

Gender-Responsive Resource Governance on Sustainable Resources Utilization in Murang'a County, Kenya

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ABSTRACT

The research paper examines how gender-responsive resource governance affects the use of resources in Murang'a County, Kenya. It highlights how gender disparities affect access and control over resources, collective action and cooperatives, environmental resource management, gender representation in governance structures, and sustainable utilization of resources. The study aligns with Sustainable Development Goal (SDG 5), which promotes gender equality as a foundation for sustainable development. The theoretical frameworks employed are the Harvard Analytical Framework and the Moser Gender Planning Framework. The methodology employed is a desktop review, which enabled the researcher to synthesize existing empirical literature, policy, documents, and county development reports to collect and analyze data on gendered patterns of resource access, control, distribution and management. The study establishes that although national gender policies and devolved governance structures are put in place in Murang'a County, women continue to suffer due to systemic barriers to access and control over land use, financial resources, and decision-making platforms. Men control the ownership of land and take leadership positions in both cooperatives and county governance structures, thereby contributing to unequal utilization of resources. As a result, agricultural productivity, household welfare, and environmental sustainability are weakened. However, the study identifies some local initiatives that demonstrate how inclusion of women in governance may improve sustainable resource outcomes. Such programs include gender-responsive budgeting, women-led cooperatives, training in digital skills, and climate-resilient agricultural programs. The research study concludes that gender inequalities remain deeply embedded in resource governance and utilization in the County. Therefore, to achieve sustainable utilization of resources, it is important to deliberately incorporate gender-responsiveness in all stages of the resource governance cycle. The research study recommends the strengthening of institutions, policy reform, and community-based interventions aligned with the Sustainable Development Goals.

Keywords: Gender-Responsive Governance, Sustainable Utilization of Resources, Gender

INTRODUCTION AND BACKGROUND OF THE STUDY

Murang'a County, the area under study, is located in the central part of Kenya. The County has a population of about 1,056,640 people, according to the Kenya National Bureau of Statistics [KNBS], 2019). Eighty percent of the population relies on agricultural activities, producing food crops, dairy products, tea, and coffee (Murang'a County Government, 2025). The county contributes approximately 2.3% to Kenya's Gross Domestic Product (GDP) and therefore greatly affects the national economic landscape. The county's economic dependence on natural and agricultural resources emphasizes the importance of sustainable resource utilization to ensure long-term economic growth, environmental sustainability and enhanced community well-being.

Despite its agricultural potential and economic significance, Murang'a county experiences gender inequalities in access to, control over, and management of productive resources. Existing studies indicate that land ownership is primarily controlled by men as women and girls have limited access to and control over resources (Mwangi et al., 2020). Further research studies reveal that there are fewer women in cooperative leadership and county governance structures, and female-headed households experience lower welfare outcomes as compared to male-

headed households (Mwangi et al., 2020; Maindi et al., 2025; Mwaniki, 2022). Consequently, gender inequality has direct implications for sustainable utilization of resources when women, who constitute approximately 50.4% of the county's population (KNBS, 2019), are excluded from resource governance processes. Further studies suggest that both agricultural productivity and environmental conservation are weakened when women lack access to inputs, credit extension services, and their indigenous knowledge of natural resource management is excluded from formal planning processes. In addition, household welfare declines when resource allocation decisions fail to consider the needs and priorities of all household members (Abillah et al., 2021; Maindi et al., 2025). These inequalities affect the efficiency, equity, and sustainability of resource mobilization in the county.

Sustainable resource utilization is therefore fundamental to achieving equitable economic growth for developing countries particularly Kenya. Recognizing this, the global development agenda identifies gender equality as central to sustainable development agenda. Sustainable Development Goal (SDG 5), which seeks to achieve gender equality is an important goal as it guarantees effective participation in decision-making, leadership roles, and implementing reforms to enable women attain equal rights to economic resources including access and control over land and other resources (United Nations, 2015). Gender-responsive resource governance therefore provides a framework for promoting equal access to resources and at the same time strengthening sustainable development outcome.

