

Empowering Community-Based Forest Management for the Sustainability of Community Forests in Tanzania.

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abstract

Community-Based Forest Management (CBFM) in Tanzania serves as an opportunity to ensure the sustainability of community forests. Therefore, the paper interrogates the empowerment of CBFM for the sustainability of community forests in rural Tanzania. A mixed research approach was applied to achieve this goal. Using this approach, both secondary and primary data were collected. The secondary data were collected through a review of the existing literature on the subject matter. In contrast, the primary data were collected through household surveys, in-depth interviews, focus group discussions, and field observations. The data were collected from 160 respondents residing in the study area. The findings revealed that CBFM played a critical role in the maintenance of community forests. It was further shown that 66% of villagers received information about CBFM through village meetings. This contributed to raising awareness, which led to about 75% of villagers participating in forest conservation activities. Therefore, the sustainability of the community forest was determined by the participation of villagers in CBFM activities. It is concluded that empowering CBFM is essential for the sustainability of community forests.

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Introduction

Forests are one of the critical resource for ensuring the sustainability of the ecosystem. Forests also play a significant role in climate change mitigation and protection of biodiversity (Bugabo et al., 2023). Moreover, forests are important in improving community livelihoods (Food and Agriculture Organization of the United Nations [FAO], 2020). Globally, there is growing attention on forest protection and restoration. For instance, in Africa, there is a long-term plan to restore more than 100 million hectares of land in 31 countries by 2030 (Kahsay et al., 2023). The success of these initiatives depends on community involvement in forest conservation. It is important to involve the local people in forest conservation so that they develop a sense of ownership (Ghimire & Lamichhane, 2020). Between the 1970s and 1990s, the community forest management model emerged in the global south. Some countries in Africa and Asia introduced a reform to define community forest institutions and practices. Such countries include Ghana, Tanzania, Malawi, Madagascar, Philippines, Nepal, India, Cameroon and Zimbabwe. Since then, the government in these countries began promoting Community-Based Forest Management (CBFM) through decentralization of the authority to local communities that are closer to the forests (Zahor, 2022). In many countries, CBFM emerged as a result of weak statehood (Basnyat et al., 2020). The strength of the state agencies is determined by the capacity and autonomy of the respective agencies (Bersch et al., 2017). When we talk of capacity, it refers to the ability of the state agencies to deliver the goal. For instance, improving the conditions of the forest and local livelihoods (Arts et al., 2023). In Nepal, CBFM has played a central role in managing natural forests. This approach made the local community to conserve the surrounding natural resources, hence fostering sustainable resource utilization. By 2020, about 2,831,707 hectares of forests were managed by the community regimes. During the four years of operation, the CBFM has shifted from a top-down to down-top system of forest conservation (Ghimire & Lamichhane, 2020).

This helped to empower and involve local people in managing nearby natural forests. The success of CBFM has been measured in terms of improved supply of forest products, generation of a green environment, empowerment of women rehabilitating the degraded land and increased biodiversity, and improvement of rural livelihoods (Ghimire & Lamichhane, 2020). For the effectiveness of community forest conservation, rewards need to be given to local communities (Setiajiati, 2017). In most low-income countries, about one-third of natural forests are managed by local communities. However, negative perceptions persist about the impact of CBFM on the sustainability of natural forests. This situation calls for empowering CBFM for sustainable forest management (Blackman et al., 2017). It is unfortunate to find out that, in most areas, the CBFM is implemented by external sectors like nongovernmental organizations. In the beginning, CBFM programs came with intensive community mobilization, training, and capacity building. Eventually, all these supports disappeared after the end of the project funds and this hampers the effectiveness of CBFM in forest conservation (Kahsay et al., 2023).

