Pathways to African Feminism and Development
Journal of the African Women Studies Centre

Land Governance and Women's Land Rights in Kenya: Advancing Gender Equality and Sustainable Development

ISSN (Online): 2309-3625

Volume 10, Issue 1, December 2025



Reimagining Women's Land Rights through Feminist Political Ecology: Tenure Security, Livelihoods, and Climate Resilience in Kenya's Tana Delta

Barrack Ogada[1]

Abstract

This paper examines how women's land tenure insecurity shapes livelihood outcomes and climate resilience in the Tana Delta, Kenya, despite progressive constitutional and statutory protections that guarantee gender equality in land rights. Drawing on Feminist Political Ecology, the study investigates how customary land governance, institutional practices, and socio-cultural norms continue to constrain women's access to, control over, and decision-making authority over land. A qualitative case study design was employed, combining two focus group discussions with smallholder women farmers, ten key informant interviews with county land officials, community elders, and civil society representatives, and a review of Kenya's National Land Policy (2009), the Community Land Act (2016), the National Climate Change Action Plan (2018–2022), judicial decisions, and relevant scholarly literature. The findings demonstrate that insecure land tenure discourages long-term investments in climate adaptation measures such as irrigation, soil conservation, agroforestry, and water harvesting. while simultaneously limiting women's access to agricultural credit, productive assets, and participation in land governance institutions. Insecure land rights, therefore, emerge not merely as a gender equality concern but as a structural constraint on sustainable livelihoods, food security, and community resilience to climate change. The study further finds that although women have developed locally grounded adaptation strategies, including seed exchange networks, community water initiatives, and collective resource management practices, their innovations remain inadequately recognised and supported within formal land governance and climate policy frameworks. The article argues that securing women's land rights should be understood as a governance imperative for climate adaptation rather than merely a social justice objective. It concludes that strengthening women's tenure security, recognising Indigenous knowledge systems, and improving the implementation of existing legal protections are essential for advancing equitable land governance and building more just and sustainable futures in Kenya.

Key words: *Climate resilience; Feminist Political Ecology; Kenya; Livelihoods; Women's land rights;*

1.0 Introduction

Land remains one of the most valuable economic, social, cultural, and ecological assets in sub-Saharan Africa. Beyond supporting agricultural production, land determines access to livelihoods, political influence, social identity, environmental stewardship, and intergenerational wealth (Boone, 2014; Ndugwa & Omusula, 2025). In Kenya, where agriculture contributes substantially to rural livelihoods and food systems, secure land tenure has become increasingly important as communities confront climate variability, population growth, competing land uses, and accelerating environmental degradation. Recent scholarship

[1] Postgraduate student at the Department of Political Science and Public Administration University of Nairobi.

demonstrates that equitable land governance is indispensable for achieving the Sustainable Development Goals (SDGs), particularly those related to poverty reduction, food security, gender equality, and climate action (Ndugwa & Omusula, 2025).

Women's access to land occupies a central place in this broader governance agenda. Although women constitute a substantial share of Kenya's agricultural labour force and play a leading role in household food production, their rights to own, inherit, control, and make decisions about land remain considerably weaker than those of men (FAO, 2023; UN Women, 2023). Importantly, recent studies caution against attributing this disparity solely to patriarchal norms. Instead, women's tenure insecurity arises from the interplay of historical land policies, plural legal systems, customary institutions, unequal access to legal remedies, and broader socioeconomic inequalities that collectively shape land governance outcomes (Meinzen-Dick et al., 2019; Ndugwa & Omusula, 2025).

This study is situated in the Tana Delta, one of Kenya's most ecologically significant yet socially contested landscapes. Located within Tana River County along Kenya's northern coast, the Delta spans approximately 130,000 hectares of floodplains, wetlands, forests, grazing areas, and mangrove ecosystems that support farming, pastoralism, fishing, and biodiversity conservation (FAO, 2017). The region experiences recurrent droughts, seasonal flooding, saltwater intrusion, and intensifying competition for land and water resources. It is also governed through multiple tenure systems, where statutory law operates alongside customary institutions that continue to regulate access to community land (FAO, 2017). These ecological and institutional characteristics make the Tana Delta an important site for examining how gender, land governance, and climate resilience intersect.

Kenya has undertaken significant legal reforms intended to strengthen equitable land governance. The Constitution of Kenya (2010) guarantees equality before the law, prohibits gender-based discrimination in property ownership, and recognizes equal inheritance rights. These constitutional protections are reinforced by the National Land Policy (Sessional Paper No. 3 of 2009), the Land Act (2012), the Land Registration Act (2012), the National Land Commission Act (2012), the Matrimonial Property Act (2013), and the Community Land Act (2016). Collectively, these laws seek to enhance tenure security and promote equitable access to land. Nevertheless, implementation has remained uneven, particularly in areas where customary institutions continue to exercise considerable authority over land allocation and dispute resolution (Cotula, 2013; Ndugwa & Omusula, 2025). Recent evidence further suggests that although the Community Land Act introduced important safeguards, including requirements for women' s representation in Community Land Management Committees, implementation has been slow, leaving many women without effective tenure security.

