CHALLENGES FACING MEN AND WOMEN IN ACCESSING WATER RESOURCES IN KAJIADO COUNTY, KENYA

Wakhungu Gladys Nafula.
Master's Student, Department of Department of Sociology, Gender and development studies, Kenya University, Kenya.
Dr. Casper Masiga.
Lecturer, Department of Sociology, Gender and Development Studies, Kenyatta University, Kenya.

International Academic Journal of Social Sciences and Education (IAJSSE) | ISSN 2518-2412

Received: 25th November 2023

Published: 8th December 2023

Full Length Research

Available Online at: https://iajournals.org/articles/iajsse_v2_i3_240_253.pdf

Citation: Nafula, W. G., Masiga, C. (2023 challenges facing men and women in accessing water resources in Kajiado County, Kenya. *International Academic Journal of Social Sciences and Education (IAJSSE),* 2(3), 240-253.

ABSTRACT

The purpose of the study was to analyze the determinants of Gender responsive gender management of water projects and resources in Kajiado West Sub County, Kajiado County, Kenya. The objectives were; to determine the constraints faced by men and women in access to water resources in Kajiado West Sub County and to identify the best strategies that can help the inclusivity of genders in the management of water resources and projects in Kajiado West Sub County, Kajiado County, Kenya. The study was based on the Harvard Analytical Framework which underscores the inclusion of both genders in development projects as beneficiaries and actors. The study used a descriptive survey research design. This design was adopted because it describes things as they are without manipulation and facilitates data collection. The target population was all the residents of Kajiado West Sub County. The sample was made of 47 respondents from 5 villages. The study used two research instruments for data collection namely Focus Group Discussion (FGD) guides and interview schedule. Validity of the research instruments was determined by the researcher in collaboration with the supervisor to make sure that the instruments reflect the objectives. Instrument reliability was determined using the split-half method. The study gathered qualitative and quantitative data. Quantitative data was analyzed using descriptive statistics for example percentages, means and standard deviations. The qualitative data was analyzed according to themes and patterns formed. The findings revealed that cultural customs and illiteracy in water resource management are among the major constraints facing men and women in the management of water resources. In addition, poor access to water sources was also cited as another problem men and women face. The study recommended that gender training of a very practical kind is needed focusing on the roles and responsibilities of project managers and their partner organizations, backed up with ongoing support through networks and exchanges.

INTRODUCTION

Water is a crucial resource not just for the sustenance of all life but also to human development. Moreover, water is a necessary element for strong ecosystems affecting biodiversity, livelihoods, health and education (UNDP, 2006). In the developing countries, the role of women in the management of water resources can never be over emphasized (Damisa & Johana, 2007). Water adds to the social welfare and economic growth of human population because many socio-economic undertakings depend heavily on access to clean and sufficient quality and quantity of water (WHO/UNICEF, 2004). The Integrated Water Resources Management (IWRM) in Pakistan and India openly challenges conservative, disjointed water development and management arrangements and emphasizes on an integrated approach with

much more synchronized decision-making process across factions and scales. The approach realizes that completely top-down, supply-led, strict and segmental tactics to water management are indefensibly high economic, social and environmental expenses on people as well as on the natural setting (Vijayanthi, 2010).

In Africa specifically, many countries have continued to experience water shortage despite heavy investments from both international and local donors. According to Mkandla (2003), by early 1990's, nine African countries namely, Algeria, Botswana, Burundi, Egypt, Kenya, Libya, Rwanda, Mauritania and Tunisia had their per capita renewable water supply less than 1000 cubic meters annually and so were categorized to have inadequate water supply. Past research shows that in many African countries, water systems are misused, not well repaired, and so fail to provide reliable water supply services. Failure of water systems could be attributed to lack of sustainable water management and negligence of repair and maintenance of the existing infrastructure (Singh, 2006).

According to Alouka (2006), the third goal of the Millennium Development Goals (MDGs) "Promote gender equality and empower women" co-opted into the SDGs deals with equality between men and women in order to promote a better and sustainable development. From the World Women Conference held in Beijing in 1995, gender has been progressively used in global discussions and declarations (Galaty, 2013). Promotion of women and girls' inference and status is important for any country's development (Guide, (2006). According to Majekodunmi (2006), power imbalances in many African communities places women at a very disadvantaged position. Lack of the capability to access formal power adversely affects their negotiating capacity to get water supply as required. In order to ensure that there is equitable access to basic needs like water, there is need for a gendered approach in the community water projects management which in turn calls for proper gender analysis to understand fully the existing gender relations within the community.