In most tropical areas, the forested land has been converted to cropland for undertaking agricultural activities for the increased population (Trigueiro et al., 2020). The increased demand for food, grafting materials, and timber by local communities near the natural forests has contributed to forest degradation and depletion (Kyere-Boateng et al., 2021; Shackleton et al., 2021). In most developing countries, CBFM has helped to decrease deforestation in some cases, while in other cases, it failed (Baragwanah, 2020). In Uganda, the increased trend of forest degradation and deforestation forced the government to shift the paradigm from centralization to decentralization. The government adopted and implemented the CBFM in managing natural forests. Moreover, in Uganda, the promotion of alternative livelihoods is the key agenda to enable the community to reduce over-dependence on forest resources (Mawa et al., 2023). The CBFM is the best approach to managing the forests (Bugabo et al., 2023). Through cooperating in managing the forests, the community members receive various benefits. The most common benefit received by the community in CBFM is access to forest resources like firewood, charcoal honey, medicinal plants, and ropes (Bugabo et al., 2023). Likewise, in Tanzania, community members extract

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firewood, fruits, charcoal, honey, local medicines, timber, and poles from community forests. This motivates them to participate in conserving and managing forest resources (Lusambo et al., 2021). Community participation in natural resource conservation develops a sense of ownership of a respective resource.

Tanzania is one of the countries that are rich in biodiversity. In 2020, about 46 million hectares of forests covered its surface. However, from 2010-2020, Tanzania experienced a high rate of deforestation. Every year, about 0.88% of forests in Tanzania are lost (Arts et al., 2023). The key driving forces for deforestation and degradation of natural forests are poverty, population growth, and agricultural activities (Sanga et al., 2022). In Tanzania, CBFM is known for improving the ecological conditions of forests. Historically, land including the natural forests has been the property of the state. In the late 1990s, the management of natural forests was decentralized from being managed solely by the government to cooperation with the local communities (Gross-camp et al., 2019). This shift helped to sustain natural forests that were at risk of degradation and deforestation. However, in some parts of Tanzania, the members of the community are not fully engaged in forest management, leading to forest degradation and deforestation. This situation calls for empowering the CBFM for the sustainability of the forests (Zahor, 2022). Empowering the community can be possible by creating a strong bond, social networks, groups, and community associations (Kimaro, 2023). These strategies are expected to bring the members of the community together to discuss and deliberate on all issues related to forest management.

Community forest management is increasingly recognized as one of the key tools for effective forest management. The CBFM is one of the two approaches of Participatory Forest Management (PFM). The PFM was introduced to ensure sustainable forest management in Tanzania. This could be achieved through lowering the rate of forest degradation and deforestation (Lusambo et al., 2021). The empowerment of CBFM is important for lowering forest degradation and deforestation. There is a need to raise awareness and improve communication with community members in the vicinity of natural forests conserved through CBFM (Luswaga & Nuppenau, 2020). This will help engage members of the community in forest conservation. In Tanzania, there is different perception regarding the participation of locals in natural forest conservation. In some villages, local people have a negative perception of the idea of community forest conservation. This is because members of the community are not fully engaged in conserving forests that are closer to them. This paper aims to examine how empowering community forest management will enhance sustainable forest management. It is anticipated that the paper will contribute to uncovering the need to empower CBFM throughout the country for effective forest management.

Materials and Methods

This study was conducted at the Mbangala ward in Songwe District. The Songwe District has 18 wards with a population of 152,103 (URT, 2022), out of these wards, only one ward was selected for the study. In the selected ward, Mbangala village implements CBFM, which is why it became the focus of the study. The Mbangala village is located in the southwestern part of Songwe District. Geographically, the village lies between 7° and 9° Latitudes South and between 32° and 34° Longitudes East. The village has a total area of 45 522.2ha (Moses, 2017). The cited study area was selected because it was one of the villages with natural forests managed by the local community under the CBFM. The Mbangala village also had a village land forest reserve that contributed to the enhancement of the livelihood of the people. In Tanzania, Village Land Forest Reserves (VLFRs) are increasingly recognized as an important base for enhancing the livelihood of rural households (Mlawa et al., 2023). The main economic activity in the study area was farming. Songwe is the third region in the production of food crops. This serves as proof that its population mainly depends on agricultural activities. In terms of the human population, in 2022, the study area had 17878 people whose main livelihood occupation was farming (United Republic of Tanzania [URT], 2022).

