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Collaboration or Contravention? Ramifications For Effective Participatory Decision-Making in Collaborative Forest Management at Echuya Central Forest Reserve, South Western Uganda

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Participatory decision-making has been extensively adopted worldwide as an essential mechanism and a good governance principle to reach a consensus in natural resource management. However, in most communities, local people who depend on forests are not involved in the decision-making process regarding conserving protected areas. This research assesses the ramifications of collaboration or contravention on effective participatory decision-making in collaborative forest management in Echuya Central Forest Reserve. It provides insights into how community consultations and participation of forest-adjacent communities in planning meetings influence the conservation of protected areas. We collected data from a total of 639 respondents, including Collaborative Forest Management (CFM) group members and non-CFM community members, government institutions, conservation organizations, and local community leaders, using semi-structured questionnaires, interview guides, and Focus Group Discussion guides. Results indicate that community consultations allow CFM stakeholders, particularly community members, to give ideas on how such projects can be implemented without destroying forest resources, promoting the goal of conserving the forest reserve. Community members' participation in planning meetings allows them to contribute ideas about relevant and appropriate forest conservation approaches. However, the National Forestry Authority (NFA) and other non-community actor groups dominate the decision-making process mainly because the NFA has the legal mandate to manage the forest reserve on behalf of the Government. We concluded that the connivance of government forestry officials with unauthorized forest resource users undermines the spirit of participatory decision-making. Dishonesty and lack of accountability hampered effective participatory decision-making, and low attendance at meetings undermines effective participation in decision-making. Thus, community members' consistent attendance of meetings is paramount for positive outcomes of participatory decision-making for the conservation of forests.

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INTRODUCTION

Forests constitute an essential part of the world's natural resources necessary for environmental protection (Anguti et al., 2022). They are crucial to global ecosystem services, including water and climate cycle regulation and biodiversity maintenance (Goldberg et al., 2020). Regrettably, the forests have been depleted by various anthropogenic activities, resulting in unprecedented loss of forest cover in many parts of the world (Roberts et al., 2021). In tropical countries like Brazil and Indonesia, over one-third of forestland has been converted to farmlands for agricultural activities (Trigueiro et al., 2020; Goldman et al., 2020). Between 1990 and 2010, Africa lost approximately 52 million ha of forest, constituting 56 percent of the reduction in forest cover worldwide (Gbetnkom, 2009; Tindan, 2013). Between 1995 and 2020, Uganda lost about 60% of its standing forests (Kazoora et al., 2020). In order to reverse the trend of forest depletion, various good governance practices have been implemented to improve their management. One of the major practices is participatory decision-making under Collaborative Forest Management, which has been extensively adopted across the world in countries such as Indonesia, Nepal, Philippines, Nigeria, Zimbabwe, and Uganda (Buncag, 2021; Luswaga & Nuppenau, 2020; Park & Yeo-Chang, 2021, Mawa et al., 2020).

Participatory decision-making was officially adopted as a conventional conservation approach in 1982, following the 3rd World Park Congress, which acknowledged the value of community participation in forest management for the sustainable use of natural resources (Twinamatsiko et al., 2015; Nabanyumya et al., 2017). The involvement of local communities was re-echoed at the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in June 1992. The conference acknowledged that indigenous and local people play an essential role in the management and development of the environment because of their indigenous and traditional knowledge about natural resources (UNCED, 1992; Kegamba et al., 2022). At the local level, community participation in forest conservation was initially premised on the notion that it facilitates proper targeting of people's needs and minimizes the costs of managing protected areas (Wily, 1998; Nabanyumya et al., 2017).

Collaborative Forest Management (CFM) practices introduced in the late 90s have become an essential tool for promoting participation in decision-making for better conservation outcomes (Kazoora et al., 2020). Collaborative Forest Management is considered a mutually beneficial arrangement in which a local community or forest user group and a responsible Government body enter into an agreement that defines shared roles, responsibilities, and benefits in a forest reserve or

part of it (MWLE, 2003; Kazoora et al., 2020). Participation in decision-making refers to a horizontal process whereby power dynamics are re-balanced, and the ideas of groups vulnerable to marginalization are clearly considered in decisions about the governance of natural resources (Ordóñez et al., 2020).

