



Advancing Gender Inclusion in Forest Governance in Selected Communities; Kori Chiefdom, Southern Sierra Leone

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Authors' contributions

This work was carried out in collaboration between both authors. The study was designed by, author KBS who conducted the research, literature searches and first draft of the manuscript. Author AAO wrote the protocol managed methodology and analysis. Both authors read and approved the final manuscript.

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ABSTRACT

In Sierra Leone, existing cultural norms are believed to limit gender mainstreaming in sustainable forest management. This study investigated women's involvement in decision making regarding forest governance and management in five communities within Kori Chiefdom Southern Sierra Leone. Respondents were selected using both probability and non-probability sampling methods. Stratified sampling was used to classify key respondents into youth and adults (male and female, based on age classes and gender. Consequently, due to the small populations of selected communities (Kawella, Lagor Kawema, Nyamawabu, Kangahun and Foya), purposive sampling was used to select 100.0% of male and female youth (ages 18 to 35), and adults (age 36 and above). Data was collected using structured questionnaires and interview schedule. Data from respondents was analysed using descriptive analysis and presented in tables and charts. The 2010 Sierra Leone National Forest Policy was analysed using content analysis. Findings revealed that

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100.0% of youth, men and women sampled, confirmed that women attend forest-user group meetings and were actively involved in decision making concerning forest governance. Likewise, majority of men sampled (above 56.2%) opined that the chiefs took final decision over forests use in their respective communities. Furthermore, most of the youth (above 50.0%) in each community and men (above 87.5%), with the exception of those in Foya, (25.0% in Kangahun), revealed that women held positions in forest-user groups. Similar proportions of youth and men also confirmed that women actively engage in implementing decisions made regarding forest governance. All, (100%) of women attested that there was no existing gender marginalization in forest governance within the communities sampled. Finally, content analysis of the 2010 Sierra Leone National Forest Policy revealed that there aren't any women specific - provisions or roles assigned to or reserved for women in any part of the policy document. In conclusion, in spite of the absence policy provisions to promote mainstreaming women's involvement in forest governance, this research confirmed that women are not hindered from participating in forest decision making and governance in the study areas. It is therefore recommended that women should be given more encouragement to participate in forest decision making and assigned more leadership roles in forest governance.

Keywords: Women; forest; governance; leadership; decision-making; policy; Sierra Leone.

1. INTRODUCTION

The perception of gender participation in group or community work has a long time been part of developmental thinking. Today in India many forest user groups have factored gender in the management of local natural resources by village communities [1]. In Sierra Leone, there are limited known initiatives or established group/s of women with mandate to engage in forest management, in spite of the comparative strength of women in the country's population. Census result indicates that there are more females than males (Female 3,601,650 and Male 3,473,991); with sex ratio of 96.5 (96 males for every 100 females); with 59.27% of the women living in the rural areas [2]. The 2015 census figures, also states that the population of women in Kori chiefdom where this study was carried out was 51.57%; implying that their role and impact in forest management could be significant if their potentials are effectively harnessed. However according to the (2021) midterm census provisional results it is summarized that the population of Sierra Leone has increased by only 449,528—from 7,092,113 to 7,541,641 between 2015 and 2021. The midterm census results also states there are more females than males nation wide (females 3,825,378, and males 3,716,263). Additionally, the results at chiefdom level have not yet been published, but not withstanding the provisional results at district level states that in Moyamba District where the study area Kori chiefdom is located the population of females are as well higher than males (females 178,935, males 167,836) [3].

Over the years research has shown that in India and Nepal women play powerful roles in

protecting the use of forests in their communities. There are incidences where women willingly functioned as shield by fighting hard to safeguard cropping lands and forests from irregular activities like mining [4].

Participation is a significant means by which a citizen's right can be measured as a form of voice empowerment, yet women are still left out in most forest governance decision making process [5]. Although women's needs vary from those of men, many forestry programmes normally, usually overlook women's specific needs and roles concerning participation. It was detected in Ghana that timing for meetings at the community level affected the vigorous participation of women as community meetings are usually being held at the time women would either be babysitting their children, preparing them for school or busy cooking lunch or dinner for the family. Even when they get chance to participate, their level of participation is much lesser than that of men forgetting that women are the main forest users, and therefore their lack of participation towards any resource can lead to performance weaknesses [6]. This is in contrast with a study conducted in India which stated that the government of India gave a mandate that there should be at least two women represented in every joint forest community management committee. This underpins the fact that such examples of women's participation in policy making can be very meaningful for environmental management [4,7,8].

