nature of the leadership of CFAs based on its friendliness in their service delivery, provision of useful advice to the community relating to benefit sharing of forest resources, officials knowledge, professionalism, fighting for community user rights and offering timely help to members. Respondents were asked to rate their local and community CFA leadership on a scale 1-5 based on the above key indicators of democratic and benevolent leadership. The researcher computed significant indices which were used to determine the most important parameter using the following algorithm;

$$S_i = \sum_{i=1}^n \frac{5R_{i1} + 4R_{i2} + 3R_{i3} - 2R_{i4} - R_{i5}}{R_{i1} + R_{i2} + R_{i3} + R_{i4} + R_{i5}} \quad (i)$$

S_i = Significance Index

R_{i1} = Number of responses as “1”for the i^{th} factor or sub-factor

R_{i2} = Number of responses as “2”for the i^{th} factor or sub-factor

R_{i3} = Number of responses as “3”for the i^{th} factor or sub-factor

R_{i4} = Number of responses as “4”for the i^{th} factor or sub-factor

R_{i5} = Number of responses as “5”for the i^{th} factor or sub-factor

According to the data collected from the semi structured questionnaires, 96.1% of respondents who are CFA members reported that elections are held after every 2 years while the rest admitted that they have no idea of what is stipulated in the constitution concerning elections. Table2 below presents detailed findings on the perceived significance of CFA leadership and governance parameters. The five-point Likert scale was converted to a significance index using equation (i) above. The higher the significance index, the higher the positive perception of CFA leadership and governance by the public.

Table 002: Public Perception on CFA Leadership and Governance

FACTOR	SIGNIFICANCE INDEX
Fighting for community user rights	3.90
Friendliness	3.88
Offering timely help to members	3.88
Providing Useful advice	3.85
Knowledgeable	3.64
Professionalism	3.36

From the above, we note that the general public perceives CFA leadership as being instrumental in fighting for community user rights followed by their friendliness in service delivery. However, it was indicated that local CFA leadership was ranked least in professionalism and knowledge of contemporary issues affecting the community. The

community members enjoy benefits from involvement in forests management activities through membership to user Groups/CBOs, whose collective membership form the CFAs. The study indicates that membership to the user groups led by majority women enables one to access some forest products through user rights. Additionally, 60% of CFAs were reported to have constituent companies whose role included: saving money for CFAs, establishing business linkages for CFA members, tree planting seminars and helping members to access permits for timber.

Effectiveness of CFAs Leadership

Male dominance in the management of forests is significantly pronounced with 100% of respondents admitting that majority of people who lead the community forest associations are men. Women constitute the majority of CFA members but they are the minority in positions of leadership. Though the 1/3rd gender rule is followed during elections, most of these women are not involved in shaping or influencing policy in CFAs or the affiliate CBOs where they are coming from. Women are not encouraged to vie for leadership positions in CFAs. Most of their time is spent doing household chores, fetching firewood and working on the farms.

It was noted that 89.7% of respondents preferred women to be put in leadership positions in CFAs. The main reason majority of respondents preferred women in leadership is the fact that they believe that they are more honest and less corrupt. On the other hand, 10.3% of respondents still preferred men to lead their CFAs citing experience and courage as attributes mostly associated with men as key in credible leadership at community level. The majority of respondents at 47.1% reported that weak CFA governance structures is the main weakness relating to CFA leadership followed by incompetence of some leaders at 40.0%. Corruption and conflict of interest were perceived as the least weakness of CFA leadership at 8.4% and 4.5% respectively.

The figure below shows some of key socio-economic aspects necessitating establishment of parameters of cohesion among community members. It presents detailed responses about what the general public expects from a properly functioning CFA.

Table 003: Socio-Economic Parameters of CFAs

Leadership Role	Small Extent	Very Small Extend	Large Extent
Resolving conflict	23.9%	34.9%	38.6%
Equal Distribution of Opportunities	45.8%	31.0%	20.6%
Democracy in Elections	31.6%	22.6%	41.9%
Effective Advocacy	52.0%	21.0%	25.0%

From the above, we note that majority of respondents expect a properly functioning CFA to have proper conflict resolution mechanisms and uphold democracy in conducting elections. It was quite unusual to note that a significant number of respondents at 52% expect effective advocacy to be a core function of properly function CFA, as well as creation of equal opportunities for sharing forest benefits.