The study employed a mixed research design in which both qualitative and quantitative information were collected. The mixed approach was chosen because it allowed the use of different methods in data collection to achieve triangulation (Almalki, 2016). Thus, the study employed a mixed method for triangulation purposes. Neither the qualitative nor the quantitative approach is self-contained. However, the mixed approach is time-consuming as it involves data collection using different methods (Creswell, 2014). The approach is suitable for a study in which one source of data may be insufficient. Furthermore, the study employed a convergent parallel mixed method design. The design is applied in studies that combine both qualitative and quantitative data (Creswell, 2014). This design involved collecting both qualitative and quantitative data concurrently. The data were collected from 160 respondents through questionnaires, in-depth interviews, and Focus Group Discussions (FGDs). Field observations were also conducted to capture real-time experiences. The qualitative data were subjected to thematic analysis while

Statistical Product and Service Solutions (SPSS) was applied to analyze the quantitative data.

Validity, Reliability of the Data, and Ethical Consideration

In data collection, a tool is considered to be reliable if it produces stable and consistent results (Kothari, 2004). The same tool will be considered valid if it measures well what is required to measure (Dawson, 2002; Marczyk et al., 2005; Kothari, 2004). To ensure the validity and reliability of data, a variety of methods were deployed in data collection. The tools to be used for data collection also were pre-tested and the pre-testing result was used to refine the tools before developing the final version of the data collection tools. All these strategies were put in place to ensure the validity and reliability of the data. Moreover, according to Babbie (2007), sometimes, the research process intrudes on people's lives, and some of the respondents of the study may be vulnerable because of their social status or position of powerlessness, and in this, anonymity and confidentiality should be observed. Babbie (2007) insists that respondents should participate in the exercise voluntarily and the collected data should be used to serve the stated purpose, and not otherwise. The study adhered to the [United Nations Universal Declaration of Human Rights 1948](#) and the Declaration of Helsinki 1975. From the cited Declarations, all issues related to ethics of the research and human rights were observed.

Findings and Discussion

The Profile of the Respondents Involved in the Study

This section presents the sociodemographic and economic characteristics of respondents involved in the study. Specifically, the section presents the age, sex, education, and occupation of the respondents involved in the study. These aspects influenced community participation in community forest management. The respondents aged 36-45 and 46-55 dominated the study. Percentage-wise, the 36-45 and 46-55 age groups comprised 42% and 33% respectively. Other age groups comprised less than 10%. This implies that the study area had more youths than children and elders. This is a capital in forest management because youths supply the needed manpower in all activities related to community forest management. Gender-wise, the females comprised 56%, while males comprised 44%. This implies that the study population had more females than men. This has a positive impact on forest management because it is rare to find women invading and clearing forests for different purposes. In terms of education, 78% had a primary education, 13% had a secondary education and 9% of respondents had a nonformal education. This implies that, in the study area, the majority had a primary education. Therefore, more efforts were needed to educate them about community forest management. In this case, village meetings played a central role in raising awareness among these respondents. Occupation-wise, 74% of the respondents were involved in agricultural activities. This indicates that agriculture was the main economic activity in the study area. Therefore, without proper strategies in place, agricultural activities could threaten the existence of community forests in the study area.

Economic Activities Conducted in Mbangala Village

The findings obtained through the household questionnaire revealed that in the study area, people were involved in different socioeconomic activities to earn a living. A majority of the respondents were involved in agricultural activities (farming and livestock keeping) and comprised 74% (Figure 1). In Tanzania, roughly 80% of the population lives in rural areas and is mostly employed in agriculture (Kinyondo & Pelizzo, 2023). Similarly, the study conducted on the community forest of the central part of Nepal in the Sindhuli District by Ombogoh et al. (2022) found that the majority (88%) of people in the study area were involved in agriculture followed by business (5%), Labour (4%) and service (2%). This indicates that agriculture is the main economic activity depended on by people living in rural settings. The findings are in line with the study conducted in Makete District, Njombe region, Tanzania by Sanga et al. (2022), which indicated farming as the main economic activity. Likewise, Lusambo et al. (2021) found that in Mufindi, Iringa Rural, and Mbozi Districts, Tanzania, agriculture was the main occupation of the local communities. About 80% of the households depended on small-scale crop production and the rest are engaged in livestock keeping, forest extraction, and petty businesses. This activity contributed to depleting and degrading the natural forests and hence, changing the land use in the study area.