In sub-Sahara Africa, the less representation of rural women's involvement in organizations dealing especially with natural resources management can be as a result of gender

biases in technology access and distribution, women's skills or labour, or their lack in governance, [9]. In a similar research Otesile and Sheriff, (2017), in their research, sought to demystify the myth surrounding challenges and limitations ostensibly encountered by rural women and the potential impact they could make in forest governance, for the development of the sector, there is still limited known documented studies done in Sierra Leone that investigated the veracity of the prevailing beliefs nor to identify with the involvement of women in forestry development. For instance, the Sierra Leone 2010 forest policy did not give any provisions or roles assigned to or reserved for women in any part of the policy document [10]. Therefore, this concept is developed from this background, believing that in order for the country to succeed in forestry development and management, it becomes imperative to address the various challenges and limitations against rural women participation in forest governance to ensure that they are seen and treated as equal partners with the men folk, in order to enable them make the needed essential and meaningful contributions that will help transform forestry in the country; and to ensure that the importance of rural women

in forest governance must not be taken for granted.

2. MATERIALS AND METHODS

2.1 Study Area

The five selected communities for this study are within Kori chiefdom (Fig. 1), these were: Nyamawabu, Foya, Kangahun, Kawella and Lagor Kawema, (Fig. 2). Kori chiefdom is in Moyamba District, Southern Sierra Leone. The chiefdom has a total land area of 663.3km², with a total population of 30,514, (14,797 and 15,717) for male and females' population respectively [2]. It is the 5th largest populated chiefdom in Moyamba district, with Tiama as the chiefdom headquarters. Tiama is located along the Freetown-Bo highway and it hosts one of Sierra Leone most prestigious universities; the Njala University and a Regional office of the Sierra Leone Agricultural Research Institute (SLARI). These five selected communities are found along Tiama - Mano highway. They are small communities of about 5 to 30 mostly mud houses finished with either zinc or thatch roofs and the dominant tribe in all five communities is Mende.