Assessment of benefits associated with Participatory Forest Management Plans (PFMP)

Provisions for community participation are contained in (sections 35, and 46 (4) of the Forests Act 2005. The main influence of these provisions has been in the formulation of PFMPs with 72.4% of the respondents reporting that their respective Forest Reserves have a FMP. Among the activities contained in these PFMPs, the traditional forest products prominently feature.

These include fuel wood collection (51.7% of the respondents), grazing-27.6%, bee keeping-10.3%, and 10.3%-tree nurseries. Various impacts can be associated with the implementation of PFMP approach. A significant proportion of the respondents at 58.6% indicated that PFM approach has resulted in the improvement of livelihoods.

Women and Forest Management

The role of women's participation in community forestry has recently been investigated in a number of theoretical and empirical papers both internationally and locally. This study sought to examine the role played by women in forest management and conservation. The majority of respondents at 83.7% reported that ability to inspire others is the most important attribute of good leaders followed by sense of purpose in what you do and communication skills. It was noted that technical excellence and high level of intelligence were ranked among the least desired attributes of preferred CFAs in the County.

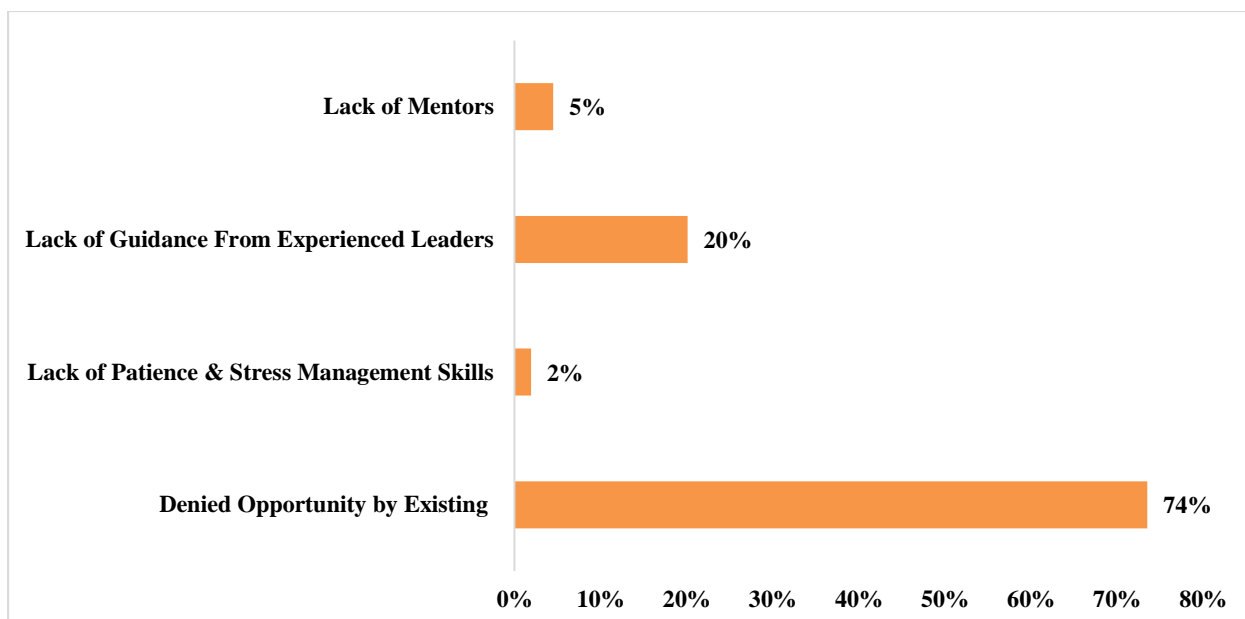


Figure 01: Obstacles to Women in Leadership

From previous sections, data from the field indicated that strengthening women's tenure rights and participation in community forestry will help in bridging gender disparity in forest management. This study went on to assess some of the possible factors that cause women to be less represented in CFA leadership. Figure 01 above presents a summary of some of these factors hindering women from accessing leadership position. Clearly, the existing succession strategies and exercise of democratic processes deny women opportunities into elective positions. Lack of patience, stress management skills and lack of mentorship were identified among the least factors that hinder women from accessing leadership through popular vote.

