

Implications of Gender Relations on Forest Management among the Indigenous Ogiek of Mau Forest in Nakuru County, Kenya

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Abstract

This study aimed at interrogating the implications of gender relations among indigenous Ogiek on management of Mau Forest in Nakuru County, Kenya to guide gender mainstreaming in forest management. The study employed cultural ecofeminist theory which captures relationship between women and the earth, comparing how women and nature are subordinated by men in patriarchal society. The study used descriptive survey study design, with sampling arrangement involving purposive and systematic random sampling methods to choose seventy-four respondents from the community forest associations (CFAs) within the Mau ecosystem. Data from the indigenous Ogiek residents were collected using questionnaires while key-in-depth interview schedule was used to collect data from Ogiek village elders, Kenya Forest Service Officers, and area chief. Test-retest method was used to test reliability of research instruments. Quantitative data was analysed using descriptive statistics. Qualitative data was analysed establishing patterns, categories, and themes. The findings showed that there exists traditional gender division of labour underprivileged by Ogiek patriarchal social structure which influences forest management among indigenous Ogiek of Mau Forest. The findings further revealed that the forest legal framework in Kenya especially the Kenya Constitution 2010, Forest Policy 2014 and Forest Act 2016 are gender blind. Further, Community Forests Associations face gender equality deficit in representation where indigenous Ogiek women are subordinated due to cultural setup of Ogiek which prioritises men over women in leadership. The study recommends that the indigenous Ogiek women should be sensitized to join and actively be part of the CFAs. Forest empowerment interventions should consider gender roles which constrain indigenous Ogiek women from participating in forest reform activities. Lastly, CFAs institute measures on equality in forest resource exploitation and benefits sharing while alive to cultural

constraints affecting indigenous Ogiek men and women.

Keywords

Gender, Forest Management, Indigenous Ogiek, Community Forest Association

1. Introduction

1.1. Background of the Study

Traditionally, indigenous people occupy diverse ecosystems that blend well with their unique culture and livelihoods. Indigenous people continue to have cultural attachment to their natural habitats such as forests and their ways of life are greatly dependent on it. Globally, indigenous people numbers between 370 and 500 million inhabiting more than 70 countries (International Labour Organisation, ILO, 2019).

In Africa, indigenous people approximate about 50 million people (International Work Group for Indigenous Affairs, 2020). In East Africa, there exist many indigenous people who are majorly pastoralists. Among the hunter gatherers, the major tribes of indigenous people include Ogiek, Waata and Yaaku while the pastoralists include Maasai, Borana and Rendile. The highest population of forest dwellers in Kenya is Ogiek who live in and around the Mau Forest Complex numbering approximately 52,596 people (Kenya National Bureau of Statistics, KNBS, 2019). The Ogiek are traditional beekeepers, honey gatherers and game hunters with greater attachment to forests. Prehistorically, Ogiek have been custodians of forest, and their livelihoods and culture are dependent on the forest, and they consider it as their ancestral home (Claridge, 2018).

Socially, the social structure of the Ogiek was patriarchal with various hierarchical structures composed of elders in a council. Presently, these structures are still recognized as holder of community interests especially when engaging governments where the elders are community mouthpiece in defense of their cultural rights and community resources. Among the Ogiek people, exploitation of forest resources differs for men and women, where women extract medicines while men commercially extract timber (Food and Agricultural Organisation, 2018). This setup requires access and ownership of land as a primary resource and means of production. Among the Ogiek, interaction with environment including use and control of forest resources reflects a gendered perspective. This gendered approach to forest resource has survived social changes leading to contemporary Kenya. These traditionally ascribed gender roles may limit Ogiek women in participating in forest use and control initiatives. This scenario seems to be exacerbated by gender blind forest laws of the republic of Kenya which serve to institutionalize and perpetuate the traditional sex roles among the Ogiek as far as forest resource use and control are concerned. Key among them includes Article 69 of the 2010 Kenya Constitution, Forest Policy 2014 and Forest

Act 2005 as repealed by Forest Conservation and Management Act 2016 (Government of Kenya, 2016). These legislations elaborate importance of forestry as economic pillar as well the need for participatory forest management. The FCM 2016 Act established Kenya Forest Service (KFS) mandating it with its board to establish forest conservation areas. Further, FCM Act 2016 section 48 (1) permits communities to register Community Forest Associations (CFA), for them to be allowed to participate in public forest management. On empowerment, FCM 2016 envisages provision of formal forest education through Kenya Forest College. Non-formal and informal education takes place in the community where targeted population live. Other policy framework guiding forestry in Kenya includes the Forest Policy 2014 developed in response to Forest Act 2005 as repealed by FCM Act 2016. It is in the logic of the foregoing discussion that this study elected to interrogate the extent of gender blindness of these legislations or policy instruments and how they have structured or re-structured gender relations in the forest management.

1.2. Statement of the Problem

The symbiosis between indigenous Ogiek men and women and their natural environment (both flora and fauna) is unrivalled globally since time immemorial. The Ogiek like most indigenous communities worldwide, have interacted in a symbiotic fashion with the Mau Forest over the years. The use of forest resources was gendered among the indigenous or pre-colonial Ogiek community. But this interaction has been shaped by Ogiek patriarchal social and economic structure that informs the use and control of forest resources. This socio-economic arrangement has endured even with the advent of modernity and capitalism. The 2010 Kenya Constitution and the enabling legislations and policies especially the Forest Policy 2014 and Forest Conservation and Management Act 2016 were expected to cure this defect. It is in this logic that this study elected to examine the Mau Forest Ogiek's gender relation and its implications on the management of Mau Forest.