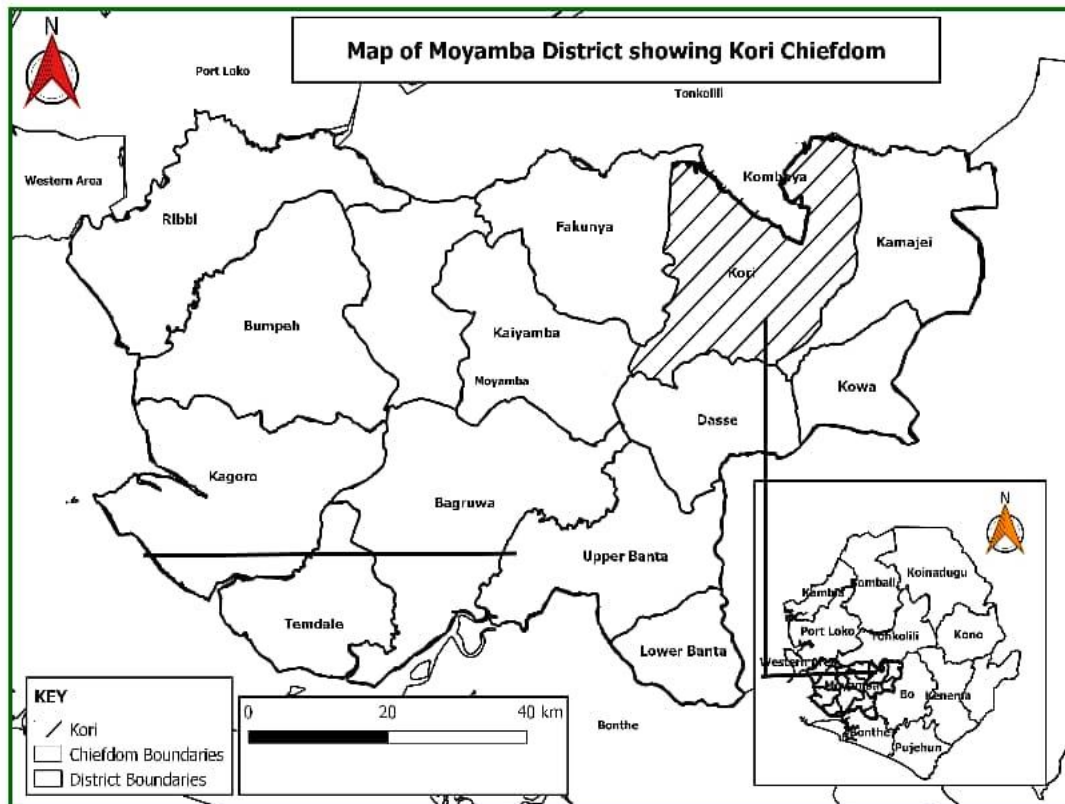


Fig. 1. Map of Moyamba District Showing Kori Chiefdom

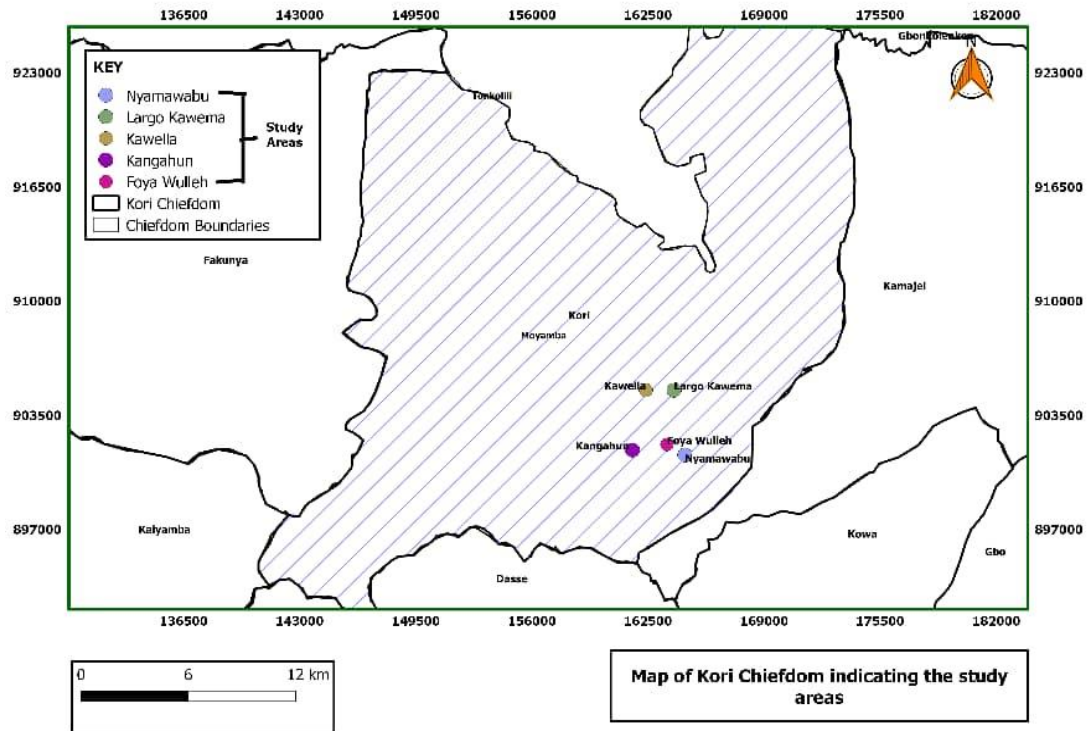


Fig. 2. Map of Kori Chiefdom Indicating the Study Areas

Table 1. Demographics of Respondents

Villages	Adult male	Adult female	Youths
Nyamawabu	7	10	23
Foya	16	17	47
Kangahun	8	14	30
Kawella	9	13	17
Lagor kawema	17	16	23
Sub-total per respondent group	57	70	140
Grand total	267		

Source: Field study

2.2 Data Collection

Quantitative data was collected using structured questionnaire. The questionnaires were divided into sections for clarity and for ease of understanding. Some of the respondents however had the questions interpreted to them in the Mende language, which is their native dialect due to their literacy levels.

Some of the information collected relating to women's roles in forest governance revolves around the following areas:

- Investigation of women's rights in forest governance decision making.
- Identifying the existence of women's specific roles in the Sierra Leone 2010 Forest Policy.

Respondents were selected using both probability and non-probability sampling methods. Therefore, stratified sampling was used to classify the population of each of the five communities on the basis of age classes into infants, young children, youth and adults (male and female). On the other hand, purposive sampling was used to select 100.0% youth within the ages of 18 to 35, and adult male and female from the age 36 and above due to the small population size in these five communities.

2.3 Data Analysis

Results were coded and analysed descriptively using Microsoft Excel 2010. Analysed data were presented in tables and charts.

3. RESULTS AND DISCUSSION

3.1 Respondents' Views on Decision Making and Forest Governance Rights amongst Women in the Five Communities Sampled within Kori Chiefdom

YOUTH

Views of Youth on Women's Attendance of Forest User Group Meetings and Involvement in Decision Making: All (100.0%) of youth in each of the five communities sampled affirmed that women in their respective communities attended forest-user group meetings (Fig. 3). Similarly, 100.0% of them also opined that woman were involved in decision making processes concerning forest governance (Table 2). This implies that women in the five communities studied were not debarred from attending forest user-group meetings, neither were they restricted from being involved in decision making processes in relation to forest governance within their respective communities. This is in agreement with [1,11] who stated that there has been women's participation in the decision-making processes of forest

organizations that took into account, women's particular needs, and thus reduced gender-based conflicts over forest access and utilization. Again, in a report by [12,13,14,15,16,17] highlighted that in Uganda women's participation in forest user groups has increased their livelihood benefits and improve their decision-making power jointly from 2009-2013.