Important to note is that consultation remains the first level of participatory decision-making process. In forest management, it entails actively seeking other people's ideas about forest conservation practices before fixing conservation plans (Baker et al., 2016). Effective consultations with local people are considered time-consuming and budget-intensive, so trade-offs exist as most projects have limited time and financial resources (Pham et al., 2015). However, conserving forest resources through participatory approaches is problematic without involving adjacent forest communities in the decision-making process (Somuah et al., 2021). Thus, practical CFM standards require consultations with local communities and indigenous people and mechanisms for resolving grievances (Dobrynin et al., 2020). Moreover, in-depth consultation of community members as part of prior stakeholder analysis can make the ecosystem management process more inclusive. It can enable communities to overcome the challenge of initial elite capture through government measures and resistance by community members involved in the decision-making process (Pham et al., 2015).

In addition to consultations, stakeholder participation in decisions related to forest planning meetings is essential to get long-lasting and viable solutions (Bruna-Garcia & MAreypérez, 2014). Community participation in planning conservation projects is vital to reaching a consensus in natural resource management, particularly in citizen governance of forests. However, in Liberia, most community members who depended on forests were not involved in developing action plans for managing and conserving the forests (Charlene et al., 2017). Yet, integrating opinions from local communities in conservation planning and development is essential to sustainable forest conservation

(Rhodes et al., 2020; Zhang et al., 2020). As Lise (2009) noted, effective community participation remains a mirage if community members are not involved in planning, implementation, monitoring, and evaluation processes. Failure to involve a community in these processes compels its members to rebel against government-initiated conservation measures.

In Uganda, community participation in forest management decision-making was enabled by the Forest Policy of 2001 and the National Forestry and Tree Planting Act (NFTPA) in 2003 (GoU, 2001; 2003). Section 15 of the NFTPA (2003) indicates that a responsible body may go into a Collaborative Forest Management arrangement with a forest use group to manage a central forest reserve. The policies and legislation acknowledged the roles played by local communities in managing Uganda's forest estates. This culminated in the implementation of CFM to enable organized communities to participate in the decision-making process for better conservation outcomes. Against this backdrop, in 2007, according to section 15 of the National Forestry and Tree Planting Act (NFTPA) 2003, NFA signed a memorandum of understanding with four communities surrounding Echuya Central Forest Reserve, located in Southwestern Uganda, to involve local communities in the conservation of the forest under the CFM arrangement (Katwinomugisha & Katebaka, 2017). The CFM groups that were formed include Muko Echuya Forest Conservation Development Association (MECDA), Bufundi Echuya Forest Conservation and Livelihood Improvement Association (BECLA), Murora Echuya Forest Conservation and Poverty Alleviation Association (MEFCPAA) and Kanaba Community Development and Echuya Forest Conservation Association (KADECA) (NFA, 2007; Katwinomugisha & Katebaka, 2017). However, although participatory decision-making has been implemented under CFM, it has been argued that the bamboo forest cover in Echuya has drastically reduced over the past three decades, with more than 60% of the bamboo stems being of poor quality, damaged, or cut (Bitariho & McNeilage,

2004; Ssali & Bitariho, 2013; Bitariho et al., 2015).