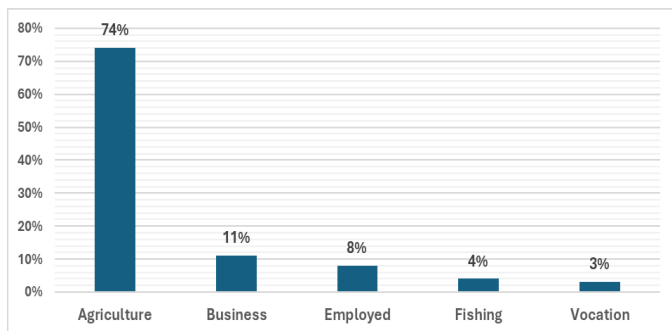


Figure 1: Economic Activities of the Study Population

The findings in Figure 1 indicate that few people were involved in fishing and vocational activities. These findings imply that the majority of the respondents relied on farming and livestock keeping. These activities if not well managed may compromise the environment. In connection with this, one key informant said:

“Agriculture is the backbone of our development. It is rare to find a household that is not engaging in farming activities. Even employed individuals supplement their income with farming activities. Generally, in rural areas like ours, you cannot earn a life without farming activities” (Key Informant/Mbangala Village/July, 2023).

The foregoing narration indicates that in the study area, agriculture served as the main source of income.

The findings obtained through FGDs revealed that over-dependence on agricultural activities contributed to environmental destruction mainly deforestation. Farmers cleared forests in favour of expanding land for farming activities. Deforestation in the Masito-Ugalla ecosystem in Tanzania was due to an increase in human activities such as farming and reliance on charcoal and firewood (Zahor, 2022). Therefore, human activities contribute immensely to forest depletion. This study further revealed that in the study village, only the forests under CBFM were safe, the rest had been degraded and depleted. This implies that farming activities were not friendly to the surrounding environment. Furthermore, the findings revealed that 11% of respondents were involved in business. The study further revealed that people in the study area engaged in small-scale business activities like food vending and operating small shops. In most African countries, food vending is an important employment opportunity and it is conducted by the youths, less educated individuals, and the poor. It is one of the economic activities that contribute to earning life for the marginalized group of individuals (Mramba, 2022). The nature of the business vendors involved, forces them to find activities to supplement business. In this case, the respondents in this category were not pure business persons. In support of this, one participant of FGDs said:

I wonder seeing businessmen engaging in activities that are conducted by us, the poor. All people claiming to be involved in business have farm plots, the reason why shops are closed, especially during the farming season. It is impossible to feed the family and access other services through business (Participant of FGD/Mbangala Village/July 2023).

From this verbatim, it is evident that in rural areas the main economic activity was agriculture. Other activities such as business, and vocation were there to supplement agricultural activities. The study by Kizigo et al. (2023) revealed that engaging in beekeeping could minimize overdependence on agriculture. Finally, only a few (4%) individuals were involved in fishing activities because of the presence of river Luika, which originated from the Mbangala forest in the study village (Figure 2). This implies that the presence of the river created opportunities for the surrounding communities. This is because people are involved in fishing activities to obtain fish for food and commercial purposes. Fishing is one of the main economic activities in the coastal regions and areas with big rivers. It contributes to ensuring food security and poverty reduction (Ulega et al., 2022). In the current study, fishing was not the main economic activity because the area had a small river, and the villagers depended mainly on farming activities. Moreover, a few people were involved in fishing because fishing was not an economic activity to depend on for earning a living. In the current study, the river created opportunities for undertaking irrigation farming, especially during the dry season. However, no one reported to use a river for irrigation. In this case, irrigation was an unutilized opportunity.



Figure 2: River Luika, Originating from the Mbangala Natural Forest

Figure 2 indicates a river that is a source of water supply for domestic and other uses. A respective river also was used for fishing activities that provided food and income to people living in the vicinity of such a river.