1.3. Objectives of the Study

General Objective of the Research

The study examined the implications of gender relations on forest management among indigenous Ogiek of Mau Forest.

Specific objectives of the research were to:

- 1) Identify the traditional gender division of labour among the indigenous Ogiek of Mau Forest.
- 2) Examine the extent to which the Forest policy 2014 and Forest Act 2016 integrates gender concerns of in forest management.
- 3) Examine how women empowerment in forest management promotes gender mainstreaming in forest management.
- 4) Discuss the implications of the above findings on women empowerment in matters forest management among the Ogiek of the Mau Forest.

1.4. Research Questions

The key questions guiding the study include:

- 1) Is division of labour among the indigenous Ogiek gendered?
- 2) To what extent are gender specific concerns of Indigenous Ogiek integrated in the Forest Policy 2014 and Forest Conservation and Management Act 2016?
- 3) Does women empowerment in forest management promote gender equality?
- 4) How can gender equality in forest management in Kenya be mainstreamed?

1.5. Theoretical Framework

This study deployed cultural ecofeminism theory in explaining the implications of gender relations of indigenous Ogiek in forest management. This theory captures relationship between women and the earth, comparing how women and nature are subordinated by men in patriarchal society. It draws a parallel connection between the way women and nature are treated by patriarchal society to the benefit of men. The men subordination of women is seen as a parallel to how humans dominate nature. The dominance of men over women is seen as a parallel to how humans dominate nature. This is rampant in exploitation of natural resources especially those of commercial value where men play dominant roles and reap higher benefits than women. Ecofeminism aims to restructure power relations between both genders promoting equitable participation. The aspects of domination include men domination of culture, women relation to environment, and domination of women and environment by men (Agarwal, 1997). The domination is intertwined with power with greater enjoyment of privileges by those in power who are also greatly valued and have greater influence and vice versa (Manuku, 2018).

Further, ecofeminism is underpinned by agency, a conceptual basis intertwined by right and ability to choose actively or passively. In passive case, choices of women are less and contented if their usual and casual roles are accomplished whereas in active form. Women have capacity to choose and by so doing women are depicted as creative and good agents of transformation (Kabeer, 2005). Eco-feminism theory helped the study by exposing how patriarchal and capitalist systems have in unison exploited women by under-privileging their capacities in forest management.

1.6. Conceptual Framework

The linkages between various variables underpinning the research are captured below (Figure 1).

2. Documents Review

2.1. Gender and Forest Management

The contribution of gender equality to sustainable development both nationally and globally cannot be overemphasized. In essence exploitation of forest resources is expected to be gendered. However, this is not the case in forest

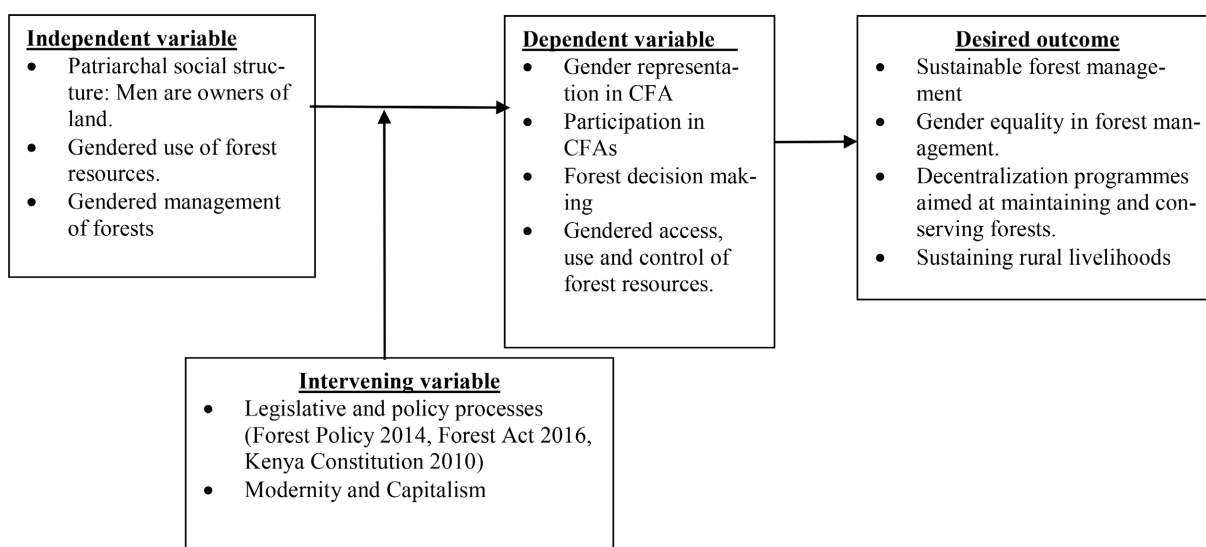


Figure 1. PFM approaches to community participation in forest conservation and management.

management in Kenya where commercial timber harvesting done by men has more economic benefits than firewood or medicinal harvesting left to women. Further, the livelihoods of women living adjacent to the forests rely on forests for their various nutritional needs. Duflo (2012) notes that differential gender roles determine extent of participations in forest resource access, use and control. However, this gender dimension in forest management is rarely integrated in forest restoration processes (Ardayfio-Schandorf et al., 2007).

2.2. Participatory Forest Management

The rampant degradation of forests nationally prompted the government to adopt Participatory Forest Management (PFM) involving communities living around the forest in management of the forests. This idea has been institutionalized Forest Conservation and Management Act 2016. The Act articulates rights and responsibilities of communities in forest management (Ongugo, 2009). The Act envisages forest participation through a registered Community Forest Association (CFA). The CFAs are registered entities and Kenya Forest Services approves their existence. The PFM allows communities living near the forests to enjoy forest resources legally.

