



# RESILIENCE, PEACE, AND STABILITY (RPS) PROGRAMME

Study on Gender Dimensions of  
Climate Security and Adaptation in the  
Context of Peace, Resilience,  
and Stability in Kenya


June 2023

Supported by Danish International  
Development Agency (DANIDA)



MINISTRY OF  
FOREIGN AFFAIRS  
OF DENMARK





# Resilience, Peace, and Stability (RPS) Programme

## **Study on Gender Dimensions of Climate Security and Adaptation in the Context of Peace, Resilience, and Stability in Kenya**

**June 2023**

**Final Report**



## WHO WE ARE

Act! is a leading Kenyan, non-profit, Non-Governmental Organization (NGO). The organisation was established in September 2001 as Pact Kenya and rebranded in 2011 as a fully-fledged local organisation. Act! focuses on building the capacity and resilience of individuals and communities, thus empowering them to get involved in the decisions and management of their development.

### Vision

A prosperous, cohesive, and resilient society living in dignity.

### Mission

To champion lasting positive community transformation.

## Study on Gender Dimensions of Climate Security and Adaptation in the Context of Resilience, Peace, and Stability in Kenya, June 2023.

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## ABBREVIATIONS AND ACRONYMS

<b>ACDI/VOCA</b>	Agricultural Cooperative Development International & Volunteer Overseas Cooperative Assistance
<b>Act!</b>	Act Change Transform
<b>APFO</b>	African Peace Forum
<b>ASAL</b>	Arid and Semi-Arid Lands
<b>CBO</b>	Community-Based Organisation
<b>CEED</b>	Center for Environment and Energy Development
<b>CEWERU</b>	Conflict Early Warning and Response Unit
<b>CEWARM</b>	Conflict Early Warning and Response Mechanisms
<b>CISP</b>	Comitato Internazionale Per Lo Sviluppo Dei Popoli
<b>CJPC</b>	Catholic Justice and Peace Commission
<b>CNRLT</b>	Conservancies & Northern Range Land Trusts
<b>CRS</b>	Catholic Relief Services
<b>CSI</b>	Community Safety Initiative
<b>DANIDA</b>	Danish International Development Agency
<b>FCDO</b>	Foreign, Commonwealth, and Development Office
<b>DPC's</b>	District Peace Committees
<b>FAIDA</b>	Faida Investment Bank
<b>FAO</b>	Food and Agriculture Organization
<b>FBO</b>	Faith-Based Organization
<b>FIDA</b>	International Federation of Women Lawyers
<b>FGD</b>	Focus Group Discussions
<b>GBV</b>	Gender-Based Violence
<b>GBVRC</b>	Gender-Based Violence Recovery Centre
<b>GoK</b>	Government of Kenya
<b>GSA</b>	Government Security Agents
<b>GSU</b>	General Service Unit
<b>IGAD</b>	Intergovernmental Authority on Development
<b>ILRI</b>	International Livestock Research Institute
<b>JIPC</b>	Jordan Industrial Ports Company
<b>KDF</b>	Kenya Defense Forces
<b>KEFRI</b>	Kenya Forest Research Institute
<b>KECOSCE</b>	Kenya Community Support Centre
<b>KII</b>	Key Informant Interview
<b>KNBS</b>	Kenya National Bureau of Statistics



<b>MIDP</b>	Merti Integrated Development Programme
<b>NCIC</b>	National Cohesion and Integration Commission
<b>NDC</b>	National Determined Contributions
<b>NDMA</b>	National Drought Management Authority
<b>NGO</b>	Non-Governmental Organization
<b>NSC</b>	National Conservation Strategy
<b>NSPCPM</b>	National Steering Committee on Peacebuilding and Conflict Management
<b>OXFAM</b>	Oxford Committee for Famine Relief
<b>PBCM</b>	Peacebuilding and Conflict Management
<b>PWDs</b>	Persons with Disabilities
<b>RDU</b>	Rapid Deployment Unit
<b>RPS</b>	Resilience Peace and Security
<b>SGBV</b>	Sexual and Gender-Based Violence
<b>SRIC</b>	Security Research and Information Center
<b>VSOs</b>	Voluntary Services Overseas
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>USAID</b>	United States Agency for International Development
<b>WFP</b>	World Food Organisation
<b>WPS</b>	Women's Peace and Security Agenda



**Climate Adaptation:** Adjustment or preparation of natural/human systems to a new changing environment to moderate harm or exploit beneficial opportunities (Moller et al., 2022).

**Climate Security:** Refers to the physical, economic, and societal impacts associated with climate change that substantially alter political stability, human security, or national security infrastructure (Schaller et al., 2020)

**Climate Change:** Significant changes in the measure of climate lasting for an extended period including temperature, precipitation, or wind patterns that occur over several decades or longer in a given geographical area (Moller et al., 2022).

**Coping /Adaptive Capacity:** the ability of a system to adjust, modify, or change itself to mitigate future dangers (e.g., introducing drought-resistant seeds). It is defined as the “potential of the system to reduce its social vulnerability and thus to minimize the risk associated with a given hazard.” (Brooks et al., 2005)

**Exposure:** Exposure refers to the broad range of elements in an area in which a hazard may affect. These elements include infrastructure, people and their organizing systems, economic resources, etc. Thus, without these elements in an area, disaster risk does not exist (Cardona et al., 2012).

**Gender:** The socially constructed norms, roles, and behaviors for men and women in society. Gender determines social expectations for men and women, as well as access to resources. This is distinct from the concept of sex, which refers to biological and physiological characteristics (March et al., 1999).

**Resilience:** The capability to anticipate, prepare for and respond to and recover from multi-hazard threats with minimum damage to social well-being, the economy, and the environment (Moller et al., 2022).

**Security:** A state in which dangers and conditions that can cause physical, psychological, or material damage are controlled to preserve the health and well-being of individuals and the community. This can refer to national security (civil and military systems deployed by a state to protect its interests) and civil security (means implemented to protect local populations) (Adger et al., 2014).

**Vulnerability:** The degree that systems for example households, communities, and organisations are susceptible to loss, damage, suffering, and death in the event of a natural hazard or disaster. It includes the characteristics of a person or group and the environment that influence their ability to anticipate, cope with, resist, and recover from the impact of natural hazards (Blaikie et al., 1994).

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Last but not least, we appreciate the ACT! team for the critical reviews and feedback from the concept to the final report, the team includes; Mr. Mohamud Haji; Mr. Otto Marevu; Mr. Dominic Pkalya, and Dr. Michael Karanja. In a nutshell, we are grateful to everyone who supported this project in some way. Your guidance and contributions were invaluable.

Climate change is having a significant impact on people and the environment in Africa, particularly in Kenya, where the economy is heavily reliant on climate-sensitive sectors such as crop farming and livestock.

Furthermore, climate security has well-documented gendered consequences with disproportionate effects on low-income and vulnerable populations. Climate security is known to have the greatest impact on women, the most vulnerable groups in society, such as the poor, rural populations, disabled, children, older populations, migrants and refugees, and other marginalised groups. Climate change has the potential to exacerbate existing structural vulnerabilities such as gender inequalities and resource access.

Climate change is increasingly recognised as a risk multiplier in global insecurity and conflict where it has the potential to exacerbate existing security risks. According to international organisations such as the UN, environmental and climate risks are affecting peace and development in their countries of operations, with East Africa identified as one of the regions that will face the most significant security risks from climate change in the near to medium term. Climate change has been identified as a driver of conflict and violence in Kenya's Northwest, Western, and Northeast regions, particularly in the Arid and Semi-Arid Lands, which account for 85 percent of the land area.

The study aimed to provide an understanding of how climate security risks and impacts manifest across gender and population groups in Kenya to inform targeted programming measures of the program for the Act Change Transform (Act!) which includes Resilience, Peace, and Security (RPS). The study sampled six ASAL counties of Isiolo, Kilifi, Samburu, Garissa, Baringo, and Kajiado. Stakeholders at the national level were also included and 421 household survey participants, 12 focus groups, and 37 key informants provided data. A thorough literature review was also carried out.

Because climate change has been identified as a security threat multiplier, the study began by looking into climate change and resource use issues as reported by different genders and population groups. Ninety-four (94) percent of respondents reported seeing weather changes in their area as a result of extreme weather events such as increased droughts, hotter temperatures, and flooding. The majority of households rely on livestock and crop farming as their primary sources of income.

In terms of livelihood activities, crop farming was performed by slightly more women (58 percent) than men (42 percent). However, there were significant differences in livestock farming, where approximately 76 percent were men and only 24 percent were women. Respondents reported decreased outputs across all livelihood sources, with crop and livestock farming, business, and charcoal production indicating the highest reported decreases. Furthermore, 85 percent of respondents reported climate change-related decreases in animal and crop yields. Other reports were decreases in forest cover (78 percent), land production (79 percent), water availability and quantity (68 percent), and energy availability (50 percent). The study also discovered increased animal and human relocation rates of 68 percent and 54 percent, respectively.

Furthermore, the study discovered that gendered resource use and responses to climate security risks vary by county, depending on culture and environment. Crop farming, for example, is primarily practiced by women in Baringo, Isiolo, Kilifi, and Samburu counties, but is mostly practiced by men in Garissa and Kajiado counties. Similarly, livestock farming is practiced mainly by men in Baringo, Garissa, Isiolo, Kajiado, and Samburu counties, whereas it is undertaken equally by men and women in Kilifi County. Similar differences are seen in firewood/charcoal burning, with women practicing it in Baringo, Isiolo, Kajiado, and Samburu counties, while men practice it in Kilifi and Garissa counties.

It emerged that women are more affected by water availability and quantity, food security, and energy resources, whereas men are more affected by animal relocation. Men and women are affected nearly equally by population relocation, forest cover, and land production.

**Under Objective 1, the study sought to establish the key climate security issues that have specific effects on women, men, children, and people with disabilities (PWDs).**

The findings show that various forms of insecurity in the sampled ASAL counties can be linked to climate change, with cattle rustling, robbery, beating and torture, gender-based violence (GBV), forced marriages, and migration by both men and women being the most commonly reported. However, more males reported forced migration, cattle raiding, and robbery, while more females reported insecurity incidents involving sexual assault, gender-based violence, and beating/torture. Competition for natural resources, such as food and water for household use and livestock, was the most closely linked to insecurity incidents.

Significant decreases in water availability and quality, energy and land productivity, as well as significant increases in human and animal relocations, were also contributing factors to the insecurity incidents, albeit to a lesser extent.

Similarly, communities reported other forms of insecurity, such as human-wildlife conflicts during droughts, when they must, for example, enter protected forests for pasture and firewood. Government institutions in charge of security, environmental, and disaster preparedness also reported resource constraints due to the scale and frequency of the challenges.

Cattle raiding, robbery, murder, and forced migration are the most commonly reported insecurity incidents in Baringo County. The most commonly reported incidents in Garissa County are beatings and torture, while murder, cattle raiding/robbery, GBV, sexual assault, forced marriage, and migration are the most commonly reported crimes in Isiolo County. Robbery, sexual assault, and beating/torture are the most commonly reported crimes in Kilifi County, while murder, cattle raiding, forced marriage, migration, and sexual assault are the most commonly reported crimes in Samburu County.

**Objective 2 of the study sought to identify the priorities, challenges, and opportunities experienced by actors involved in the implementation of gendered climate security interventions.**

Some of the challenges include cultural barriers that limit uptake and shifts in gender norms that affect women while entrenched livelihood options for men, limit uptake of new resilience measures.

In terms of governance, it was reported that there were insufficient resources and capacity building of government and community security structures such as nyumba kumi to incorporate climate security issues. Inadequate climate security response measures exist, such as inoperable gender desks at police stations. Furthermore, insufficient self-organised community groups, particularly among men, for incident response and alternative dispute resolution, such as community negotiations, were reported. Similarly, incidents of insecurity were exacerbated by poor relationships between communities, particularly with security agents.

There are several options for responding to climate insecurity incidents. Bottom-up approaches are encouraged in all approaches, with local communities invited to participate in the design of security and climate-related solutions for their communities. Respondents in various counties use multiple insecurity redress mechanisms. Key strategies include having peacebuilding programs (47 percent), weapon acquisition (40 percent), conservation efforts (34 percent), self-organisation (27 percent), and alternative livelihood measures (24 percent). Most women report peace-building approaches and self-organization into community groups in place, whereas men mostly report security enhancement strategies. Other measures used equally by men and women include less frequent travel to reduce conflict risks, fetching water for livestock, fortifying bomas, and pursuing alternative livelihoods.

The most recommended measures to address climate security risks across all counties include focusing on climate change impacts on food, water, livelihoods, grazing resources, and energy. As a result, any

interventions to address climate change-security risks must be intricately linked to development agendas aimed at addressing poverty, unemployment, climate change impacts, and inequality to strengthen these communities' resilience. Improving relationships between communities and security agents in these counties, particularly through citizen-security dialogues, intergenerational dialogues, and inter-community dialogues.