Information Sharing about CBFM and Participation in Forest Management

The findings obtained through the questionnaires revealed that villagers were well-informed about participation in forest management. The findings revealed that members of the community were given information about forest management through village meetings (66%), Village announcements (20%), and posters (14%) (see Figure 3). The findings indicate that different methods were employed to inform the villagers about issues related to community forest management. This is evident that members of the community were well-informed about forest management. This is contrary to the study conducted by Luswaga and Nuppenau (2020) in Usambara, Tanzania whereby the knowledge of the villagers regarding tenure rights on the forest on the CBFM side, and information flow seemed to be limited. This means that information flow to the villagers in matters related to CBFM was limited hence limiting their participation in forest conservation activities.

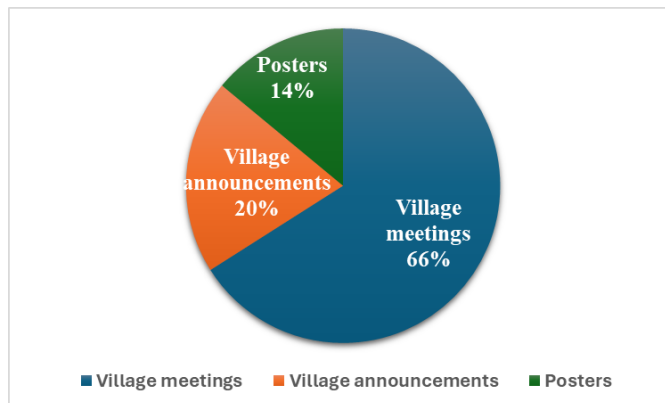


Figure 3: Methods Employed to Share Information About Community Forest Management

The findings presented in Figure 3 indicate that the preferred method of information sharing was the village meetings. Through the village meetings, the people of the study area discussed and deliberated about community forest management. This channel of information sharing is common in most of the villages in Tanzania. In support of this, the study conducted by Mkiramweni et al. (2023) in Mlimba District Council, Morogoro Region, Tanzania, found that community meetings, notice boards, and public speakers were used to share information with members of the community. This implies that community meetings are the common medium of information sharing in most villages in Tanzania. During the meetings, the villagers discussed issues that were relevant to their villages. The findings also revealed that members of the community became knowledgeable about forest management through village meetings. Because of this, the village chairperson said:

We normally prefer to disseminate information to villagers through meetings because it gives a chance to the villagers to ask for clarification when needed. Sometimes we invite the forest officers to our meeting to educate the villagers on the values of natural forests. This enables the villagers to get the necessary knowledge the need to and how to conserve the natural forests (Key Informant/Mbangala Village/July, 2023).

This narration indicates that village meetings serve as the platform for knowledge sharing about community forest management. The other preferred method of information sharing was the village announcements. The household survey indicated that 20% of the respondents mentioned village announcements as the media used to share information in their village. During FGDs, it was revealed that, in the village, there was a special person who was used to disseminate information to people. Such a person was given a piece of information to share with people from the village officers. An announcement was given to members of the community early in the morning before they left their beds. This time was preferred because the majority got the information as they were still in their household. Likewise, Mkiramweni et al. (2023) documented that, public speakers are an effective method of information sharing in the village. Public speakers make sure everyone in the village is informed about the matter in place. In the current study, it was further found that village announcements were used during an emergency especially when there was a wildfire nearby or within the community forest. Finally, the findings revealed that posters also were used to disseminate information to members of the community about community forest management. This method of information sharing was selective, and that is why it was used rarely. In Mlimba District Council, Morogoro Region, Tanzania notice boards were used to give updates to members of the community. The notice boards served as central hubs for displaying vital updates and information related to the health dispensary construction project, including financial details like funds received and expenditures (Mkiramweni et al., 2023). The weakness of notice boards is that only literate villagers access the information. In this context, the information reaches a few people. Therefore, this channel of communication is not effective in sharing information with villagers.

