

Influence of Gender Equality in the Management Committee on Community-Led Monitoring of Borehole Water Projects

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ABSTRACT

In recent years, governments and development practitioners have emphasized the involvement of all stakeholders, especially the intended beneficiaries in the project cycle to accelerate the achievement of development objectives and sustain the realized gains. Various approaches are being used to intensify the involvement of people in the planning, implementation, monitoring, and evaluation of community-driven development interventions. In Kenya, County governments are constitutionally mandated to promote the participation of the people in development and governance at the local level. Since their inception, the County governments have been putting in place local governance structures and avenues for members of the community to participate in development projects and programs. In Kenya, these participatory local governance structures and avenues have not been widely studied. The study assessed the influence of gender equality in the management committee on community-led monitoring of borehole water projects. The study was based on the theory of participation which attributes the success of engagement between project stakeholders to four favorable factors: context, design, power, and scale of the engagement. A case study research design was used. The study population comprised the household heads, borehole water project management committee members, and officials of the County government of Meru County, as key informants. Interview schedules and a questionnaire were used to collect both qualitative and quantitative data. Systematic random sampling was used to select 38 household heads. All the 12 members of the Mbeu cattle dip community borehole management committee, one Mbeu Ward administration official, and 10 officials of the Directorate of Monitoring and Evaluation in Meru County formed part of the study sample. The study showed that superficially, there is no gender-based discrimination in community-led monitoring of borehole water projects. The study showed that County Government of Meru policies meant to promote gender equality are not well cascaded or implemented at the local level. The study concluded that the management committee is pivotal in community-led monitoring of borehole water projects and broadly, implementation of community-led development initiatives. The study recommends that authorities ought to educate members of the community about patterns of gender-based discrimination.

Keywords: Gender Equality; Management Committee; Community-Led Monitoring; Borehole Water Projects

I. INTRODUCTION

Globally, people living on USD 2 or less, have declined from 29% to 15% in the 2000s. In the least developed and developing countries, the number of people in high-income categories has increased slightly compared to developed countries Kochhar (2015). However, the living standards remain low, especially in Africa. Begashaw (2019) content that concerted efforts are required to accelerate development; especially after the 2019 Coronavirus disease (Covid-19) pandemic. The efforts include increasing the resilience of the people and greater coordination among development actors (ADB, 2021). To rapidly grow incomes and sustainably improve living standards for people across Africa, there is a need to increase the efficiency and effectiveness of development interventions across national and sub-national levels (Kochhar, 2015). Participation of the people in their development initiatives is one of the ways to increase resilience (Lechler & Cohen, 2009).

Kenya has undertaken market reforms to increase efficiency in the public-led development efforts (Hope, 2012). These have been in the form of the Sessional Paper No. 10 of 1965 on African Socialism, the return of political pluralism in the 1990s, economic recovery strategies in the early 2000s, and the roll-out of the devolved governance system in 2013 (Hope, 2012). The devolved governments in Kenya are expected to implement effective methods for the participation of members of the community in governance and development (Constitution of Kenya, 2010). As a result, communities are expected to lead in initiating various projects and programmes which respond to their own needs. For example, the National policy on community development in Kenya emphasizes the participation of all members of the community and consideration of communities' priorities in developmental funding (MEACLSP, 2017). According to the World Bank (2021), community-led development efforts such as water projects play a key role in poverty-reduction-oriented development interventions. However, World Bank (2021) points out that such

community-led efforts should be guided by transparency, extensive people involvement, and the development of local community capacity.

According to Upadhyay (2002), national and local governments should establish water user groups or committees to decentralize control of water resources to promote transparency in community water management. The committees create opportunities for water users to engage in decision-making and help governments maintain water projects by increasing demand for water resources and encouraging local government ownership of those resources. Thus, committees play a crucial role in project cycle management because they enable implementing organizations to establish direct connections with beneficiaries, realize development goals, and maximize project spending. The living standards of people are raised when development goals are met (Lechler & Cohen, 2009).

On the other hand, Mofolo and Adonis (2021) believe that committees present opportunities to revive local governance and development throughout Africa. As a result, they believe that community committees can improve accountability by ensuring that the money set aside for carrying out development functions is widely used. However, they also note that committees face difficulties in this capacity because they lack the authority and power to affect local water resource policy (GWP West Africa, 2009; Mofolo & Adonis, 2021).

In Meru County, participatory approaches are used to address the challenges encountered in the management of community borehole water projects (Meru County Government, 2018). The participatory approaches bring onboard all the community members at the village, ward, Sub-County, and County levels in the entire project cycle management. According to Woetzel (2015), providing equal opportunities for men and women to engage in economic activities can increase the global Gross Domestic Product (GDP) by between USD 5.8 and 25 trillion.

Baum, et al. (2000) posits that project implementers aiming to enhance inclusivity would first measure sub-population orientations, and then attempt to align project activities with the priorities of different groups of people. Mommen, Humphries-Waa, and Gwavuya, (2017), show that the participation of groups of people like women in community-led development projects influences the achievement of development objectives. A Study by Mommen, et al. (2017) on community-based water projects shows that about half of the water projects committees had at least one woman in the senior ranks of the committee's leadership. As a result, women-led community-based groups could be performing better despite their under-representation in senior leadership positions. Therefore, the exclusion of some groups of people in community-led development initiatives could be limiting all-inclusive human development (Kiprono, Nganga, & Kanyiri, 2015).

This paper examined gender equality in community-led monitoring of borehole water projects. The study focused on the borehole water project in Mbeu Ward, Meru County in Kenya. By assessing gender equality in community-led monitoring of borehole water projects, the study created evidence to assist development organizations and governments at national and local levels to design and implement appropriate approaches to make community-led monitoring of local development projects effective.