Views of Youth on who takes Final Decisions regarding Forest Governance: Results showed that views of youth varied slightly on who took the final decisions. While some (100.0% in Kawella, 95.7% in Lagor Kawema, 77.8% in Kangahun 54.3% in Foya), said it was the chiefs, while others (90.9% in Nyamawabu), said final decisions were made by Men, (Table 3). This is an indication that final decision-making regarding forest governance is generally done by various town chiefs who are mostly men in the communities sampled, except in Kangahun where the town chief was a woman. This statement is in agreement with [6] which states that in Ghana forest governance decision-making is also mostly in the hands of men. Additionally, [18,19] stated that men are often prioritized over women on the access and use of forest resources thus leaving women in a more vulnerable economic state.

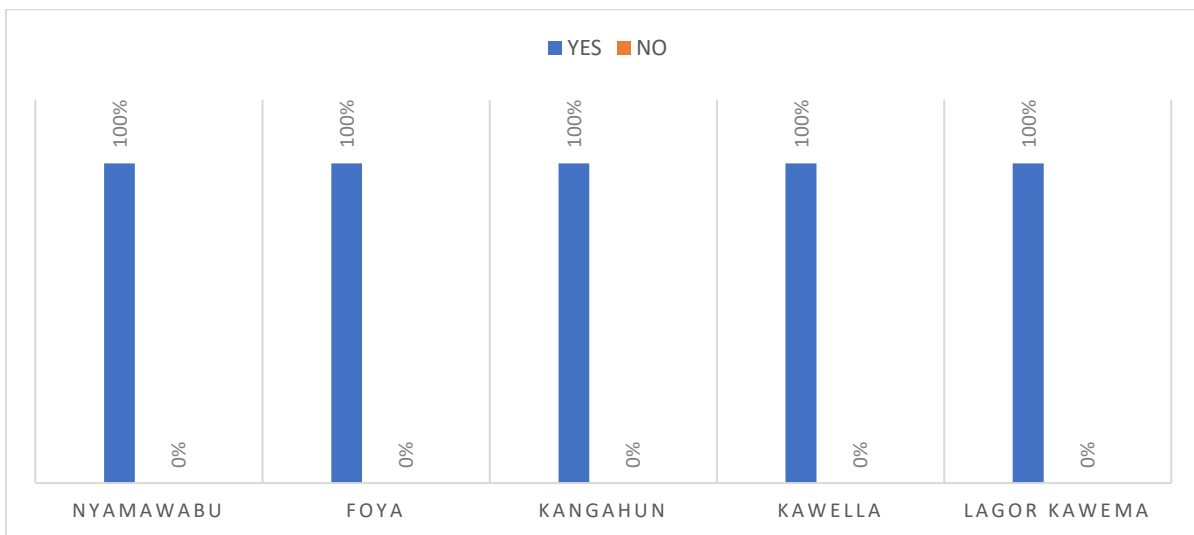


Fig. 3. Views of Youth on Women's Attendance of Forest User Group Meetings

Table 2. Views of youth on women's involvement in decision making regarding forest use

Option	Communities				
	Nyamawabu (%)	Foya (%)	Kangahun (%)	Kawella (%)	Lagor Kawema (%)
Yes	100.0	100.0	100.0	100.0	100.0
NO	0.0	0.0	0.0	0.0	0.0

Source: Field study

Table 3. Views of Youth on Who Takes Final Decisions Regarding Forest Governance

Options	Communities				
	Kawella (%)	Lagor Kawema (%)	Kangahun (%)	Foya (%)	Nyamawabu (%)
Chiefs	100.0	95.7	77.8	54.3	0.0
Men	0.0	0.0	0.0	0.0	90.9
Committee	0.0	2.3	22.2	45.7	0.0