The findings revealed that community participation in forest management was amplified by information on community forest management. Contrary to this, the study by Chiwaya and Mzuzza (2022) found that, in Chiradzulu District, Malawi, community participation in community forest management was influenced by education. An increase in the level of education yielded an increase in the number of people participating in community forest management. The findings obtained through the household survey revealed that the majority (75%) of villagers in Mbangala Village were fully participating in all activities related to forest management, while 21% were participating partially in managing the community forest. Only 4% of villagers reported that they were not participating in managing the community forest (Figure 4). Enhancing community participation is one of the key factors to support local-level resource governance. Involving the local community in issues related to resource governance creates a sense of ownership of the respective resource. This increases the level of community participation in community forest management (Ombogoh et al., 2022). Community participation in forest conservation ensures the sustainability of forests.

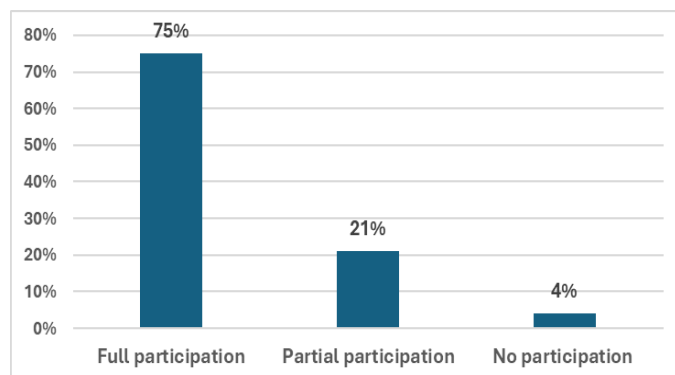


Figure 4: Community Participation in Forest Management

Findings in Figure 4 indicate that most, that is, (75%) members of the community participated fully in forest management. This is a result of information sharing indicated in Figure 3. This implies that many members of the community received information about the need for community participation in conserving the natural forests. About 21% of community members reported having participated in forest management partially. Generally, full participation and partial participation both represent participation. The findings in Figure 4 also indicated that 4% of the members of the community did not participate in forest management. This is the group of people that need to be given education on the values of forests to human beings and other living organisms. Even though few people were participating in forest management activities, measures need to be taken to make all people participate in conserving the community forests.

Benefits Obtained from Mbangala Community Forests and the Role of Villagers in CBFM

The findings of the in-depth interviews revealed that members of the Mbangala village were of the view that having the forest was a blessing to them. This perception was triggered by the benefits community members got from the forests. The forests provided both services and materials to members of the community. This contributed to making the members of the community to value the forest, and hence protecting it. To support this, one of the participants of FGDs said:

The Mbangala forest played a significant role in enhancing the livelihood of the people. The forest assures water supply for domestic and other uses. People access the forest to collect firewood as a source of energy. More importantly, the forest provides building materials. These benefits make people value the forest and hence protect it (Participant of FGD/Mbangala Village/July, 2023).

The foregoing narration indicates that the Mbangala community forest contributed to enhancing the livelihood of the people. The narration is also a piece of evidence that members of the community had access to forest materials. The findings obtained through household survey, indicated that about 61% of people mentioned that they were beneficiaries from both firewood and access to building materials, while 28% benefited only from access to firewood (Figure 5). This is contrary to findings by Bugabo et al. (2023) in which the Echuya Central Forest Reserve, Uganda had different benefits like agricultural support, financial support, ecotourism projects, livestock farming, beekeeping, training, and organic farming to the local community. This indicates that forests provide many benefits to local people and thus, have different benefits for local people in their vicinity.