1.1 Statement of the Problem

Since the promulgation of the Constitution of Kenya in 2010, there has been a sharp focus on community-driven development in Kenya. The County Governments are constitutionally mandated to provide opportunities for self-governance, intensify the involvement of the people in making decisions that affect them and foster the rights of the people to take charge of their development. Although requisite local governance structures have been developed to promote community-driven development, the technical capacity within the County Governments to design and implement appropriate approaches to guarantee community-led development is still nascent. Concerns have been raised about the extent of involvement of the people, recognition of the peoples' priorities and knowledge, and the amount of local capacity created to sustain development projects.

Meru County Government expects management committees, which bring together members of the community and officials of the County Government to create a community-led mechanism for monitoring the borehole water projects. But there is an evidence gap, specifically on how the management committees influence gender equality, utilization of local knowledge, and development of local capacity within the community-led mechanism for monitoring borehole water projects. This is significant since an effective community-led mechanism for monitoring projects is achieved through proven participatory approaches. The borehole water project in Mbeu Ward, Meru County in Kenya was the first borehole water project initiated by the County Government of Meru in 2018. Therefore, assessing the influence of gender equality in the management committee on community-led monitoring of borehole water projects created evidence to assist development organizations and governments at national and local levels to design and implement appropriate approaches to make community-led monitoring of local development projects effective.

II. LITERATURE REVIEW

2.1 Gender equality in community-led monitoring of development projects

According to Woetzel (2015), the global Gross Domestic Product (GDP) can rise by between USD 5.8 and 25 trillion by granting men and women equal opportunities to participate in economic activities. Therefore, advancing gender equality may have a greater impact in developing nations (ILO, 2017). In research to evaluate women's involvement in community-led development, Fonchingong and Ngwa (2006) found structural and systematic hurdles to women's engagement in all project management phases. Despite making up a sizable portion of the population that produces food, women are unable to successfully contribute to higher levels of development planning due to ingrained traditions, low literacy rates, and a lack of property rights. Additionally, women are not given the chance to be appointed to high-ranking positions on community-based committees or organizations (Fonchingong & Ngwa, 2006).

Baum et al. (2000) demonstrate the disproportionate levels of involvement of different groups of people in different community activities. More women participate in volunteer groups' activities than men Baum, et al., (2000). The data highlights the centrality of community sub-groups' priorities. The findings by Baum, et al. (2000) imply that project implementers aiming to enhance inclusivity would first measure sub-population orientations, and then attempt to align project activities with the priorities of different groups of people.

A Study by Mommen et al. (2017) on community-based water projects shows that about half of the water projects committees had at least one woman in the senior ranks of the committee's leadership. The data further reveals that the water-project committees with women in their senior ranks tended to meet more regularly compared with those without. Although the performance of the committees can be influenced by many different factors, those that meet regularly are better placed to handle management issues than those which meet infrequently. Thus, the evidence by Mommen, et al. (2017) suggests that women-led community-based groups could be performing better despite their under-representation in senior leadership positions.

Studies in Kenya reveal the extent of women's exclusion in community-led management of public education institutions. According to Kiprono et al. (2015), the lack of participation of women does not adequately influence decisions made on the issues affecting the management of public schools. The exclusion of some groups of people in community-led development initiatives could therefore be limiting all-inclusive human development. About 15.5 million or 15.1% of children aged between five and seventeen years had 'never gone to school (NGEC, 2016). Most of these children who were not in school were from poor communities and households. The finding by Fonchingong and Ngwa (2006) that illiteracy hampers effective participation of some groups of the population in community development implies that the millions of children excluded in the education system may not be contributing to community development efforts in Kenya. Additionally, the number of women aged between fifteen and thirty-four years who were not in education, training, or employment (16.6%) was higher compared with men (11.3%). Even though more women were self-employed compared to men, the number of women in formal employment was lower compared with men (NGEC, 2016).

According to Imbaya, Nthiga, Sitati, and Lenaiyasa (2019) in conservancy management, senior leadership makes the major decisions affecting the conservancies with no or little input from the community members. The study shows that the participation of women in the conservancy's meetings was found to be the lowest. The women who attended the meetings tended to be observers rather than active contributors. The study concludes that the cultural systems do not give as much space to women compared to men. This continues to limit their contribution to community development. The findings mirror studies by Mommen, et al. (2017), Baum, et al. (2000), and Kiprono et al. (2015) which document the barriers that hamper all-inclusive community development concepts.

Tambo and Wünscher (2017) show that participatory methods like the farmer field fora enhance the participants' innovative capacity in Ghana. According to the study, farmers belonging to field fora had a 27% higher likelihood of demonstrating innovative abilities. Additionally, the fora enhanced innovative capacities by nearly 50%. The fora provided opportunities for sharing ideas amongst the members to solve complex problems (Tambo & Wünscher, 2017). The study also reveals that the innovative capacities acquired through participation in the farmer field fora did not spill over to the non-participants. Comparing this finding with that of Fonchingong & Ngwa (2006), it is evident that systemic and systematic exclusion of some groups for people in community-led project cycle management is very costly. According to Tambo & Wünscher (2017), to expand capacity at the local level, community-based projects need to widen the net for participation in development. According to Van Aalst, Cannon & Burton (2008), community risk assessment methods can help communities to adapt to the adverse effects of climate change.

Thwala (2010) evaluates the contribution of community involvement to South African community water project success. The results show that the community wants its capability to be increased in the planning of

community-based water projects. According to the survey, approximately 75 percent of the community's residents were enthusiastic about participating in water projects. More than 90% of the locals answered they would like to be involved in choosing how to manage every stage of water project management. That is, selecting, carrying out, and keeping an eye on the tasks. The study did point out that the community preferred to be engaged to complete the work rather than paying professionals to lay the groundwork.