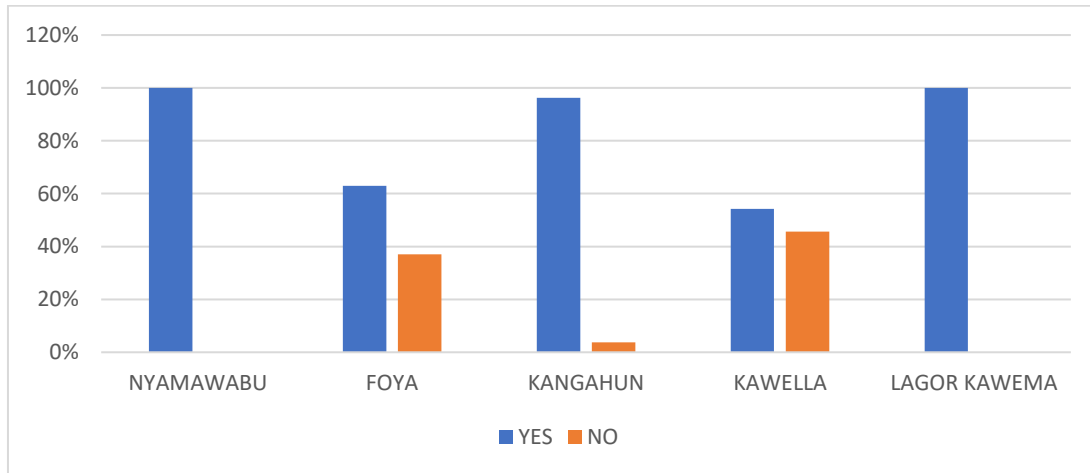


Fig. 4. Views of youth on women holding positions in forest-user groups regarding forest governance

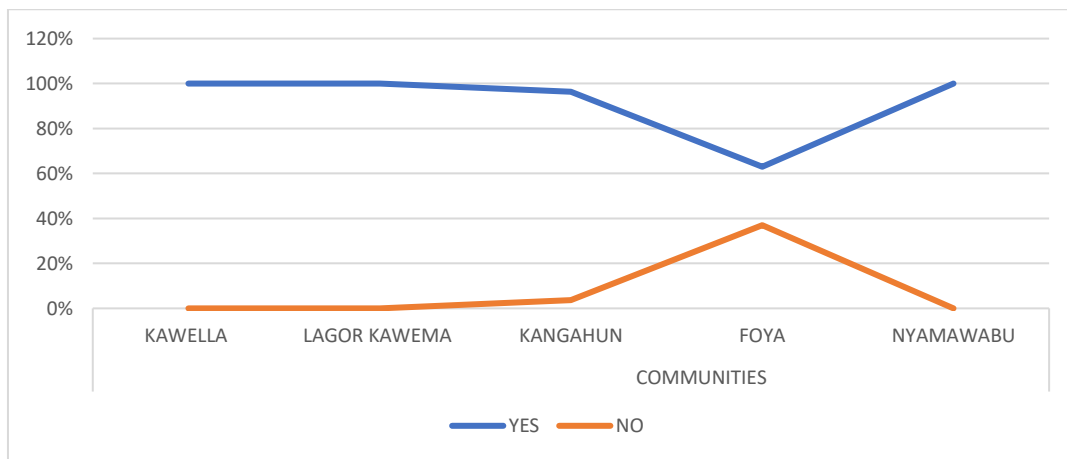


Fig. 5. Views of youth on women's active involvement in implementing decisions made regarding forest governance.

Views of Youth on Women Holding Positions in Forest-User Groups and their Active Involvement in Implementing Decisions Made Regarding Forest Governance: According to the youth (100.0% in Nyamawabu and Kawella, 96.3% in Kangahun, 82.6% in Lagor Kawema, and 50.0% in Foya) women within their respective communities held positions such as women's leader and treasurer in forest-user groups for forest governance, (Fig. 4). Furthermore, 100.0% of youth in Nyamawabu and Lagor Kawema; and varying proportions of

youth, in Foya (63.0%), Kangahun (96.3%) and Kawella (54.3%) (Fig. 5), were of the view that women in their respective communities were actively involved in implementing decisions made regarding forest governance. This shows that women were not left behind in the distribution of authority and responsibilities regarding forest governance in the respective communities sampled. This agrees with [20,21] who asserted that women's roles and responsibilities can provide a clear access point for them when involved in decision making processes. A study

by [22,23] found out that in the rural North Central of Nigeria, women’s role in forest governance has given women access to the exploitation of forest resources which has positively impacted their income by making payment for food and paying of children’s fees thus given them a sense of responsibility in the home.

MEN

Views of Men on Women’s Involvement In Decision Making: All, 100.0% of the men in study area (Kawella, Lagor Kawema, Nyamawabu, Kangahun and Foya) affirmed that women are involved in forest decision making. (Table 4). These decisions are mostly done during meetings in which women are given audience to express their views. This agrees with Nepal’s community Forestry programme amendment made to the Community Forest programme’s operational guidelines in 2009) wherein 50 percent was set as the minimum threshold for female representation in the Executive Committee of the Forestry User Groups, as women’s involvement fosters development [21] Additionally in a report by FIP [24] in 2013-2018 Mexico’s National Development Plan goal was to achieve development by incorporating gender equitable approaches and intends to implement special activities in the different states to protect women’s rights and avoid gender segregation. The Mexico’s Forest and Climate Change project, (CONAFOR) intends to reduce institutional and social barriers limiting women’s participation in forest management with the support of an institutional approach to promote their participation in decision-making bodies.