Globally, empirical evidence demonstrates that when women and girls have the equal access to productive resources, like land, credit, and agricultural inputs, household food security increases, agricultural productivity improves, and environmental conservation outcomes are strengthened (Food and Agriculture Organization [FAO], 2024; Gupta, 2025). Gender inequality can compromise the sustainability and efficiency of resource use, resulting to poverty, social marginalization and environmental degradation (Sangura & Kemboi, 2025; Ng'ang'a, 2024). The research findings demonstrate the importance of integrating gender perspective in resource governance to help attain sustainable development. It is against this background that this study seeks to examine the influence of gender-responsive resource governance on sustainable utilization of resources in Murang'a County. The findings are expected to contribute to policy and practice with the aim of strengthening equitable resource governance to advance sustainable development in the county.

LITERATURE REVIEW

Empirical studies reveal that, majority of women in Murang'a County face discrimination despite legal provisions for equal property rights. Men are continuously advantaged by customary inheritance practices, whereas most women do not have title deeds (Mwangi et al., 2020). Some scholars indicate that, in female-headed households, there is limited access and control over agricultural production as the land ownership is predominantly male (Mwangi et al., 2020; Kamau, 2014). As a result, women are further disadvantaged as they lack collateral to access credit, which further constrains their participation in economic activities due to lack of title deeds. A study by Muathe & Karanja, (2025) points out that access to credit significantly influences the performance of micro and small enterprises in Murang'a County. However, women entrepreneurs are disproportionately disadvantaged by collateral requirements. A similar study by Muhuthia et al., (2020) adds that access to finance is a key determinant of women's participation in entrepreneurial activities in the county.

Additionally, even though women are primarily in charge of home water management and water collection, they have limited influence over water governance decisions. According to a study by Njagi (2021), women's participation is still minimal, undermining both equity and effectiveness, even if participatory decision-making processes improve water supply management outcomes.

Cooperatives, self-help groups and farmer associations are examples of collective action initiatives. They are important platforms for they help people to share knowledge, acquire resources and access markets in rural economies like Murang'a County (Murang'a County, 2025). Some researchers found that female-headed households participate in these initiatives at lower rates than male-headed households, which signifies that participation is highly gendered. Women farmers have less access to agricultural supplies, extension services, and market connections which translate into lower access to agricultural inputs, extension services, and market linkages for women farmers (Maindi et al., 2025). Moreover, cooperatives have also helped strengthen economies, especially in the dairy and coffee sectors. For example, the Murang'a County Creameries

Cooperative Union increased daily milk intake from 27,000 litres to 52,000 litres between 2023 and 2024. The prices also increased from 31 Kenyan shillings to 50 Kenyan shillings per litre (Murang'a County Government, 2024). However, most leaders in cooperatives and governance are men, thereby limiting women's control over strategic decisions regarding production, pricing, and profit distribution (Murang'a Cooperative Development Office, 2025).

Some scholars have also highlighted the great role rural women have because of their vast indigenous knowledge of local ecosystems in areas such as plant species, water sources, soil conditions, and seasonal patterns through their daily interactions with natural resources (Abillah et al., 2021). Despite this, more studies have demonstrated that the contributions of women are frequently undervalued and excluded from formal environmental planning processes, even though they play an important role in wetlands conservation, agroforestry, watershed management and agroforestry (Abillah et al., 2021; Oginga, 2025). The use of land within catchment areas significantly affects water quality in riverine wetlands in Murang'a County, and inclusive land-use planning that incorporates the perspectives and knowledge of all community members, including women is recommended. Gatama et al. (2024) also add that women's participation in green economy initiatives is constrained by structural barriers, including limited access to finance, technology, and decision-making platforms.

The Murang'a County Climate Change Action Plan 2023–2027 therefore acknowledges the differentiated impacts of climate change on men and women and outlines strategies for gender-responsive climate adaptation, including agroforestry, drought-resistant crop varieties, and water harvesting systems (Murang'a County Government, 2023). However, the extent to which these strategies are implemented in a gender-responsive manner remains an area requiring further investigation.