According to Agwata, Gathagu and Mulwa (2014), Kenya is restricted by a yearly renewable fresh water supply of only 647 cubic meters per capita, and is categorized as a water-scarce nation. In the rural areas of Kenya only 60% of the people can access better drinking water sources (Keriko, Omoti & Kitetu, 2016). The time consuming activity of fetching and getting water obstructs women specifically from engaging in other income generating activities and makes girls not attend to school on a regular basis (Buluku, 2013).

Water resources and projects are the pillar of agriculture which is the backbone of the Kenyan economy and presently signifies about 20 percent of the GDP (Buluku, 2013). Small scale holder agriculturalists contribute over 75 percent of the total agrarian production in Kenya (USAID, 2007). According to Buluku (2013), women were estimated to own and control only one percent of the registered water projects and only 5 percent of the titles are held joint names despite the women being in much more need of the resource. It is against this background that this study was conducted to determine the challenges facing men and women in accessing water resources in Kajiado County, Kenya.

Problem of the statement

In most arid areas there are conflicts over water too much for animals, too little for household use or too polluted that may harm people, food production and environment. Practical experience demonstrates that effective, efficient and equitable management of water resources can only be achieved when both women and men are involved in consultation processes and in the management and implementation of water related services. The government of Kenya and other stakeholders have insisted on the inclusivity in the management of water resources and projects because both men and women use water differently. This is evident in the policy documents from the Kenya Constitution 2010 to the policy frameworks in the ministry of water and the county departments of water. The inclusivity and attention in reality faces a myriad of concerns and issues. Studies by Gachagu (2013), Morara, MacOpiyo & Kogi-Makau, (2014) and (Kindiki, 2015) have been conducted on gender responsive management of water resources. The studies have however been done in other places with different economic and socio-cultural dynamics compared to Kajiado County. Therefore, this study aimed to determine challenges facing men and women in accessing water resources in Kajiado County, Kenya

Objective of the study

i. Which constraints do men and women face in the access of water resources in Kajiado West Sub County, Kajiado County, Kenya?
ii. What are the best strategies that can ensure inclusivity of all genders in the management of water resources?

EMPIRICAL LITERATURE REVIEW

Constraints faced by men and women in access to water resources

According to a study by Syed (2010), there are several aspects hindering the sustainable development and access of the water projects and resources in Israel. They include the ever increasing water demand which has been deepened by the increase in population and concurrent growth of economic activities requiring water as an input such as in hydropower generation, irrigated agriculture, industries, tourism, and mining. Water scarcity is further compounded by the degradation of water sources and their catchments and also the depletion of the existing natural storage capacity. In South Africa, the degradation of water projects resources can alter gender responsibilities and relations in homes and communities for example, water degradation increases women's time for labor-intensive household tasks, such as having to walk longer distances for the collection of water (Sedibelwana, 2008). The inadequacy of water resources, such as dams and other reservoirs, exacerbates water deficiency even further. The study by Sedibelwana (2008), however disagree with findings of yet another study by Majekodunmi, (2006) which established that there were no constraints based on gender in terms of access to and control over water resources in Obudu Plateau, Nigeria. This therefore presents a gap in the inconsistency of findings and necessitates the need to carry out the current study in an effort to establish more true and current findings.

A study by Majekodunmi (2006), focused on gender mainstreaming in the management of water resources in Nigeria found that women received less than 10% of the credit for smallholder and only 1% of the total credit to agricultural sector. Improving the access of rural female farmers to productive resources such as land, water and finance can play a significant role in enhancing female farmers' productivity, food security and sustainable development. In addition, access by female farmers to management role of water projects and resources enables them to manage their environmental and socio-economic challenges in agriculture on a sustainable basis (Buor, 2004).

According to a study carried in Kenya, Kithome (2012) recorded 15community water project visits for women against 5 for men. The results revealed that targeting men for water project management is based on erroneous assumptions, one that men are farmers and secondly, that whatever they learn in community forums will effectively be shared with members of the family. In Kenya, community water project management has been decentralized to the village and community level. Decentralization of communal water projects is aimed at improving farmer's access to these services. However, the success of water project decentralization has been hindered by accessibility to all genders (Kithome, 2012).