On the other hand, de Araujo Lima Constantino et al. (2012) show that community empowerment through community-based resource monitoring is dependent on the value attached by local people to their biological resources, community rights of the resources, and political environment, and partnership with stakeholder. Increased involvement of the community in the steps of monitoring had a greater impact on empowerment (de Araujo Lima Constantino, et al., 2012).

Through case studies of 7 irrigation schemes, Mati (2008) describes the experience Kenyan smallholder farmers have had in increasing their ability. The research reveals methods for enhancing smallholder farmers' abilities in irrigated agriculture. These include extension agents from the national government, business sector activities, NGOs, and farmer peer learning. Additionally, participation programs led by NGOs and the corporate sector that included training and visits to more experienced farms boosted farmer experience and expertise. The evidence indicates that all stakeholders must work together in a determined effort to reach the targeted level of capacity.

2.2 Theoretical Framework

The study was based on the theory of participation by Reed et al. (2018). The theory describes various factors influencing the outcomes of the project engagement with stakeholders. The factors are the operating context, design, power, and scale of the engagement. Reed et al. (2018) explain that the engagement between the project and stakeholders can succeed or fail based on the way factors are handled during the engagement with stakeholders.

The theory of participation by Reed, et al. (2018) relates to the influence of the management committee in community-led monitoring of development projects. The influence of the management committee is affected by the design of the committee, the powers of the committee, context, time, and spatial scales within which the committee and the project operate. The members of the communities may perceive weak designs and structures of the management committee. When the communities do not have real opportunities to shape the design of the management committees or the project, their participation in monitoring the project through the committee is limited. Further, the powers available to the committee to enforce its decisions affect the participation of the community in the monitoring of community development projects.

The operating context as expounded by Reed, et al. (2018) can also influence the functions of a management committee. In communities with limited knowledge and skills, the management committee lacks the personnel to effectively engage the local authorities in project monitoring. Additionally, the change in regimes at the local level over time affects the way management committees are involved in project monitoring. Therefore, the four factors: context, power, design, and scalar fit can explain the study objectives. Gender equality in community-led project monitoring depends on the context in which the management committee is operating and its power thereof. The utilization of local knowledge is dependent on the extent to which the community can continue to monitor community projects on their own. This depends on the effectiveness of the management committee to engage with the County Government while monitoring the project.

III. METHODOLOGY

The study used a case study design to assess the influence of the management committee in community-led monitoring of borehole water projects. Ryder (2013), Cawley (2016), and Thwala (2010) are some of the reviewed empirical studies which used case study design to examine community participation in the management of development projects. The population of the study included the community intended to gain from the borehole water project, members of the management committee for the project, and targeted officials of the County Government of Meru. A questionnaire and interview schedules were utilized as the two study tools. Household heads and management committee members were given interview schedules, and representatives of the County Government of Meru filled out a questionnaire. The interview schedules were administered to household heads and management committee members while a questionnaire was filled in by sampled officials of the County Government of Meru. Interview schedules and the questionnaire were used to collect both qualitative and quantitative data from heads of households within the community benefiting from the borehole water project, members of the management committee, and key informants drawn from the directorate of monitoring and evaluation and Ward administration of Meru County. A systematic sampling technique was used to draw a sample of household heads who took part in the

study. The submitted data were downloaded and analyzed using STATA statistical software and Microsoft Excel. The quantitative data and emerging themes in the qualitative data were analyzed with respect to the research objectives. The qualitative information which was collected was suitable for gaining deeper insights into the influence of the management committee in community-led monitoring of borehole water projects.

IV. FINDINGS AND DISCUSSIONS

4.1 Response Rate

According to the data presented in **Table 1**, the household heads who responded to the interview schedule were 38 (100%), from a sample of 38 household heads. The researcher ensured equal gender representation in the sample. Therefore, the percentage of men (50%) and women (50%) respondents were equal. The key informants (officials of the County Government of Meru's monitoring and evaluation department and Mbeu Ward Administration) who responded to the research questionnaire were 8 (70%) from a sample of 11 key informants. There were more male key informant respondents (87.5%) than women key informant respondents (12.5%). The members of the management committee who responded to the interview schedule were 12 (100%) from a sample of 12 management committee members. There were more male management committee members respondents (66.7%) than women (33.3%). The response rate for the three categories ranged between 72.7% and 100%. This was sufficient for the research study (Mugenda & Mugenda, 2013). The data reveals that more men are involved in the monitoring of borehole water projects than women. This finding is consistent with that of Fonchingong & Ngwa (2006) showing that women do not effectively participate or lack opportunities to participate in community-led development initiatives.

Table 1: Categories and Gender of the Respondents

Respondent category	Gender						% Of target respondents	
	Men		Women		Grand Total			
	F	%	F	%	F	%	F	%
Household Heads	19	50.0%	19	50.0%	38	100.0%	38	100.0%
Key Informants	7	87.5%	1	12.5%	8	100.0%	11	72.7%
Management Committee	8	66.7%	4	33.3%	12	100.0%	12	100.0%
Grand Total	34	58.6%	24	41.4%	58	100.0%	61	95.1%

4.2 Influence of the Management Committee on Gender Equality

The findings presented in this section show the perspectives of the respondents on the presence of gender-based discrimination in community-led monitoring of the borehole water project, consideration of gender in leadership, and strategies to promote gender equality.

4.2.1 Gender-Based Discrimination

The findings presented in **Table 2** show that majority of the respondents: household heads (97%), management committee members (100%), and key informants (100%) said that there is no gender-based discrimination in community-led monitoring of the borehole water project. One (1) household head acknowledged, during the interview, that there is some form of gender-based discrimination. She said,

“They thought I had no money to fund the project”.