The fauna species in Echuya have alarmingly reduced over the past three decades (Bitariho et al., 2015). The number of bird species in ECFR reduced from 100 in 2001 to 94 species in 2015, while tree species reduced from 35 to 20 species (Byaruhanga *et al.* (2001); Bitariho (2015). Moreover, few studies have tried to measure the level of community participation in forest management and the effect such consultation has on forest conservation (Prouty et al., 2017). Thus, there is limited understanding of how community consultations and participation in planning meetings under the CFM arrangement contribute to the conservation of protected areas. Therefore, the objective of this paper is to assess the ramifications of collaboration or contravention on effective participatory decision-making in collaborative forest management. Our specific questions are: Are community members consulted by the Government (National Forestry Authority) and Conservation NGOs (*Nature Uganda*) in the CFM processes? Do community members participate in planning meetings under the CFM arrangements? What are the challenges that hinder the effectiveness of participatory decision-making in CFM?

MATERIALS AND METHODS

The Study Area

The study was conducted in communities surrounding Echuya Central Forest Reserve in Bufumbira County in Kisoro District and Rubanda County, Rubanda District. The forest reserve lies between 1°14'–1°21'S and 29°47'–29°52'E and covers an area of 34 km² (Bitariho & McNeilage, 2004). It is dominated by bamboo (*Sinarudinaria alpina*) on the hilltops and other woody and herbaceous plants, especially Macaranga on the hillsides and valley bottoms (Bitariho et al. 2015). Echuya is a unique Afromontane habitat and an area of high endemism (Plumptre et al., 2003). Farmlands surround the forest, and it has a high population. Thus, this study was carried out in the four sub-counties from which the CFM groups were made.

The sub-counties are Muko, Bufundi, Murora, and Kanaba (Katwinomugisha & Katebaka, 2017). In addition to the CFM group members from these sub-counties, the study involved non-CFM community members, National Forestry Authority (NFA) officials, staff members from *Nature Uganda*, Institute of Tropical Forest Conservation (ITFC), District Local Government officials of Rubanda and Kisoro districts where the forest reserve is situated. Echuya was considered for this study because the community members are involved in decision-making through their CFM groups, yet forest resources remain depleted. The bamboo forest cover in Echuya has drastically reduced over the past three decades. More than 60% of the bamboo stems are of poor quality, cut, or damaged (Ssali & Bitariho, 2013; Bitariho *et al.*, 2015). The number of tree species reduced from 35 to 20, while bird species in the forest reserve reduced from 100 in 2001 to 94, in 2015 (Bitariho *et al.*, 2015).

The Study Design

The study concurrently employed cross-sectional and explanatory designs that illustrate a mixed methods research approach that helped to triangulate quantitative and qualitative findings. Households were selected using simple random sampling; households with CFM and non-CFM group members were selected, and research tools were administered to them. Other respondents selected using purposive sampling methods were National Forestry Authority (NFA) officials, staff members from *Nature Uganda*, Institute of Tropical Forest Conservation (ITFC), District Forestry and Natural Resource Officers from Kisoro and Rubanda District, where ECFR is located, Local Council Leaders, and CFM group leaders, who constituted key informants of in the study. A total of 639 respondents were sampled from four sub-counties surrounding ECFR where Collaborative Forest Management is implemented. Semi-structured questionnaires were used to obtain quantitative and qualitative data from the CFM group members and selected non-CFM community members. Interview guides were used to obtain in-depth information from key

informants. Focus group discussions were conducted with CFM group committee members.

Data Management and Analysis

The study collected both qualitative and quantitative data. Qualitative data obtained from key informants and FGD participants were analyzed using content analysis with the aid of the NVivo package, version 10, which helped to organize and manage data more coded and thematic (Silver & Lewins 2014). Responses from key informant interviews and FGDs were transcribed, translated into English, and organized according to sub-themes based on the study's objective. This facilitated easy analysis of data and interpretation of the findings. The NVivo package, version 10, aided qualitative data analysis. NVivo helped to organize and manage data in a more coded manner (Silver & Lewins, 2014). Quantitative data were cleaned, coded, and entered into SPSS statistical package Version 25 for analysis. Descriptive statistics were generated and presented to inform the frequencies and percentages. Linear regression was used to determine how much participation in decision-making under CFM influenced the conservation of ECFR.