Further research studies reveal that, the county governments are responsible for key resource sectors such as water, agriculture, environment, trade and health in Kenya's devolved governance. Effective resource governance requires representative and inclusive institutions. However, gender representation within county governance structures remains inadequate. A study by Mwaniki (2022) which examined the determinants of equality practices on women's leadership in Murang'a County Government, reveals that despite constitutional requirements for gender balance, men continue to dominate the County Executive Committee and other key decision-making bodies. This male dominance restricts the integration of gender-sensitive perspectives in policy formulation, budget allocation, and service delivery. As a result, gender-responsive budgeting (GRB) in Murang'a County is used as a tool to address the governance gaps because it analyzes government budgets from a gender perspective and thereby allocates resources to address the differentiated needs of women and men. Specifically, in the county, GRB has been applied in sectors such as agriculture; where subsidies are given to women farmers, health; where maternal services are provided, and education; where childcare and pre-primary programs are enhanced, thereby aligning with Kenya's Public Finance Management Act (KIPFRA, 2024). In addition, monitoring indicators for counties to track gender equity in utilization of resources, including women's access to agricultural inputs, participation in governance forums, and uptake of digital skills has been developed by the National Gender and Equality Commission (NGEC) (NGEC, 2023).

In conclusion, the reduction of gender gaps in access to agricultural inputs can increase farm yields significantly and more particularly on women's farms by 20–30%, contributing to both food security and economic (FAO, 2024). Therefore, gender-responsive allocation of resources ensures that the benefits of development are shared more broadly across the population and thereby reduces poverty and inequality (World Bank, 2024). Furthermore, women's inclusion in resource management enhances conservation outcomes by incorporating diverse knowledge systems, promoting sustainable practices, strengthening community stewardship of natural resources, and improving environmental sustainability (Abillah et al., 2021; Too et al., 2025). The intersection of the dimensions mentioned above are evident in Murang'a County as Agricultural productivity is constrained when women farmers lack access to subsidized inputs, credit, and extension services. Environmental conservation, on the other hand, is undermined when women's knowledge of local ecosystems is excluded from formal planning. Household welfare also suffers when resource allocation decisions do not account for the needs of women and children. These interconnections highlight how gender-responsive governance is essential for sustainable utilization of resources (Mwangi et al., 2020; Njagi, 2021).

Theoretical Frameworks

The Harvard Analytical Framework and the Moser Gender Planning Framework are used to examine the influence of gender-responsive resource governance on sustainable utilization of resources in Murang'a County.

The Harvard Analytical Framework

The Framework, also known as the Gender Roles Framework, is designed as a practical tool for development practitioners and planners to integrate gender analysis into project design and evaluation (Overholt et al., 1985). The Harvard analytical framework is helpful in this study because it allows people to understand how agricultural labour is distributed between men and women. Several scholars have indicated women's contributions are undervalued and unrecognized, yet they perform a significant role in agricultural labour as they are greatly involved in planting of crops, weeding, harvesting and food processing (Mwangi et al., 2020; Maindi et al., 2025). This happens despite women's primary responsibility for reproductive activities such as childcare, water collection, food preparation and household maintenance, which creates time constraints that limit their participation in economic activities and governance processes.

The Moser Gender Planning Framework

The framework was developed by Caroline Moser in 1993. It extends the analysis of gender roles to include strategic considerations (Moser, 1993). The practical gender needs include access to clean water, agricultural inputs, affordable healthcare, and childcare facilities that enable women to participate in economic activities (Murang'a County Government, 2025; Muthura, 2025). By increasing women's access to productive resources, initiatives such as the Muranga County Inua mkulima program, which offers farmers subsidized farm inputs, address real gender needs (Maarifa Center, 2023). Moreover, the equal access to land and control of property inheritance for women, equal representation in leadership roles in cooperatives and county governance, the abolition of cultural practices limiting women's participation in public life and reform of the financial system to remove gender-based barriers to access to credit are key strategic gender needs (Mwangi et al., 2020; Mwaniki, 2022; Wandia & Njoroge, 2022).