In many African societies, the men and women's positions, interests, and concerns are diverse because of biological inconsistencies, but because society's conception of male and female roles and qualities, places the two groups in a definite association to one another. Another underlying factor causing the diverse priorities of men and women in relation to water and sanitation programs is the low value which is placed on women's time (Njiriri, 2013). According to the study by Njiriri (2013), women have traditionally been allocated most of the domestic chores, for example cooking, disposing human waste, drawing water to the point that their public life is severely limited. This has constricted their public life exacerbated further by the fact that men hold positions of authority. In Kajiado west sub County still there exists gender imbalance in water resources and project management. This is due to the reason that women are still considered as juniors to men in the society due to the cultural predispositions while men are considered as the heads of the homes as well as the main decision makers in the domestic and community levels.

Kenya's population explosion lately at 5.5 percent rate per annum has led to incredible stress on the natural resources particularly water resources where sharing is now a common phenomenon. Invasion of land in fragile areas such as wetlands and conservation areas has led to desertification in the county and breakdown of natural ecological cycles. The ever increasing demand for the available water resources has often led to human-wildlife conflict and environmental degradation (Mkandla, 2003). This study doesn't interrogate the constraints faced by men and women in accessing water resources thus leaving a gap which the current study seeks to fill.

Strategies of ensuring gender inclusivity

The Sustainable Development Goals (SDGs) have greatly improved water supply but still scores of women carry water throughout their whole life and consequently are kept out of

school and away from other economic activities and other growth opportunities (Omari, 2010). Gender disparity is an important hurdle in the achievement of the SDG targets. Realizing the goals will be difficult without diminishing the gap between women and men in terms of capacities, access and control of resources and opportunities (UNDP, 2006). According to Mayoux (2000), in the developed world, a number of serious misconstructions around gender concerns exist obstructing the effective implementation of gender related policies and strategies. Therefore, strategies of ensuring gender inclusivity must be interrogated to ensure effectiveness in access to the resources.

According to Bennett (2008), women encounter bigger difficulties than men in accessing water in large scale for irrigation purposes or for livestock breeding. This is because access to irrigation systems is often contingent on land tenure consequently there is a general assumption that women's water needs are subsumed under those of men or equate them with domestic purposes. In addition, women are often excluded from user associations, or participate only marginally. Men, in particular those from more affluent households, tend to have more external ties, including political connections to irrigation officials, and to be more active at water user association meetings giving them greater influence over water management (Bennett, 2008). This therefore means that the relevant stakeholders should come up with better strategies to ensure inclusivity by gender in the management of water resources.

Damisa and Yahana (2007), conducted a research in Nigeria and discovered that land tenancy was a factor that deters women and the youth from engagement in agriculture and management of water resources. Almost50% of the female operated farms were less than 50 acres while only 285 of male operated farms were less than 50 acres according to the same research. Even in pricing of land, gender was a key factor. The study recommended encouragement of land ownership by women as one of the strategies to improve gender disparity situation in the management of water resources. However, the study did not interrogate further strategies as well as the practicality of the above mentioned strategy.

THEORETICAL FRAMEWORK

The study was based on Harvard analytical framework. The Harvard analytical framework was developed by the Harvard Institute for International Development in partnership with the United Stated Agency for International Development (USAID) and published 1985. The Harvard Analytical Framework is often referred to as the Gender Roles Framework or Gender Analysis Framework. The framework was adopted because it aims to help planners design more efficient projects and improve overall productivity. This theory is relevant because it would map out the work and resources of men and women in a community and highlighting the main differences which are prime areas of study in the current research. This enables project planners and policy makers to make an economic case for allocating resources to women as well as men. It is used in adopting a sustainable livelihoods approach to poverty reduction. The Figure 1 presents Harvard analytical framework.