Based on the study's findings, the following windows of opportunity and practical recommendations for advancing the gendered climate security agenda in Kenya were identified. Gender-specific recommendations are discussed further, and pilot projects that coordinate across multiple donors and sectors are recommended to avoid overstretching the programmes. It is critical to balance the nexus of water, food, and energy supplies in these communities, as well as improve policy and governance of these resources:

**I. Advocacy programmes for women to access land and take up alternative livelihood options:**

The study revealed that women continue to face limited access/representation in natural resource management decisions across the surveyed ASAL counties. Such pilot programmes would aim to reduce these barriers by ensuring their representation, for example, in grazing committees, peace committees, water and resource users associations, and or local structures like baraza la wazee and nyumba kumi.

**II. Support for development of locally designed agreements and policies:**

The programme could pilot support for the development of locally designed resource management policies such as grazing plans, grazing and paddocking committees, forest scouts, and environment women leagues to carefully plan, protect, and control resource usage for the benefit of all community members through the National Conservation Strategy (NSC).

**III. Support implementation of peace agreement actions:**

As a pilot, this could include support for the implementation of actions identified in the Samburu-Marsabit peace agreement or the Amaya Triangle Initiative (which includes Baringo, Isiolo, Laikipia, and Samburu counties). This assistance would include among other things, bringing community members, particularly young men and security personnel together for interagency and intergenerational dialogues such as quarterly or annual joint barazas and peace caravans.

**IV. Mainstreaming of gender in peace agreements:**

The programme should pilot the incorporation of gender into the identified peace treaties. A review of the Samburu-Marsabit Peace Agreement reveals a high-level recognition of climate change-related conflicts, but no mention of gender. A localised approach that includes marginalised groups such as women, people with disabilities (PWDs), children, minority groups, environmental defenders, and indigenous people who can identify their key issues and priorities is recommended in these peace agreements and negotiations.

**V. Support through the NCIC and NSC to adopt the legal framework on Alternative Dispute Resolution (ADR) mechanisms.**

The study found that local groups have resolved conflicts and some have been accused of denying or delaying justice for victims. Supporting the NSC and NCIC in adopting the legislative framework on Alternative Dispute Resolution mechanisms is thus recommended at the national level. Given the aforementioned challenges in ADR, additional mediation and arbitration training could be provided for local groups charged with resolving disputes, particularly those involving livestock, water, and natural resources, as well as sexual assault allegations brought to the courts.

### **VI. Forced migration is a key emerging security issue:**

Forced migration in the form of climate-related livestock relocation has been reported across counties, primarily affecting men. A programme could be piloted to closely monitor livestock movement during relocation via an information/hot line incident reporting platform linked to security agencies and monitored nationally to see if effective responses are being implemented.



## 1.1 Overview of Resilience Peace and Stability (RSP) Program

The Resilience, Peace, and Stability (RPS) Programme, funded by the Danish International Development Agency and implemented by Act Change Transform (Act!) aims to promote resilience, peace, and stability in Kenya by decreasing violent extremism and political and natural resource-based conflicts. The project addresses three major localized dimensions of conflict (i) political, (ii) resource-based, and (iii) violent extremism, the priority being used in addressing the drivers of violence.

The theory of change hypothesizes that strengthening opportunities for inter- and intra-community dialogue, supporting authorities and communities in effectively and equitably sharing resources, and enhancing the ability of law enforcement to respond to security threats is likely to improve community resilience and reduce the level of conflict.

The RPS's overarching goal is to reduce violent extremism as well as political and natural resource-based conflicts in Kenya. Among the programme outcomes are:

1. Enhanced cooperation and trust between communities and government agencies (particularly the police) based on human rights and good governance.
2. Enhanced relations between groups and communities affected by conflict (inter-ethnic, intra-ethnic, other conflictual in-groups and out-groups).
3. Increased community anchoring of at-risk individuals through improved messaging, economic opportunities, social connections, and a sense of belonging particularly for women, youth, and vulnerable communities to reduce pull and push factors that leads to violence.

## 1.2 Study Objectives

The purpose of this study was to gain a better understanding of how climate change security risks and impacts manifest across gender and population groups in Kenya, including the various communities involved in the RPS programme. The study's overall goal was to inform effective planning and management of Kenya's RPS programme about climate security risks and issues.

The specific objectives of the study were:

1. To establish key climate security issues that have specific effects on women, men, children, and PWDs.
2. To identify priorities, challenges, and opportunities experienced by actors involved in the implementation of gendered climate security interventions especially under the women's peace and security agenda (WPS) in Kenya.
3. To document case studies, important lessons learned, gaps, and mitigation measures in the engendering of climate security interventions in ASAL areas in Kenya.
4. To identify windows of opportunity and practical recommendations for advancing the gendered climate security agenda in Kenya.

### 2.1 Dynamics of Climate Change Vulnerability and Gender

Over the last 20 years, studies have found mixed results, with the majority discovering that climate change influences conflict, while others found no link (Adger et al., 2014; GTZ, 2008; Schaller et al., 2020).

This section unravels the gendered climate change issues that inform the research question: What are the key climate security issues that affect women, men, children, and people with disabilities?

Regardless of the uncertainties surrounding the interconnections between climate change and security, adopting a precautionary principle is prudent where identifying and implementing response actions is required before adverse effects manifest. Crucially, in fragile areas, ignorance of the climate-insecurity link can increase vulnerability and grievances against already strained communities and governing structures (Canfin, 2017; Schaller et al., 2020).

Climate change poses both direct and indirect threats to human, national, and international security, with social, economic, and institutional factors mediating the situation. This is because climate change reduces access to and the quality of natural resources that are essential for livelihoods. This in turn undermines human security and increases the risk of violent conflict (Adger et al., 2014; Bartlett, 2008). Climate change impacts, in particular, have contributed to volatile food prices and competition for natural resources such as soil and water, which can lead to increased conflict and fragility, particularly in marginalised and unequal societies. Furthermore, extreme disasters caused by climate change put a strain on public funding, disaster risk management, and planning institutions, limiting their legitimacy. (Schaller et al., 2020; World Bank, 2018).

Changes in the climate change system interact with socioeconomic processes to affect society's hazards, levels of exposure, and vulnerability of a society (IPCC, 2014, 2007). People who are socially, economically, culturally, politically, institutionally, or otherwise marginalised are especially vulnerable to climate change and also to some adaptation and mitigation responses i.e., medium evidence, high agreement (IPCC, 2007; Mukoni, 2013). This increased vulnerability is rarely the result of a single cause. Rather, it is the product of intersecting social processes that result in disparities in socioeconomic status, income, and exposure (Mukoni, 2013). Furthermore, marginalisation and limited participation are challenged as vulnerable voices, actions and experiences are excluded from discussions about natural resources due to issues such as discrimination based on gender, class, ethnicity, age, and (dis)ability, among others (UNDP, 2013).

In society, vulnerability and inequality are primarily associated with women and girls. This, however, is not the case. The changes needed for gender equality must address not only why women and (some) men lack resources, but also why they may not even access and use resources aimed at them. Thus, fighting for social justice, equal rights, and gender equality are ideologies that combat vulnerability and marginalisation while demanding equal representation for all, including men, women, girls, children, and people with disabilities (Mohajan, 2022; Widya & Asnani, 2020) and the different variants of feminism. This paper also tries to highlight the major challenges that the feminists are facing and the future goals of the feminist movement should be.”,“container-title”:”Research and Advances in Education”,“DOI”:”10.56397/RAE.2022.09.02”,“ISSN”:”27887057”,“issue”:”3”,“journalAbbreviation”:”RAE”,“language”:”en”,“page”:”11-26”,“source”:”DOI.org (Crossref).

In conclusion, climate change affects men and women differently, owing primarily to social norms, traditional roles, and different power structures in many communities, as explained in the findings sections. As a result, men and women often do different jobs, have different access to resources and information, and react differently to natural disasters. This is covered in greater detail in the sections that follow.



## 2.2 Institutional Frameworks for Climate Change and Security Policies

It is critical to incorporate a gendered analysis into policy formulation and implementation of climate change risks and impacts. Examples of international agreements that reinforce gender perspectives in climate change policies in Kenya include the 2030 Agenda for Sustainable Development, the Paris Agreement (2015), and the National Determined Contributions (NDC). For example, the National Determined Contributions (NDC) highlight the factors that contribute to gender-related climate change vulnerability, as well as the gender responsiveness of adaptation and mitigation mechanisms that will reduce the vulnerability of disproportionately affected groups, particularly women and youth (GoK, 2020).

In terms of climate change-related security risks, while climate policy has been identified as a solution to crisis prevention, there are currently no consistent national and international strategies in place. People who migrate across borders in response to soil erosion, drought, and other climate-related extreme weather events, for example, are not eligible for asylum under the 1951 UN Refugee Convention. (UNHCR, 1951).

We examined key guidance and planning policy documents at the national level, including the County Integrated Development Plans, the Climate Change Act of 2016, the National Determined Contribution, the National Adaptation Plan, and the National Policy on Peacebuilding and Conflict Management (2015). Each has articulated the effects of climate change on people and various productive sectors such as food and land, water, energy, and governance. This includes the contribution of climate change to extreme weather events, the loss of human lives, food, nutrition, water, and energy insecurity, as well as increased strain on Kenya's monetary and governance structures, particularly disaster risk and mitigation institutions.

Climate change is identified as a contributing factor to security risks in the sampled county integrated development plans (CIDPs), particularly through inter and intra-migration of people and livestock, as well as competition for pasture and water. Furthermore, other conflict drivers such as rangeland subdivision and commercialization, boundary disputes, competitive politics, or the discovery of new resources exacerbate these stresses (GoK, 2018).

Similarly, National Policy on Peacebuilding and Conflict Management embraced by the legislature in 2015 and a product of the review process of the Sessional paper (No.5 of 2014) identifies various forms of climate-related conflicts including resource-based conflicts over access, control, and ownership especially in ASAL communities. The policy will not be implemented until the National Cohesion and Peace Building Bill, which was developed in 2016, is passed.

A National Steering Committee on Peacebuilding and Conflict Management (NSC) exists within the Ministry of Interior and National Administration's Peacebuilding and Conflict Management Directorate. It is an interagency committee responsible for coordinating all peace-and conflict management-related activities. It also aims to incorporate traditional justice resolution mechanisms into the formal legal judicial structures through partnerships with civil society organisations (CSOs). The NSC doubles as Kenya's Conflict Early Warning and Response Unit (CEWERU) for implementation of the Conflict Early Warning and Response Mechanisms (CEWARN) Protocol, to which IGAD member states acceded in 2002. As such the directorate has facilitated several peace agreements between Samburu and Marsabit and other resolutions between communities in Laikipia, Kisumu, and Nandi counties, and Isiolo and Garissa counties (NSC, 2019). Due to insufficient resource allocation and devolved powers, the bill's delayed passage has limited ownership of peacebuilding efforts at the community and county levels (Odidi, 2022).

Further, the National Cohesion and Integration Commission (NCIC) is a statutory body established under the National Cohesion and Integration Act No.12 of 2008 amended in 2022. The core mandate of the NCIC is to create a harmonized structure for cohesion and peacebuilding in the country. The commission hosts peace-building dialogues in the counties regularly but is seen as having insufficient prosecutorial powers to, for example, tame inciters and hate mongers.

The National Drought Management Authority Act (2016) establishes the NDMA which coordinates all drought risk management-related issues. There is a drought risk management and ending drought medium-term plan under it, which led to the launch of the Ending Drought Emergencies (EDE) initiative in 2015, which identifies a peace and security pillar about climate change and security risks in Kenya.

NDMA also undertakes community participatory processes to identify community priority risks and corresponding strategies to address the risks through participatory disaster risk assessments conducted at the ward level. These are also used to develop county and national drought contingency and response plans.

In summary, the policies outlined above recognise climate change as a risk multiplier in national security, particularly in ASALs and resource conflicts. Some policies have resulted in increased allocations, such as the Disaster Resource Management fund, which uses 2 percent of the county budget for preparedness, early warning, and recovery projects. In addition, the climate change fund has activated 2 percent of the county development budget for climate change projects. However, a gendered perspective on these climate risks is lacking, as is a national-level gender action plan that focuses on the gendered impacts of climate change.

*“There is no separate gender action plan at the national level, but gender is considered/mainstreamed in national climate change policies, plans, and legal instruments.” (KII-State Department for Gender and Affirmative Action).*

Similarly, despite the presence of numerous organisations and non-governmental organisations in the sector, lack of coordination and duplication of efforts is cited as a major challenge, along with insufficient funding for relevant institutions/committees. Similarly, the pending passage of the National Cohesion and Peace Building Bill limits implementation by restricting partnerships, networking, coordination, and resource allocation among key stakeholders involved in peacebuilding efforts. As a result, presenting the bill to the cabinet would be critical.

The National Action Plan on Arms Control and Management (2006), as well as the recommendations of the Truth, Justice, and Reconciliation Commission, will face similar challenges in terms of resource allocation, staff capacity, and insufficient political support.

*“However, even with action plans, budgetary allocations are not met, resulting in interventions that are not fully implemented and hampered by a lack of resources that cuts across genders.” (KII-Climate Change Directorate).*

Table 2-1 presents the status and gaps in existing climate and gender policies in the sampled counties.

Table 2-1: Status and Gaps in County Gender and Climate Change Policies

County	Policy	Stage	Policy Objective
Isiolo	Isiolo Gender Policy 2021 – 2025	In place	The policy provides a legal framework to fast-track initiatives that seek to promote gender inclusion and equality. It is premised on the Constitution of Kenya 2010, which elaborates on the principles of gender equality, upon which public and private institutions and individuals should operate. It mirrors the national policy on gender, which aims at creating a just, fair, and transformed society, free from gender-based discrimination.