Views of Men on Who Takes Final Decisions Regarding Forest Governance: Varying

proportion of the men in the study stated that final decision making over the use of the forests in their respective communities mainly made by the chiefs (100.0% in Kawella and Lagor Kawema, 83.3% in Nyamawabu, 75.0% in Kangahun and 56.2% in Foya), (Table 5). Similarly, this statement is in agreement with [6] which states that in Ghana forest governance decision-making is also mostly in the hands of men. Also, [18,19] stated that men are often prioritized over women on the access and use of forest resources thus leaving women in a more vulnerable economic state.

Views of Men on Women Holding Positions in Forest-User Groups and their Active Involvement in Implementing Decisions Made Regarding Forest Governance: Almost all the men confirmed that women held positions in forest-user groups, (100.0% Nyamawabu, Kawella and Lagor Kawema, 87.5%, In Foya, and 25.0% in Kangahun), (Fig. 6). This statement aligns with a literature by [1] which states that women’s’ presence at meetings frequently and holding authorized positions, and their voice recognized are good indicators of women’s participation in forest governance. Similarly, high percentages of the men attested that woman actively involved in forest governance (100.0%in Nyamawabu, Foya, Kawella and Lagor Kawema) and 87.5% in Kangahun), (Fig. 7). This conforms with [25,26] in a report that states that women are charged with high responsibility in managing their homes. Women’s involvement in forest governance may secure sustainable utilization of forest resources. Moreover [12,13,14,15,16,17] in their report states that in Uganda women’s participation in forest leadership roles has increased from 16% to 50% thus enhancing their confidence, engagement, and better access to resources.

Table 4. Views of men on women’s involvement in decision making regarding forest use

Options	Communities				
	Kawella (%)	Lagor Kawema (%)	Kangahun (%)	Foya (%)	Nyamawabu (%)
Yes	100.0	100.0	100.0	100.0	100.0
No	0.0	0.0	0.0	0.0	0.0

Table 5. Views of men on who takes final decisions regarding forest governance

Options	Communities				
	Kawella (%)	Lagor Kawema (%)	Nyamawabu (%)	Kangahun (%)	Foya (%)
Chiefs	100.0	100.0	83.3	75.0	56.2
Men	16.7	31.2	25.0%	0.0	0.0
Committee	0.0	12.5	0.0	0.0	0.0

Source: Field study

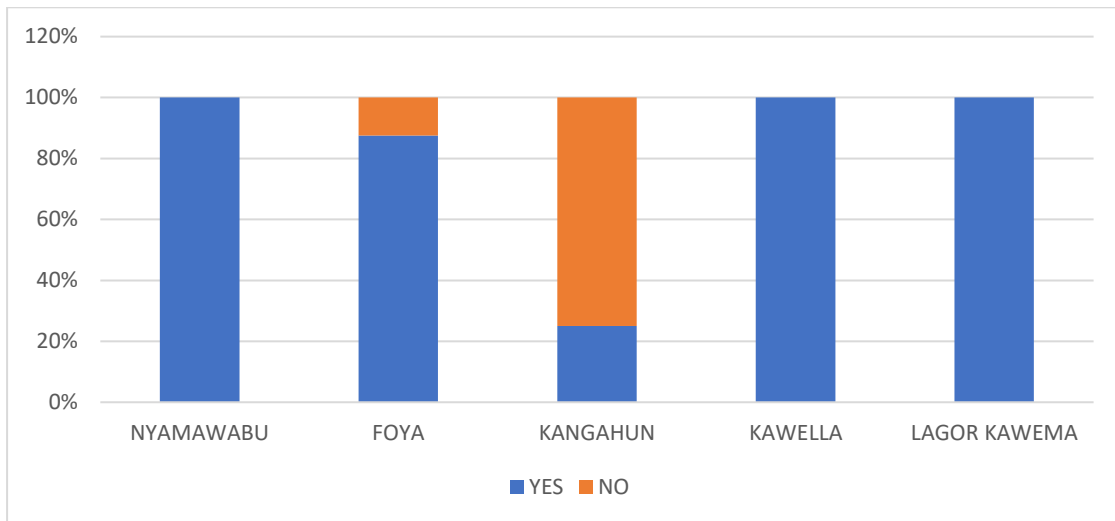


Fig. 6. Views of men on women holding positions in forest-user groups regarding forest governance