2.3. Legislative and Policy Processes in Forest Management in Kenya

The Kenya constitution 2010 is very progressive, it captures environmental conservation under Article 69. This is operationalized by FCM Act 2016, regarding forest resources. The FCM 2016 Act provides a legal framework for the exploitation and rehabilitation of forest lands. It also categorizes forests as community, private and public forests. The administration of FCM 2016 is by Kenya Forest Service (KFS) with its board responsible for establishing forest conservation areas divided into ecosystems. Further under section 48 (1) of the FCM Act 2016

communities are granted opportunity to participate in forest management through a registered CFA.

Forest Policy 2014, operationalises Forest Act 2005 as repealed by Forest Conservation and Management Act 2016, and in alignment with Kenya Constitution 2010. The policy statements captured in the policy include: promoting participatory management of indigenous forests with communities and other stakeholders, supporting formal forest sector education programmes at different skill levels which are regularly reviewed to encompass emerging issues and challenges, support non-state actors and local communities to undertake forest-related development activities and investments, develop and implement an equitable benefits sharing scheme in the forest sector.

3. Methodology

3.1. Research Design

A cross sectional descriptive study design was adopted in the study. This design allows capturing phenomena as it is at the moment. The researcher employed this research design due to its relevance to research questions examining already existing phenomena of indigenous Ogiek participation in CFAs. Qualitative research also allows capturing the voices of the underprivileged (Frisby, Maguire, & Reid, 2009). These voices include indigenous Ogiek women who are put down by cultural practices and patriarchy. Quantitative research also provides “generalizable” findings, and according to Marlow (1993) the finding on number of women and men who participates in CFAs at different levels is important for extrapolation to other forest management institutions to mainstream the excluded gender.

3.2. Target Population

In this study, the respondents were the Ogiek men and women who live in and around East Mau Forest Complex with their existence closely tied to the forest. Residence in Mau East Forest Complex and being an indigenous Ogiek was the major criterion of participating in the study. Further, membership to Mau CFAs for the last three years was a key criterion of participating in the study. Further, traditional, and local authorities including village elders, government local administrators and Kenya Forest Service officers are targeted to address research questions.

3.3. Sampling Technique and Sample Size

The study employed criterion sampling, as a sampling method. Through it, selection of study participants based on pre-set guideline was used (Patton, 2002). The criteria met by the sample included being resident of Mau Forest Complex and indigenous Ogiek of the said locality. To determine sample size, (Krejcie & Morgan, 1970) formula of a finite population was used. As captured in **Table 1** below, the study targeted 67 Mau CFAs members who are indigenous Ogiek

Table 1. Study population.

Strata	Population size	Sample Size	Sample Percentages
MACOFA CFA members	80	67	82%
KFS at Nakuru forest station	6	3	50%
Traditional leaders	3	3	100%
Chiefs	1	1	30%
Total	90	74	82%

people living within East Mau Forest Complex. Mau Community Forest Association (MACOFA) has 80 registered members out of which 67 were chosen in the study. The 13 members were excluded based on ethnicity authenticated by dialect since some immigrants from other communities especially Kipsigis and Kikuyu communities currently own land in Mau East. Further, traditional, and local authorities including three village elders and three KFS officers and one chief are targeted as key informants to address research questions.

3.4. Research Instruments

3.4.1. Key In-Depth Interview Schedule

Key in depth interview schedule was administered to respondents including two KFS offices, two Ogiek village elders and one chief whom it was thought have first-hand knowledge about the community. The respondents were asked same questions for uniformity thus allowing comparison of answers per question. The tool allowed collection of data from illiterate study participants. Open ended questions allowed for further probing and the informants were free to explain their opinions.

3.4.2. Questionnaire

Questionnaires were distributed to indigenous Ogiek, Ogiek village elders, chief and KFS officers. The questionnaire allowed collection of data by administering a standard set of questions to respondents. The questionnaires had both open ended and closed ended questions. The questionnaires were divided into three sections each addressing the three objectives under study.

3.4.3. Document Review

Internal and external documents were reviewed and formed part of the study. Electron and hard copy documents informed the study complementing the study findings. The tool is effective and efficient for gathering data from past documents to fill research gaps with supplementary data. In this study, forestry documentary data on legal and policy framework in Kenya were reviewed.

3.5. Pretesting of Research Instruments

The data collection tools were piloted to test their accuracy before the main

research process. The process involved selection of few respondents with similar characteristics to target population and administration of the research tools. It involved testing the understanding of instructions by respondents. The significance of the testing was to detect any earlier warning on potential areas of complexity of research tools, potential data flaws and methodology deficiencies. The selected pilot test population were not used again in the main study.

3.6. Validity and Reliability of Research Instruments

Validity was achieved by developing questionnaires and interview schedules that address research problems, and research objectives and research questions. Pre-testing was done prior to main study. Further, relevant theories and frameworks are employed to guide the study ensuring greater validity of research content. The significance of validity testing is to capture any errors in the data collection tools. To test the reliability of the instruments, the researcher employed the test-retest method during the pilot study done weeks before the actual study was conducted.

3.7. Data Analysis and Presentation

Based on objectives of the study qualitative data was edited and coded as per the themes and analysed throughout the study period for patterns and themes. The responses were presented in narrative and verbatim quotation forms. Quantitative data was analysed using descriptive statistics such as frequencies, mean, and standard deviation with the help of statistical package for social scientists (SPSS) version 22. The information was presented in tables and graphs. The two data sources were triangulated for comprehensive understanding of the phenomenon under study.