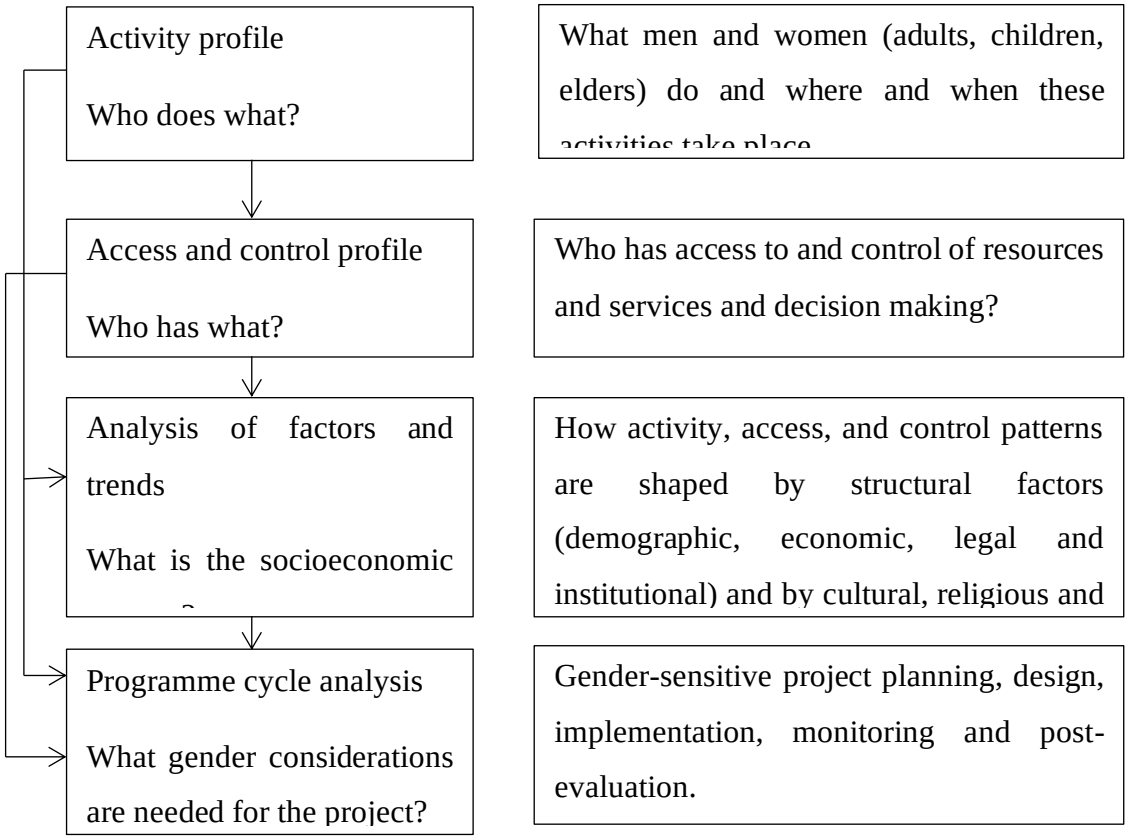

Figure 1 Gender analysis Framework

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive survey research design to undertake a gender assessment of water resources management in Kajiado West Sub County. It describes events as they are and facilitates rapid data collection and ability to understand population from sample.

Study Area

The study site was in Kajiado West Sub County in Kajiado County. Kajiado West Sub County borders Kajiado East and Kajiado Central. The issue of gender and water project management has not been pronounced because of the different roles that men and women of Kajiado West perform (GoK, 2009).

Target Population

The target population comprised of all the residents of Kajiado West Sub County and the 54 water projects in the five villages of the sub county. The unit of analysis was the individual woman or man in households.

Sample Size Determination

According to Mugenda and Mugenda (2003), 20 percent to 30 percent of the targeted population is sufficient to make a generalization. For this study, 30% of the target population was sufficient enough to make a generalization because it was representative of the target population.

The sample size and sampling procedures is presented in Table 1.

Table 1: Sample size and sampling techniques

Category	Target population	Sample size	Percentage	Sampling technique
Borehole managers	17	17	100.0%	Purposive sampling
Respondents (villagers)	270	30 (6*5)	30.0%	Simple random sampling
Total	**287**	**47**		

Source: Author, (2022)

Research Instruments

Focus Group Discussion (FGD) guide and interview guide were utilized to gather data. The FGD guide collected the demographic characteristics of the respondents and on issues of gender disparities in management of water projects in Kajiado West Sub County. The interview guide of the key informants had questions regarding gender issues and management of water resources in the sub county.