—Female household head during an interview on 14th December 2021.

Although this data speaks to the intentional gender-based discrimination, analysis of gender representation in community-led monitoring of borehole water projects shows that women are underrepresented. This is probably because the management committee is appointed and therefore, women are disproportionately represented. This finding is consistent with that of (Baum, et al., 2000) who found that women tend to participate more in activities or initiatives that are voluntary rather than appointive or elective initiatives. The data reveals that although there is no gender-based discrimination in community-led monitoring of borehole water projects—albeit, in intent, systemic barriers like policies and procedures at the county level inhibit women's participation in community development. This finding can be explained in terms of the theoretical framework for the study. The context within which the borehole project is monitored is favorable. The County Government of Meru should build on the positive perception to advance gender equality in community-led monitoring of borehole water projects.

Table 2: Respondents' Views on the Presence of Gender-Based Discrimination

Respondent category, gender	Response					
	No		Yes		Total	
	F	%	F	%	F	%
Household Heads	37	97%	1	3%	38	100%
Men	19	100%	0	0%	19	100%
Women	18	95%	1	5%	19	100%
Key Informants	8	100%	0	0%	8	100%
Men	7	100%	0	0%	7	100%
Women	1	100%	0	0%	1	100%
Management Committee	12	100%	0	0%	12	100%
Men	8	100%	0	0%	8	100%
Women	4	100%	0	0%	4	100%
Grand Total	57	98%	1	2%	58	100%

4.2.2 Consideration of Gender Consideration in the Management Committee Leadership

According to data presented in **Table 3**, most of the household heads (97.4%) and management committee members (100%) said that being male or female is not considered when a member is joining the management committee leadership. However, the majority of the key informants (officials of the Meru County Government monitoring and evaluation department and Mbeu Ward Administration) (100%) said that one's gender is considered when instituting the management committee leadership. One household member said,

"Men are always active in what is going on".

—Female household head during an interview on 14th December 2021.

According to the data, the County Government of Meru envisions considering one's gender when constituting management committee leadership. According to the theory of participation by Reed, et al. (2018), the vision of the County Government of Meru has not been realized either because the design of the management committee structure does not promote it, or because the members of the community do not have adequate power to achieve the vision. This finding is consistent with Fonchingong and Ngwa (2006) who found out that long-held traditions like low literacy and lack of property rights lock women out of leadership opportunities.

Table 3: Views of Different Categories of Respondents on Consideration of Gender in the Management Committee Leadership

Respondent category, gender	Response					
	No		Yes		Total	
	F	%	F	%	F	%
Household Heads	37	97.4%	1	2.6%	38	100.0%
Men	18	47.4%	1	2.6%	19	50.0%
Women	19	50.0%	0	0.0%	19	50.0%
Key informants	0	0.0%	8	100.0%	8	100.0%
Men	0	0.0%	7	87.5%	7	87.5%
Women	0	0.0%	1	12.5%	1	12.5%
Management Committee	12	100.0%	0	0.0%	12	100.0%
Men	8	66.7%	0	0.0%	8	66.7%
Women	4	33.3%	0	0.0%	4	33.3%

4.2.3 Promotion of Gender Equality

According to the data presented in **Figure 1**, most of the respondents said that the management committee needs to ensure that both men and women actively participate in monitoring the borehole water project. More women (38%) than men (15%) said that ensuring participation of both men and women would promote gender equality. More men (18%) than women (4%) said that the management committee can promote gender equality by equitably sharing

leadership positions between men and women. Several respondents also suggested listening to the views of both men and women. More women (17%) than men (4%) suggested listening to all views of the management committee. These findings confirm the study by Kiprono et al. (2015) which revealed the disproportionate representation of women in education institutions' management committees and that of Fonchingong & Ngwa (2006) who revealed systemic barriers like long-held traditions which prevented women from accessing high-ranking leadership opportunities. These findings can also be explained using the theory of participation by Reed, et al. (2018). The varying responses between men and women on how the management committee can influence gender equality show the different experiences of men and women on gender equality.