	Isiolo Climate Change Policy	In place	The overall goal of domesticating the national policy is to build resilient communities and natural systems to steer Isiolo County towards a low-carbon pathway for sustainable development. This will help to realise the vision of a secure, just, integrated, and prosperous region where everyone can realise their full potential and live a high quality of life.
	Isiolo Child Protection Policy	Public participation stage	Seeks to protect children from child labor which is common in the region in the form of sand harvesting, street hawking, farming, domestic work, and harmful cultural practices such as FGM and early marriages.
	Isiolo PWDS Policy	Draft stage	Seeks to address various issues affecting PWDs including, scholarships, devices, health, economic empowerment, etc.
Kajiado	Kajiado Anti FGM Policy	In place	Firmly grounded in the principles of gender equality, inclusivity, and non-discrimination. Provides the legal framework required to fast-track the eradication of FGM at the county level by creating decentralised governance structures that will cascade from the ward level to the county level.
	Kajiado Child Protection Policy	Draft stage	Seeks to protect the children from child labor which is common in the region in the form of sand harvesting, street hawking, farming, domestic work, and harmful cultural practices such as FGM and early marriages
	Kajiado PWDs Policy	Draft stage	Seeks to address various issues affecting PWDs including, scholarships, devices, health, economic empowerment, etc
	Kajiado Climate Change Policy	Public participation stage	The county shall use instruments and other economic inducements to provide incentive(s) for climate change activities including reduction of greenhouse emissions and use of renewable energy by local communities.
Kilifi	GBV and Gender Policy	Draft – has been forwarded to the County Assembly	Seeks to provide measures for awareness, prevention, and response to sexual and gender-based violence (SGBV), to provide for the protection, treatment, counseling, support, and care of victims of SGBV, and connected purposes.
	Menstruation Hygiene Policy	Draft – not yet submitted to the Assembly	Seeks to curb teenage pregnancy through menstrual hygiene management in Kilifi County which is among the top 10 counties in Kenya that records high numbers of teenage pregnancies.
	County Climate Act 2021	It is an Act of the County Assembly but not operationalised	Aims at putting in place the framework and mechanisms for mobilisation and facilitation of communities and other stakeholders in the county to respond effectively to climate change through appropriate adaptation and mitigation measures and actions and for connected purposes.

Garissa	Gender policy	Yet to be passed by the County Assembly	<p>Seeks to ensure that the rights of women, men, boys, and girls are promoted, protected, and realized in equal measure.</p> <p>Operationalises the climate change fund to facilitate community-initiated climate change adaptation and mitigation projects and resilience building. In collaboration with partners, the county was able to produce 5 of the 30-ward climate change action plans. The project will help to develop three other ward action plans. Care International has developed an adaptation learning programme as well as a report outlining the vulnerabilities and recommendations for pastoralists and agropastoralists.</p>
	County Climate Change Act 2018	In place	<p>Climate change gaps include twenty-five ward administrative units, implying that the county climate change act is not fully comprehensive. The 2 percent fund from the climate change fund is insufficient, given that the total cost for Masalani ward is KES 292 million.</p>
	Garissa County Livestock Policy	In place	<p>Defines the strategic direction for the county livestock industry by addressing key aspects in the hope and belief that this will spur the livestock industry and the county economy to greater heights. These aspects are livestock production, diseases, and pests, trade and marketing, research and extension, an organisational framework for the public and private sectors, and cross-cutting issues including land tenure, environment, peace, and security among others.</p>
	Garissa County Livestock Marketing Bill and Rangeland Management Bill	Draft/ Consultation	<p>The bills are intended to create an enabling environment for the development and regulation of the livestock industry in the county. These bills will help to keep the local livestock sector and livestock products competitive and sustainable, while also increasing the sector's contribution to the country's economy.</p>
Baringo	Baringo County Climate Change Act, 2021	Draft, awaiting gazette	<p>Aimed at providing a mechanism to finance climate change activities programs and projects in the county including organisation of the various steering committees to the ward level</p>
	Social Protection Policy, 2021	In place	<p>Ensures the effective and efficient implementation of all social protection programmes in the county, as well as increased access to social protection by vulnerable members of the society and the development of their resilience. The national and county governments and other institutions provide cash transfers, to protect the elderly and people with disabilities.</p>

Samburu	Samburu County Livestock Sales Yard Act, 2018	In place	Provides for the establishment and control of livestock sales yards, promotes effective and efficient operation of livestock markets, and other connected purposes. Development planning in sectors is hampered by a lack of coordination and collaboration.
	Samburu County Agricultural Machinery Act, 2015	In place	Provides a legal and regulatory framework for the development and regulation of agricultural machinery services. Coordination and collaboration between public (state) and private actors are lacking.
	Child Protection Policy	Public participation	Seeks to address the issues facing children in Samburu County including Female Genital Mutilation (FGM), child marriage, teenage pregnancies, and beading.
	Social Protection Policy, 2018	In place	The social protection policy for the elderly and PWDs involves cash transfers from both national and county governments to support the vulnerable members of society.

## 2.3 General Gaps in Climate Insecurity for Men, Women, and Children

This section focuses on gaps in climatic security incidents in the study counties.

### 2.3.1 Gaps Concerning Women, Men, Children, and PWDs

Potential gaps to consider when developing climate security interventions in ASALs in Kenya, that affect all study groups (women, men, children, and PWDs) in the study include:

- **Gender data and analysis:** A key policy gap in climate security interventions in ASALs is the limited availability of gender-disaggregated data and comprehensive gender analysis. Understanding the various vulnerabilities, adaptive capacities, and needs of women, men, girls, and boys is critical for developing effective and inclusive climatic security interventions.
- **Participation and decision-making:** Another policy gap is the failure to include women meaningfully in decision-making processes related to climate security interventions. While women frequently play critical roles in climate change adaptation and mitigation in ASALs, their participation in decision-making forums and policy dialogues is frequently limited. Women and other marginalised groups participating in decision-making processes can result in more context-specific and effective interventions.
- **Access to resources and technology:** Women in ASALs face challenges in accessing resources and technologies necessary for climate change adaptation. There is a policy gap in terms of women's and marginalised groups' limited access to land, finance, credit, and modern agricultural technologies, which limits their ability to adapt and build resilience. To close these policy gaps, women's entrepreneurship and leadership in sustainable practices must be promoted, as well as equitable access to resources and technologies.
- **Capacity building and awareness:** There is a policy gap in enhancing women's and other stakeholders capacity in ASALs, which is critical for effective climate security interventions. There is a need for gender-specific training programs and awareness campaigns that address issues such as water scarcity, food insecurity, and natural resource management. Women can be empowered to actively participate in climate adaptation and mitigation efforts by increasing their knowledge and skills.



- **Addressing gender-based violence:** There is a policy gap in addressing gender-based violence (GBV), which intensifies during climate-related crises, exacerbating women and girls' vulnerabilities in ASALs. It is critical to incorporate GBV prevention and response mechanisms into climate security interventions. To address the intersectionality of climate change and violence against women, this includes creating safe spaces, providing psychosocial support, and promoting gender-responsive justice systems.
- **Institutional coordination and funding:** Policy gaps exist in the coordination of different government agencies, non-governmental organisations, and stakeholders. Coordination is essential for effective climate security intervention implementation. Improving collaboration, harmonisation, and coordination mechanisms can assist in bridging gaps and avoiding duplication of efforts. Furthermore, ensuring adequate funding and resource allocation for gender-responsive climate security interventions is critical to their success.

### 2.3.2 Gaps Concerning Women

This research focuses on specific gaps in climate security interventions that disproportionately affect women living in ASALs. In the context of climate change, women frequently face unique challenges and vulnerabilities. To close these gaps, climate security interventions must be gender-responsive.

This involves integrating gender considerations across all stages of planning, implementation, and evaluation which includes promoting women's access to resources and technologies, ensuring their meaningful participation in decision-making processes, addressing gender-based violence, and providing targeted support for women's empowerment, education, and livelihoods.

- **Limited access to resources:** There is limited access to resources necessary for climate change adaptation and resilience-building for women in ASAL areas, such as access to land, water, credit, finance, technology, and productive assets.
- **Gender-based division of labor:** Domestic chores, caregiving, and food production are frequently assigned to women by societal norms and gender roles. Climate change increases the work burden on women by requiring them to take on additional responsibilities such as water collection, fuelwood gathering, and managing household needs in the face of resource scarcity.
- **Limited access to information and technology:** Women in ASALs face barriers to accessing climate-related information, education, and training. Lack of information on climate risks, adaptation strategies, and market opportunities hinders women's ability to make informed decisions and participate in climate security interventions effectively.
- **Climate change increases the risk of GBV in ASALs:** Climate-related displacement, scarcity of resources, and social tensions exacerbate GBV. Women and girls are particularly vulnerable to sexual and physical violence, forced displacement, and early marriage.
- **Limited participation and decision-making:** Women's meaningful participation in decision-making on climate change adaptation and mitigation is frequently limited. Their voices, perspectives, and experiences are underrepresented in climate governance structures, policy dialogues, and community-based adaptation initiatives.
- **Lack of gender-disaggregated data and analysis:** The scarcity of gender-disaggregated data and analysis impedes the understanding of women's specific vulnerabilities and needs in the context of climate change.

### 2.3.3 Gaps Concerning Men

While the effects of climate change can affect both men and women in ASALs, some gender-specific gaps may disproportionately affect men. Gender policy gaps are not limited to women, and addressing the specific needs and vulnerabilities of men is critical for inclusive and effective climate security interventions.

It is important to note that these disparities between men and women are not mutually exclusive, and they frequently intersect with those experienced by women and other marginalised groups. A holistic and intersectional approach is required to develop climate security interventions that take into account the diverse needs and vulnerabilities of all individuals in ASALs. The policy gaps are:

- **Livelihood shifts and unemployment:** Climate change has the potential to disrupt traditional ASAL livelihoods such as pastoralism and agriculture, which have traditionally been male-dominated industries. Shifting weather patterns, prolonged droughts and land degradation reduce livestock productivity and agricultural yields, resulting in men being unemployed or underemployed.
- **Mental health and psychosocial stress:** Men's mental health and well-being are impacted by climate-related stresses such as asset loss, displacement, and food insecurity. They are under pressure to fulfill their traditional roles as providers and protectors. However, changing environmental conditions and challenges to one's livelihood increase stress, anxiety, and feelings of powerlessness.
- **Health risks and occupational hazards:** Men working in climate-sensitive industries like agriculture, fishing, or forestry may face unique health risks and occupational hazards. Extreme weather events, exposure to agrochemicals, and physical exertion increase the vulnerability of men to injuries, respiratory illnesses, and other occupational health issues.
- **Role expectations and social norms:** Men in ASALs are frequently subjected to societal expectations based on traditional gender roles and norms. These expectations make it difficult for them to participate in climate change adaptation and mitigation efforts.
- **Access to resources and decision-making:** While men may have more access to resources than women in some contexts, disparities still exist. Men's adaptive capacities and ability to contribute to climate resilience are hampered by limited access to credit, land, technology, and decision-making spaces.

### 2.3.4 Gaps Concerning Children

There are specific gaps in climate security interventions that have serious consequences for children living in ASALs. Children are a vulnerable population, and their special needs and rights must be taken into account in climate change adaptation and mitigation efforts. To close these gaps, a child-centered approach that recognises the rights, needs, and vulnerabilities of children in ASALs is required. It entails incorporating child-centered indicators and targets into climate policies, ensuring child-sensitive budgeting, and encouraging multi-stakeholder collaborations to provide comprehensive support for children's well-being and resilience in the face of climate change.

Some of these gaps are:

- **Health and nutrition:** Climate change can have detrimental effects on children's health and nutrition. Increasing temperatures, water scarcity, and changing disease patterns can all contribute to malnutrition, waterborne diseases, and other health risks.
- **Education and school safety:** Extreme weather conditions and natural disasters disrupt children's education. Floods, community conflicts, droughts, and storms all wreak havoc on school infrastructure, forcing temporary or even permanent closures. Furthermore, increased household responsibilities as a result of climate change, such as water collection or caregiving for sick family members, have a disproportionate impact on girls' education.

- **Displacement and migration:** Climate-related environmental changes, such as droughts and land degradation, contribute to population displacement and migration in ASALs. Displaced children often face challenges in accessing basic services, including education, healthcare, and protection from exploitation.
- **Protection from exploitation and violence:** In the context of climatic security incidents, children in ASALs become more vulnerable to various forms of exploitation and violence. Livelihood disruptions, increased poverty, and social tensions increase the risk of child labor, early marriage, trafficking, and other forms of abuse.
- **Participation and empowerment:** Children's meaningful participation in decision-making processes related to climate security crises is frequently limited. Children, on the other hand, have unique knowledge, perspectives, and innovative ideas that can help to improve climate security interventions.

### 2.3.5 Gaps Concerning PWDs

Climate security interventions have specific policy gaps that disproportionately affect people living with disabilities in ASALs. In the context of climate change, people with disabilities face unique challenges and vulnerabilities. To close these gaps, climate security interventions must take a disability-inclusive approach, which includes actively involving PWDs in the design, implementation, and monitoring of climate adaptation and mitigation strategies.