3.8. Ethical Considerations

Kenya University Ethics Committee and National Commission for Science, Technology, and Innovation (NACOSTI) approved the study. During the study appropriate explanation of study to the participants was done to enable them to make informed consent. Voluntary participation was sought from study participants. Also, the principle of no harm was adhered to during the study. Confidentiality of data was ensured by coding the data and not capturing participants' names in the questionnaires. Lastly, objectivity was maintained throughout the study to avoid any biasness.

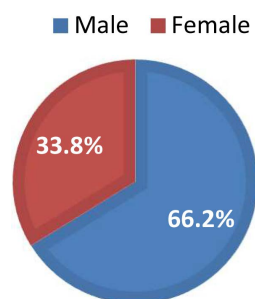
4. Results and Discussions

4.1. Response Rate

Information contained in **Table 2**, reveals that 66% of KFS officials, 98% of Mau CFA members, 66% of traditional leaders and 100% of chiefs responded during data collection. The response rate was 71 out of 74 sample size.

Table 2. Response rate.

Strata	Sample Size	Response	Response Rate
Mau CFA members	67	66	98%
KFS at Nakuru forest station	3	2	66%
Traditional leaders	3	2	66%
Chiefs	1	1	100%
Total	74	71	95%

**Figure 2.** Distribution of the respondents by gender in percentage.

4.2. Gender Distribution of the Respondents

Data on the distribution of sampled respondents in the Mau Forest by their gender reveal that the majority are men (66.2%) while women are (33.8%). (Figure 2)

The findings is correlated to Ogiek culture which privileges men over women and men represents the households in external engagement including responding to study enumerators. Cultural inhibition prevented women from talking in front of their husbands due to cultural dictates. This was validated by Marishoni Area Chief Mr David Barngetuny, who explained that Ogiek men dominate in household and community engagements as per the cultural set up of the Ogiek. Also, Ogiek women held up by household chores tended to leave engagement with research assistants to their husbands. This is in sync with Coulibaly-Lingani *et al.* (2011) who documented women participation in household chores and other roles associated with women could be a factor preventing women from participation in community external engagement.

4.3. Age of Respondents

As indicated by data in Table 3, the respondents were distributed between the ages of 20 to 41 years and those between 31 to 41 years had the highest frequency (61.9%). The study notes greater efforts is needed to mainstream youths' participation in forest management.

4.4. The Length of Mau CFA Membership

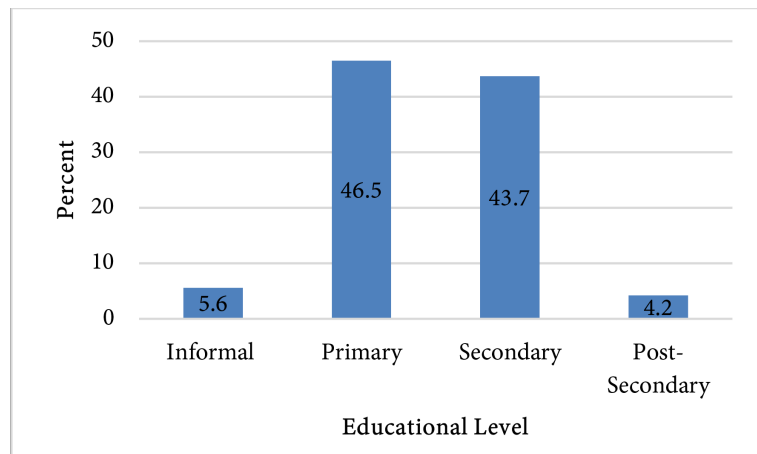
The study targeted participants whose membership within Mau CFA was 3 years and above. Data in Table 4 revealed that 29.5% of the respondents have been

Table 3. Age of respondents.

Strata	Frequency	Percent
Below 20 years	0	0
21 - 30 years	12	16.9
31 - 40 years	44	61.9
Above 41 years	15	21.1
Total	71	100

Table 4. Length of being members of Mau CFA.

Strata	Frequency	Percent
3 - 4 years	21	29.5
5 - 6 years	23	32.3
Above 6 years	27	38.1
Total	71	100

**Figure 3.** Level of education of the respondents.

members of Mau CFA for 3 - 4 years while 32.3% have been members for 5 - 6 years and 38.1% for more than 6 years. version).

4.5. Level of Education of the Respondents

Information contained in **Figure 3** shows significant number of respondents (46.5%) attained primary education while 43.7% secondary education, 5.6% had no formal education while 4.2% attained tertiary education. The results illustrate that a higher number of the respondents were literate. Literacy level is critical in participation in forest management and associations including CFAs and forest user groups.

4.6. Land Size of the Respondents

Data contained in **Table 5** reveals most of the respondents 87.3% own land sizes

of between 2 to 5 acres, while 7.1% had less than one acre of land and 5.6% had 5 acres and above. The results reveal that the study participants are small holder farmers. The results are in concurrence with Claridge (2018) who documented those constant evictions of Ogiek since independence resulted in them occupying small land parcels of land around Mau Forest. The land was allocated to them by government as a community land. However, evictions resulted in individual Ogiek subdividing the community land into small parcels to cater for all households.

4.7. Result Presentation

4.7.1. Identify the Traditional Gender Division of Labour among the Indigenous Ogiek of Mau Forest

Information contained in Table 6 indicates that 53.5% of men's role is community forest protection. It is the most important task assigned to men in the Ogiek society of Mau Forest. Other roles practised by Ogiek men include bee keeping (38%) herding cattle (2.8%) and hunting (5.6%). This is in sync with the work of Ansell (2000) who posits that the role of gender is critical in any serious sustainable development discussion.