Data Analysis

The primary data obtained from the field was cleaned and edited to minimize or do away with errors made by respondents. Data was coded to put responses of questions into specific categories reducing it into manageable summaries. The quantitative data was analyzed using descriptive statistics like percentages, means and standard deviations. They were presented in tables, charts and graphs. The qualitative data from the key informant interviews and focus groups discussion was analyzed according to themes and patterns formed. They were presented in the form of narratives and verbative quotations.

RESULTS AND DISCUSSIONS

Constraints faced by men and women in Management of water projects

The study aimed to examine the constraints faced by men and women in access to water resources in Kajiado West Sub County, Kajiado County, Kenya.

Customs and traditions

The examination of water requirements for both men and women in Kajiado West offer perceptions on the problems encountered. Gender relationships between men and women as entrenched in the traditional customs present trials not only for women but also for men. Strict cultural norms in the community are a main constraint that men and women face in Kajiado west in relation to water resource management. The traditional beliefs demand that women partake in diverse responsibilities from men. It was revealed that women in the society cannot control water projects since they do not own livestock in the patriarchal society of Kajiado West Sub County.

The study findings revealed that the ethos of the Kajiado West people favours men because they have more powers in the controlling and ownership of water resources. The bulk of the residents were of the view that water is mainly meant for livestock and irrigation, and for the reason that men regulate the water projects, women are required to get up very early before sunrise to fetch water before the men come with the livestock. The study further established that men give first priority to watering their cattle even before the women can fetch water for domestic usage. This is substantiated in the following quote from Annita, 40 years old (not her real name) in the Focus Group Discussions.

"Women in this area and neighbouring areas too have to wake up as early as 4:00 AM to head to the water points in order to fetch water early enough before the men arrive with their cattle because men don't care if the women haven't fetched, they just drive in their cattle and force the women to wait for long and also the water gets dirty."

Because of such struggles, the water quality in Kajiado west has worsened to such a level that individuals have complained of health problems because the cattle pollute the water meant also for household uses. The constraints encountered by both men and women can also be implicit in terms of gender inequalities, entrenched in the cultural beliefs. The findings established that the Kajiado West area is part of the bigger Maasai settlement in which women are regarded among the possession of men. Kajiado is a male-controlled society and this means that there are massive gender disparities in many things. This is exemplified in quotes like these by Agnes, 46 years old and Jimmy, 53 years old (not their real names).

"In this our community, women and men have their roles and duties. More so no one does duties that are not theirs because there is a clear cut difference in roles by gender."

"Women and men have their responsibilities as per the Maasai traditions. The roles clearly spell out what females and males should engage themselves in the community. The roles are not similar."

To this end, women have unequal access to information in terms of water resource management to an extent that they underrepresented in decision-making. This study established from focus group discussions and key informant interviews that in most areas, women were still underrated and thus not deemed fit to be in leadership position. Nonetheless, in line with the statutory requirement for equal opportunity, men have no choice but to permit females to be among the management group.

The females in Kajiado West Sub County still encounter a lot of obstacles to partake in community development undertakings such as water projects. These obstacles comprise of denial by spouses to go to meetings that talked the subject of safe water, percipience, subsidiary responsibilities, frail management, lack of time and failure to see the benefits of their involvement.

Lack of Knowledge in Water Resource Management

Most of the residents of the Kajiado West sub county indicated that they lacked formal education and training because they either dropped out of school or did not attend school at all. A key informant Derrick (not his real name) informed the researcher the following:

"*Honestly, even some of us managers of the water projects and boreholes did not attend formal education, some don't even know how to read and write especially the elderly ones"*

Illiteracy in the sub county limits the appropriate control of water resources and projects. Additionally, many of the residents of Kajiado West argued that they have never attended school and this had restricted their comprehension of water resources management as exemplified by these quote from Rebecca, 35 years old (not her real name) during the focus group discussions:

"Most of us never went to school and thus cannot understand fully how to manage the resources, the management is therefore left for the elderly men."

Additionally, the findings displayed a gender angle in line with the awareness for water resource management. In many times, females have failed to attend school and have had to assist their mothers in fetching water. It came out also that youthful girls are habitually circumcised as per the cultural dictates. The community regards girls as resources who when married off provide them dowry in the form of livestock. Girls are not therefore accorded education opportunities.