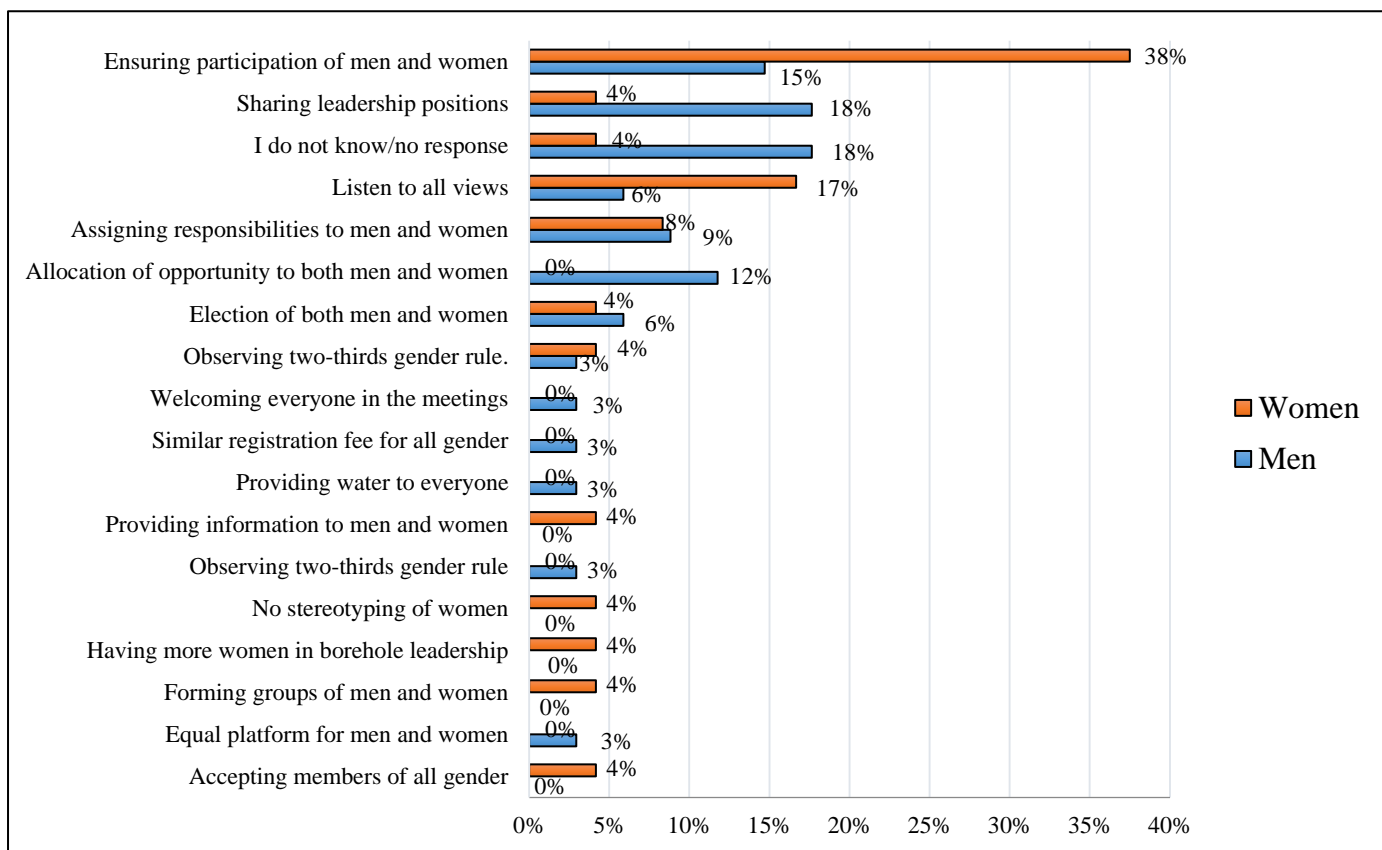


Figure 1: Gendered Distribution of Respondents' Views about the Influence of Gender Equality in the Management Committee on Gender Equality in Community-Led Monitoring of Borehole Water Project

According to the findings presented in **Figure 2**, most household heads said that the management committee should ensure both men and women participate in monitoring the borehole water project (34%) while several others (18%) did not know what the management committee should do to promote gender equality. Other household heads (13%) said that both men and women should be assigned responsibilities when monitoring the borehole water project. Most of the management committee members said that gender equality can be promoted by sharing leadership positions (33%) and listening to the views of all members (25%) during the monitoring of the borehole water project. Most of the key informants (officials of the Meru County government monitoring and evaluation department and Mbeu Ward administration) said that the management committee should equitably share leadership positions (33%) and listen to the views of all members of the community (25%). The key informants also said that an equal platform should be given to men and women (13%) and that the two-thirds gender rule in Kenya should be observed (13%). These findings can be compared with Imbaya, et al. (2019) who argues that the cultural systems do not give as much space to women compared to men. The views expressed by women tend to lean towards the expansion of the space to include more women in monitoring the borehole water project. According to the theory of participation by Reed, et al. (2018), the calls to create more space for women in community development show that opinions have changed over time.