One respondent from Marishoni noted that,

“Ogiek Women majorly focus more on collecting medicinal herbs and indigenous vegetables for household consumption while men patrol the forest, practise bee keeping and planting trees” Respondent; Marishoni Village, 25/09/2022.

This finding is sync with FAO (2018) revealing that indigenous women extract from the forests their nutritional, health, and cultural needs while men depend on forest resources for commercial purposes majorly through timber

Table 5. Land size of the respondents.

Strata	Frequency	Percent
Less than 1 acre	5	7.1
2 - 5 acres	62	87.3
5 acres and above	4	5.6
Total	71	100

Table 6. Major tasks done by Ogiek men.

Forest Roles	Frequency	Percent
Bee Keeping	27	38.0
Protection of forests	38	53.5
Herding cattle	2	2.8
Hunting	4	5.6
Total	71	100

extraction. This is true for indigenous Ogiek women whose primary benefit from Mau Forest is herbal medicine extraction. Further, the results concur with United Nations Development Programme (UNDP, 2002) documented that majority of women and their children dominate the population of people that daily search for fuel wood and other biomass-based fuel. With regards to Ogiek women, firewood collection is a second benefit from Mau Forest after herbal medicine. Differential traditional gender roles impact women and men differently. When study participants were questioned on the consequences of gendered roles on Mau Forest management majority indicated mutual protection of Mau Forest (53.5%), indigenous knowledge preservation (21.1%), promoting of gender equality (14.1%), preservation of Ogiek culture (11.2%) as shown by data in **Table 7**.

The findings reveal that Ogiek men and women are differentially affected by Mau Forest. The findings align with Mwangi *et al* (2011) who posits that men being custodians of community culture put greater emphasis on forest preservation, while women responsible for feeding the family tend to reduce pressure of forest resources to mitigate ensuring livelihood challenges ensuing from forest destructions.

These findings therefore concur with the eco-feminist theory which elaborates that gender is a critical factor in “shaping resource access, and control”. The findings also reveal that the traditional division of labour among the indigenous Ogiek continues to undermine women to low cadre roles as it had been in the Ogiek patriarchal precolonial community.

4.7.2. Examine the Extent to Which the Forest Act 2016 Integrates Gender Concerns of Indigenous Ogiek in Forest Management

The FCM Act 2016 allows communities to participate in forest management through a registered CFA. To complement this, the Forest Policy 2014, stipulated policy statements required for effective management of forests. The study focused on respondents who are only members of Mau CFAs for three or more years. The results reveal that most respondents (97%) are ordinary members within the Mau CFA. Belonging to CFA therefore enables Ogiek access, use and control of forest resources. Data carried in **Table 8** reveals that majority (76%) affirm that the Act enables participation.

But a significant of respondents thought that the policy does not adequately enable them play greater role in Mau Forest management. This may be associated to

Table 7. Consequences of gendered roles on Mau Forest management.

Consequences of Gendered Roles	Frequency	Percent
Mutual protection of forest	38	53.5
Indigenous Knowledge preservation	15	21.1
Promotes gender equality	10	14.1
Preservation of Ogiek Culture	8	11.2
Total	71	100

a gap in the implementation of the forest policy. Women's inability to access information during policy dissemination is another hindrance to its understanding. Disseminating information especially policy issues through groups assumes that all participants have same level of literacy and understanding which is often not the case, consequently alienating certain segment within the community. The lack of understanding of policy components often leads to non-adherence to it and in some instances abuse by those in authority because community members will not know how to hold them accountable.

One Chief for example lamented that:

“The Kenya Forest Services uses the law as authority to encroach Mau Forest and harvest young trees as they believe the law is on their side. They also collect money from encroachers including the Ogiek who feel victimised because of the law” Key informant, 29/09/2022.

To test the association between level of participation among indigenous Ogiek men and women and if Forest Act 2016 adequately allow Ogiek to participate in the management of Mau Forest, 80% affirmed that both genders are allowed to participate. But given the obtaining gender relations among the Mau Forest Ogieks' lack of conscious and deliberate statements about women participation leaves them to vagaries of traditional patriarchal devises.

Figure 4 tested the degree of participation of Ogiek in Mau CFA where 38% of the respondents indicated nominal participation, consultative (29.5%), and activity specific (21.1%), active (11.2%), passive and interactive (4.2%) respectively.

Table 8. Respondents response on whether Forest Policy 2014 adequately enables for Ogiek men and women participation in forest management.

	Frequency	Percent
Yes	54	76.0
No	17	23.9
Total	71	100

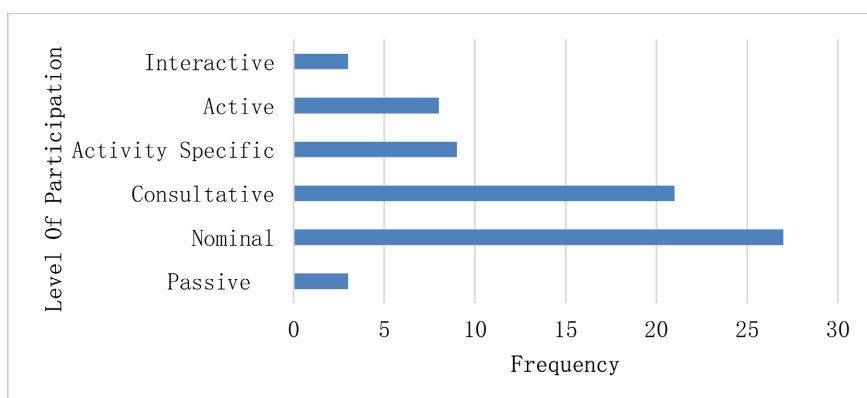


Figure 4. Level of participation in Mau CFA.