RESULTS

Characteristics of Respondents

The majority of the respondents were males, 55%, while females were 45%. Those who attained primary education were 70.1%, 15.3% had no formal education, 12.2% obtained a secondary education, and 2.4 attained tertiary education. The majority (50.9%) of the respondents lived between 1-2 kilometers away from the forest reserve, 27.5% lived within less than one kilometer, while 21.6% lived more than 2 kilometers away from the forest reserve. The main type of land surrounding households was farmland (67.5%); 21% were surrounded by the forest, while 11.6% were in the village center. The majority of the respondents (82.1%) depend on farming as their main income-generating activity; other income-generating activities were tourism-related activities (23.5%), village markets

(13.3%), retail shops (5.9%), formal employment (5.3) and casual labour (4.3%).

Community Consultations in the Decision-Making Process for Forest Conservation

Results show that only 16.8% of the respondents were consulted by Government forestry officials before ECFR was gazetted. The majority, 83.2% of respondents, were not consulted. The NFA officials simply made announcements stopping community members from accessing forest resources without authorization from the government body (NFA). This was re-echoed by a community member who said,

"... NFA organized a community meeting at the church to explain what was happening. During the meeting, they told us that we were not supposed to go to the forest without seeking permission from NFA and that we should not cut fresh bamboo. Without permission, anyone caught in the forest would be arrested" Community member, Bufundi, Sub Country.

Respondents revealed that consultations were made after the forest was gazetted to facilitate the formulation and implementation of the CFM program. NFA, District Forestry/Natural Resources Officials, and *Nature Uganda* held consultative meetings with communities around Echuya represented by Local Council Leaders and CFM group executives to negotiate co-management arrangements before signing CFM agreements. Through key informant interviews, CFM group leaders confirmed being consulted, as illustrated by one of the key informants:

"I was consulted on several occasions. I participated in planning meetings. I also participated in the formulation and signing of the constitution for our group. I was the contact person throughout the entire process of forming our CFM group" [KII02]

Respondents also reported that NFA officials often consult district leaders, local council leaders at Sub County, parish and village levels, and conservation organisations such as *Nature Uganda* whenever a project is implemented in

forest-adjacent communities. The consultations allow CFM stakeholders, particularly community members, to give ideas on how such projects can be implemented without destroying forest resources, which promotes the attainment of the goal of conserving the forest reserve.