METHODOLOGY

The study used a systematic desktop review design to examine how gender-responsive management affects the sustainable use of resources in Murang'a County, Kenya. A systematic desktop review involves identifying, gathering, synthesizing, and analyzing existing published and unpublished relevant academic literature to answer a particular research question without primary data collection (Snyder, 2019). The design was suitable because it allowed the researcher to draw together existing evidence on gendered patterns of resource access, control, distribution and utilization in Murang'a County.

The study only relied on secondary data from academic, government, policy, statistical, and institutional sources. The resources included peer-reviewed journal articles and dissertations which included, (Abillah et al., 2021; Gicheha, 2024, Kipkemai et al., 2025 among others); national statistical data from Kenya National Bureau of Statistics (KNBS) (2019, 2023); and reports from national and international organizations, Murang'a County Government, and the National Gender and Equality Commission (NGEC).

The documents were selected based on specific inclusion criteria. They had to: (i) address gender, resource management, access and control, distribution and management; (ii) provide empirical or contextual evidence relevant to understanding gendered resource governance in Murang'a County; (iii) be peer-reviewed academic publications, government documents, official statistical reports, policy documents, theses and dissertations, or credible publications from recognized organizations; (iv) be sufficiently current to reflect contemporary conditions or provide important historical context to explain how gender-responsive resource governance has developed in the county.

Documents were excluded if they lacked relevant county-specific or contextually applicable information, had no clear relationship to the study objectives, lacked credible methodology or institutional backing, or did not provide meaningful insights on gender and resource management.

The collected data were analyzed using thematic content analysis, which involves identifying, analyzing, and reporting patterns in the form of themes. The research study was therefore organized around the key dimensions of the research objectives, that is, gendered resource access, control, distribution, and management; gender involvement in resource governance processes; and the effectiveness of gender-responsive strategies and initiatives.

However, reliance solely on secondary data, limits the study's ability to capture first-hand experiences of people involved in resource governance in Murang'a County.

RESULTS FINDINGS AND DISCUSSIONS

Gendered Patterns of Resource Access and Control

The literature review confirms that the access and control over resources are significantly gendered in Murang'a County. Studies have established that males own land, a very critical productive resource in the county's agrarian economy, as confirmed by a study by Mwangi et al. (2020), who established that gendered access to and control over land and dairy products significantly influence household welfare outcomes in Murang'a County, with male-headed households reporting better access to food, healthcare, education, and housing compared to female-headed households. Customary inheritance practices, which favour male heirs, perpetuate this land ownership gap despite legal provisions for gender equality in property rights.

Further research studies establish that access to water resource also reflects gendered inequalities in Murang'a county. A study by Njagi (2021) reported that approximately 41% of Murang'a residents have access to improved water sources though women who bear the primary responsibility for water collection are disproportionately affected by inadequate access. Nevertheless, women's involvement in water governance decision-making is still restricted, and these investments have not adequately addresses the gendered aspects of water insecurity (Njagi, 2021).

Women in Murang'a County are also disadvantaged by structural barriers that prevent them from accessing credit which limit their economic opportunities. The disparities are contributed by a lack of collateral such as land titles, limited financial literacy, and restrictive lending requirements as reported by (Muathe & Karanja, 2025; Muhuthia et al., 2020). A study done by Gicheha (2024) also examined financial inclusion and women's economic empowerment in Murang'a County and found that despite policy interventions aimed at expanding financial access, structural constraints continue to limit women's participation in formal financial systems. Women predominantly rely on informal financial mechanisms such as table banking, savings groups, and microfinance schemes, which provide essential household resilience but limited pathways for large-scale economic transformation (Maindi et al., 2025).

The Gender Dynamics in Resource Governance Processes

In resource mapping, women's extensive indigenous knowledge of natural resources including plant species, water sources, soil conditions, and wetland ecosystems, is frequently undervalued and excluded from formal processes. Women play critical roles in wetlands conservation and restoration in Murang'a County and their daily interactions with the environment generate practical knowledge that is essential for effective resource management (Abillah et al., 2021). However, formal mapping exercises and environmental impact assessments often fail to incorporate women's knowledge, resulting in incomplete data and suboptimal resource planning.