Inclusive policies, targeted capacity building, and mainstreaming disability considerations into climate programmes are critical steps toward ensuring the rights, dignity, and well-being of PWDs in ASALs. These policy gaps are as follows:

- **Accessibility and inclusive infrastructure:** During disasters, people with disabilities frequently face barriers to accessing climate-resilient infrastructure such as water and sanitation facilities, healthcare services, and shelters. Their ability to adapt and respond to climate-related risks is hampered by limited physical accessibility, a lack of assistive devices, and inaccessible information.
- **Evacuation and emergency preparedness:** Climate-related disasters, such as floods or storms, present unique challenges for PWDs in terms of evacuation and emergency response. PWDs' needs may be overlooked in evacuation plans, early warning systems, and emergency shelters.
- **Livelihoods and economic opportunities:** Climate change disrupt livelihoods and income-generating activities, affecting the economic well-being of PWDs. They face additional barriers in accessing alternative livelihood options, vocational training, and employment opportunities.



## 3. RESEARCH DESIGN AND METHODOLOGY

### 3.1 Analysis Framework for Gendered Climate Change Security Risks

The study used two analysis frameworks to capture relevant elements of the entire community; the Capacities and Vulnerabilities (CVA) Framework and the Harvard Analytical Gender Roles Framework (March et al., 1999; UNDP, 2017).

The Harvard Analytical Framework Gender Roles framework (March et al., 1999) is a tool used for identifying the types of roles played by men and women in a household or community, as well as for documenting gendered differences in resource access and control. The framework guided the literature review in which we examined the various climate change impacts on different population groups (women, men, children, and people with disabilities). Likewise, it influenced the design of data collection tools such as focus group discussions, household surveys, and key informant interview guides.

The framework guided gender analysis which provided gender-disaggregated data to understand who is doing what, when, and how about climate change and security risks. This approach ensured a gender-responsive approach to climate security risks and conflicts, by adopting a gendered analysis lens across the identified climate security interlinkages, sectors, risks, and interventions. Furthermore, it increases the likelihood that the recommended measures will attract buy-in and ownership from various groups as their gender roles, needs, and priorities are taken into account and that the program interventions will be sustained when environmental conditions change.

The Capacities and Vulnerabilities Assessment framework (CVA) (IFRC, 2007) is used to understand the strengths (capabilities) and weaknesses (vulnerabilities) of sampled populations to predict the impact of a crisis (in this case climate change insecurity). The CVA approach is effective and widely used in humanitarian settings to critically examine gender and its associated roles, responsibilities, and power dynamics in a given community.

Furthermore, the framework aided in the direction of a high-level vulnerability and gender analysis of the sampled counties, as well as their capacity to adapt to climate change and related security risks. Counties were assessed (based on available data) in the following ways:

1. Context: What are the current physical and social considerations e.g., local climate, geography, modes of production, boundaries, and other assets.
2. Disturbance: What are the disturbances faced in the community including natural hazards, conflict, insecurity, food shortage, etc.
3. Coping capacity: What is the community's capacity to adapt as represented through proxy factors such as education, secure livelihoods, poverty index, water availability, and land potential, among others?

### 3.2 Data Collection and Analysis

The study used both qualitative and quantitative methods to collect primary and secondary data. There was an attempt to strengthen the study by using two different methods, as the weakness of one could be fortified by the other. Data analysis entailed transforming data from one form to another (Blaikie, 2018). Thus, quantitative data were combined and analysed in Microsoft Excel and SPSS to represent the various climate change risk profiles. Furthermore, data analysis entailed categorizing qualitative data into thematic categories and sorting data to find patterns.

The study used a quantitative approach to count climate security/insecurity phenomena or map their prevalence, whereas a qualitative approach was used to gain a deeper understanding of climate change security and its characteristics.

A structured questionnaire was used to collect information about climate change, security issues, and

applicable adaptation and resilience measures from a sample of the population representing ASAL regions in Kenya for the quantitative study design.

In terms of qualitative research, an in-depth literature review on existing climate change impacts, security issues, and interventions was conducted, which included using focus group discussions and key informant interviews to gather contextual information from target populations and experts working directly on climate change and security issues respectively.

The following factors are broadly presented throughout the report in the literature, findings, and appendix sections, guided by the aforementioned frameworks.

Table 3-1: Climate Security Capacities and Vulnerabilities Assessed

Sector	Vulnerabilities Assessed	Capacities
Social	<ul style="list-style-type: none"> <li>• Occupation of unsafe areas (boundaries)</li> <li>• Lack of mobility</li> <li>• Vulnerable occupations</li> <li>• Corruption</li> <li>• Lack of education</li> <li>• Poverty</li> <li>• Poor management and leadership</li> <li>• Lack of disaster planning and preparedness</li> <li>• Lack of security</li> <li>• Forced migration and displacement</li> </ul>	<ul style="list-style-type: none"> <li>• Social capital</li> <li>• Good governance</li> <li>• Memory of past disasters</li> <li>• Local leadership</li> <li>• Local Non-governmental organizations</li> <li>• Well-developed disaster plans and preparedness</li> <li>• Presence of security, protection, and redress mechanisms</li> <li>• Secure access, land rights, and movements</li> </ul>
Physical	<ul style="list-style-type: none"> <li>• Unsafe critical infrastructure (e.g., bridges, dams)</li> <li>• Rapid urbanization</li> </ul>	<ul style="list-style-type: none"> <li>• Physical capital</li> <li>• Resilient buildings and infrastructure that cope with and resist extreme hazards.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Non-diversified economy</li> <li>• Subsistence economies</li> <li>• Relief/welfare dependency</li> </ul>	<ul style="list-style-type: none"> <li>• Economic capital</li> <li>• Secure livelihoods</li> <li>• Financial livelihoods</li> <li>• Diversified agriculture and economy</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Pollution of water sources</li> <li>• Global climate change (temperatures, flooding, etc)</li> </ul>	<ul style="list-style-type: none"> <li>• Natural environment capital</li> <li>• Biodiversity</li> <li>• Responsible natural resource management</li> <li>• Natural environment recovery processes e.g., rangelands recovering from degradation)</li> </ul>

Adapted from (IFRC, 2007)

### 3.3 The Study Participants

This study involved 3 groups of participants including the following:

#### Key Informant Interviews

Participants in key informant interviews (KII), focus group discussions (FDGs), and household surveys (HHS) were chosen from six ASAL counties and Nairobi County (to provide a national perspective). Data was collected from 37 expert respondents (12 female and 35 male) representing ASAL and national (Nairobi) perspectives using a key informant interview guide. The KIIs came from a variety of fields, including security and law, community development, the environment, agriculture, the religious sector, education, and the gender sector. The goal of reaching out to the above stakeholders and duty bearers was to establish existing plans and programmes to address issues of climate change insecurity affecting the community, as well as to get an expert opinion on what causes climate change security incidences. The duty bearers also proposed opportunities for the county and national governments, CSOs, the private sector and other partners to develop programmes to address climatic security incidents.

#### Focus Group Discussions

Focus group discussions were held to help community members understand the gendered dimensions of climate security and the adaptive mechanisms they had developed. The FDGs provided information on the challenges they faced in addressing energy sources, grazing resources, and domestic water in their communities. This study included 12 FDGs. Two FDGs with 8 to 10 participants were held in each of the six ASAL study counties. The two FDGs were for men and women, respectively, and included representatives from youth and PWDs.

#### Household Surveys

A total of 421 households were chosen at random and interviewed using a structured questionnaire. Data was collected by a team of 3 data enumerators per county who were recruited locally. The calculation of The sample respondents in the six counties was calculated using Taro Yamane's (1967) formula. Using the 2019 Kenya population and housing census results (KNBS, 2019), the sample was proportionately distributed across the six counties. Table 3-2 shows the gender distribution of HHS study participants, and Table 3-3 shows the gender distribution of KII participants.

Table 3-2: HH Survey Participants Sampled by Sex.

County	Sex of HHS Participant		Total
	Female	Male	
Baringo	36 (44%)	45 (56%)	81
Garissa	52 (75%)	17 (25%)	69
Isiolo	18 (60%)	12 (50%)	30
Kajiado	31 (34%)	60 (66%)	91
Kilifi	59 (49%)	61 (51%)	120
Samburu	16 (53%)	14 (47%)	30
<b>Total</b>	<b>212 (50%)</b>	<b>209 (50%)</b>	<b>421</b>

Table 3-3: KII Sampled by Sex

County	Sex of KII Participant		Total
	Female	Male	
Baringo	2	4	6
Garissa	1	4	5
Isiolo	1	4	5
Kajiado	3	2	5
Kilifi	2	3	5
Samburu	2	3	5
Nairobi	1	5	6
<b>Total</b>	<b>12</b>	<b>25</b>	<b>37</b>

Table 3-2 and Table 3-3 show that 459 respondents (men - 234 and women- 224) were drawn from all the study counties that took part in the study indicating that the sampling of participants took gender balance into account.

## 4. FINDINGS

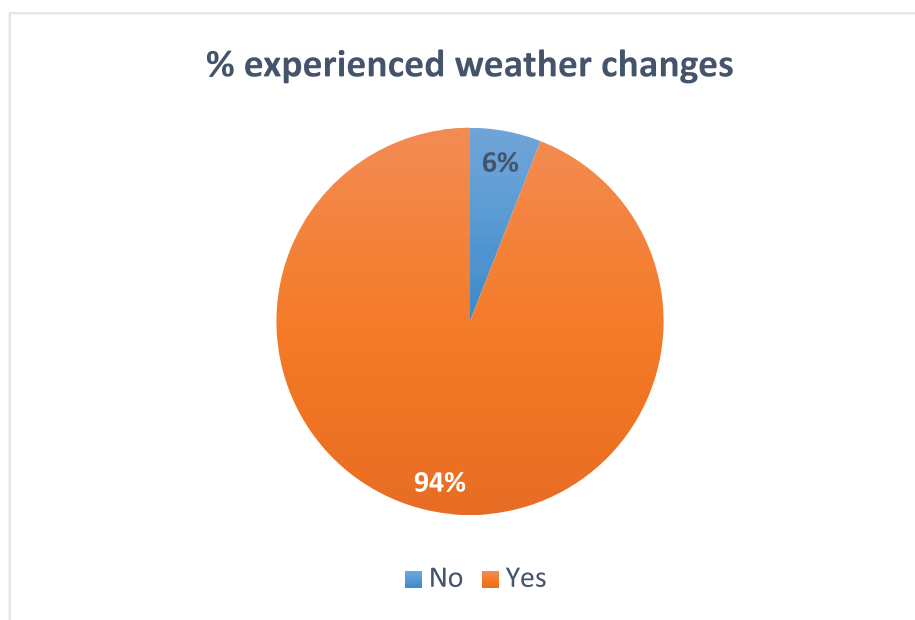
This chapter presents the findings from the counties in terms of climate change effects as they relate to security risk incidents encountered by men, women, children, and people with disabilities (PWDs). Given that these risks are shared across the sampled counties, a sectoral analysis of security risks was adapted to provide a general picture of the situation. This section also identifies the priorities, challenges, and opportunities faced by actors involved in the implementation of gendered climate security interventions in Kenya, particularly under the Women's Peace and Security Agenda (WPS). This section documents lessons learned, gaps, and mitigation measures in the engendering of climate security interventions in ASAL areas in Kenya and identifies practical recommendations that can be used to advance the gendered climate security agenda in Kenya.

### 4.1 General and Cross-Cutting Climate Change Issues

This section discusses the study's cross-cutting issues that apply to all of the study counties. However, as will be seen in other sections of the report, some issues are unique to specific counties.

#### 4.1.1 Climate Change Impacts

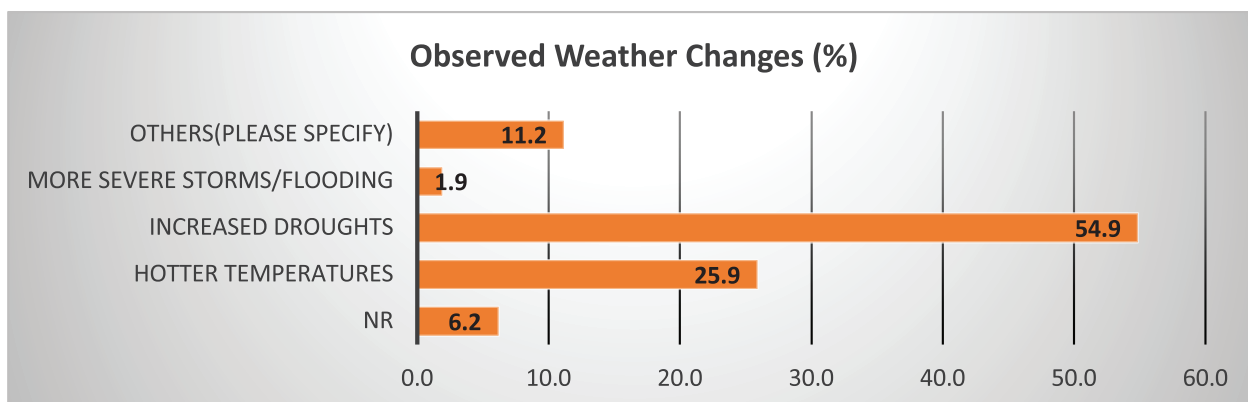
Figure 4-1: Experience of Weather Changes in the Six Counties



The vast majority -94 percent of the study participants from the 6 counties experienced weather changes, while only 6 percent did not.