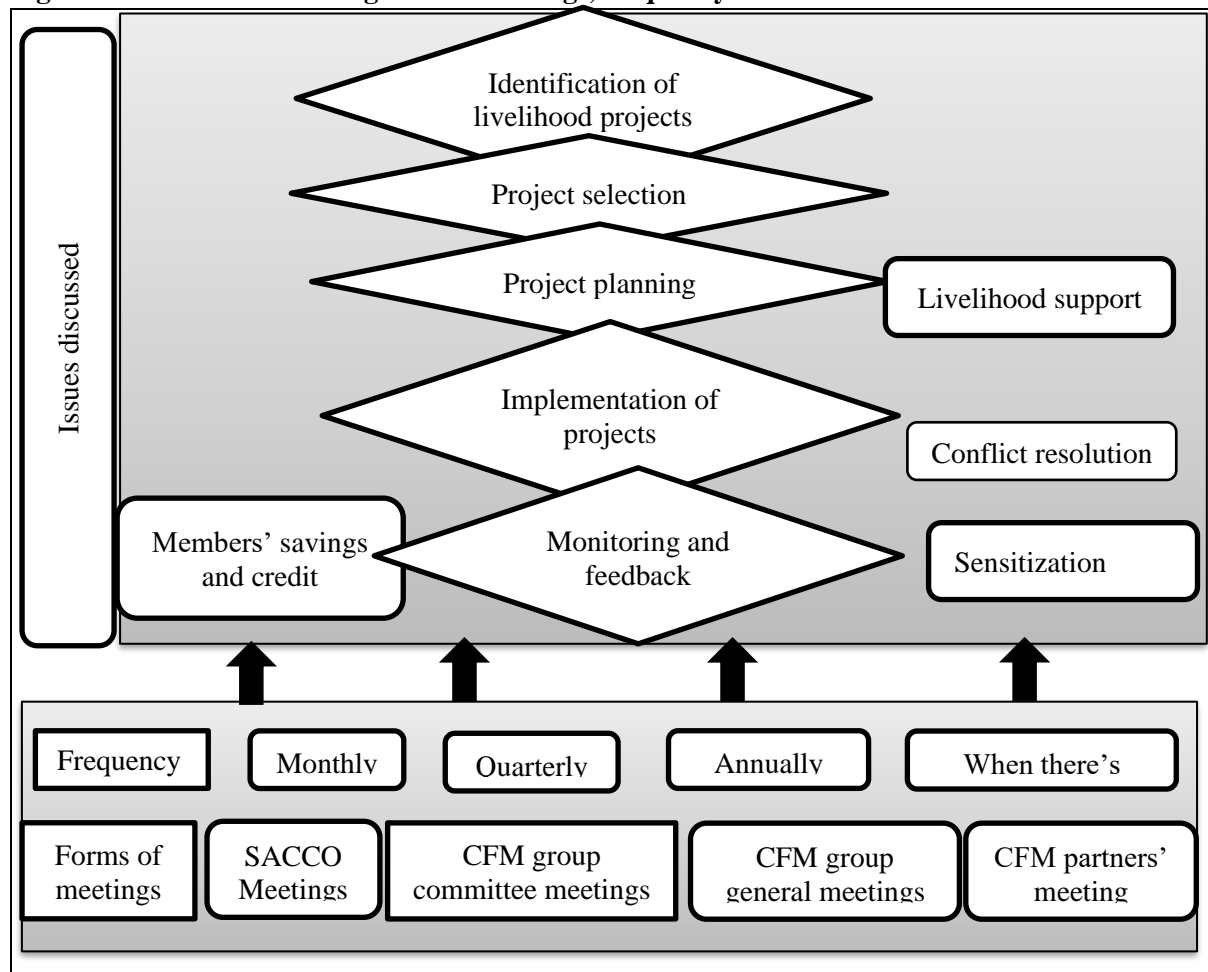
In some instances, the NFA dominates the decision-making process because it is autonomous and has the final say about activities to be carried out in the forest reserve. It was reported that NFA sometimes fails to respect the roles of other stakeholders, as revealed by one of the respondents. *“NFA is autonomous and not answerable to the district. It is not collaborative, does not respect the roles of other stakeholders, and does things its own way.”* [KII04]. Relatedly, interviews with an NFA official revealed that the mandate to manage Echuya is the responsibility of the NFA.

“The local government and community only have an oversight role on the management of ECFR. NFA is the final decision maker regarding activities to be carried out in the forest reserve” [KII03].

Community Participation in CFM Meetings about Forest Conservation

Through household surveys and key informant interviews, respondents revealed that community participation in decision-making is majorly through meetings attended by both men and women from communities adjacent to Echuya. The meetings concerned identifying, selecting, planning, implementing, and monitoring development projects, as reported by 93% of the respondents (Figure 1). The meetings are held at different levels: CFM group and subgroup levels and CFM committee level, while others are held between CFM groups, Nature Uganda, NFA, and District leadership.

Figure 1: Illustration of categories of meetings, frequency and issues discussed



Interviews with *Nature Uganda* staff revealed that the conservation NGO organizes meetings to sensitize local community members about the benefits of forest conservation, promote community empowerment, and encourage them to support the conservation of ECFR. During meetings, CFM group members identify projects in which they are interested in participating. The projects are implemented by subgroups formed out of the bigger CFM groups. The sub-groups have committees represented by men and women responsible for implementing the day-to-day project activities. Community members' meeting participation allows them to contribute ideas about relevant and appropriate forest conservation approaches. Respondents reported that meeting participation increases local community members' voices and enhances their participation in decision-making regarding conserving the forest reserve.