Understanding this implementation gap requires attention to the historical evolution of land governance in Kenya. Colonial land alienation, post-independence settlement policies, and the coexistence of statutory and customary tenure systems have produced overlapping land claims that continue to shape contemporary access and ownership (Boone, 2014; Cotula, 2013). In many customary systems, women often obtain access to land primarily through male relatives (fathers, husbands, or brothers) rather than through independent ownership. While such arrangements may provide temporary use rights, they often offer limited protection during widowhood, divorce, inheritance disputes, or large-scale land investments. Courts have increasingly affirmed women's constitutional property rights, as in *Rono v Rono & Another* [2005], which rejected discriminatory inheritance practices. Yet legal enforcement remains inaccessible to many rural women due to limited legal literacy, financial constraints, and institutional barriers. As a result, progressive legal reforms have not consistently translated into substantive tenure security at the community level.

These governance challenges are increasingly consequential in the context of climate change. The Tana Delta has experienced growing climate variability, manifested in prolonged droughts, recurrent floods, saline intrusion, declining agricultural productivity, and increasing pressure on communal natural resources (Mulonga & Olago, 2024). When land rights remain insecure, households are generally less willing or able to invest in long-term adaptation measures such as agroforestry, irrigation infrastructure, soil conservation, water harvesting, and ecosystem restoration because future access to land cannot be guaranteed (Meinzen-

Dick et al., 2019). Emerging evidence suggests that tenure security is, therefore, not merely a property rights issue but also a critical determinant of adaptive capacity and sustainable rural development.

Despite these important developments, existing scholarship has largely treated women's land rights, climate adaptation, and rural livelihoods as separate policy concerns. Fewer studies examine how insecure land tenure simultaneously shapes women's livelihood opportunities, adaptive capacity, and participation in land governance in ecologically vulnerable community land settings such as the Tana Delta. Moreover, policy, therefore, evaluate legal reforms without adequately examining how historical institutions, customary governance, and local power relations shape their implementation at the community level. This gap limits understanding of why progressive constitutional and statutory guarantees continue to produce uneven outcomes for rural women.

To address this gap, this study examines how women's land tenure security shapes livelihoods and climate resilience in Kenya's Tana Delta. Guided by Feminist Political Ecology (Rocheleau et al., 2013), the study conceptualises access to land as an outcome of interconnected social, political, ecological, and institutional power relations rather than a mere legal entitlement. Feminist Political Ecology provides an appropriate analytical lens because it explains how gender intersects with environmental governance, customary institutions, and resource access to produce differentiated experiences of vulnerability and adaptation. The framework further illuminates how women, despite structural constraints, actively develop locally grounded adaptation strategies that contribute to more resilient and sustainable rural livelihoods. By integrating empirical evidence from the Tana Delta with contemporary debates on land governance, gender justice, and climate resilience, the study contributes to ongoing discussions about how secure land rights can strengthen both women's livelihoods and equitable climate adaptation in Kenya.

2.0 Research Design

This study used a qualitative case study design to examine how women's land tenure insecurity affects livelihoods and climate resilience in the Tana Delta, Kenya. A qualitative approach was appropriate because the study sought to understand the lived experiences, perceptions, and institutional realities that shape women's access to land in a socially and culturally complex setting. Unlike quantitative approaches that primarily measure the prevalence of phenomena, qualitative research enables an in-depth exploration of how social, historical, cultural, and governance processes interact to influence women's land rights and adaptive capacities (Braun & Clarke, 2023; Creswell & Poth, 2016). The case study design enabled an intensive examination of the Tana Delta as a geographically bounded, contextually rich setting where customary tenure systems, statutory land governance, and climate-related environmental pressures converge. Case studies are particularly appropriate when researchers seek to understand contemporary social phenomena within their real-life contexts (Yin, 2018). Examining the Tana Delta as a single case, therefore, provided an opportunity to explore the complex interactions among land governance institutions, gender relations, livelihood strategies, and climate resilience.

The study was conducted in the Tana Delta, located within Tana River County, along Kenya's northern coastline. The Delta is one of East Africa's largest and most ecologically significant wetland ecosystems, supporting floodplain agriculture, pastoralism, fishing, mangrove forests, and diverse wildlife (FAO, 2017). The region experiences recurrent droughts, seasonal flooding, saltwater intrusion, and increasing competition for land and water resources, making it particularly vulnerable to climate change. Land governance in the Delta is characterised by overlapping statutory and customary tenure systems, with community institutions continuing to play a central role in land allocation and dispute resolution. These ecological and institutional characteristics make the area an appropriate setting for examining how land tenure security influences women's livelihoods and climate adaptation.

Purposive and snowball sampling were used to identify participants with relevant knowledge and lived experience of women's land rights, livelihoods, and climate adaptation. Purposive sampling enabled the selection of participants with direct experience of the issues under investigation, while snowball sampling facilitated the recruitment of additional participants through referrals from initial respondents, particularly in communities where land issues are socially sensitive (Creswell & Poth, 2016). Data were collected through two Focus Group Discussions (FGDs) with 30 smallholder women farmers, 15 in each group. These women were selected because they relied on agriculture for household livelihoods and had

firsthand experience with land access challenges and climate-related risks. In addition, ten key informant interviews (KIIs) were conducted with community leaders, including women leaders, who possessed extensive knowledge of local land governance systems, customary land administration, community decision-making processes, and women's participation in land management. These participants provided institutional and community-level perspectives that complemented the experiences shared during the FGDs.