Similarly, extreme weather changes have been observed over time as a result of climate change, with increased droughts and hot temperatures resulting in diminished water points and a lack of pasture for livestock, which is a major source of livelihood for pastoral communities in ASAL regions. Because of extreme weather changes, people's livelihoods have changed dramatically, and they are being forced to adapt.

Figure 4-2: Observed Weather Changes



A majority, 54 percent, reported increased droughts while 25.9 percent reported hotter temperatures. However, only 1.9 percent of the participants reported more severe storms/flooding while 6.2 percent did not respond. According to (IPCC, 2007), the weak, poor, and the marginalised in society have the least capacity or opportunity to prepare for the effects of climate change including participating actively in mitigation negotiations. Women are not decision-makers in many communities due to cultural norms, illiteracy, and lack of involvement in political positions and household decision-making, thus, limiting their ability to respond quickly and adequately during disasters.

Animal and human relocation, land production, forests, animal and crop yields, energy, food security, water availability, and water quality were the most commonly reported climate change impacts. As illustrated in the graph below, men and women are affected differently by security incidents.

Figure 4-3: Effects of Climate Change across the Sectors by Gender

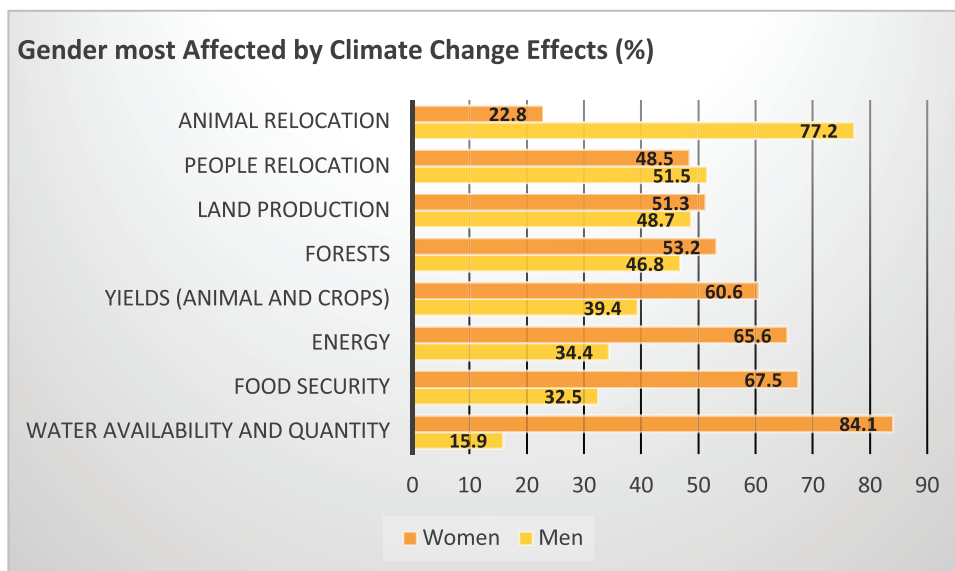


Figure 4-3 shows that 77.2 percent of men and 22.8 percent of women were affected by animal relocation while 84.1 percent of women and 15.9 percent of men were affected by water availability and its quality. The climate change impacts that affected women more include food security (67.5 percent), energy (65.6 percent), animal and crop production (60.6 percent), forest (53.2 percent), and land production (51.3 percent). Women are more vulnerable to the effects of climate change than men due to their social roles or cultural norms, and biological differences(IPCC, 2007; Mukoni, 2013). According to this study, men were more affected by human and animal relocation than women. Research shows that women are more

affected by climate change due to the gender responsibilities accorded to them by society. For example,

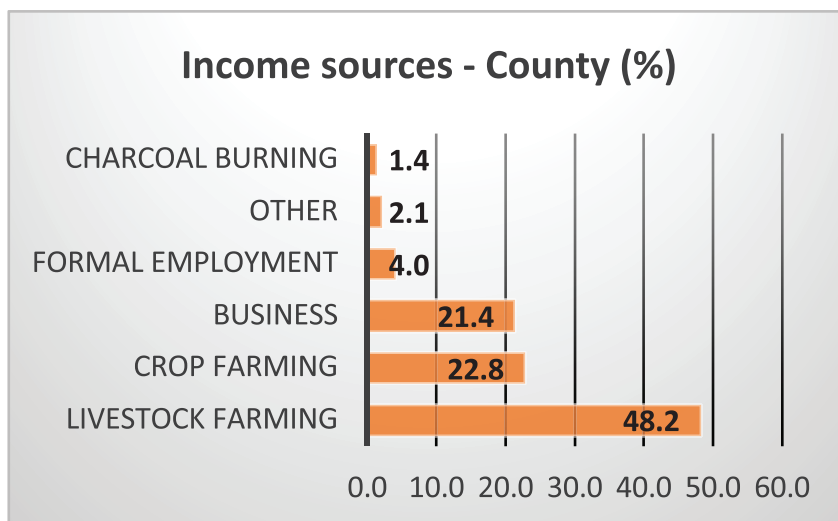
women are responsible for childcare, water, food, and energy. They also depend heavily on natural resources, thus, being directly affected by any change in climate patterns (Mukoni, 2013). Women are more vulnerable to the effects of climate change because they are more likely to be poor and have limited access to resources such as land, credit, and education (Nagel & Lies, 2022) we argue that much climate change research conflates “gender” with “women.” We ask, what are the consequences of this conflation, and what do we learn when we follow sociologist George Homan’s classical command to “bring men back in” to our analysis of the gendered dimensions of climate change? We find, first, that scholarship on gender and climate change tends to depict women mainly as victims of the uneven impacts of climate change. While this assessment is accurate on its face, it leads to solutions that address the problem (women’s troubles). Women are more negatively affected by climate change than men in five impact areas: agricultural production; food and nutrition security; health; water and energy; climate-related disaster, migration, and conflict (Awiti, 2022).

The study discovered that extreme changes in weather and livelihood sources have forced women in pastoral communities to take on additional roles such as grazing, small businesses, and livestock marketing in addition to their domestic roles to supplement their livelihoods. Similarly, women are frequently widowed when their husbands are killed during the conflict over pastures and water for their livestock, which have become scarce as a result of climate change.

#### 4.1.2 Households Livelihood Sources

In terms of income sources, participants in the HHS study were asked to indicate their sources of income, as shown in Figure 4-4.

Figure 4-4: Income Sources in the Six Counties



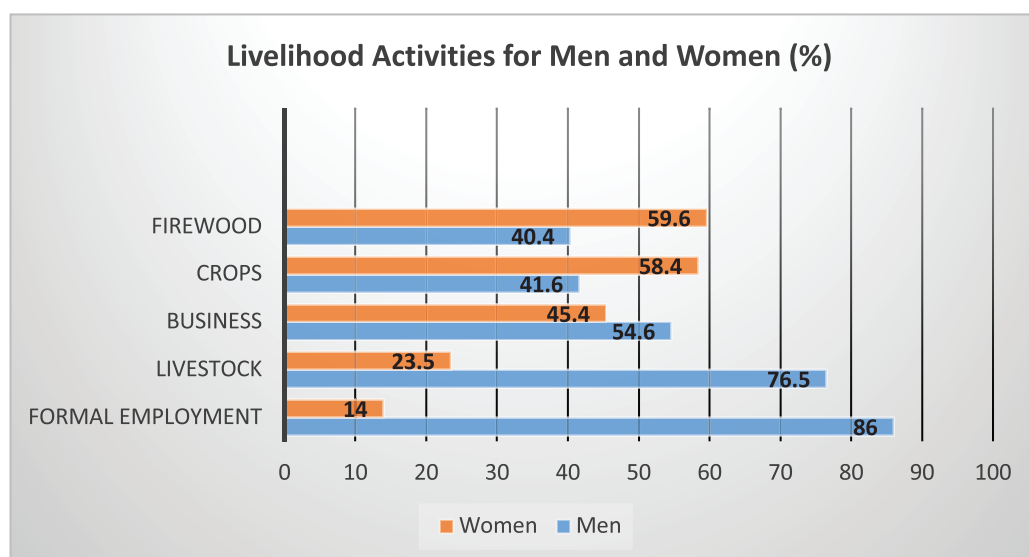
Because the counties are in Kenya’s ASAL regions, the majority of households (48.2 percent) rely on livestock, followed by crop farming (22.8 percent) and business (21.4 percent). According to this study, the least reliant income sources were formal employment (4.0 percent) and charcoal burning (1.4 percent). Income/livelihoods diversification was viewed as one method of protecting households from pastoral communities from extreme climate change events and security incidents.



The study findings are consistent with other studies in which changes in the climate change system interact with socioeconomic processes to influence a society's hazards, levels of exposure, and vulnerability (IPCC, 2014, 2007; Mukoni, 2013; UNDP, 2013). People who are socially, economically, culturally, politically, institutionally, or otherwise marginalised are especially vulnerable to climate change and also to some adaptation and mitigation responses i.e., medium evidence, high agreement (IPCC, 2007). This increased vulnerability is rarely the result of a single cause, rather, it is a product of intersecting social processes that result in disparities in socioeconomic status, income, and exposure. Furthermore, marginalisation and limited right to participation are challenged as the vulnerable voices, actions and experiences are excluded from discussions concerning natural resources. This is sometimes a result of discrimination based on gender, class, ethnicity, age and (dis)ability, among others (Mukoni, 2013; UNDP, 2013).

Further, the study revealed that men are more involved in both formal employment and livestock farming as livelihood activities compared to women as shown in Figure 4-5.

Figure 4-5: Livelihood activities for men and women



Many men in the six counties are in formal employment (86 percent), livestock farming (77 percent), and business (55 percent). Crop farming (59 percent), firewood business (mostly done by women), and livestock (24 percent). There were only 14 percent of women in formal employment.

The HHS findings are supported by responses from the KII and FGD, which revealed gendered livelihood activities. For example, while agriculture was important in all counties, culture, and the environment dictated the type of activities for men and women. Crop farming is thus primarily practiced by women in Baringo, Isiolo, Kilifi, and Samburu counties, whereas men practice the same activity in Garissa and Kajiado counties. Similarly, men dominate livestock farming in Baringo, Garissa, Isiolo, Kajiado, and Samburu counties, while men and women are nearly equal in Kilifi. Similar differences can be seen in firewood/charcoal burning, where women predominate in Baringo, Isiolo, Kajiado, and Samburu, while men predominate in Kilifi and Garissa.

Concerning the low number of women in formal employment (14 percent), the findings imply that a greater proportion of women in the study counties lacked formal education, which provides people with the opportunity and skills required by employers in the job market. Furthermore, women are not heavily involved in livestock farming, but rather in selling firewood/charcoal and crop farming, which may not require formal skills. "Prolonged exposure to direct sun and heat from charcoal burning has caused adverse effects on women's skin," for example (KII, Kajiado County).

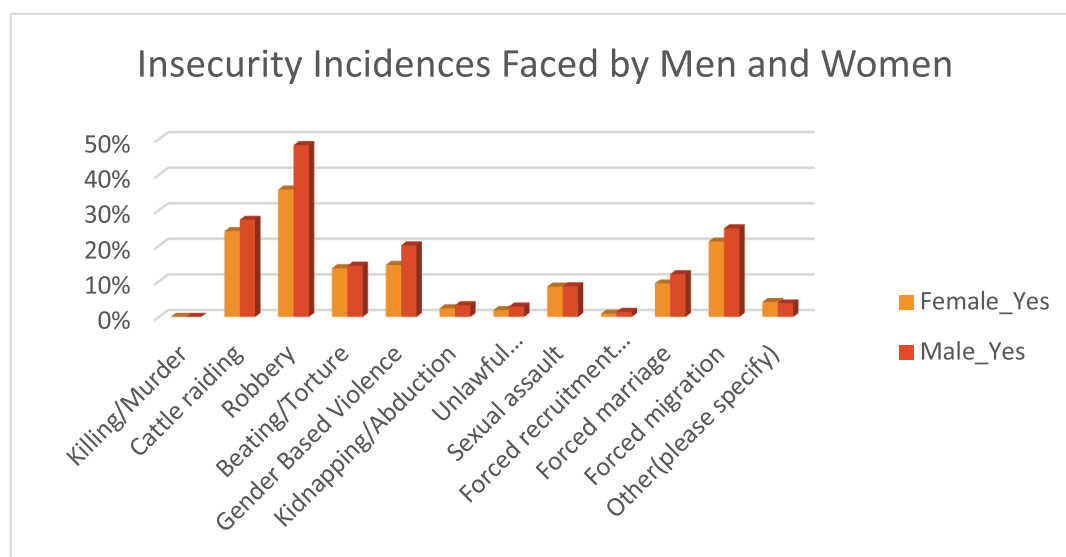


## 4.2 Climate Security Issues on Men and Women

This section presents the results of surveys and interviews on climate change and security issues affecting men, women, children, and people with disabilities. The section responds to the research question: What are the key climate security issues that affect women, men, children, and people with disabilities?