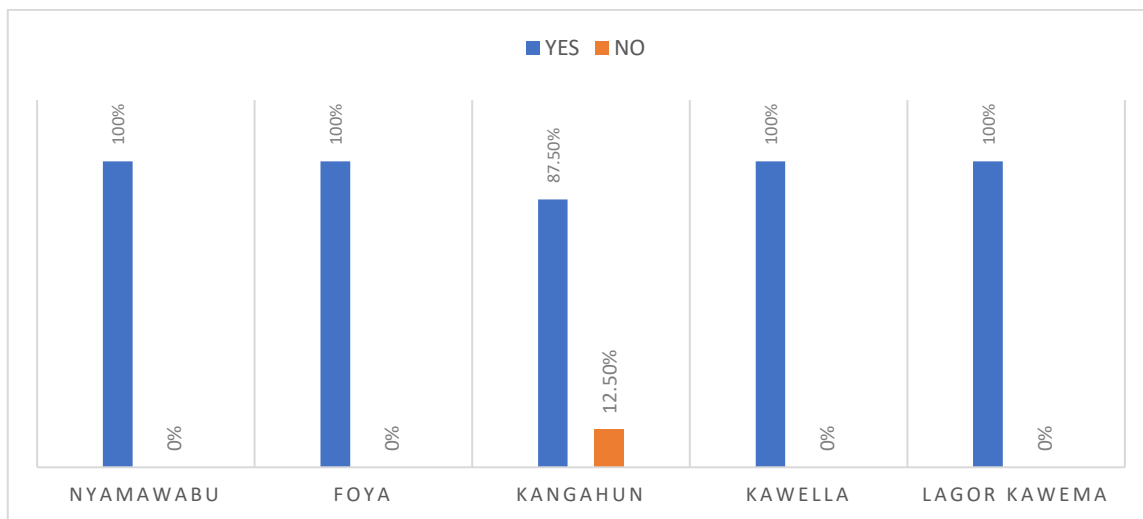


Fig. 7. Views of men on women’s’ active involvement in implementing decisions made regarding forest governance

Source: Field study

WOMEN

Women’s View on their Active Involvement in Forest Decision Making and Forest Governance:

In the five communities sampled within Kori chiefdom, 100.0% of the women claimed that they are actively involved in decision making. (Table 6). They further revealed that decision making on forest use are mostly done in the presence of women. The women added that they go into the forest on a daily bases for firewood, herbs and wild fruits, therefore their right has not been undermined in their respective communities. In [27] findings in the Congo Basin,

is in contrast of this statement as women do not have any right to take part in meetings and development regarding their forest, women are sidelined in any decision-making process thus rendering them voiceless. However [28,29,30,31] in their research states that high increase of women’s participation in forest decision making improves forest sustainability and more opportunity thus giving raise to their voices for active participation in forest decision making. The effective participation of women in decision making will provide them the opportunity to present their concerns, needs and incorporate their views in the discussion process.

Views of Women on the Medium in which they are Given Audience During Forest Decision Making: Most of the women sampled disclosed that the medium through which they are mostly given audience during forest decision making is mainly through meetings (100.0% in Nyamawabu, Kangahun and Lagor Kawema. In Foya its 87.5%) workshops (92.3% in Kawella), (Table 7). This statement disagrees with [32,33,34,35,36] in their findings that women’s voices are not equally heard even during meetings making their suggestions in forest decision making unheard. In fact, as a tradition in DRC women are not expected to speak at meetings. However [5,37] in his research stated that the presence and willingness of women to speak up in meetings, all significantly improve decision making for sustainable forest management.

Views of Women on Existence of Gender Marginalization in Forest Governance within their Respective Communities: One hundred percent of women in the five communities sampled acknowledged that women were not being marginalized in forest governance user groups within their communities (Fig. 8). This implies that women in the selected communities were represented adequately in forest user groups. This statement is in contrast with [9] in their research which states that women face discrimination when marketing their forest produce directly in the market, additionally language barrier and access to training and information all form of marginalization for women’s involvement in policy reform.