Fieldwork was conducted over a one-month period in August 2025. Primary data were collected through Focus Group Discussions (FGDs) and Key Informant interviews (KIIs). FGDs enabled participants to collectively reflect on their experiences with land access, agricultural livelihoods, climate variability, and community responses to environmental change. These discussions also fostered interaction among participants, allowing shared experiences and differing perspectives to emerge naturally. KIIs provided complementary insights into local land governance institutions, customary tenure arrangements, community leadership structures, and the implementation of national land policies within the Tana Delta. Together, FGDs and KIIs captured both lived experiences and institutional perspectives, strengthening the credibility of the findings through methodological triangulation (Patton, 2015). To enrich the empirical evidence, primary data were complemented by an extensive desk review of relevant legislation, policy documents, judicial decisions, government reports, and peer-reviewed literature. Documents reviewed included the Constitution of Kenya (2010), the National Land Policy (Sessional Paper No. 3 of 2009), the Community Land Act (2016), the Land Act (2012), the National Climate Change Action Plan (2018–2022), and contemporary scholarly literature on gender, land governance, and climate resilience.

Data from the Focus Group Discussions, Key Informant Interviews, and documentary review were analysed using reflexive thematic analysis, following Braun and Clarke's six-phase analytical framework (Braun & Clarke, 2021, 2023). The analysis involved familiarisation with the data, generation of initial codes, identification of candidate themes, review and refinement of themes, definition and naming of themes, and production of the final analytical narrative. The thematic approach was particularly appropriate because it enabled the systematic identification of recurring patterns related to women's land tenure insecurity, customary governance, livelihood vulnerability, climate adaptation, and women's agency. Throughout the analytical process, findings from the FGDs, KIIs, and documentary sources were continuously compared to identify areas of convergence and divergence, thereby enhancing the study's trustworthiness and analytical depth.

Given the feminist orientation of this study, reflexivity was an important aspect of the research process. The researcher remained aware that discussions of land ownership, customary authority, and gender relations involve unequal power dynamics that could influence participants' willingness to share their experiences. Throughout the fieldwork, efforts were made to create respectful, inclusive discussion environments where participants could express their views freely and without coercion. Rather than treating participants as passive sources of information, the study recognized them as knowledgeable actors whose lived experiences directly contributed to knowledge production on women's land rights and climate resilience. Participation in the study was entirely voluntary. Before each Focus Group Discussion and Key Informant Interview, participants were informed about the purpose of the research, the voluntary nature of their participation, and their right to decline to answer any question or withdraw from the discussion at any stage without consequence. Participants also gave informed verbal consent before participating. To protect participants' privacy, personal identifiers were omitted during data analysis and reporting, and findings are presented in a manner that preserves participants' anonymity. Given the sensitivity of land-related disputes within the Tana Delta, particular care was taken to conduct discussions in ways that minimised the possibility of community tensions or of exposing participants to social harm.

3.0 The Findings

3.1 Women's Land Access, Tenure Insecurity and Livelihoods in the Tana Delta

The findings indicate that women's access to land in the Tana Delta remains largely mediated through customary social relations rather than through independent ownership. Across both focus group discussions, participants consistently reported that access to agricultural land was typically obtained through fathers, husbands, brothers, or other male relatives. While these arrangements enabled women to cultivate land for

household food production, they rarely conferred secure ownership or decision-making authority. Consequently, many participants perceived their rights as temporary and conditional, particularly during widowhood, divorce, family disputes, or community land reallocations.

One participant explained,

> *The land we cultivate belongs to our husbands' families. We can plant crops every season, but we cannot decide what happens to* the *land. If our husbands die or disagreements arise within the family, we can easily lose everything we have worked for.* (FGD 1, August 2025)

Rather than demonstrating that women own less than three percent of titled land in the Tana Delta, the field findings show that very few participants held land registered in their own names. This distinction is important because the national estimate that women own less than three percent of registered land applies to Kenya as a whole and should not be interpreted as a direct finding from this study (FAO, 2023). Instead, the empirical evidence demonstrates widespread tenure insecurity among women in the study area, irrespective of national ownership statistics.

Key informant interviews (KIIs) similarly revealed that community land administration remains heavily influenced by customary governance institutions. Community leaders explained that although statutory law recognizes women's equal rights to own and inherit land, many land allocation decisions are still negotiated through clan structures and community elders. In practice, women's claims often remain secondary to those advanced by male household heads or lineage representatives.

A community leader observed,

> *Our laws* recognize *equality, but in many villages land matters are still discussed by elders. Women are consulted more than before, but they rarely make the final decision on who receives land."* (KII 4, August 2025)

The findings further indicate that tenure insecurity significantly shapes livelihood decisions. Many participants reported reluctance to invest in long-term agricultural improvements because continued access to land was not guaranteed. Women explained that constructing irrigation systems, planting fruit trees, restoring degraded soils, or adopting agroforestry required investments whose benefits would be realised only over several years. Without secure tenure, such investments were perceived as highly risky. These findings align with broader scholarship showing that secure land tenure strengthens agricultural productivity by encouraging long-term investment and reducing uncertainty about future land use (FAO, 2023; Meinzen-Dick et al., 2019). Similar patterns have been documented elsewhere in Kenya, including parts of Kilifi and Kajiado Counties, where insecure tenure discourages households from investing in sustainable land management despite increasing climate variability (UN-Habitat, 2024).