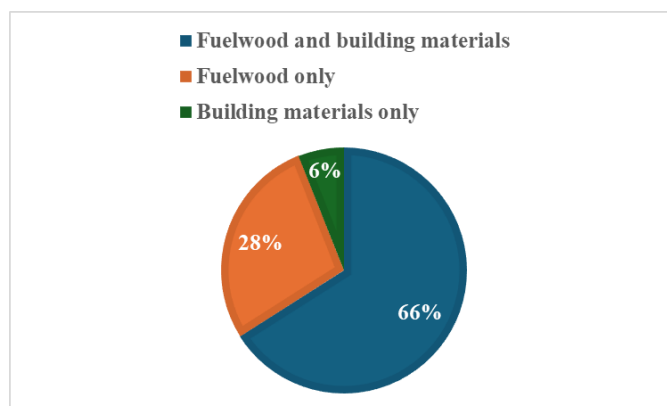


Figure 5: Benefits Obtained from Mbangala Community Forest

The findings presented in Figure 5 indicate that, community members living in the vicinity of the Mbagala forest benefited from access to both firewood and building materials. This does not mean these were the only benefits of the Mbangala community forest. Respondents just mentioned the direct benefit acquired from the forest. Indirect benefits like being the source of water for domestic and other uses were not mentioned. Natural forests provide firewood, charcoal, and medicines for communities surrounding the forests (Tegeje & Mkonda, 2022). The current study found that the firewood collected from the forest was the main source of energy for members of the Mbangala village. Women visited the forest to obtain firewood for domestic and commercial purposes (Figure 6). In Tanzania, wood fuel contributes 49% of total deforestation and the cost of deforestation is about US\$ 6,252,012 (Lusambo, 2023). This implies that fuel wood deteriorates many forests in Tanzania hence, calling for alternative sources of energy.

Moreover, the findings obtained through FGDs revealed that the villagers in Mbangala village benefited from using the forest for traditional functions. The forest provided the avenue for traditional worshipping. This benefited a few members of the community because, in most African societies, traditional worshipping is conducted by a few people. This finding implies that community members to some extent, acquired livelihood from utilizing natural forests. The sacred natural forests are used for traditional functions like traditional worshipping and rainmaking (Sanga & Haulle, 2022). Most people worship in modern religions. Furthermore, the key informants also revealed that the Mbangala forest was used for rainmaking. Traditionalists visited the forest to ask for rain from the forest spirits. One elder said *'Normally, when the rain delays, we visit the forest to ask our ancestors to release the rain'*.



Figure 6: Women Carrying Bundles of Firewood

Traditional functions conducted in the Mbangala forest contributed to forest conservation. This is because, the local people in the village respected the forest especially the portions of the forest used for traditional functions. The findings also revealed that the community benefited from the revenues collected from the Mbangala community forest. The collected revenue helped in the construction of the primary school class and the house for teachers (Figure 7a and 7b).



Figure 7a: A Primary School Class



Figure 7b: A Teachers' House

The buildings presented in Figure 7a and 7b indicate that the Mbangala community forest was one of the sources of revenue for the village government. Therefore, the villagers benefited directly and indirectly from the community forest. This calls for the need to maintain the forest for current and future generations. One of the ways of maintaining the forest is to empower community-based forest management.

The findings obtained through FGDs indicated that the villagers had different roles to play in the sustainability of the forest. The roles played by villagers include patrolling in the forest, choosing the village forest conservation committee (VFCC), and voting for applicants requesting to harvest the forest products for charcoal, logs, and timbers from the outside Mbangala village. Nonmembers of the Mbangala village had to table the request whenever they wanted to access the Mbangala forest products. This is a shred of evidence that members of the community were involved in deciding issues of their community. The villagers also had the role of giving information to the leaders and village forest conservation committee whenever they saw the

forest harvested illegally. The other reported role was protecting the forest from wildfire, especially during the dry season. It was interesting to find out that members of the community in the Mbangala were willing to play their role in maintaining the community forest. The willingness was amplified by being well-informed on the values of the natural forests.

Empowerment and Implementation of the Community-Based Forest Management

For the sustainability of community forests, the CBFM needs to be empowered. The empowerment of CBFM will enable strategies for involving the community in forest management to be strong and sustainable. Ways to empower CBFM include discouraging the top-down approach in forest management instead the down-top approach in forest management needs to be exercised for the CBFM to be powerful. The community members also need to be fully involved in decision-making at the village level. The findings obtained through in-depth interviews revealed that the empowerment of CBFM depends on the commitment of the villagers and the willingness of the village leaders. In terms of the need for commitments, the Village chairperson said:

While we strive to make CBFM powerful, it is important to cultivate a sense of ownership among villagers. This will develop commitment for villagers to get involved in forest management voluntarily. Empowerment without commitment is meaningless. (Key Informant/Mbangala Village/July, 2023).