These findings reveal that most respondents are just members with little decision-making responsibilities.

One respondent lamented that;

“Ogiek men own land and other household resources thus culturally they are sole decision makers. Women have no decision-making powers on matters pertaining land and forests... our culture is skewed in favor of Ogiek men”. (Respondent, Marishoni, 30/09/2022).

As depicted in **Figure 5**, the respondents indicated motivating factors for their participation in Mau CFA include the need to acquire new skills (46%), benefits sharing (37%), be part of decision making at (11%), and preserve Ogiek culture (6%).

Data contained in **Figure 6** showed the challenges respondents face that undermines their participation in CFA, significant number (47.8%) of them indicated lack of information on meeting dates. Other factors that hinder participation include the long distance to the meeting venue at (30.9%), commitment to other home activities (15.4%), technical issues discussed not understandable (5.6%). The results validate **Agarwal (2001)** on inequalities affecting women participation in community associations in addition to their share of agricultural work which constrains their participation.

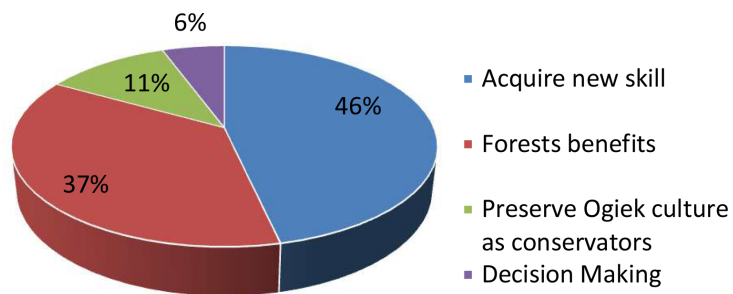


Figure 5. Motivation for participation in CFA.

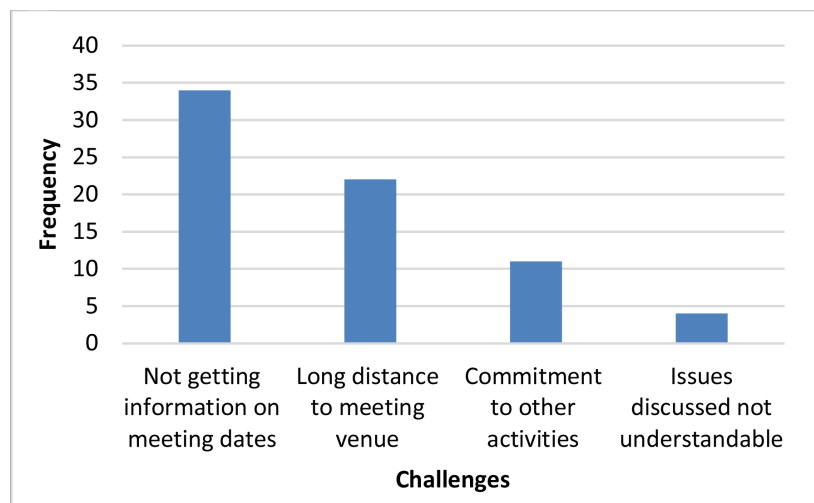


Figure 6. Challenges preventing Ogiek participation in CFAs.

Based on the constitution of the CFAs, members within the CFAs are granted equal opportunities in enjoyment of forest benefits. When responded were asked if indeed Mau CFA adhered to equality in benefits sharing, significant number of respondents (61.9%) indicated that sharing of forest resources in Mau CFA is fair as revealed by **Figure 7**. This can be explained from an Ogiek socialization point of view.

Though Mau CFA is fair in forest resource sharing, the type of benefits varies for men and women where men tend to benefit from timber harvesting while women benefit on collection of herbs. To assess if this is true and if indeed Ogiek men and women benefit differentially in on forest resources, majority of the respondents (67.6%) indicated existence of variance among CFA members as revealed by **Table 9**. The finding is in sync with **Agrawal and Chhatre (2006)**, who posit that the discrimination of women, realizing fraction of benefits is existence in various forest initiatives. The Forest Conservation and Management Act 2016, Section 49, sub section 2 on obligations of a forest association is silent on who between men and women members of CFA should receive listed benefits in the Act. This leaves CFA leadership to open interpretation of the law and in some cases accord different benefits to men and women members of the CFA.

Information carried in **Figure 8** suggests that to cure this defect and promote equality in forest resources sharing between Ogiek men and women members of CFA this can be done via capacity building (51%), sharing the benefits according to constitution of CFA (27%), transparency in benefit sharing (10%), proportion of leadership to be reserved for women (7%) and women to be given preference in benefit sharing (5%).

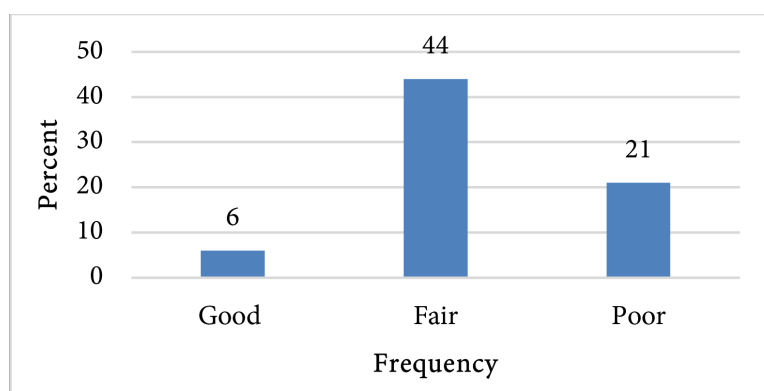


Figure 7. Respondents' response on perception of the forest resources benefit sharing.