Women also reported that insecure tenure limited access to agricultural finance. Most formal lenders required land titles as collateral, effectively excluding many women from loans for irrigation equipment, improved seed varieties, farm inputs, or small-scale agribusiness development. Consequently, participants often relied on informal savings groups and rotating credit associations to finance agricultural activities. Although these community-based financial arrangements provided important support, respondents acknowledged they were insufficient to finance larger climate adaptation investments.

The findings, therefore, demonstrate that tenure insecurity extends beyond questions of legal ownership. It directly influences women's livelihood opportunities, agricultural investment decisions, access to financial resources, and long-term adaptive capacity. Insecure land tenure emerges not only as a gender equality concern but also as a structural constraint on sustainable rural livelihoods in the Tana Delta. These findings support the central proposition of Feminist Political Ecology that access to environmental resources is shaped by broader systems of social power, institutional authority, and unequal governance arrangements rather than by legal entitlements alone (Rocheleau et al., 2013).

3.2 Climate Change, Tenure Insecurity, and Gendered Vulnerability in the Tana Delta

The findings demonstrate that climate change has intensified existing livelihood challenges in the Tana Delta, but its impacts are unevenly felt due to differences in access to land, productive resources, and decision-making authority. Participants consistently identified prolonged droughts, recurrent flooding, saltwater intrusion, declining soil fertility, and increasing water scarcity as the most significant environmental stressors affecting agricultural production. While these hazards affected entire communities, women reported greater livelihood insecurity because their adaptive responses were constrained by insecure land tenure and limited control over productive assets.

Participants explained that prolonged droughts had shortened growing seasons, reduced crop yields, and increased household food insecurity. Seasonal floods were similarly reported to destroy crops, erode fertile topsoil, and disrupt farming calendars. Women in villages along the lower reaches of the Tana River further observed that saltwater intrusion into freshwater sources had degraded water quality for domestic use and irrigation, forcing households to travel longer distances to find potable water.

One participant explained,

> *When the rains fail, we lose our crops first. When floods come, they wash away the farms we depend on. After that, we must walk much further to find clean water for our families.* (FGD 2, August 2025)

These experiences align with recent environmental assessments showing that the Tana Delta has experienced increasing climate variability, characterised by prolonged droughts, recurrent flooding, saline intrusion, and ecosystem degradation, all of which threaten agriculture and rural livelihoods (Government of Kenya, 2023; Mulonga & Olago, 2024). Although climate hazards affected both women and men, the findings reveal important gendered differences in exposure, responsibilities, and adaptive capacity. Women described taking primary responsibility for household food production, water collection, fuelwood gathering, and family care. During periods of drought, these responsibilities expanded considerably as water sources became more distant and agricultural productivity declined. Consequently, women experienced what participants described as a "double burden," responding simultaneously to declining farm productivity while meeting increasing household care responsibilities.

A woman's leader observed,

> *When there is* drought*, men often leave with livestock to look for pasture, but women remain behind to care for the children, find water, and somehow provide food from whatever is left.* (KII 7, August 2025)

These findings illustrate that vulnerability is socially differentiated rather than determined solely by exposure to climatic hazards. Feminist Political Ecology holds that environmental risks are mediated by unequal power relations governing access to resources, institutions, and decision-making processes (Rocheleau et al., 2013). Similarly, Ribot (2017) argues that vulnerability arises not simply from environmental events but from unequal access to rights, assets, and opportunities that enable individuals and communities to respond to those events. The experiences of women in the Tana Delta support these perspectives, showing that climate risks are amplified where tenure insecurity limits women's capacity to make independent decisions about land use and agricultural investment.

The findings further indicate that insecure land tenure discourages investment in long-term climate adaptation strategies. Many participants explained that they were reluctant to establish irrigation infrastructure, plant fruit trees, undertake soil conservation measures, or invest in agroforestry because they lacked confidence that they would retain access to the land long enough to benefit from such investments.

One participant remarked,

> *Why should I plant trees that will mature after several years if tomorrow someone can tell me that the land no* longer *belongs to me?* (FGD 1, August 2025)

This hesitation has broader implications for climate resilience. Previous research shows that secure tenure encourages farmers to adopt sustainable land management practices, invest in soil conservation, and use climate-smart agricultural technologies because they have greater confidence in future returns on their investments (FAO, 2023; Meinzen-Dick et al., 2019). Conversely, insecure tenure promotes short-term coping strategies that may meet immediate household needs but undermine long-term environmental sustainability.

Participants also reported that the lack of legally recognised land rights limited access to agricultural credit and government-supported climate adaptation programs. Because many financial institutions require registered land titles as collateral, women frequently relied on informal savings groups and rotating credit associations to finance agricultural activities. While these community initiatives provided important financial support, respondents acknowledged that their resources were insufficient for large-scale investments in irrigation, water-harvesting infrastructure, or improved agricultural technologies.