Constraints of access to water

The study revealed that Kajiado west is classified as an ASAL and its dwellers encounter the problem of access of water. Residents in the FGDs pointed out that they had challenges accessing water points like boreholes because they are required to get up very early in the

morning and walk for many 250ilometres in search of water. These women were forced to walk long distances with children on their backs because they are also in charge of domestic chores. On the other hand, the men trek for long distances with their livestock in search of pasture and water. Rita (not her real name) was quoted in the FGD as follows:

"The roads here in Kajiado west are very poor and therefore women walk for long distances carrying babies to fetch water for home use."

Subsequently, young girls and boys are not able to go to school regularly as required. The boys have to take care of the cattle while the girls are forced to stay at home and carry out domestic tasks or assist their mothers to fetch water.

According to the Kajiado District Development Plan Report (GoK, 2008), the women and girls in Kajiado walk for long distances in search of water which is a very precious commodity. The findings of this study therefore agree with the revelations of the development plan. This is a quote from Mary (not her real name) one of FGD members.

"The problems associated with the fetching of water by women are many. The women are for the most time of the day away searching for water and therefore domestic conflicts are very common here."

The findings of the study reveal that the water quality is also not guaranteed and remains one of the major constraints that the residents of Kajiado West encounter on a daily basis. The water at the water points is contaminated by the livestock. Even though there are domestic water treatment options for example the use of reagents, the monetary constraints may restrict this. The demographic features of the respondents indicated that many of them are not of affluent income generating activities.

Strategies to ensure the inclusivity of gender

The fourth objective sought to examine the best strategies that can help the inclusivity of genders in the management of water resources and projects in Kajiado West Sub County, Kajiado County, Kenya. The researcher had 6 items in the research instruments to answer the question asked under this objective. The findings are summarized in Table 2:

Table 2: Strategies to ensure gender inclusivity in water resources management

Strategy	SA		A		D		SD	
	F	%	F	%	F	%	F	%
Enforce the one third gender rule in the constitution	17	63.0%	6	22.0%	3	11.0%	1	4.0%
Ensure that where a man is the manager of a project, the vice is a woman	21	78.0%	5	19.0%	1	4.0%	0	0.0%
Encourage women to attend adult learning centers to ensure they are empowered	14	52.0%	8	30.0%	3	11.0%	2	7.0%
The elders should abolish some restrictive cultures	20	74.0%	6	22.0%	1	4.0%	0	0.0%

The findings in Table 2 show that majority (63.0%) of respondents showed strong agreement with the strategy that the one third gender rule in the constitution should be fully enforced in the region. Only one respondent strongly disagreed that that that strategic wouldn't work. This implies that if the one third gender rule is fully implemented, then we would have many women in the management of water projects and the gender disparity would really narrow. The finding agrees with that of Lusuva 2009) in Tanzania's Usangu plains which established that one strategy to improve women participation in water projects management would be through reliance on the constitutional dictates. The finding also agrees with another one by Buluku (2013) who also established that enforcing the one third gender rule can go a long way in enhancing improvement in management of natural resources.

Further findings show that majority (78.0%) of the respondents indicated that the strategy that would close the gender gaps is that it should be ensured that where a man is the manager of a project, the vice is a woman. Only one respondent indicated that it would not work. This would guarantee women participation in the management of water resources. This finding is in agreement with that of Kithome (2012) whose study on water management in Machakos district indicated that ensuring women deputize in the management positions ensures better management and participation by all.

The study further reveals that majority (52%) of the respondents strongly agree that encouraging women to attend adult learning centers to ensure they are empowered is a good strategy to ensure their participation in management. when women are educated to higher levels, they become enlightened and empowered to participate more actively in crucial roles of their lives. The finding agrees with Mwangi (2015) who in a study in Kisamis discovered that women were not participating in management of water resources because of illiteracy.

The findings additionally show that majority (74.0%) of the respondents agree that the strategy to improve gender participation would be that the elders should abolish some restrictive cultures. The finding implies that culture is central to some of the restrictions that women face in terms of their participation in crucial roles in the society. This finding agrees with Majekodunni (2006)'s assertion that culture is a predictor of the level of participation in water resources management by gender.