Table 9. Respondents' response on differences between male and female CFA members on benefits sharing.

	Frequency	Percent
Yes	48	67.6
No	23	32.3
Total	71	100

Forest Act 2016 anticipates participatory management of community forests with adjacent communities being part of the management and decision making. This is strengthened by the Kenya Constitution 2010 which expects representation in public institutions to be gender sensitive. As revealed by **Figure 9**, significant number of respondents (56%) agreed that women and men should be given equal opportunities in representation in Mau CFA.

Though there is equality in representation opportunities for men women members of Mau CFA, men are the dominant. This can be attributed to cultural set up of the area occupied majorly by Ogiek where culturally men represent community interests. The findings concur with **Kinyanjui (2007)** who asserts that women considered as the most vulnerable in the community, bear the brunt of discrimination common in CFAs.

Further the management of the CFAs is through elected committees. The committee makes daily decisions necessary for running of the CFA. As revealed by **Table 10**, 68% of respondents affirmed that Ogiek men and women are part of Mau CFA decision-making, as some of them hold elective positions within

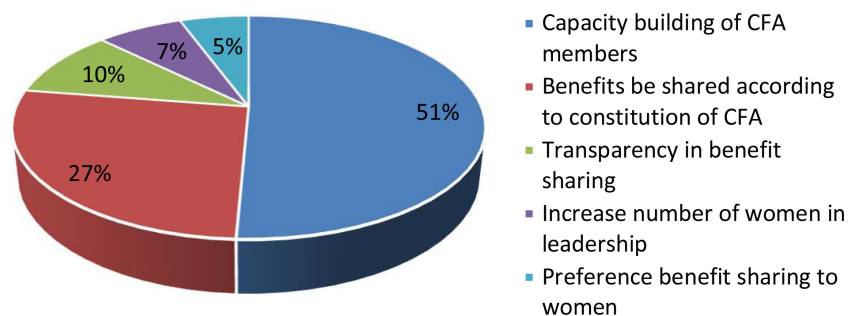


Figure 8. Ensuring equality in forest resource sharing.

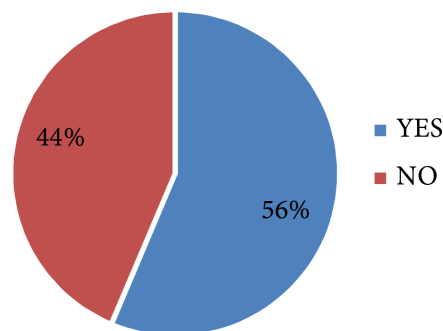


Figure 9. Respondents' response on whether women and men are given equal opportunities in representation in Mau CFA.

Table 10. Respondents' response on representation in Mau CFA.

	Frequency	Percent
Yes	48	68
No	23	32
Total	71	100

CFA management committee.

As these decision-making organs are elective, few women occupy them as they cannot compete favorably with men who culturally vote for fellow men perceived as champions of community interests. The Ogiek patriarchal system makes it difficult for women to enjoy equal representation in elective forest decision making organs.

4.7.3. Examine How Women Empowerment in Forest Management Promotes Gender Mainstreaming in Forest Management

The third objective attempted to examine how women empowerment in forest management promotes gender mainstreaming in forest management. Gender empowerment in forest management is critical for sustainability of forest resources. To achieve this, the Forest Management and Conservation Act 2016 mandates Kenya Forest Service (KFS) to offer forestry trainings nationally. This role of KFS is supplemented by CFAs who periodically capacitate its members based on the identified needs on forest management. This is evinced by information contained in **Table 11**, 83% of study participants have previously participated in forest management trainings conducted by KFS.

Data carried in **Figure 10** shows that in the last 3 years the trainings they have received focused on tree planting 43.6%, bee keeping at 21.1%, making of beehives at 14.0%, firefighting at 21.1%.

This was augmented by this quote from the field,

Table 11. Participation in forest trainings conducted by KFS.

	Frequency	Percent
Yes	59	83.0
No	12	16.9
Total	71	100

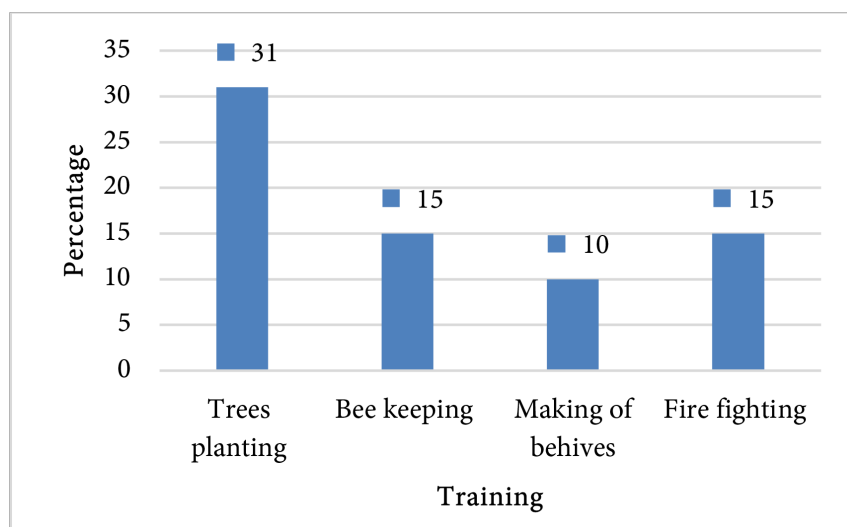


Figure 10. Respondents' response on nature of trainings received from KFS.