The findings demonstrate that climate vulnerability in the Tana Delta cannot be understood independently of land governance. Rather than separate challenges, climate change and tenure insecurity reinforce one another, producing cumulative disadvantages for rural women. Secure land rights are not merely legal protections but enabling conditions that enhance adaptive capacity, strengthen livelihood resilience, and encourage long-term investment in sustainable natural resource management. These findings reinforce growing international evidence that improving women's tenure security contributes to gender equality, agricultural productivity, food security, and climate resilience (FAO, 2023; UN Women, 2023).

3.3 Between Law and Practice: Women's Land Rights under Kenya's Plural Land Governance System

The findings reveal a persistent disconnect between Kenya's progressive legal framework for women's land rights and the realities of land governance in the Tana Delta. Although participants were generally aware that the Constitution of Kenya (2010) guarantees equality before the law and prohibits gender-based discrimination in property ownership, many noted that access to land remained largely determined by customary institutions rather than statutory provisions. Consequently, formal legal protections often had limited influence on everyday decisions about land allocation, inheritance, and dispute resolution.

One participant remarked,

> *We know the Constitution says women have equal rights, but in our villages, land issues are still decided by elders. What happens in practice often differs from what the law says.* (FGD 2, August 2025)

Similarly, a community leader explained:

> *When disputes arise, families typically seek solutions from clan elders before turning to government* offices *or the courts. Customary processes remain the first point of reference for many households.* (KII 3, August 2025)

These findings illustrate the operation of legal pluralism, in which statutory law coexists with customary governance systems. Although Kenya has enacted significant legislative reforms, including the Constitution of Kenya (2010), the National Land Policy (Sessional Paper No. 3 of 2009), the Land Act (2012), the Land Registration Act (2012), the Matrimonial Property Act (2013), and the Community Land Act (2016), implementation remains uneven because customary institutions continue to exercise substantial authority over community land administration (Boone, 2014; Cotula, 2013). Rather than replacing

customary governance, statutory reforms have created overlapping legal systems whose interaction often shapes women's actual access to land.

The findings further indicate that women remain underrepresented in local land governance processes. Participants reported that community meetings on land allocation, investor negotiations, and dispute resolution were predominantly attended by male elders and local leaders. Although women occasionally participated in these meetings, they rarely influenced final decisions on the allocation or use of communal land.

One woman's leader explained,

> *Sometimes women are invited to meetings, but most of the decisions have already been made. Speaking does not* always *mean your views will change the outcome.* (KII 8, August 2025)

These experiences suggest that formal representation alone does not necessarily translate into meaningful participation. Feminist Political Ecology argues that environmental governance is shaped by unequal power relations that determine whose knowledge, interests, and priorities are recognised within decision-making institutions (Rocheleau et al., 2013). The findings indicate that women's exclusion is, therefore, not simply a consequence of limited legal rights but also of institutional practices that privilege particular forms of authority and customary legitimacy.

Another issue emerging from the key informant interviews concerns the allocation of community land for commercial investment. Community leaders acknowledged that portions of communal land had, over time, been allocated for agricultural and development projects. However, participants expressed concern that consultation processes often failed to adequately engage women, particularly those whose livelihoods depended directly on farming, grazing, fishing, or the collection of natural resources.

One participant observed,

> *When land is allocated for projects, discussions usually occur among leaders. Women who cultivate those areas are informed after decisions have already been made*. (FGD 1, August 2025)

This finding reflects broader debates about land governance in Africa, where land increasingly serves not only as an economic resource but also as a political asset through which authority, investment, and development priorities are negotiated (Boone, 2014). Without transparent and inclusive governance mechanisms, women remain disproportionately vulnerable to displacement because their claims are often based on customary use rather than formally registered ownership.

Importantly, the findings do not suggest that statutory reforms have been ineffective. Rather, they indicate that implementation remains constrained by institutional capacity, limited legal awareness, and the continued legitimacy of customary governance structures. Kenya's judiciary has increasingly strengthened women's property rights through constitutional interpretation. For example, in *Rono v Rono & Another* [2005], the Court of Appeal rejected discriminatory inheritance practices and affirmed constitutional principles of equality in succession matters. More recent constitutional jurisprudence has similarly reinforced women's property rights. Nevertheless, participants noted that pursuing legal remedies remains difficult because of financial costs, geographic distance, lengthy court procedures, and limited access to legal assistance.

The findings, therefore, suggest that improving women's land tenure security requires more than legislative reform. Effective implementation depends on strengthening collaboration between statutory institutions and customary governance systems, expanding legal literacy at the community level, improving access to affordable legal aid, and ensuring that women participate meaningfully in land governance institutions rather than merely being represented numerically. These findings support recent scholarship arguing that successful land governance reforms require institutional transformation alongside legal reform

if statutory guarantees are to produce substantive gender equality (Cotula, 2013; FAO, 2023; UN Women, 2023).

3.4 Women's Agency, Indigenous Adaptation and Climate Resilience

Although the findings reveal significant structural barriers to women's land tenure security, they also show that women in the Tana Delta are active agents in developing locally grounded adaptation strategies that strengthen household livelihoods and community resilience. Rather than responding passively to environmental and institutional challenges, participants described a range of collective initiatives that mobilise indigenous knowledge, social networks, and local institutions to sustain agricultural production and manage climate-related risks.