The most commonly reported security incidents in the sampled counties are; cattle rustling, robbery, highway robbery, beating and torture, GBV, forced marriages, and migration. Men surveyed reported insecurity incidents such as cattle raiding, robbery, beatings/torture, and forced migration. As a result, women surveyed reported insecurity incidents such as sexual assault, gender-based violence, and beating/torture. Women were reported to be more vulnerable to robbery, gender-based violence, and forced migration due to the absence of men (husbands) as breadwinners and protectors in their homes.

Figure 4-6: Security Incidences as Reported across Male and Female Respondents.



The table shows that robbery (48 percent men and 34 percent women) was the most reported incident while killing/murder (2 percent men and 2 percent women) was the lowest. The robbery was reported as a major challenge in all counties. In Samburu County, for example, both men and women FGDs reported high cases of highway robbery due to poor road networks. Traveling to some parts of the county was difficult because passengers in public transport vehicles had their valuables stolen by robbers who stopped them along roads with poor road networks.

Young boys are involved in muggings in Garissa town, according to women FGDs in the county.

*“Young boys drop out of school and migrate to Garissa town in search of work to support their mothers following their fathers’ forced migration with livestock (in search of water and pasture). The boys commit minor offenses such as mugging, pickpocketing, and stealing people’s valuables in exchange for food, and drugs to send something home.” (Women FDG, Garissa County).*

Looking at the factors that lead to conflict across sectors, respondents reported that natural resources (46 percent), grazing resources (45 percent), food sources (45 percent), household water (29 percent), and agriculture/livestock use (38 percent) were the most common causes of conflict.

Some respondents believed that as resources became scarcer, these cases of insecurity increased or worsened, and poverty increased due to diminished livelihood sources as livestock died. Conflict over resources is seasonal, dropping when there are abundant resources and rain. They then reappear during droughts. Respondents in Samburu County reported that the conflict between commercialised pastoralism and

nomadic pastoralism had gotten worse. This has resulted in fenced-off land, limiting nomadic pastoralists' movement and access to water and pasture.

Some respondents, however, believed that these incidents of food and land insecurity had decreased, for example, in Baringo, Garissa, and Kajiado counties, as a result of ongoing environmental conservation measures, the introduction of kitchen gardens, which provided additional sources of food for households, and thus reduced gender-based violence related to food and land.

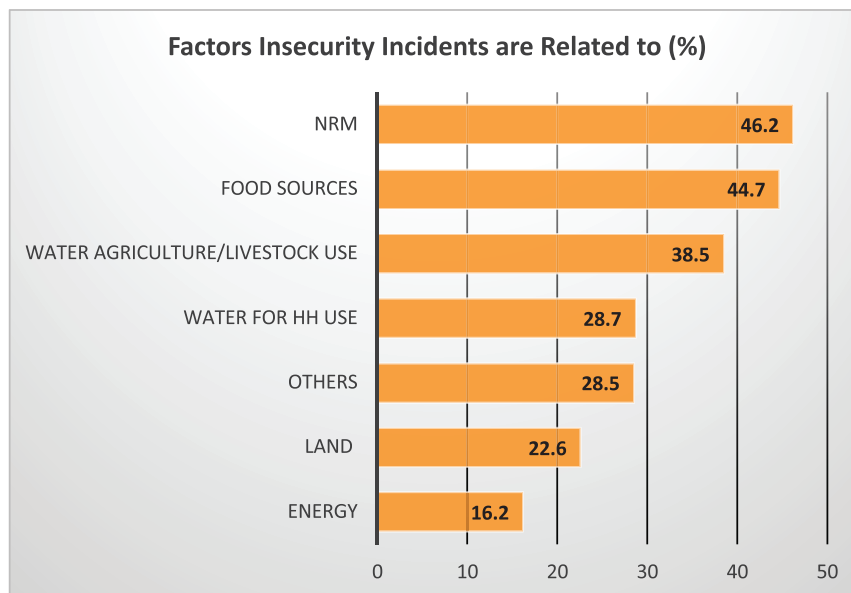
*“Gender-based violence is linked to food sources--the area is dry and now relies on depleted livestock.” Food markets are based in Ngong and its surrounding area, and food has become scarce and expensive.*

*This puts a strain on the family.” (KII-Kajiado County).*

*“Places like the lower part of Marigat were very fertile, but due to dryness, a lack of water, and floods, only a few crops thrive there now. This phenomenon is shrinking productive land. People have been forced to relocate to higher elevations such as Mogotio and Kabarnet, where crops can be grown. There is no competition for the few places capable of supporting food crops, resulting in conflicts.” (KII - Baringo County).*

Improved infrastructure, such as roads and bridges, was reported to have increased access to markets and information/education, as well as the provision of security personnel, and tougher measures by law courts against sexual offenders. In Kajiado County, regulation on the sale of land and the formation of gender, drought mitigation, and climate change committees have been reported as useful. In Kilifi County, advocacy measures against killings of the elderly disguised as witchcraft but caused by land pressure/ conflicts have resulted in a decrease in the vice. Other local initiatives, such as nyumba kumi, wazee wa mtaa and community policing, are said to be more effective in reducing reported insecurity incidents. Similarly, Samburu initiatives such as GSU bases, RDU bases, and Meru and Borana peace talks have been reported to contribute to some security improvements.

Figure 4-7: Factors Associated with Insecurity Incidents across the 6 Counties.



While some respondents believed that insecurity has increased or worsened as a result of scarce resources and increased poverty as livestock died, others believed that conflicts over resources were seasonal, as reported by KIIs from Isiolo County,

*“Conflicts over resources are seasonal as they subside when there are plenty of resources and rain. They then re-emerge in times of droughts.” (KII, Isiolo County).*

Raids increase during the rainy season, which is when pasture increases to support “restocking.” During the dry spell, however, many resource conflicts did not result in cattle raids in this county.” (Kajiado County, KII).

### 4.3 Effects of Climate Security Incidents on Men

Climate Change (CC) Impacts and Issues lead to and worsen climate security risks for men, according to peer-reviewed literature (Mukoni, 2013; UNDP, 2013). In this study, the effects of climate security on men are analyzed and classified into water and energy, food and land, migration, displacement, and governance, as shown in Table 4 1.

	Climate Change (CC) Impacts and Issues	Climate Security Risks on Men
Water and Energy	<ul style="list-style-type: none"> <li>• Unevenly distributed</li> <li>• Kenya is classified as having a scarcity of water (both quantity and quality are insufficient).</li> <li>• Competing uses/demand (agriculture, industry, electricity, household use, etc.)</li> <li>• Drought and flooding of water sources.</li> <li>• Fossil fuels extraction demand</li> <li>• Degraded forests reduce access to firewood.</li> </ul>	<ul style="list-style-type: none"> <li>• Longer distances traveled to find water for their livestock expose them to danger in conflict zones.</li> <li>• Enhanced vulnerability to banditry in the aftermath of natural disasters.</li> <li>• Illegal detention and torture as they move in search of pasture and water.</li> <li>• Killings due to fights over water and pasture.</li> <li>• Exposure to armed groups, particularly cattle rustlers looking for new sources of livelihood after disasters.</li> </ul>

## Food and Land

- Need for more land to meet demand.
- Reduced yields and crop losses due to CC.
- Increased deforestation and land degradation from unsustainable agricultural practices.
- Soil degradation.
- Increased demand for water.
- Forced to relocate if forests cease to provide food and dwindling rural livelihoods.
- Frequently involved in resource conflicts between pastoralists and sedentary farmers.
- As their means of subsistence decline, they turn to radical organisations and petty crime.
- Hopelessness as their source of income has declined due to GBV.
- Suicides have been reported during high-stress periods.
- Cases of drug abuse are on the increase.
- Men linked to an increase in GBV.

## Migration and Displacement

- Migration due to floods and drought.
- Degraded resources forcing the movement to new areas.
- Migration from high-risk zones.
- Restrictions on where animals can graze expose them to local community conflicts.
- Exposure to crime and terrorist organisations further restricts nomadic lifestyles.
- Environmental migration (forced and voluntary)
- Forced to relocate to urban areas and countries such as the Middle East in search of new sources of income, exposing them to abuse and mistreatment.
- High GBV and divorce rates are also linked to migration impacts.
- Risk of being trafficked for labor and overexploitation.
- Increased substance and drug abuse as a result of hopelessness, as well as increased poverty linked to sexual assault.

Governance	<ul style="list-style-type: none"> <li>• Climate change impacts higher where governance structures are weak.</li> <li>• Little or no social safe nets to adapt to climate change in fragile states.</li> <li>• Increased pressure on strained results from climate change conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>• Poor governance hence limited assistance for migration-related conflicts.</li> <li>• Poor governance traps states and men in a cycle of violence.</li> <li>• Delays in getting redress for men wrongfully imprisoned.</li> </ul>
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Table 4-1 shows that men face increasing challenges and vulnerabilities, such as having to walk longer distances to find water and pasture for their livestock and being vulnerable to cattle raiders. Men are said to have died as a result of these clashes with bandits and having to go for days without food or water. As a result, men’s health has suffered. Because of the longer distances traveled in search of water and pasture, social bonds between men and their families deteriorate, and some men abandon their families.

In Samburu County, for instance, it was reported that,

*“Water availability and quality for households and livestock are both impacted.” Because water sources have dried up, people are now reliant on boreholes, lakes, and dams. Those who live far from these water sources suffer greatly while searching for water and walking long distances for the scarce commodity. Herders (men and young men) frequently fight at water points due to long lines of animals waiting for water.” (FGD Men – Samburu County).*

This study examined the numerous challenges that men face as a result of the loss of their livelihoods in the form of livestock and land, particularly when they relocate. It is important to note that for men in pastoral communities, livestock is a source of wealth, pride, and identity. As a result of losing their animals in large numbers due to raids or droughts, many men have committed suicide, inflicted physical harm on themselves, and reported increases in alcohol and drug abuse, while others have fled their families.

For example, a KII in Kajiado reported,

*“In Isinya Sub-County, there is an increase in the number of mentally ill people roaming the streets caused by the hopelessness of men who have lost their livelihoods due to prolonged drought. There is no hope for these men and their families.” (KII, Kajiado County).*

In Baringo County, women with FGD reported,

*“Men today are suffering because they are unable to provide for their families. Drought killed their animals. They have no way of supporting their wives and children. As a result, women have refused to give them food and conjugal rights. Others are subjected to gender-based violence by their wives. This situation is extremely frustrating for men.” (FGD, women, Baringo County).*

In Samburu, men FGD said,

*“Previously, GBV was thought to affect only women. Women now look down on men who are unable to provide for their families due to livestock (wealth/property) loss because of poor climatic conditions. Men are feeling violated, and some have developed mental health problems. If men who provide for their families and solve social problems are not mentally stable, everyone suffers in a community.” (Men FGD – Samburu County).*

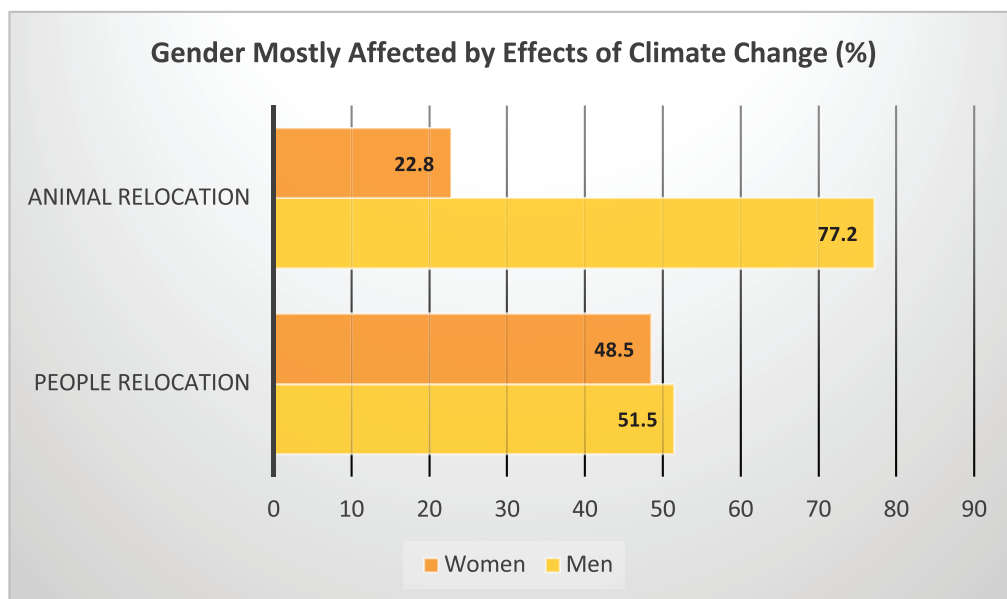
Due to increased poverty as livestock dies during droughts, young men are more likely to be recruited into cattle rustling, petty crime, terror groups, or as informers. Similarly, the conflict has been reported in

Kilifi between herders (mostly men) and commercial plantation owners, and local farmers. Other conflicts have erupted between Kilifi residents and herdsmen from other counties such as Tana River and Garissa, resulting in killings and illegal imprisonment. Similarly, the conflict between Meru farmers and herdsmen from Isiolo and surrounding counties is common in Isiolo.