Conclusions

In the management of water resources, women's contribution is not felt despite their roles and responsibilities that put them at the heart of management. Women are passively involved in water projects management and do not make decision on water resources. They are not allowed to participate in community water committees, thereby perpetuating traditional gender inequalities. Education of women is educated to empowerment hence the girl child education means more lady managers in many different spheres hence narrowing the gap. Society should be alive to the realities of the 21st century world and hence abolish demeaning customs and traditions to safeguard the participation of women in management of water projects.

Recommendations

Gender training of a very practical kind is needed focusing on the roles and responsibilities of project managers and their partner organizations, backed up with ongoing support through networks and exchanges. It is particularly important to provide support to staff within projects who have responsibility for spearheading, supporting and sustaining gender sensitive practice, such as social development staff or gender focal point.

The study also recommends that women need to learn about their rights and take charge in the process of change. Women's active involvement in water management requires strategy of empowerment. The governments at both national and county levels needs to assist in the empowerment of women by creating development policies that improve the knowledge and skills of both women and men.

REFERENCES

Agwata, J. F., Gathagu, T. W., & Mulwa, R. M. (2014). *Socioeconomic Factors Hindering the Participation of Women in Managing Water Resources in Kajiado County, Kenya*.

Galaty, J. G. (2013). The Collapsing Platform for Pastoralism: Land Sales and Land Loss in Kajiado County, Kenya. *Nomadic Peoples,* 17(2), 20-39.

Kabeer, N. (2005). Gender Equality and women empowerment: A critical Analysis of the Third Millennium Development Goal. *Gender and Development,* 13(1), 13-24.

Kombo, D. K. & Tromp, D. L. A. (2006). *Proposal writing: An Introduction.* Nairobi: Pauline's Publications Africa.

Majekodunmi, A. (2006). Using Gender Mainstreaming process to help protect Drinking water sources of the Obudu Plateau Communities in Northern state. Nigeria.

Mkandla, M., (2003). Pro-Poor Strategies to Meet Basic Needs: The Case of Women and Rainwater Harvesting in Kajiado District, Kenya. *African Water Journal, Pilot Edition UN Water/ Africa*. Addis Ababa, Economic Commission for Africa.

Mugenda, A. G & Mugenda, O. M. (2003). *Research methods. Quantitative and Qualitative research*. Nairobi: Acts Press.

Moyo, C. S. (2014). Active participation of rural women in development issues: poverty alleviation lessons for South Africa. *Gender and Behaviour, 12*(1), 5994-6002.

Njiriri, C. W. (2013). *Women's role and participation in water management: A case of Kaiti watershed in Makueni County, Kenya*. Unpublished masters' project: University of Nairobi.

Njiru, B. (2013). *Challenged Livelihoods as a Result of Water Scarcity among Maasai Women Pastoralists in Kajiado County, Kenya.* Impacts of Climate Change and Variability on Pastoralist Women in Sub Saharan Africa, 45.

Nzioka, A. (2009). The Effect of land tenure on women access and control of land in Kenya.

Ogato, G. S., Boon, E. K. & Subramani, J. (2009). *Improving Access to Productive Resources and Agricultural Services through Gender Empowerment:* A Case Study of Three Rural Communities in Ambo District, Ethiopia.

Sedibelwana, M. (2008). *Research Project: Challenges And Opportunities*: An evaluation of the
Implementation of Gender Mainstreaming in South Africa Government Nelson Mandela Metropolitan University.

Singh, N. (2008). Equitable gender participation in local water governance: An insight into institutional paradoxes. *Water Resources Management* 22(7): 925-942.

Tedla, S. & Flintan, F. (2007). Gender and Social Issues in Natural Resources Management Research for Development, Addis Ababa: *Organization for social Science Research in East and Southern Africa (OSSREA).*

UNESCO, (2008). *Education for All*: Global Monitoring Report, UNESCO.

Vedavali & Sharma. (1997). *Gender dimensions in biodiversity management*: India report Submitted to FAO, Chennai India and M.S Swaminathan research foundation. Retrieved November 1 2018 at *www.distel.cal/uganda.html.*

Vijayanthi, K.N. (2010). Women's empowerment through self-help groups: A participatory approach. *Indian Journal of Gender Studies* 9(2): 263-274.