Key informants from the natural resource and environment office in Kisoro and Rubanda districts reported that they often organize stakeholder sensitization meetings with adjacent communities, conservation organisations such as eco-trust and *Nature Uganda*, and religious institutions. CFM group members attended most meetings organized by *Nature Uganda*, while those organized by NFA were attended by both CFM members and non-CFM community members. The meetings allow community members to effectively participate in decision-making to determine appropriate conservation measures, strengthen collaboration, and ensure improved biodiversity composition in Echuya Forest.

Nature Uganda invites members for meetings whenever the need arises. CFM group members hold periodic meetings at group, subgroup, and committee levels. SACCO meetings are conducted monthly, CFM group committee meetings are held quarterly, and CFM group general meetings are held annually. The issues discussed in meetings are shared in subsequent meetings with other stakeholders, such as *Nature Uganda* before final decisions are made. Results from interviews and household surveys revealed

that the meetings concerned credit and savings, implementation of livelihood projects, conflict resolution, sensitization on how to abide by the forest protection laws, and conservation of the forest reserve. The majority, 89.3% of community members, rated the outcome of the meetings as very good because most respondents felt their issues raised in the meetings were attended, as illustrated by one of the respondents:

“The last meeting I attended was about KADECA’s development projects. We discussed how to kick-start other projects, such as the eco-tourism project. The issues raised in the meeting were attended to because the eco-tourism site was constructed using profits from the SACCO as suggested.”
[KII03]

CFM members reported that the Local Government officials do not invite community members to attend council meetings to contribute ideas about the conservation of Echuya. The community members only attend when invited by *Nature Uganda*. CFM members further faulted NFA for failure to consider their ideas.

Challenges that Hinder Effective Participation in Decision-Making in CFM

Key informant interviewees reported that the challenges in the decision-making process under CFM arise from differences in stakeholders' interests and the approach considered appropriate for conservation. *Nature Uganda* prefers that nature takes its course and allows new species to regenerate on their own within the forest, while NFA supports controlling the encroachment of new species over other species. A case in point was when NFA wanted to cut *Macaranga* trees in some parts where it had dominated the forest reserve and gradually replaced bamboo but faced resistance from *Nature Uganda*, whose conservation point view was that natural resources should be allowed to regenerate. A key informant explained this:

“Power struggles manifested between Nature Uganda and NFA. Nature Uganda wants nature to take its course and leave new

species to encroach on others, yet NFA officials feel that it is better to prevent some species from encroaching on and displacing other tree species. However, as NFA, we don't need permission from anyone to do something in the forest...we only need to inform them about what we are doing.” [KII01]

Respondents reported a challenge of dishonesty and lack of accountability, especially on the side of NFA, which they encountered while increasing participation in decision-making. NFA officials connive with unauthorized forest resource users and exhibit low cooperation when conducting joint patrols. The Locally Based Monitors (LBMs) reported that NFA patrol men thwart them from patrolling areas where they have illegally allowed community members to graze cattle or harvest bamboo and scoop soil manure. This was revealed by a respondent who said:

“NFA workers cooperate with people who destroy the forest. They lack transparency. They say to give me something and use the forest. One time, I caught a person grazing in the forest; when I asked him, he said that my grandfather gave the officer a sheep and that I should be grazing in. NFA officials know that they have destroyed the forest. They do not allow us to patrol areas where they know they have allowed people to graze or cut bamboo. When we conduct patrols, they say we go to side A, knowing that some