Across the two Focus Group Discussions (FGDs), participants explained that women had established informal seed exchange networks to preserve and distribute drought-tolerant crop varieties. These community-managed seed systems enabled households to recover more quickly after droughts and floods by ensuring access to locally adapted planting materials without relying entirely on commercial seed suppliers.

One participant explained:

> *When floods or drought destroy our crops, we share seeds among ourselves before the next planting season. If we waited to buy seeds every time, many families would not plant again.* (FGD 2, August 2025)

Participants also described collaborative approaches to water management during prolonged dry periods. Women's groups organized collective labour to rehabilitate shallow wells, maintain water storage facilities, and coordinate access to scarce water resources for domestic use and small-scale farming. These initiatives reduced household vulnerability and strengthened cooperation among community members.

A woman's leader observed:

> *Working together has helped us* survive *difficult seasons. When one water point dries up, women organize themselves to repair another one or support families that have no access.* (KII 9, August 2025)

The findings further indicate that women play an important role in managing relationships between farming and pastoralist communities during periods of resource scarcity. Participants described informal negotiations over grazing routes, seasonal access to water sources, and conflict mediation at the household and community levels. Although these arrangements are rarely recognised within formal land governance structures, they significantly reduce tensions over increasingly scarce natural resources.

These findings reinforce Feminist Political Ecology's argument that environmental governance extends beyond formal state institutions and includes everyday practices through which local communities negotiate access to resources and respond to environmental change (Rocheleau et al., 2013). Women's adaptation strategies, therefore, represent not merely household coping mechanisms but locally embedded governance practices that contribute to collective resilience.

However, the findings also reveal an important paradox. While women are central actors in climate adaptation, their knowledge, labour, and innovations receive limited institutional recognition. Participants consistently reported that government agricultural programs, climate adaptation projects, and financial support mechanisms were more accessible to those with formally recognised land rights. Because many women lacked registered land ownership, they faced considerable difficulty accessing agricultural credit, extension services, irrigation support, and adaptation financing.

One participant remarked,

> *Many programs ask for documents* showing *ownership of land. We may be the ones farming every day, but without those documents we are often left out.* (FGD 1, August 2025)

These findings align with recent evidence that women's exclusion from productive resources limits the effectiveness of climate adaptation interventions, despite their central role in agricultural production and natural resource management (FAO, 2023; UN Women, 2023). They also support Agarwal's (2010) argument that women's meaningful participation in natural resource governance requires more than physical presence; it depends on their ability to influence decisions, access productive resources, and benefit equitably from institutional support.

The experiences documented in the Tana Delta, therefore, illustrate that women's agency operates within significant structural constraints. Community initiatives such as seed exchange networks, collective water management, informal savings groups, and local conflict mediation demonstrate considerable adaptive capacity. Nevertheless, these locally generated innovations remain difficult to scale because of insecure land tenure, limited financial resources, and restricted participation in formal governance institutions, which continue to constrain their long-term sustainability.

From the perspective of Feminist Political Ecology, these findings underscore the inseparability of gender justice, environmental governance, and climate resilience. Women's Indigenous adaptation practices constitute valuable forms of ecological knowledge that complement formal climate adaptation policies. However, unless land governance institutions recognise and support these locally generated innovations through secure tenure, inclusive decision-making, agricultural financing, and extension services, their transformative potential will remain constrained. Strengthening women's agency, therefore, requires institutional reforms that move beyond protecting legal rights to creating enabling conditions that allow women to participate fully in the governance of land and natural resources while enhancing community resilience to climate change.

3.5 Reimagining Women's Land Rights through Feminist Political Ecology: Implications for Livelihoods and Climate Resilience

This study demonstrates that women's land tenure insecurity in the Tana Delta cannot be understood as an isolated question of property ownership. Rather, it reflects the interplay of historical land governance systems, customary institutions, socio-cultural norms, and contemporary climate change, all of which shape women's livelihood opportunities and adaptive capacity. By integrating empirical evidence with Feminist Political Ecology (FPE), the study extends existing scholarship by showing that land rights, environmental governance, and gender justice are mutually constitutive rather than separate policy concerns.

A central contribution of this study is demonstrating that legal reform alone is insufficient to transform women's lived experiences of land tenure. Kenya has one of Africa's most progressive constitutional and statutory frameworks for gender equality in land rights, including the Constitution of Kenya (2010), the National Land Policy (Sessional Paper No. 3 of 2009), the Land Act (2012), the Land Registration Act (2012), the Matrimonial Property Act (2013), and the Community Land Act (2016). Nevertheless, the findings show that women's everyday access to land continues to be negotiated primarily through customary governance institutions. This finding aligns with broader scholarship on legal pluralism, which holds that statutory reforms often coexist with customary tenure systems whose local legitimacy often shapes actual property relations more strongly than formal legislation (Boone, 2014; Cotula, 2013). The study, therefore, suggests that improving women's tenure security requires institutional transformation alongside legislative reform.

The findings further demonstrate that insecure land tenure is a significant determinant of climate vulnerability. Participants consistently reported that uncertainty about future land access discouraged investment in irrigation infrastructure, agroforestry, soil conservation, water harvesting, and other long-term adaptation measures. This finding reinforces previous research showing that tenure security strengthens incentives for sustainable land management by increasing confidence that households will

benefit from future investments (FAO, 2023; Meinzen-Dick et al., 2019). However, the present study extends this literature by showing that tenure insecurity not only constrains agricultural investment but also narrows women's adaptation options within ecologically fragile community land systems where climate risks are increasingly severe.