When asked about effective ways to empower women to ascend to leadership positions, a majority of respondents at 52.3% reported that women have to, first enhance their skills, 19.3% said that support and mentorship from men, followed by 16.1% who preferred mentorship from other women in leadership. On the contrary, support from family, community and raising education levels were ranked least at 9.7% and 2.6% of respondents respectively. Table below gives a summary of responses on ways to empower women to ascend to leadership position.

Table 004: Empowering Women for Leadership

Sub-Factor	Percent
Enhancing Their Skills On Job	52.3%
Support & Mentorship From Men	19.3%
Support & Mentoring From Other Women	16.1%
Support From Family & Community	9.7%
Raise Their Level of Education	2.6%

As discussed earlier, a majority of women are ordinary members of CFAs while men dominate in executive positions and committee members. The public agrees with theoretical and empirical evidence in research that women are not adequately represented in CFAs. When asked if people are willing to elect women in executive position in CFA committees, 82.7% of respondents reported that they are willing to have a woman as their leader in user group in the CFA. A significant number of respondents however were not of the opinion that women should hold senior and executive posts.

It is important to note that despite a high number of respondents being willing to elect a women into user group CFA leadership, it remains paradoxical that 50% of women still preferred men to women. However, the study did not establish the reasons why a significant number of female respondents still preferred men in leadership despite having pointed out their weaknesses. Women's benefits from forest resources are mainly in form of firewood collection and Tree Nursery Establishment.

When asked of the sector which women representations need to be enhanced, majority of respondents at 63.3% reported that women need stronger representation in farming in the forests followed by firewood collection at 52.2%. Planting of trees and nurturing nurseries were mentioned least by respondents as requiring stronger representation of women.

Conclusions and Recommendations

Women enjoy considerable influence and support at the user group level, a clear indication that women can lead if given a chance. From the study, the majority of CFA members usually do not have access to adequate information about their respective forests. This being the case, women are the most affected. The reason this happens is because training and seminars almost always target the Executive and Management Committees. The trickle down of information is not as effective as would be desired. Sometimes this is intentional because the current sitting officials view sharing of information as a threat to their positions. Therefore majority of CFA members have very limited knowledge of what PFM is all about.

This practice of not adequately sharing forest management's knowledge has also contributed to leadership wrangles because the executive feel superior and more empowered than their constituent members and are very reluctant to leave positions of leadership to others. It's imperative to have the CFA constitution to align with the revised Forest Act 2005, EMCA 1999, CIDPs and the Natural Resource Benefit Sharing Bill, 2014.

There is a general consensus that to a large extent, accessing benefits from the forest has improved the standard of living of CFA members. However these benefits have not been equitably distributed across gender. There is need to build the capacity of CFAs to address the main conflict issues identified during the study which include poor and selfish leadership, lack of consultations, and general leadership weaknesses. The underlying cause for this state of affairs is the fact that most of the CFAs are operating with old constitutions that are vague and unclear on the roles and responsibilities of the respective CFA leaders.

Dispute resolution mechanisms have also not been entrenched in these constitutions and as a result leadership wrangles in some CFAs have persisted for a very long time and this has sometimes stalled implementation of programs. The role and participation of women in the management of CFAs has a significant impact on forest conservation. The increasing emphasis on rights to access and use of natural resources is critical for sustainable forests conservation and utilization.

From the findings it was noted that technical excellence and high level of intelligence were ranked among the least desired attributes for one to be a CFA leader. However, acquisition of skills in leadership, support and mentorship from men and other women were noted as an important factor, therefore enhancing capacity of women should be considered as the way forward. Further studies need to be done to establish the reasons why a significant number of female respondents still preferred men in leadership despite having pointed out their weaknesses. Future research should look at the strategies to advocate for gender equity in forest management which includes institutional reforms.

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