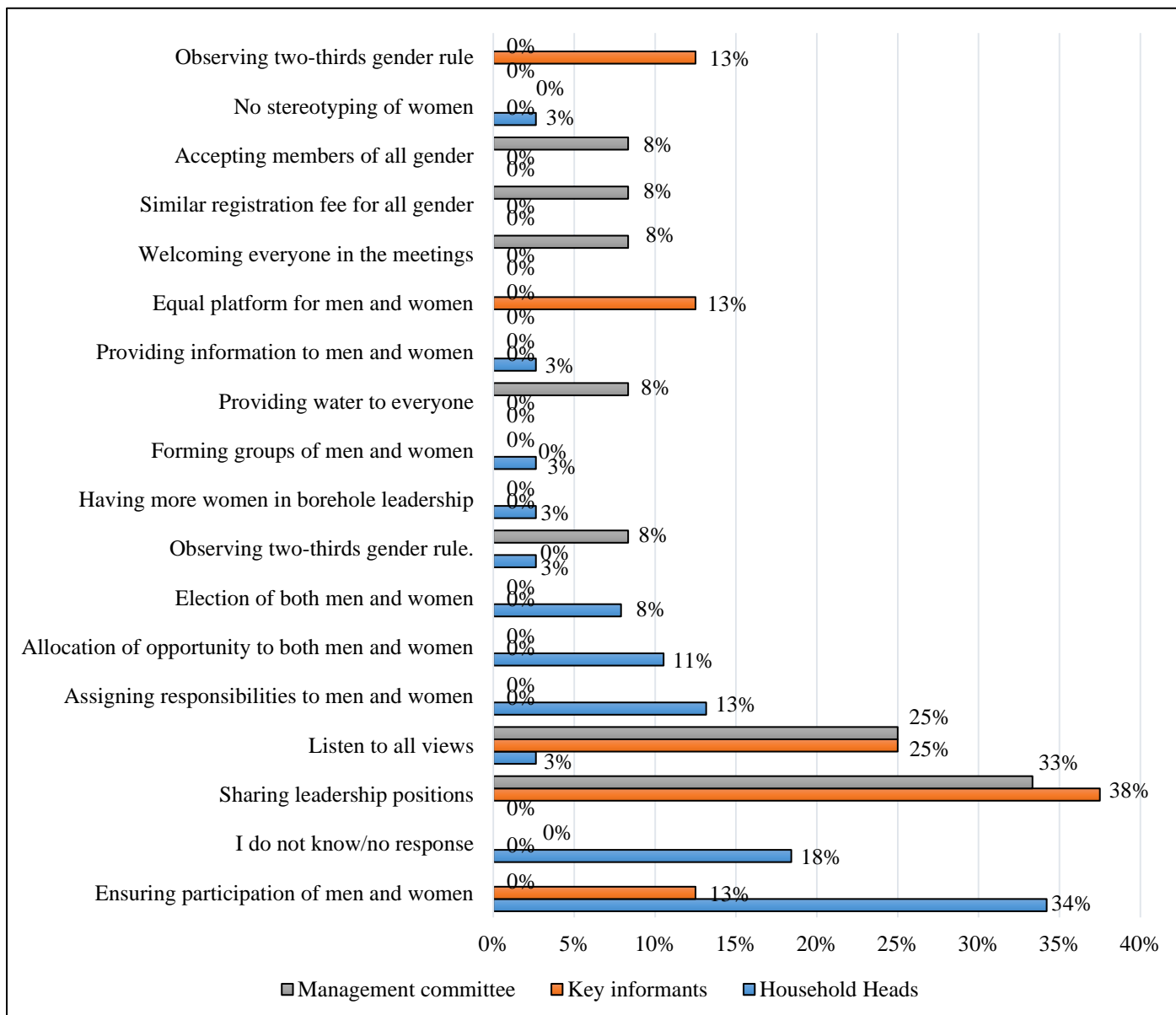


Figure 2: Distribution of respondents' categories views about the influence of the management committee on gender equality in community-led monitoring of borehole water project

According to the data presented in **Table 4**, the older members of the management committee and household heads: 50 to 60 years and 60 years and above, said that the election of both men and women and assigning responsibilities between men and women would promote gender equality. The majority of the respondents (33%) who were aged between 30 to 39 years did not state what the management committee can do to promote gender equality. The majority of the respondents (33%) who were below 30 years old: those under 25 Years and 25 to 29 years said that the management committee can assign responsibilities to men and women, provide information to men and women, and create groups that bring men and women together. The data does not show a substantial difference in the views expressed by respondents across the different age brackets. Assigning responsibilities to both men and women would eliminate cultural biases against women in accordance with the findings of Imbaya, et al. (2019). Additionally, the design of the management committee and borehole management structure at large need to be redesigned to enhance effective interaction between various subpopulations as spelt out by Reed, et al. (2018).

Table 4: Respondents' Views on Influence of the Management Committee on Gender Equality by Age Bracket

	Age bracket						
	Not stated	Under 25 Years	25 to 29 years	30 to 39 years	40 to 49 years	50 to 60 years	60 years and above
Accepting members of all gender	0%	0%	0%	0%	7%	0%	0%
No stereotyping of women	0%	0%	0%	6%	0%	0%	0%
Welcoming everyone in the meetings	0%	0%	0%	0%	0%	11%	0%
Similar registration fee for all gender	0%	0%	0%	0%	7%	0%	0%
Observing the two-thirds gender rule	13%	0%	0%	0%	0%	0%	0%
Forming groups of men and women	0%	33%	0%	0%	0%	0%	0%
Having more women in borehole leadership	0%	0%	0%	0%	7%	0%	0%
Equal platform for men and women	13%	0%	0%	0%	0%	0%	0%
Providing water to everyone	0%	0%	0%	0%	7%	0%	0%
Providing information to men and women	0%	33%	0%	0%	0%	0%	0%
Observing the two-thirds gender rule.	0%	0%	33%	0%	7%	0%	0%
Election of both men and women	0%	0%	0%	11%	0%	0%	50%
Allocation of opportunity to both men and women	0%	0%	0%	11%	7%	11%	0%
Assigning responsibilities to men and women	0%	0%	33%	11%	7%	0%	50%
Listen to all views	25%	0%	0%	11%	0%	22%	0%
I do not know/no response	0%	0%	0%	33%	7%	0%	0%
Sharing leadership positions	38%	0%	0%	0%	13%	22%	0%
Ensuring participation of men and women	13%	33%	33%	17%	33%	33%	0%

4.4.5 Sustainability of the borehole water project

According to the data presented in **Table 5**, there is consensus among household heads (81.6%), management committee members (100%), and officials of the County Government (100%) that monitoring the borehole water project through the management committee helps to sustain it in the long term. One of the household heads said that the management committee should implement the decisions arrived at through community engagement to sustain the borehole water project. She said,

“[The management committee can sustain a borehole water project by] using community resolutions in the management.”

–Female household head during an interview on December 15th, 2021

The opportunity to sustain the borehole water project through community-led monitoring is consistent with the findings of Van Aalst, Cannon, and Burton (2008) that community risk assessment methods help communities to adapt to adverse effects of climate change and to reduce the vulnerabilities of the communities. Community-led monitoring of the borehole water project can enable the community to improve their livelihoods through proper utilization of water resources available to them, over the long term. Additionally, according to the theory of participation by Reed, et al. (2018), the County Government of Meru together with the management committee should ensure that the community is aware of the sustainability agenda. This can be done through the creation of forums to enable the community to effectively participate in monitoring the borehole water project and intentional building of capacity of members on project monitoring.