The findings also contribute to contemporary debates about differentiated climate vulnerability. Rather than viewing vulnerability as a direct consequence of environmental hazards alone, the study shows that exposure to climate risks is mediated by unequal access to land, productive assets, financial resources, and governance institutions. Women's greater vulnerability, therefore, reflects structural inequalities embedded in land governance rather than inherent characteristics associated with gender. This interpretation aligns with Ribot's (2017) argument that vulnerability arises from unequal access to rights and resources, while reinforcing the central proposition of Feminist Political Ecology that environmental risks are socially and politically produced through unequal power relations (Rocheleau et al., 2013).

An equally important contribution concerns the relationship between women's agency and institutional recognition. Despite considerable structural constraints, women actively developed locally grounded adaptation strategies through seed exchange networks, collective water management, informal savings groups, and community-based conflict resolution mechanisms. These findings challenge narratives that portray rural women primarily as passive victims of climate change. Instead, they support emerging scholarship that conceptualises women as critical environmental actors whose Indigenous knowledge and collective action strengthen community resilience (Agarwal, 2010; FAO, 2023). Nevertheless, the study also reveals that these initiatives remain difficult to scale because institutional support continues to favour formally recognised landowners. Consequently, women's adaptive capacity remains constrained not by limited knowledge or innovation but by unequal access to tenure security, financial resources, agricultural services, and decision-making authority.

The findings further suggest that the relationship between land governance and climate resilience is reciprocal. Secure land rights encourage long-term environmental stewardship by creating incentives for sustainable investment, while effective climate adaptation depends on inclusive governance systems that recognise local knowledge and ensure equitable access to resources. These interconnected relationships support recent international calls to integrate gender-responsive land governance into climate adaptation planning, rather than treating gender equality and environmental sustainability as separate policy agendas (FAO, 2023; UN Women, 2023). In the context of the Tana Delta, strengthening women's tenure security would, therefore, contribute to improved agricultural productivity, enhanced food security, more sustainable natural resource management, and greater community resilience to climate change.

This study contributes to Feminist Political Ecology by showing that women's land rights should be understood as both governance institutions and adaptive resources. Existing applications of FPE have emphasised how gender shapes access to environmental resources and participation in resource governance (Rocheleau et al., 2013). Building on this perspective, the present study shows that secure land tenure is itself an adaptive asset that enables women to make long-term livelihood investments, participate meaningfully in environmental decision-making, and strengthen community resilience. This conceptualisation broadens the understanding of land rights beyond questions of ownership to encompass the institutional conditions that enable sustainable development amid increasing climate uncertainty.

4.0 Conclusion

This study examined how women's land tenure security shapes livelihoods and climate resilience in the Tana Delta, Kenya, through the lens of Feminist Political Ecology. The findings demonstrate that women's land rights cannot be reduced to questions of legal ownership or gender equality. Instead, they are embedded within broader historical, institutional, socio-cultural, and ecological processes that shape access to productive resources, participation in governance, and the capacity to respond to climate change.

Although Kenya has established an extensive legal and policy framework promoting gender equality in land ownership, the coexistence of statutory and customary tenure systems continues to produce unequal outcomes for many rural women. As a result, the benefits envisioned by constitutional and legislative reforms have not been fully realised at the community level.

The study further demonstrates that land tenure security is an essential foundation for sustainable livelihoods and climate adaptation. Women with insecure land tenure face significant constraints in investing in long-term agricultural improvements, accessing financial resources, adopting climate-smart agricultural practices, and participating meaningfully in environmental governance. Climate variability, therefore, intensifies existing inequalities by interacting with tenure insecurity, creating cumulative vulnerabilities that undermine household resilience and sustainable rural development.

At the same time, the findings reveal that women are not passive recipients of climate impacts. Through Indigenous knowledge, collective action, seed exchange networks, community water management, and local conflict resolution initiatives, women continue to develop innovative adaptation strategies that strengthen household and community resilience despite persistent structural constraints.

The study contributes to scholarship on land governance by demonstrating that secure land tenure should be understood not only as a legal entitlement but also as a critical adaptive resource that enables sustainable investment, strengthens environmental stewardship, and expands opportunities for equitable participation in governance. By integrating empirical evidence from the Tana Delta with Feminist Political Ecology, the study advances understanding of how gender, land governance, and climate resilience are mutually reinforcing dimensions of sustainable development.

These findings suggest that achieving climate resilience in Kenya requires governance approaches that move beyond legislative reform to strengthen institutional implementation, recognise women's Indigenous knowledge, promote meaningful participation in land governance, and address the structural inequalities that continue to shape access to land and natural resources. Reimagining women's land rights in this way offers an important pathway toward more just, inclusive, and sustainable futures.

5.0 Recommendations

The findings of this study demonstrate that strengthening women's land rights is fundamental to enhancing sustainable livelihoods and climate resilience in the Tana Delta. Accordingly, the following recommendations are proposed.