### 4.3.1 Effects of Relocation on Men

Relocation affects both men and women; however, this study discovered that animal relocation primarily affects men, whereas human relocation has nearly equal effects on both men and women. Men are more likely than women to migrate to towns or cities to work (Kangas et al., 2014). It was reported, for example, that men in the surveyed countries were forced to migrate to the Middle East in search of work. Similarly, because of their involvement in pastoralism, men are more affected by both animal and human relocation.

Figure 4-8: Effects of Animal and Human Relocation on Men and Women



Climate change reduces livelihoods, causing significant stress for men who are socially assigned the role of breadwinners. Men have been forced to relocate over long distances, for example, to Uganda and Somalia, affecting their social fabric with family and friends.


In Samburu for example, a KII reported,

*“Men in this county have been forced to move longer distances including crossing the border into Ethiopia, Uganda, and South Sudan over long periods where they face torture, imprisonment, and ill-treatment. Our herds~~men~~ have been imprisoned in Uganda and the county leaders are following up on the matter.” (KII, Samburu County).*

This study revealed that animal and human relocation hurt men in all counties, leading to torture, lawful and unlawful imprisonment, and ill-treatment by bandits and security agencies. For example, Samburu herdsmen were reportedly imprisoned in Uganda, and county leaders are investigating the situation. The study found that people were subjected to torture and imprisonment by security forces in Isiolo, Samburu, Garissa, and Kilifi because they were suspected of belonging to illegal groups and were accused of trespassing.

Conflicts over pasture and water have fueled people and animal relocation in some counties, such as Baringo, making some areas no-go zones, forcing people (men, women, children, and PWDs) to move from their ancestral land, leading to land competition and shrinkage in the areas where they move into.





People are also being forced to abandon land and farming in general in search of jobs in cities, resorting to fishing on the shores of Lake Baringo.

In Kilifi County, a KII reported,

*“The decline in fish biodiversity has a disproportionate impact on men, who make up the majority of artisanal fishermen, forcing them to go deeper into the waters, exposing them to weather and security risks. Due to reduced fish yields, they are forced to move into more dangerous and deeper seas without proper fishing and safety equipment. During these movements, the men are subjected to extrajudicial killings, are suspected of belonging to terrorist organisations, and face imprisonment and harassment from security agencies.” (KII, Kilifi County).*

According to the surveys, men were most affected by human relocation in Samburu and Kajiado counties, while women were most affected in Baringo, Garissa, Isiolo, and Kilifi counties, as evidenced by women being left as sole breadwinners or widowed. This could be because when men move, women are forced to take on the role of head of the household, and when men are killed, women are widowed and thus negatively impacted.

#### **4.4 Effects of Climate Security Incidents on Women**

According to a review of the literature on the effects of climate security on women, Climate Change (CC) Impacts and Issues lead to and worsen climate security risks for women. (GoK, 2020; UNDP, 2013; World, 2018; IFRC, 2007). Women surveyed reported incidents of insecurity such as sexual assault, gender-based violence, parental beating or torture, and attacks by wild animals.

In Isiolo County, a KII reported a high rise in parental abuse,

*In our community, we have reports of boys beating their mothers whenever they miss food at home due to scarcity of resources (KII, Isiolo County).*

Also, in Garissa, an FGD reported a rise in gender-based violence against women,

*“Boys and men beat up women when there is no food at home. Men have no money to support their families, including buying food, due to the loss of their livelihoods. To avoid violence, women and girls are forced to look for food by hook or crook. Some people are forced to engage in transactional sex in exchange for food.” (KII, Garrisa County).*

In this study, the effects of climate security on women are analysed and classified into water and energy, food and land, migration and displacement, and governance, as shown in Table 4-2.

Table 4-2: Gendered Climate Security Risks on Women

	<b>Climate Change (CC) Impacts and Issues</b>	<b>Climate security risks on Women</b>
Water and Energy	<ul style="list-style-type: none"> <li>• Unevenly distributed water sources</li> <li>• Kenya is classified as having a scarcity of water (both quantity and quality are insufficient).</li> <li>• Competing uses/demand (agriculture, industry, electricity, household use, etc.)</li> <li>• Drought and flooding of water sources.</li> <li>• Fossil fuels extraction demand</li> <li>• Degraded forests reducing access to firewood.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased incidences of sexual violence and gender-based violence as a result of increased stress levels in both men and women.</li> <li>• Longer distances to travel for fuelwood when forests are degraded, potentially exposing them to harm/violence.</li> <li>• Land grabbers forcibly displaced widows from remaining productive lands.</li> <li>• Killings by wild animals as they travel longer distances in search of water and food.</li> </ul>
Food and Land	<ul style="list-style-type: none"> <li>• Need for more land to meet demand.</li> <li>• Reduced yields and crop losses due to CC.</li> <li>• Increased deforestation and land degradation from unsustainable agricultural practices.</li> <li>• Soil degradation.</li> <li>• Increased water demand.</li> <li>• Women are more dependent on crops, wood, and forest resources and have less capacity to cope.</li> <li>• Women have less land ownership than men.</li> </ul>	<ul style="list-style-type: none"> <li>• More time spent obtaining fuel and water exposes them to the dangers of violence in conflict zones.</li> <li>• Sexual exploitation to survive as a result of crop failures and livestock losses.</li> <li>• Women are forced into marriages in exchange for cattle.</li> <li>• Increased risks of being trafficked as they move into urban areas and other countries in search of livelihood.</li> <li>• Single motherhood is on the rise, as is the likelihood of raising children who do not complete their education.</li> <li>• No land ownership, hence, no access to credit, which leads to an increase in poverty levels.</li> <li>• Increase in malnutrition and diseases due to poor diet and inadequate nutrition.</li> </ul>



Migration and Displacement	<ul style="list-style-type: none"> <li>• Migration due to floods and droughts.</li> <li>• Degraded resources force movement to new areas.</li> <li>• Migration from high-risk zones.</li> <li>• Increased risks of moving to urban areas in search of livelihood.</li> </ul>	<ul style="list-style-type: none"> <li>• Longer distances traveled to collect firewood and water increase their exposure to violence in conflict zones.</li> <li>• Exposure to stress and sexual violence in IDP camps.</li> <li>• Trafficking to Saudi Arabia, Qatar, Israel, and Lebanon in search of new sources of livelihood.</li> <li>• Higher divorce rates associated with GBV, as well as long periods of migration leading to an increase in sexual diseases in periods of movement.</li> <li>• Schools were closed as a result of conflict and flooding that affected children increasing the burden of care for women.</li> <li>• Women's health is endangered by limited access to services and health care.</li> </ul>
Governance	<ul style="list-style-type: none"> <li>• Climate change impacts area higher where governance structures are weak.</li> <li>• Little or no social safe nets to adapt to climate change in fragile states.</li> <li>• Increased pressure on strained results from climate change conflicts</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal participation in conflict and climate change-related governance structures and decision-making.</li> <li>• Poor governance hinders adaptation efforts (most affected by (CC) where redress mechanisms are nonexistent or overburdened.</li> <li>• No involvement in Kangaroo courts leading to delays in addressing challenges faced by victims of sexual assault and GBV.</li> </ul>

Table 4-2 shows that women are more vulnerable to a variety of challenges, including being forced to walk longer distances in search of water, food, and firewood to support their families. Some women, like men, are killed and attacked in the forest by wild animals or bandits, including forced marriages for girls. Gender-based violence was seen or experienced at a higher rate in some counties. It should be noted, however, that reported cases of GBV are not always related to climate change issues, but may be one of the contributing factors. Similarly, GBV is frequently underreported due to stigma and cultural factors. Furthermore, some women go for days without food because whatever little they have is given to small children.

Table 4-3: Gender-Based Violence by County

Type of Insecurity:	County	No (%)	Yes (%)
Gender-Based Violence	Baringo	94	6
	Garissa	100	0
	Isiolo	33	67
	Kajiado	64	36
	Kilifi	96	4
	Samburu	67	33

Other challenges faced by women in this study included becoming sole breadwinners for their families and their children becoming street children due to a lack of food, as reported in Samburu,

*“Many women in our county are becoming breadwinners because men are fleeing from home and responsibilities, leaving women at home with children but no jobs. Women are burning charcoal to feed their children, they carry heavy bags of charcoal to the market and sometimes get little or no money from it. Other women have become alcoholics as a result of their frustration.” (Men FGD, Samburu County).*

As reported here, the challenge of women becoming breadwinners and husbands fleeing from home has resulted in intense mental challenges and stress. Some women, like men, have developed health problems and turned to alcohol and drug abuse.



**A woman in Cherab Ward, Isiolo County, taking care of what is left of her livestock following a devastating famine**

Other women, like men, were reported to have abandoned their children, resulting in street children in Maralal. Similarly, the health of the women and families left behind suffers when livestock and men leave for extended periods, limiting access to nutritious meat and milk and forcing them to rely on wild fruits or one meal per day. Forced marriages of young girls in exchange for cows have also been reported.

#### **4.5 Effects of Climate Security Incidents on Children**

Children are more vulnerable to environmental changes than adults because of their small physical body size, physiological and cognitive immaturity, and reliance on caregivers for safety and protection. The effects of climate change on agricultural yields and productivity have had a significant impact on children’s health outcomes, particularly in ASAL regions that are heavily dependent on subsistence agriculture and where undernutrition and malnutrition are already prevalent.

Participants in this study reported school children suffering as a result of climatic security incidents such as forced migration/relocation from homes and schools, due to lack of food or flooding, and exposure to violence in areas that are prone to banditry attacks and cattle raiders.

In addition, children have been reported to suffer from severe malnutrition as a result of the high cost of food and neglect, in which adults leave homes, leaving children behind, in search of pasture and water for animals and alternative sources of income.

Young girls in Kajiado County, for example, were exposed to FGM at a young age in preparation for early marriages, according to study respondents. Early marriage was seen as a way to relieve household burdens



and, in many cases, in exchange for cattle for restocking after long droughts.

All study participants (KIIs, FGDs, and HHS) in the study counties reported a high prevalence of school dropouts, where boys move away with men to look after pasture and water for animals. As a result of being out of school, high rates of teenage pregnancies, street children, involvement in petty crimes, and some instances of child prostitution and drug abuse were reported. Parental abuse was reported in Isiolo County, with boys beating their mothers over resources. Most of these incidents were escalated by high drug abuse and alcoholism. Table 4-4 shows some of the security risks facing children in the study counties.

Table 4-4: Gendered Climate Security Risks on Children

	<b>Climate Change (CC) Impacts and Issues</b>	<b>Climate security risks on Children</b>
<b>Water and Energy</b>	<ul style="list-style-type: none"> <li>• Unevenly distributed.</li> <li>• Kenya is classified as having a scarcity of water (both quantity and quality are insufficient).</li> <li>• Competing uses/demand (agriculture, industry, electricity, household use, etc.)</li> <li>• Drought and flooding of water sources.</li> <li>• Demand for fossil fuel extraction.</li> <li>• Degraded forests make it more difficult to obtain firewood.</li> </ul>	<ul style="list-style-type: none"> <li>• Incidences of sexual violence and abuse have increased as a result of increased stress levels in both men and women</li> <li>• Girls travel longer distances to find fuelwood when forests are degraded, exposing them to harm/violence.</li> <li>• Killings by wild animals as they travel longer distances grazing and looking for pasture and water for their family livestock.</li> <li>• Girls accompanying their mothers in search of water and firewood missing or dropping out of school.</li> </ul>
<b>Food and Land</b>	<ul style="list-style-type: none"> <li>• Need for more land to meet demand.</li> <li>• Reduced yields and crop losses due to CC.</li> <li>• Increased deforestation and land degradation from unsustainable agricultural practices.</li> <li>• Soil degradation.</li> <li>• Increased water demand.</li> </ul>	<ul style="list-style-type: none"> <li>• More time spent collecting fuel and water exposes girls in conflict zones to the risk of violence.</li> <li>• Girls are more likely to marry off to alleviate the economic burden caused by crop failures and livestock losses.</li> <li>• Young girls are forced into marriages in exchange for cattle – for ‘restocking’.</li> <li>• Increased risks of forced child labor and trafficking as dropouts move into urban areas in search of alternative income sources, e.g., Kilifi County.</li> <li>• High drop-out rates to assist parents in their search for water (for girls) and pasture (for boys).</li> <li>• Boys engaging in crime at an early age.</li> <li>• High rates of parental abuse due to scarcity of resources.</li> </ul>

Migration and Displacement	<ul style="list-style-type: none"> <li>• Migration due to floods and drought.</li> <li>• Degraded resources force movement to new areas.</li> <li>• Migration from high-risk zones.</li> </ul>	<ul style="list-style-type: none"> <li>• Girls who travel longer distances to collect firewood and water are more vulnerable to harassment and sexual abuse.</li> <li>• Exposure to stress and sexual violence in IDP camps.</li> <li>• Trauma occurs when parents relocate to distant places.</li> <li>• Due to high divorce rates associated with GBV and long periods of migration, children lack basic needs.</li> <li>• School closures are common as a result of conflicts, migration, and flooding.</li> <li>• High levels of indiscipline among children resulting in crime and drug abuse at a young age.</li> <li>• Increased cases of child prostitution and early adolescent pregnancy as a result of family structure breakdown.</li> </ul>
Governance	<ul style="list-style-type: none"> <li>• Climate change impacts higher where governance structures are weak.</li> <li>• Little or no social safe nets to adapt to climate change in fragile states.</li> <li>• Increased pressure on strained results from climate change conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>• No participation in conflict and climate change-related governance structures and decision-making.</li> <li>• Adaptation efforts to support children (most affected by (CC) where redress mechanisms are nonexistent or overburdened.</li> <li>• Delayed redress mechanisms for children/victims of sexual assault and gender-based violence.</li> <li>• Children not involved in Kangaroo courts and have no way of sharing their opinions or concerns.</li> </ul>

Table 4-4 shows that, in addition to children experiencing violence and abuse from stressed-out parents, they are at risk of being killed by wild animals as they trek longer distances looking for firewood, fetching water, and grazing their family livestock. Boys and girls who spend more time fetching water or herding animals attend fewer days of school and are more likely to drop out.