Table 5: Respondents’ views on whether the management committee helps the community to sustain the borehole water project

Respondent category, gender, and age bracket	No		Yes		Total	
	F	%	F	%	F	%
Household Heads	7	18.4%	31	81.6%	38	100.0%
Men	6	15.8%	13	34.2%	19	50.0%
Women	1	2.6%	18	47.4%	19	50.0%
Key Informants	0	0.0%	8	100.0%	8	100.0%
Men	0	0.0%	7	87.5%	7	87.5%
Women	0	0.0%	1	12.5%	1	12.5%
Management Committee	0	0.0%	12	100.0%	12	100.0%
Men	0	0.0%	8	66.7%	8	66.7%
Women	0	0.0%	4	33.3%	4	33.3%

According to findings presented in **Figure 3**, most of the respondents, 54.2% of women and 32.4% of men said that the management committee should maintain the borehole water project over the long term while several others, 12.5% of women and 23.5% of men said that the management committee can involve the community in the monitoring of the borehole water project to sustain the project in the long term. Other respondents, 8.3% of women and 11.8% of men said that enforcement of payment of maintenance fees by the management committee would sustain the borehole water project. These findings do not present a substantial difference among respondents across the gender spectrum.

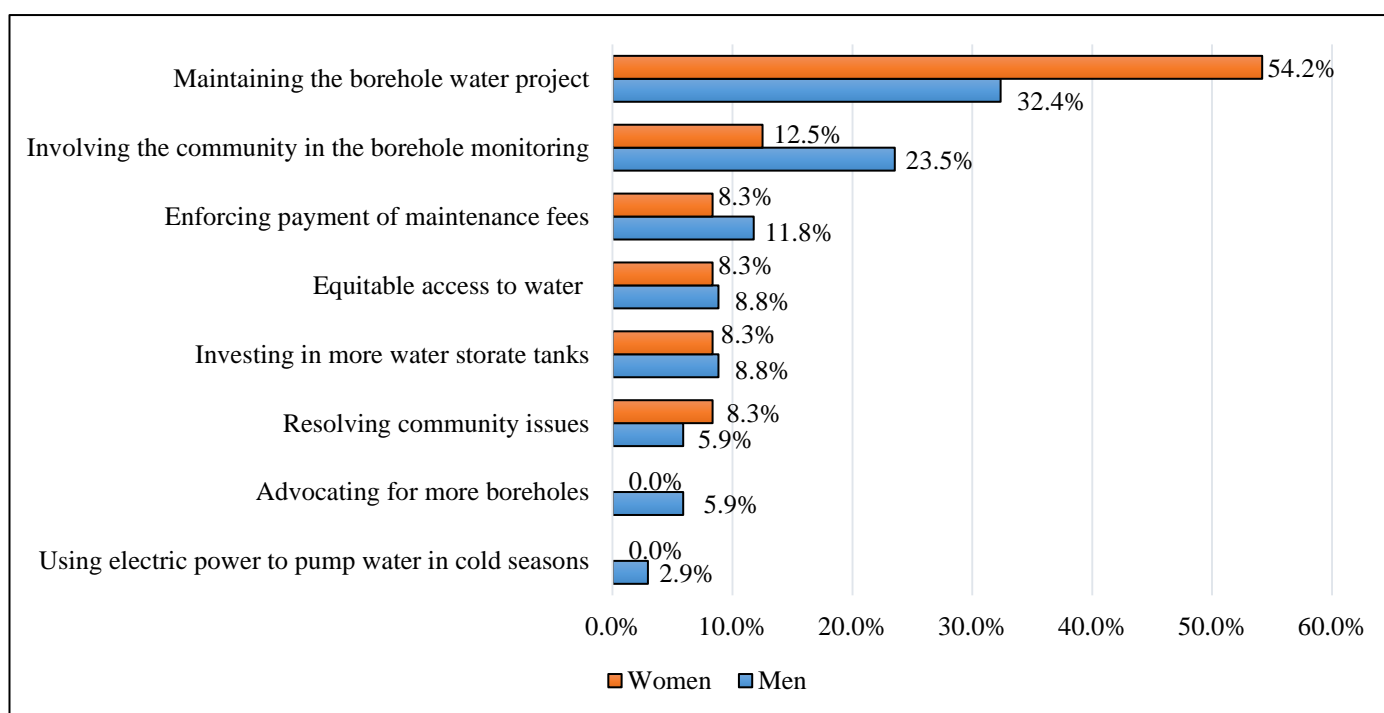


Figure 3: Gendered Respondents’ Views on the Ways the Management Committee Can Help the Community to Sustain the Borehole Water Project

According to the data in **Figure 4**, most of the respondents identified maintenance of the borehole water project, involvement of the community in monitoring the borehole water project, and enforcement of payment of maintenance fees as some of the sustainability factors of the borehole water project. Most management committee members (50%) believed that maintaining the borehole water project will sustain it. Most key informants (62.5%)



believed that the involvement of the community in monitoring the borehole water project will sustain it. On the other hand, the household heads mentioned equitable access (23.2%) to water and enhancement of the capacity of the borehole (10.5%) as some of the sustainability factors. The findings indicate that a clear roadmap needs to be developed to sustain the borehole water project. The creation of a clear borehole water project sustainability roadmap would enhance participation as stipulated by Reed, et al. (2018).