“I have received training on how to prepare and plant trees. I am knowledgeable on planting commercial trees as opposed to medicinal trees I am used to planting” (Female respondent, Kapchololwa, 29/9/2022).

However, as revealed by **Table 12**, men (97%) majorly receive more information regarding Mau Forest management as compared to women (3%). This can be attributed to information dissemination channels within the community where men are dominant participants.

Information carried in **Table 12** indicate that preferential dissemination of information accords men (97%) more knowledge than women (3%) making it difficult for women to participate equally within the CFA. As depicted by **Figure 11**, the respondents recommended that forest empowerment within Mau Forest should be strengthened to be gender sensitive by conducting more trainings close community targeting both genders.

4.7.4. Implications of the Study Findings on Women Empowerment on Matters Forest Management among the Ogiek of the Mau Forest

The last objective of this study was to discuss the implications of the study findings on Ogiek women empowerment on matters forest management. The study found that among indigenous Ogiek before independence there exist division of labour with men predominantly protecting forests, commercially extract timber and practise bee keeping while women extract herbal medicines and firewood from Mau Forest. This division of labour coupled with socio cultural set up of Ogiek patriarchal society impacts management of Mau Forest significantly.

Table 12. Respondents’ response on who receives more information regarding Mau Forest management.

	Frequency	Percent
Men	69	97
Women	2	3
Total	71	100

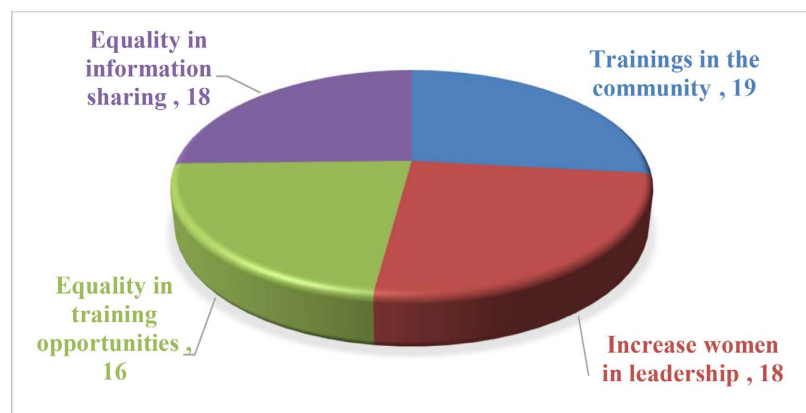


Figure 11. Respondents’ response on ways of strengthening gender empowerment in forest management.

Further the differential roles of Ogiek men and women where Ogiek women do low value activities in Mau Forest impacts their livelihoods negatively. The findings are in line with Kiptot (2015) who posits that the socio-cultural norms impact women forest livelihoods positively or negatively.

The findings revealed that FCM Act 2016 provides avenues for participatory management of forests through the CFAs. Through the CFAs individuals' members of forest adjacent communities have equal opportunities to participate in forest management. The Act on paper therefore has allowed indigenous Ogiek men and women enjoy equal opportunities in forest management including equality in participation but failed to restructure the patriarchal Ogiek social structure. Further the Forest Policy 2014, developed in line with FCM Act 2016, captures public participation as one of its key principles. This is validated by most of the respondents who affirmed that the Forest Policy 2014 adequately enables Ogiek men and women participation in forest management. Though there exists equality in participation in forest management within the Mau CFA, indigenous Ogiek women are underrepresented in decision making organs which are majorly elective. Their interests are therefore not well represented in day-to-day management of Mau Forest.

Though the FCM Act 2016 and Forest Policy 2014 are progressive in promoting participatory forest management, some respondents (23.9%) believed that lack of civic education is the major impediment and undermines the spirit of the law. Lack of understanding of policy provisions inhibits Ogiek men and women from full enjoyment of rights as captured within the policy.

5. Conclusion of the Study

The study documented existence of gender division of labour among the indigenous Ogiek of Mau Forest Nakuru County. The patriarchal set-up of Ogiek community privileges men over women in forest opportunities and resources benefits sharing. Forest legal framework especially the Kenya Constitution 2010, and FCM Act 2016 has not restructured gender relations among indigenous Ogiek. Lastly the study concludes that Community Forests Associations face gender deficits in representation in decision making organs where Ogiek women compete equally with men in elective positions making them highly disadvantage to get elected due to cultural and patriarchal nature of leadership among the Ogiek.

6. Recommendations of the Study

The study recommends below guidance to strengthen gender equality in forest management.

- 1) Indigenous Ogiek women be sensitized on the need to join and actively participate in CFAs ensuring their interests are well captured.
- 2) Forest empowerment activities should consider gender roles which constraints indigenous Ogiek women from participating in forest reform activities.

3) The government should institute measures to ensure full implementation of existing forest legislation and policies especially the Kenya Constitution 2010, Forest Policy 2014 and FCM Act 2016.

4) CFAs to adopt various affirmative strategies including quotas in certain positions to improve women's participation in CFAs considering cultural constraints limiting their participation.

7. Suggested Areas for Further Research

The study recommends below guidance to strengthen gender equality in forest management.

1) There needs to be a closer examination of indigenous women contribution towards sustainability of forest institutions especially CFAs.

2) Future research can focus on gender relations among indigenous Ogiek in other areas as this study was confined to Nakuru, County.

3) Future research can focus on CFAs performance where proportion of indigenous women in leadership positions is higher.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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