In the mobilization of resources, disparities exist in access and control as men dominate formal cooperatives and producer organizations, which afford greater access to agricultural inputs, financial resources, and market linkages. For example, the Murang'a County Creameries Cooperative Union, achieved significant increase in milk production and pricing, but male dominance still remained in its governance structures (Murang'a County

Government, (2024); Murang'a Cooperative Development Office, (2025). On the other hand, women, engage in informal mobilization through self-help groups, table banking, and microfinance schemes. Even though these informal mechanisms strengthen household resilience, they provide limited pathways for scaling economic activities or influencing broader resource governance decisions (Maindi et al., 2025).

Women are also under represented in planning and allocation in county governance structures which directly affects the responsiveness of development plans to women's needs. A study by Mwaniki, (2022) confirms this as men dominate the Murang'a County Executive Committee and other key decision-making bodies, despite constitutional requirements for gender balance. Abillah et al., (2021) also adds that women's participation in policy formulation and resource planning is limited due to patriarchal cultural norms, institutional barriers, and limited leadership opportunities. Resource allocation systems therefore, tend to favor individuals with assets and collateral, which further disadvantages women due to lack formal land titles (Muathe & Karanja, 2025).

There are also disparities in resource utilization based on men's and women's roles and priorities. In most cases, women prioritize household welfare, risk reduction and food security, while on the other hand men engage in profit-oriented activities (Maindi et al., 2025). As a result, the women's utilization patterns are oriented toward immediate household needs which tend to be more conservative and risk-averse. Furthermore, women's utilization choices are constrained by time poverty resulting from their triple burden of reproductive, productive, and community management roles, contributing to limited mobility and restricted access to markets and information.

The Local Initiatives Promoting Gender-Responsive Resource Governance

The local initiatives in Murang'a County include community-based organizations, climate resilience programs, digital skills training programs, financial literacy, social infrastructure and gender responsive budgeting.

First, community-based organizations in the county, such as women's self-help groups and cooperatives, have served as platforms for economic empowerment and collective voice. The programs supported by the National Government Affirmative Action Fund (NGAAF) have enabled women to establish small enterprises and community projects (Kenya News Agency, 2025). The programs have partnered with other development organizations, such as Jacobs Ladder Africa, which have expanded opportunities for women in climate-resilient sectors, including green jobs and digital entrepreneurship (Jacobs Ladder Africa, 2025).

Second, the Climate resilience programs include drought-resistant crop adoption, agroforestry and water harvesting systems as guided by the Murang'a County Climate Change Action Plan 2023–2027 (Murang'a County Government, 2023). The programs address critical environmental sustainability challenges. However, gender-responsiveness varies, and ensuring that women are fully integrated into climate adaptation planning and implementation remains an ongoing challenge

Third, digital skills training programs have also emerged as an important avenue for women's economic empowerment. In the county, there are over 500 youth and women who have been trained in digital literacy and thereby expanding opportunities in e-commerce and online work (JLC News, 2025).

Fourth, financial literacy and leadership training further strengthen women's capacity to manage resources and engage in governance processes. These initiatives represent practical interventions that address women's immediate needs while also building capabilities for longer-term transformation.

Fifth, social infrastructure has also been invested in Murang'a County that supports women's economic participation. For example, Early Childhood Development Education (ECDE) programs has been established which benefit over 38,000 learners while creating employment opportunities, reduce childcare burdens on women (Murang'a County Government, 2025). In the same manner, investments in maternal and child health services contribute to household welfare and enable women's continued participation in productive activities (Muthura, 2025).

Finally, gender-responsive budgeting has been applied in key sectors such as agriculture, health, and education, aligning with the requirement in Kenya's Public Finance Management Act for inclusive budgeting (KIPPRA, 2024). There have been subsidies and input programs for women farmers through the Inua Mkulima initiative, which benefited over 195,000 farmers (Murang'a County Government, 2025). The use of gender-disaggregated data through the Kenya Integrated Agricultural Management Information System (KIAMIS) enables tracking of whether women farmers are equitably benefiting from these programs (Maarifa Centre, 2023).