Community involvements contribute to building a sense of ownership among members of the community on available resources (Ghimire & Lamichhane, 2020). It was further reported that the availability of funds could facilitate to empowerment of the CBFM. The mentioned factors play a critical role in strengthening community-based forest management strategies. Moreover, community awareness of CBFM was reported to be crucial in empowering community-based forest management. Information could help to make all villagers participate in forest management. One of the ways of disseminating information was through the village meetings.

The empowerment and implementation of CBFM faced some challenges. One of the reported challenges was a lack of commitment among members of the forest conservation committee. The findings obtained through FGD revealed that some members of the committee were reluctant in implementing their responsibilities. For instance, villagers reported incidences of invading the forest to the committee for forest conservation, but no measures were taken. It was the case because people who invaded the forests were their relatives. This consequently, affected the participation of villagers in forest conservation activities. This suggests that members of the community lacked a sense of ownership over their resources. Another challenge is the lack of transport facilities for patrolling all areas of the forest. It was difficult to patrol the entire forest on foot because the forest covered a large area. The findings obtained through in-depth interviews with the key informants revealed that the increased internal and external pressure on land pushes people to invade the community forest. The study by Sirima (2022) found that population increase threatens the sustainability of forests since the increase exacerbates the demand for new farms as well as new settlement areas creating pressure on forest reserves. Population increase is associated with the rise in demand for both timber and non-timber forest products. This threatens the existence of community forests.

Implications of the Findings

The findings presented in this paper have a practical contribution to the existing environmental policies in Tanzania. The findings build on the existing evidence on the need to strengthen the down-top approach in forest management. The findings further suggest that the strengthened down-top approach would contribute to making all members of a given community participate in the management of the community forest. Furthermore, the findings have revealed important issues to be considered in the formulation of policies related to forest conservation. In this case, the findings contribute to informing the policymakers and other stakeholders on the need and importance of empowering CBFM for the sustainability of community forests in Tanzania. This is because CBFM has contributed immensely to the management of community forests in Tanzania. Moreover, the findings suggest that information sharing through village meetings is more useful than posters and village announcements. Village meetings contribute to raising awareness and hence making villagers participate in forest conservation activities. More importantly, findings are applicable and able to address the Sustainable Development Goals (SDGs), especially SDG number 15, which aims to address life on land. Specifically, SDG 15 addresses the need to protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss. The findings showed that this is

possible if we maintain the existence of forests by involving members of the community.

Conclusions and Recommendations

Farming activities enhanced the livelihood of people near the Mbangala community forest. The Mbangala villagers relied on farming as their primary livelihood strategy. Other activities like food vending and fishing supplemented farming. Generally, farming is the engine of the economy among people living in rural settings. Community-based forest management approach is the key to maintaining and improving forest conditions and the livelihood of the people. The approach created a sense of ownership of community forests among community members. This is because the approach involved members of the community in decision-making in matters related to community forests. Through this approach, members of the community in the vicinity of the forests participate in activities geared toward forest management. Village meetings played a central role in informing members of the community about the need to manage community forests through a participatory approach. The village meetings were the main tool for information sharing among people living near the Mbangala community forest. Awareness creation through village meetings stimulated community participation in community forest management.

Furthermore, the members of the community had a positive attitude toward community participation in forest management because they benefited directly

and indirectly from the forest. The Mbangala community forest was one of the sources of the village revenues. Income generated from harnessing forest resources was used to construct buildings for school classes and houses for teachers. The Mbangala community forest also ensured energy security for villagers. Villagers collected firewood from the Mbangala community forest for domestic use. The study recommends the need to empower community-based forest management for the sustainability of community forests. This is possible through involving all members of the community living in the vicinity of the forest. By involving members of the community in decision-making and participation in forest management, the CBFM will gain more power. A practical way to empower CBFM is by discouraging the top-down approach to resource management. For the sake of raising awareness among members of the community, it is important to carry out community meetings regularly.

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Conflict of Interests

The author declares no potential conflict of interest.

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