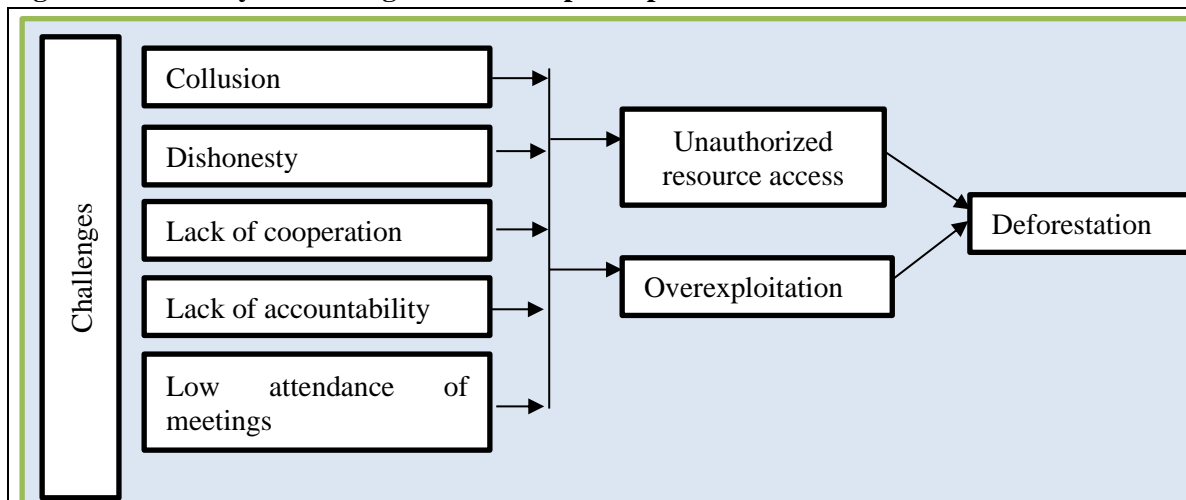
(unauthorized forest users) are on side B. They don't allow us to patrol areas where they know that they allowed people to graze or cut bamboo.” [KII05]

Likewise, another key respondent reported:

“Sometimes, we agree on what to do, and NFA officials do things to the contrary. When we get encroachers, they (NFA staff) do not support us. We agreed that licensing bamboo harvesting stops, but you see vehicles carrying bamboo saying that they come from Headquarters. They pass behind our backs.” [KII05].

Through FGDs, participants reported that some CFM chairpersons usurped all powers and did not fully involve other committee members in decision-making. The other challenge is that sometimes, CFM group members fail to agree on project implementation modalities, which eventually attracts hatred among group members. Sometimes, members refuse to participate in project activities because they do not support the implemented ideas or projects. Respondents further reported a challenge of low attendance at meetings by some CFM group members, local community members, and District officials, which affects the quality of decisions made. The challenges that hinder effective participation in decision-making in CFM are summarized in Figure 2.

Figure 2: Summary of challenges that affect participation and their effect on forest conservation



DISCUSSION

Community Consultations in the Decision-Making Process for Forest Conservation

Results show that Government forestry officials did not consult most community members before the gazettement of ECFR. This contravenes Baker et al. (2016), who asserted that the first level of the participatory decision-making process is community consultation, a process of actively seeking the views and ideas of other people about forest conservation practices before plans are fixed. Likewise, Somuah et al. (2021) argued that effectively conserving forest resources through participatory approaches is problematic without involving forest-adjacent communities in decision-making. As noted by N'tambwe et al. (2023), community members in the decision-making process can help community members overcome elite capture through government measures and resistance by community members involved in the decision-making process.

Nonetheless, consultations with stakeholders were made after the forest was gazetted to facilitate the CFM program's formulation and implementation. This is corroborated by Mawa et al. (2020), whose study revealed that community consultations with stakeholders had been initiated in areas neighboring Budongo forest while implementing the CFM program. NFA officials often consult district leaders, local council leaders at Sub County, parish, and village levels, and conservation organizations whenever a project is implemented in forest-adjacent communities. This agrees with Pham et al. (2015) who revealed that consultations ought to be conducted before implementing conservation projects. The findings are further in agreement with Rhodes et al. (2020), who asserted that the participation of various stakeholders is essential as they are most conversant with forest management issues. Moreover, Dobrynin et al. (2020) stated that effective collaborative forest management standards require consultations with local communities and indigenous people and mechanisms for resolving grievances.