The Relationships Between Gender-Responsive Governance and Sustainable Development Outcomes

Evidence from Murang'a County confirms that agricultural outcomes, including food security and agricultural productivity are directly impacted by gendered access to productive resources, especially land, credit, and collective action platforms. According to Maindi et al. (2025), participation in collective action programs improves agricultural efficiency and livelihood outcomes, but participation rates are much lower for female-headed households. Household food security improves and agricultural productivity increases when women gain access to inputs and collective marketing opportunities (Mwangi et al., 2020). An example of how inclusive market access can raise farmer incomes is the mango value chain development, which sold over 600,000 kilograms through cooperative systems, illustrating how inclusive market access can improve farmer incomes (Murang'a County Government, 2024).

In regard to environmental sustainability, women's involvement in natural resource management enhances conservation outcomes. Abillah et al. (2021) documented women's critical contributions to wetlands conservation in Murang'a County, while Kipkemai et al., (2025) and Oginga (2025) demonstrated the interconnections between land management practices and hydrological sustainability. These findings suggest that excluding women from environmental governance results in suboptimal conservation outcomes and undermines the sustainability of resource use.

Further evidence suggests that gender-responsive resource governance contributes to poverty reduction by expanding women's economic opportunities and improving household resource allocation. With poverty rates in Murang'a County estimated at 28–36%, and higher prevalence in rural areas (KNBS, 2023), addressing gender disparities in resource access represents a significant pathway for poverty reduction aligned with SDG 1. The World Bank (2024) has similarly emphasized that addressing gender-based constraints to economic participation is essential for poverty reduction in Kenya.

In the domain of governance and institutional strengthening, gender-responsive approaches enhance the quality and legitimacy of resource governance by ensuring that diverse perspectives inform decision-making. Participatory water management, inclusive budgeting processes, and representative governance structures all contribute to more effective and accountable resource management (Njagi, 2021; KIPPRA, 2024). The adoption of monitoring tools such as NGEI indicators and gender-disaggregated data systems strengthens the evidence base for policy design and implementation (NGEI, 2023; KNBS, 2025).

CONCLUSION

In conclusion, the study establishes persistent gendered inequalities in Murang'a County in relation to use of resources. The review demonstrate that men take control over land ownership, control financial resources, and water utilization and governance. On the other hand, women bear disproportionate reproductive responsibilities, creating time poverty that limits their participation in productive and community governance roles. There are structural barriers which undermines equitable and sustainable utilization of resources. However, the local initiatives align strongly with the Sustainable Development Goals, demonstrating that sustainable utilization of resources depends on deliberate integration of gender-responsive approaches throughout the governance cycle from resource mapping and mobilization to planning, allocation, utilization, and optimization.

RECOMMENDATIONS

The research study proposes the following recommendations for policymakers, development practitioners, and community stakeholders in Murang'a County.

Firstly, women's land rights and asset ownership should be strengthened by the Murang'a County Government and the National Land Commission. Campaigns to formalize women's land rights, shared titling, and inheritance reform and legal awareness should be enhanced.

Murang'a County policymakers should establish Gender-Responsive Budgeting in health, agriculture, and education sectors. Gender budget statements should also be established and budget allocations to measurable gender equity outcomes monitored through gender-disaggregated indicators.

In cooperative development programs, women should be considered as important stakeholders. The representation of women in leadership positions should be in accordance with the constitutional two-thirds gender rule's minimum requirements.

The county should also address cultural and social barriers through community engagement for sustainable changes. The county government should support community-based projects that highlight the social and economic advantages of gender-inclusive resource governance and increase gender sensitization programs.

The development practitioners should also expand digital and financial literacy programs for women to reach more women across all sub-counties, with particular attention to rural areas with limited connectivity.

Gender-Responsive approaches in climate adaptation should also be integrated. The implementation of the Murang'a County Climate Change Action Plan should explicitly incorporate gender-responsive approaches by ensuring women's participation in climate vulnerability assessments and adaptation planning.

Finally, monitoring and evaluation systems should be strengthened as they are essential for tracking progress and ensuring accountability, and adapting strategies. The county government should institutionalize the collection and analysis of gender-disaggregated data across all sectors using tools such as KIAMIS and NGEI indicators.

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