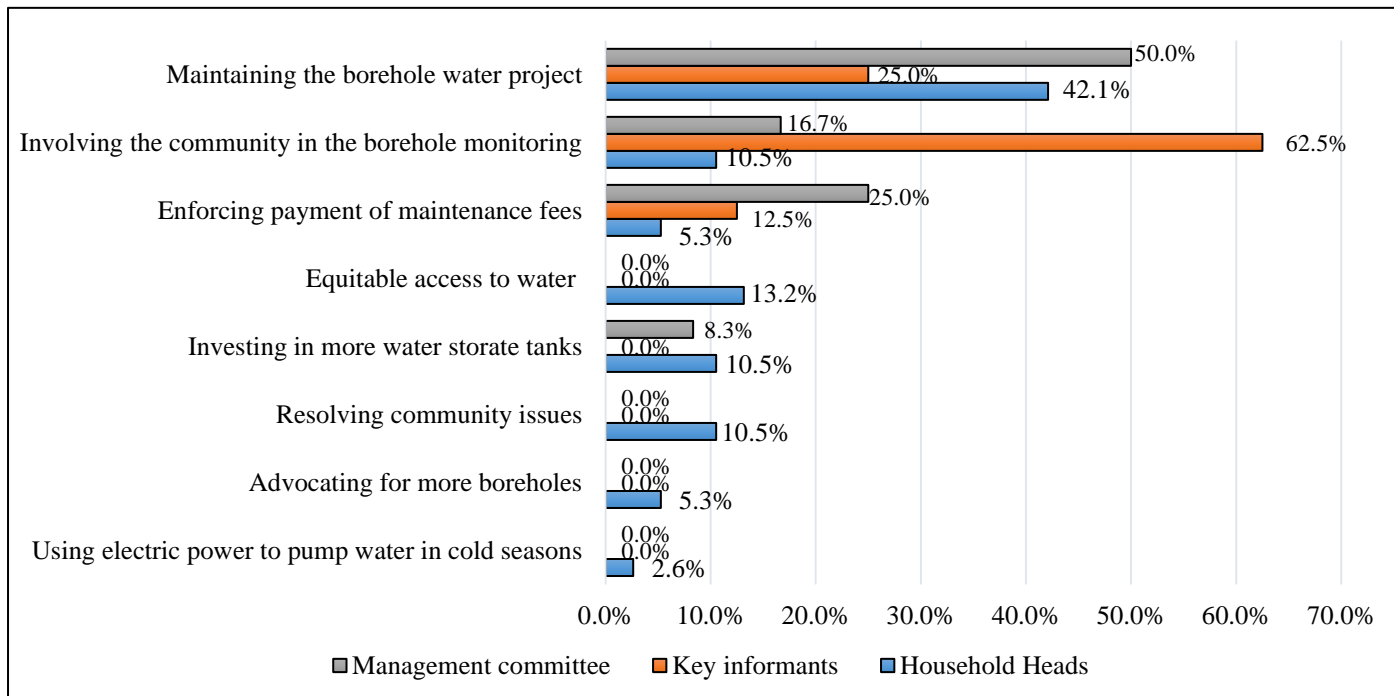


Figure 4: Distribution of Different Categories of Respondents' Views on the Ways the Management Committee Can Help the Community to Sustain the Borehole Water Project

According to the data presented in Table 6, the respondents' views about the borehole water project sustainability factors do not substantially differ across the age spectrum. Most of the respondents said that the management committee needs to lead the community to maintain the borehole water project to sustain it.

Table 6: Age Distributed Respondents' Views on the Ways the Management Committee Can Help the Community to Sustain the Borehole Water Project

Responses	Age bracket							Grand Total
	Not stated	Under 25 Years	25 to 29 years	30 to 39 years	40 to 49 years	50 to 60 years	60 years and above	
Using electric power to pump water in cold seasons	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	1.7%
Advocating for more boreholes	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	3.4%
Resolving community issues	0.0%	0.0%	33.3%	5.6%	6.7%	0.0%	50.0%	6.9%
Investing in more water storage tanks	0.0%	0.0%	0.0%	22.2%	6.7%	0.0%	0.0%	8.6%
Equitable access to water	0.0%	0.0%	0.0%	5.6%	20.0%	11.1%	0.0%	8.6%
Enforcing payment of maintenance fees	12.5%	0.0%	33.3%	11.1%	13.3%	0.0%	0.0%	10.3%
Involving the community in the borehole monitoring	62.5%	66.7%	0.0%	5.6%	13.3%	11.1%	0.0%	19.0%
Maintaining the borehole water project	25.0%	33.3%	33.3%	38.9%	33.3%	77.8%	50.0%	41.4%

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the presented findings, the management committee is pivotal in community-led monitoring of borehole water projects and broadly, implementation of community-led development initiatives. The borehole water project management committee and the County government of Meru have not succeeded in bridging the gender gap in community-led monitoring of the borehole water. In addition, the borehole water project management committee and the County government of Meru have not leveraged local knowledge during the monitoring of the borehole water project as envisioned. Similarly, the acquisition of local community capacity has been suboptimal. Notably, the measures put in place by the County Government of Meru and the borehole water project to promote gender equality, leverage local knowledge and develop local community capacity are either ineffective or have not been properly implemented at the local level.

5.2 Recommendations

5.1 Recommendations for Practice to the Authorities

The County government of Meru, the management committee, authorities, and entire development practitioners should educate members of the community about gender discrimination. The members of the community should be enabled to identify patterns of gender-based discrimination. The County Government of Meru, and the entire development fraternity should eliminate barriers that limit the participation of women in development initiatives. These should include affirmative action to ensure more women are appointed and elected to leadership positions. The County Government of Meru should also evaluate the implementation of policies and procedures aimed at promoting gender equality at the local level.

5.2 Recommendations for Beneficiaries

The beneficiaries of the borehole water project—both men and women should actively participate in management committee meetings. The beneficiaries need to rigorously assess the borehole water project leadership and call out gender disparity. The beneficiaries—who are the electorate need to hold the County Government to account with respect to the elimination of barriers hindering women's participation in development.

5.3 Recommendations for Practice by Other Stakeholders

The Government of Kenya, County governments, development partners, and implementing organizations need to work with the local community to ensure a whole-community approach to project monitoring and management. The stakeholders should engender their development indicators to stamp out all forms of gender-based discrimination. Additionally, the National government and county governments need to collaborate with non-governmental actors operating within the local communities to create synergies meant to enhance women's participation in development.

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