Table 6. Women’s View on Their Active Involvement in Forest Decision Making and Forest Governance

Option	Communities				
	Nyamawabu (%)	Foya (%)	Kangahun (%)	Kawella (%)	Lagor Kawema (%)
Yes	100.0	100.0	100.0	100.0	100.0
No	0.0	0.0	0.0	0.0	0.0

Source: Field study

Table 7. Views of women on the medium in which they are given audience during forest decision making

Option	Communities				
	Nyamawabu (%)	Foya (%)	Kangahun (%)	Kawella (%)	Lagor Kawema (%)
Workshop	0.0	12.5	0.0	92.3	0.0
Meetings	100.0	87.5	100.0	7.7	100.0

Source: Field study

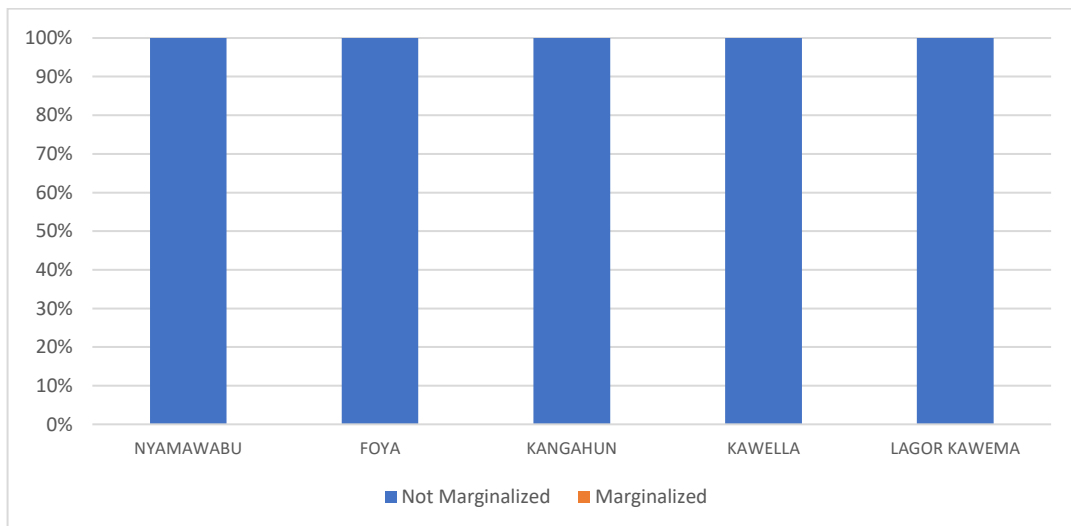


Fig. 8. Views of women on existence of gender marginalization in forest governance within their respective communities

Review of Existence of Women-Specific Provisions in the Sierra Leone Forest Policy of 2010:

Policy Review: The existing Sierra Leone Forest policy of 2010 is presented under a series of headings that also encapsulates a set of objectives followed by respective policy statements and strategies for the implementation of the policy provisions. For the purpose of this research, an attempt was made to look at each objective to see if there is provision for women-specific roles within the forest policy document.

This policy review revealed that there are no existence of women-specific provisions or roles assigned to or reserved for women in any part of the policy document. Nonetheless, the following are a few areas that in the opinion of the researchers', could have been used as opportunity to give some recognition to women's potential roles in forest governance. Perhaps doing this could help facilitate Sierra Leone considering the relative proportion of male to female to attain similar achievements made by other countries such as Uganda, Nepal and India in forest management. These areas are as indicated below, and are extracted from the respective objectives and policy provisions they relate to...

Objective (No. IV) - Education and Awareness

REVIEW/FINDINGS:

Policy Statement 16 on Forestry Education: Support stakeholder education related to technical management of forest resources that is consistent with best management practices.

In addition to the strategies stated in policy statement 16, the researchers are of the opinion that priority could be given to women to have scholarship for studying forestry. This will help empower more women to gain technical and professional exposure in forest management. This privilege will be cascaded into these formally educated women becoming facilitators of gender mainstreaming in forestry practice in the country, especially at the grass root level where most of the impact is made.

Objective (No. V) - Research and Monitoring

REVIEW/FINDINGS:

Policy Statement 17 on Research: Adopt, adapt and utilize best practices and science-

based research to support and improve sustainable forest management.

Under this policy statement, strategy (No iii) states as follow– *“to Promote demand-driven research by encouraging the participation of communities and other stakeholders in the identification, design, implementation and evaluation of research activities, e.g., women’s preference on species selection”*. In the researchers’ opinion, stipulating the relative proportion of women to be actively engaged in forestry research could be another helpful way of gender mainstreaming in forestry practice in the country.

4. CONCLUSION

Outcome of this research have led to the drawing of the following conclusion.

- Women are actively involved in forest decision making and forest governance in the study area.
- Women are given audience regarding forest decision making at forest user group meetings in the study area.
- There is no existing gender marginalization on forest governance within the communities sampled.
- There are no women-specific provisions or roles in any part of the policy document.

5. RECOMMENDATION

This study therefore recommends the following.

- More encouragement should be given to women to participate in forest decision making and governance
- More leadership roles should continue to be assigned to women to enhance a robust participation of forest governance in the study area.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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