Community Participation in CFM Meetings for Forest Conservation

Forest-adjacent communities participate in decision-making through meetings organized by conservation organizations. This is consistent with Bruna-Garcia and MArez-Pérez (2014), who noted that stakeholder participation in decisions related to forest planning meetings is essential to finding long-lasting and viable solutions. Results from the current study indicated that community members participate in meetings that are concerned with identifying, selecting, planning, implementing, and monitoring development projects. This is contrary to the Charlene et al. (2017) study, which showed that most community members who depended on forests were not offered a platform to contribute to forest management or action plan development. However, scholars (Rhodes et al., 2020; Zhang et al., 2020) opined that integrating opinions from local communities in conservation planning and development is an essential aspect of sustainable forest conservation. Lise (2009) consistently argued that effective community participation remains a mirage if community members are not involved in planning, implementation, monitoring, and evaluation processes. Failure to involve a community in these processes compels its members to rebel against government-initiated conservation measures.

Results from the current study agree with N'tambwe et al. (2023) that holding sensitization meetings between forest adjacent communities and other stakeholders is critical for increased community participation in projects that promote forest conservation. Results showed that CFM group members participate in periodic meetings about credit and savings, implementation of livelihood projects, and conservation of the forest reserve. This is in line with Foncha and Ewule (2020), who noted that participation in planning for alternative livelihood strategies contributes to proper forest management and reduces forest resource dependency.

Challenges that Hinder Effective Participation in Decision-Making in CFM

Based on this study, variations in opinions about forest conservation approaches pose a challenge between government forestry bodies and non-governmental conservation institutions. According to Jung et al. (2024), a structured approach is required to gain insights into systematically addressing issues concerning conservation planning. Hence, the disparities in forest conservation techniques can be solved using an organized approach to improve CFM's participatory decision-making. The current study further established that dishonesty and lack of accountability hampered effective participatory decision-making. Government forestry officials connive with unauthorized forest resource users and exhibit low cooperation when conducting joint patrols. This agrees with Kazoora et al. (2020), who noted that sometimes, government forestry officials abet illegal forest activities to be carried out in protected areas, which impedes efforts to promote CFM. As a result, the local people take a laissez-faire approach towards forest protection, or worse, they try to take as much as they can without authorization (Soliev et al., 2021). Some CFM chairpersons usurped all powers and did not fully involve other committee members in decision-making. On the other hand, sometimes community members refuse to participate in project activities because they do not support the ideas or projects being implemented. Likewise, Oladeji et al. (2022) noted that community members are reluctant to engage in conservation activities in which they have minimal interest. Effective participation in decision-making was further reported to be undermined by low attendance at meetings. According to Hughes et al. (2022), failure to actively participate in decision-making and reach an agreement that ultimately contributes to biodiversity conservation undermines the spirit of participatory conservation approaches.

CONCLUSION

Effective community participation is essential for local community members in the decision-making

processes to conserve protected areas. Forest-adjacent communities' participation in decision-making through planning meetings enhances conservation outcomes. However, the failure of government forestry officials to consult local community members cripples their participation in the decision-making processes. As a result, this state creates disharmony between community members and forest managers. It is important to involve community members in the identification, selection, planning, implementation, and monitoring of development projects members of local communities so that they do not rebel against government-initiated conservation measures. Nonetheless, variations in opinions about forest conservation approaches pose a challenge between government forestry bodies and non-governmental conservation institutions. The disparities in forest conservation techniques can be solved using an organized approach to improve participatory decision-making in CFM. The connivance of government forestry officials with unauthorized forest resource users undermines the spirit of participatory decision-making. The failure of CFM executives to fully involve other community members in the decision-making process and the limited participation in project activities cripples the effectiveness of participatory decision-making under the CFM arrangement. Consistent attendance of meetings is paramount for positive outcomes of participatory decision making for conservation of forests.

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