5.1 Strengthening the Implementation of Gender-Responsive Land Governance

The National Land Commission, the Ministry of Lands, Public Works, Housing and Urban Development, and county governments should strengthen the implementation of existing land legislation by ensuring that constitutional and statutory guarantees of women's land rights are upheld. This should include regular monitoring of compliance with the Community Land Act (2016), enhanced oversight of Community Land Management Committees, and enforcement of provisions that require women's meaningful participation in community land governance. Beyond numerical representation, women should be enabled to participate substantively in decision-making on land allocation, dispute resolution, and natural resource management.

5.2 Enhancing Access to Justice and Legal Literacy

Despite progressive legal reforms, many rural women still face barriers to enforcing their land rights. National and county governments, in collaboration with the National Legal Aid Service, civil society organisations, and community-based organisations, should expand legal literacy programs and community legal aid initiatives focused specifically on land rights, inheritance, and succession. Improving awareness of constitutional protections and increasing access to affordable legal support would strengthen women's ability to pursue legal remedies when customary practices conflict with statutory law.

5.3 Integrating Women's Land Rights into Climate Adaptation Planning

Climate adaptation policies should explicitly recognise secure land tenure as an enabling condition for resilience, rather than treating land governance and climate adaptation as separate policy domains. County Integrated Development Plans (CIDPs), County Climate Change Funds, and local climate adaptation programs should incorporate gender-responsive land governance into adaptation planning by improving women's access to climate-smart agriculture, agricultural extension services, irrigation technologies, adaptation financing, and ecosystem restoration initiatives. Such integration would enhance both agricultural productivity and long-term environmental sustainability.

5.4 Recognizing and Supporting Indigenous Women's Knowledge

The study demonstrates that women possess extensive Indigenous knowledge of seed conservation, water resource management, conflict mediation, and sustainable agricultural practices. County governments, research institutions, and development partners should formally recognise these locally developed adaptation practices by incorporating them into community-based climate adaptation programs. Supporting women's groups through technical training, financial assistance, and institutional partnerships would facilitate the scaling up of successful local innovations while preserving Indigenous ecological knowledge.

5.5 Strengthening Community-Based Land Governance

Community land governance institutions should adopt more inclusive decision-making processes that recognize women as legitimate rights holders and active contributors to environmental governance. Traditional leaders, Community Land Management Committees, and local administrative structures should collaborate to ensure that women participate meaningfully in discussions about land allocation, investment decisions, and natural resource management. Building constructive partnerships between customary institutions and statutory land governance mechanisms would strengthen accountability while respecting legitimate community governance structures.

6.0 References

Agarwal, B. (2010). *Gender and green governance: The political economy of women's presence within and beyond community forestry*. Oxford University Press.

Boone, C. (2014). *Property and political order in Africa: Land rights and the structure of politics*. Cambridge University Press.

Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide. Sage Publications.

Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health*, *24*(1), 1–6.

Constitution of Kenya. (2010). Government Printer.

Cotula, L. (2013). *The great African land grab?: Agricultural investments and the global food system*. Bloomsbury Publishing.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.

Food and Agriculture Organization. (2017). *The community land rights of women and youth in Tana River County*. FAO.

Food and Agriculture Organization. (2023). *The status of women in agrifood systems*. FAO.

Government of Kenya. (2009). *Sessional Paper No. 3 of 2009 on National Land Policy*. Government Printer.

Government of Kenya. (2012). *Land Registration Act, No. 3 of 2012*. Government Printer.

Government of Kenya. (2013). *Matrimonial Property Act, No. 49 of 2013*. Government Printer.

Government of Kenya. (2016). *Community Land Act, No. 27 of 2016*. Government Printer.

Government of Kenya. (2023). *National Climate Change Action Plan (2023–2027).* Ministry of Environment, Climate Change, and Forestry.

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). Sage Publications.

Meinzen-Dick, R., Quisumbing, A., Doss, C., & Theis, S. (2019). Women's land rights as a pathway to poverty reduction: Framework and review of available evidence. *Agricultural systems, 172,* 72-82.

Mulonga, J., & Olago, D. (2024). Vulnerability to climate change of coastal mangrove-dependent communities in the Tana Delta, Kenya: A local perspective. *Discover Environment*, *2*(1), 68.

Ndugwa, R. P., & Omusula, C. K. (2025). Institutional frameworks, policies, and land data: Insights from monitoring land governance and tenure security in the context of sustainable development goals in Kenya, Rwanda, Uganda, and Zambia. *Land*, *14*(5), 960.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, *16*(1), 1609406917733847.

Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice. Sage Publications.

Ribot, J. (2017). Cause and response: Vulnerability and climate in the Anthropocene. In *New directions in agrarian political economy* (pp. 27–66). Routledge.

Rocheleau, D., Thomas-Slayter, B., & Wangari, E. (2013). *Feminist political ecology: Global issues and local experience*. Routledge.

Rono v Rono & Another [2005] eKLR.

UN Women. (2023). *Progress on the Sustainable Development Goals: The Gender Snapshot 2023*. United Nations.

UN-Habitat. (2024). *Land tenure security and sustainable urban and rural development*. United Nations Human Settlements Program.

Yin, R. K. (2018). *Case study research and applications* (Vol. 6). Thousand Oaks, CA: Sage Publications.