Children in Baringo County, according to KIIs, face insecurity, including not attending school because schools are closed due to floods and cattle raids in their neighborhoods. The study also discovered that girls were married off as a way to cope with food scarcity in some families.





In Samburu County, it was reported,

*“Because of the poverty caused by the effects of climate change, our girls are doing sex for pads. We also face a GBV challenge because Moran’s rape is not considered a crime in our culture. We are disappointed that Samburu County has been reported to have the highest rate of teenage pregnancies in Kenya, at 68 percent (Kenya National Economic Survey, 2022). This is upsetting to us as male parents in this county because it demonstrates that we have failed to protect our daughters. However, this is due in part to the fact that many men have left their homes in search of pastures and water, particularly during the drought. That made it easier for other men to take advantage of our girls. People with disabilities face violence and in some cases, they are treated as outcasts and are not cared for because there is no food or money to transport them to the hospital. They are facing serious challenges and require support. The county government and our leaders must assist us in meeting some of these challenges.” (FDG Men – Samburu County).*

Children in Samburu County especially girls face many challenges including poverty, retrogressive cultural practices, high levels of teenage pregnancies – 68 percent reported during the COVID-19 pandemic (Kenya National Economic Survey, 2022), poor child protection particularly where men leave homes in search of jobs, pasture and water for livestock (other men violating girls and children) and others abandoning their families when they are unable to support them.

The problem of street children has been reported in Samburu County, where many children can be found scavenging for food in Maralal Town. Children have also been reported to experience traumatic stress as a result of their parents’ relocation for work.

*“Maralal is home to a growing number of street children. This occurrence is upsetting and reflects poorly on us as men and as fathers. This means that while we are men, we cannot protect our children.” (FDG Men - Samburu County).*

#### **4.6 Effects of Climate Security Incidents on PWDs**

PWDs’ movement has been restricted during extreme weather events such as floods, putting them in danger, particularly those using wheelchairs and those who rely on caregivers for movement. PWDs have difficulty traversing long distances as a result of reduced livelihood opportunities in local areas, and they are sometimes the first casualties in armed clashes.

Similarly, rates of suicidal thoughts are high, particularly when caregivers are displaced due to droughts and flooding, rendering them unable to care for them or abandon them. During severe droughts, PWDs who receive cash transfers from the government or other institutions are sometimes exploited by poor family members. Cases of funds being diverted from PWDs have been reported, particularly during drought emergencies. The study identified several climate security threats to PWDs, as shown in Table 4 5.

Table 4-5: Gendered Climate Security Risks on PWDs

	<b>Climate Change (CC) Impacts and Issues</b>	<b>Climate security risks PWDs</b>
Water and Energy	<ul style="list-style-type: none"> <li>• Unevenly distributed.</li> <li>• Kenya is classified as having a scarcity of water (both quantity and quality are insufficient).</li> <li>• Competing uses/demand (agriculture, industry, electricity, household use, etc.)</li> <li>• Drought and flooding of water sources.</li> <li>• Demand for fossil fuel extraction.</li> <li>• Degraded forests make it more difficult to obtain firewood.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased incidences of sexual and gender-based violence due to rising stress levels in both men and women.</li> <li>• Land grabbers forcibly displaced PWDs from remaining productive lands.</li> <li>• PWDs are exploited and abused as a result of receiving aid and cash transfers during droughts.</li> <li>• Killings by wild animals as they travel longer distances in search of water and food.</li> </ul>
Food and Land	<ul style="list-style-type: none"> <li>• Need for more land to meet demand.</li> <li>• Reduced yields and crop losses due to CC.</li> <li>• Increased deforestation and land degradation from unsustainable agricultural practices.</li> <li>• Soil degradation.</li> <li>• Increased water demand.</li> <li>• Women are more dependent on crops, wood, and forest resources and have less capacity to cope.</li> <li>• Women have less ownership of land.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased cases of rape of young girls with disabilities who are vulnerable when caregivers migrate in search of work.</li> <li>• There are many cases of neglect as priorities shift to the more capable individuals.</li> <li>• A high rate of starvation and malnutrition due to poor diet from neglect by caregivers.</li> <li>• PWDs are exploited and abused as a result of receiving aid and cash transfers during droughts.</li> <li>• Increased school dropouts as priorities shift to more urgent needs.</li> </ul>
Migration and Displacement	<ul style="list-style-type: none"> <li>• Migration due to floods and drought.</li> <li>• Depleted resources force people to relocate to new areas.</li> <li>• Migration from high-risk zones.</li> </ul>	<ul style="list-style-type: none"> <li>• PWDs are abandoned by family and caregivers during migration and displacement, increasing their exposure to harassment, violence, and suicidal thoughts.</li> <li>• Exposure to stress and sexual violence in IDP camps.</li> <li>• Exposure to rape and sexual assault when caregivers travel long distances to look for food and livelihoods.</li> <li>• PWDs are moved or taken to urban centres by the caregivers to borrow from the streets where they are exposed to hot sun and cold weather during rainy seasons.</li> <li>• PWDs are more likely to be affected by school closures as a result of conflict and flooding.</li> </ul>



Governance	<ul style="list-style-type: none"> <li>• Climate change has a greater impact where governance structures are weak.</li> <li>• Little or no social safe nets to adapt to climate change in fragile states.</li> <li>• Increased pressure on strained results from climate change conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal participation in conflict and climate change-related governance structures and decision-making.</li> <li>• Poor governance hinders adaptation efforts (most affected by (CC) where redress mechanisms are nonexistent or overburdened.</li> <li>• Poor representation in the local, county assembly.</li> <li>• Kangaroo courts delay redress mechanisms for victims of sexual assault and gender-based violence.</li> </ul>
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Table 4-5 shows that PWDs are at risk of facing a variety of challenges and increased vulnerability, such as limited access to water and energy, sexual and gender violence, and exploitation as a result of receiving aid and cash transfers during drought periods. Others are at risk of being attacked by wild animals if they are left alone during family relocations due to floods and conflicts, or if they go for long periods without food after being abandoned. Due to delays in redress mechanisms for victims of sexual assault, neglect, and gender-based violence, PWD does not have access to justice. This is due to PWDs’ lack of participation in governance systems and in court systems, where their representation is minimal. Furthermore, during migration and displacement, PWDs are abandoned by family and caregivers, increasing their vulnerability to harassment and violence.

In Baringo, some PWDs were experiencing violence,

*“Violence is being directed at some people with disabilities in this county. In some cases, they are considered outcasts and are not cared for. Because some have never attended school, it is difficult for them to find work or start small businesses. They are facing serious challenges and require immediate assistance, including vocational training. Disability is not inability. Some people, if properly trained, can support themselves.” (KII, Baringo County).*

Empowerment programmes, such as providing relevant education and/or skills or training, as well as involvement in governance, are critical to ensuring that PWDs fully participate in the development of their counties.

*“We do not have any representation in the County Assembly. Cases of rape of disabled women are on the rise, and we lack the necessary equipment and devices. Access to government and health services is difficult in multi-story buildings, and there is little effort to install ramps. There are no clear records of disabled people in the county, even at the Sub-County level, making outreach difficult. We didn’t have a unified organisation for the disabled until recently when we formed the umbrella, which is still in the early registration stages.” (KII Isiolo County).*

This study strongly advocates for the empowerment of PWDs to improve their ability to advocate for their rights and earn a living.

#### **4.7 Actors Involved in the Implementation of Gendered Climate Security Interventions in Kenya**

This section answers the research question: **what are the priorities, challenges, and opportunities experienced by actors involved in the implementation of gendered climate security interventions?**

The stakeholders presented several challenges and opportunities in addressing the aforementioned climate change and related security issues. While some issues are unique to men and women, others affect everyone in the community.

#### 4.7.1 Priorities of Actors in Climate Insecurity

The following are key priorities of actors in climate insecurity.

1. Promote meaningful participation, protection, and rights for women in all aspects of climate security incidents.
2. Recognise and respond to various ways in which women, men, children, and PWDs contribute to the experience, and adapt to climate security incidents in the country.
3. Diversification of livelihood opportunities for women and men through water harvesting projects, which use available freshwater lakes and rivers for irrigation projects focusing on food and fodder crops for both human and livestock consumption.

#### 4.7.2 Challenges of Climate Change Insecurity

**Inadequate funding is cited by both state and non-state actors.** This is because extreme weather events such as drought are becoming more frequent and extend over longer periods. This means that any progress made in addressing issues such as natural resource management and peace treaties is undone when extreme events occur. In the case of the National Climate Change Action Plan 2018-2022, insufficient funding has hampered the full implementation of actions identified for the agriculture and water sector plans, which would significantly alleviate some of the recurring insecurity issues associated with food and water security.


*“Even with the action plans, there are budgetary allocations for interventions that are not implemented and are hampered by a lack of resources that affect both genders.” (KII National).*

Similarly, resource availability hinders the development of good information and road networks limiting access to affected areas even during extreme weather conditions and periods of insecurity. Some respondents stated, for example, that some areas of West Pokot County are inaccessible and abandoned for these reasons. Inadequate resources imply insufficient capacity, for example, in developing and implementing sustainable livelihood and peace programs and monitoring their effectiveness to allow for appropriate adjustment.

All ASAL counties are classified as **highly vulnerable to climate change, with limited coping capacities** due to high levels of poverty, a lack of alternative employment opportunities, and high levels of illiteracy, particularly among women and people with disabilities. As a result, when extreme climate change events and associated insecurity strike, communities are unable to adequately recover, leading to extreme coping mechanisms such as cattle rustling and forced marriages, which affect young men and girls, respectively, to replace lost livestock.

**Retrogressive/problematic cultural practices and gender norms** have also been identified as contributors to climate change security concerns. This is because cultural norms continue to exclude women, children, and people with disabilities from decision-making tables, preventing them from sharing their concerns, opinions, allocating resources, and gaining access to information. Women, children, and people with disabilities are the last to learn about or access information, including any assistance offered by benefactors.

Concerning problematic cultural practices in Samburu County, men FGD participants expressed concern about their culture’s acceptance of the rape of girls: “We have a gender-based violence challenge facing us because the rape of girls by Morans is not viewed as a crime by our culture” (men FDG - Samburu County). This was a surprising revelation because the concern was expressed by men, not women. Do women and girls regard this type of rape as normal? This is an example of a cultural practice that prevents girls, women,



and children from reporting or responding to insecurity issues because they are unable to challenge their culture.

Similarly, cultural norms that place a high value on the number of livestock have hampered government programmes such as destocking and controlled grazing as opposed to nomadic grazing in men. This has an impact on children who are forced to drop out of school to help their parents herd/graze a large number of livestock, especially during droughts.

While some counties such as Kajiado cited a **lack of coordination** among the county's many non-state actors, others such as Garissa County cited **the small number of actors**, for example, to build their capacity in livestock management. In Kajiado County it was highlighted that stakeholders needed to be more coordinated and implement more integrated programmes to address the various identified drivers of insecurity, such as climate change, natural resource management, and livelihood development. Respondents in Garissa requested assistance in implementing livestock management systems that can withstand extreme weather changes. Collaboration can improve the effectiveness and efficiency of integrated programmes addressing women, men, children, and people with disabilities, as well as climate and security linkages, through partnerships and complementarity of mandate among actors, funds, and programmes.

Lack of effective **community and information-sharing platforms** has also hindered the implementation of programs where non-state actors are unable to reach all affected communities, due to the vastness of the counties. Similarly, there is frequent misreporting in the media when cattle raids are reported without highlighting the negative impacts on the most affected local communities. In Kilifi County, for example, a **lack of self-organized groups** among the men was cited as a barrier to collective engagement of men in understanding the issues that affect them limiting the design of relevant programs that would assist the men in addressing their specific issues.

In terms of responses to insecurity issues related to climate change, stakeholders cited that alternative dispute resolution mechanisms have not been effective e.g., in Samburu and Garissa counties example Kangaroo courts were identified as **limiting justice to victims of violence and injustice**, especially women, children and PWDs. Similarly, victims in Kilifi County, for example, are left hopeless due to delayed justice and response from security agents and justice systems. For example, victims of unlawful imprisonment may abandon the courts as a tool for social justice.

*“Alternative Dispute Resolution (ADR) has been a hindrance to access to justice where the “kangaroo” courts are so many at the village level and as such the issues don’t get to the justice system or security actors.” (KII - Garissa County).*

Lastly, **ineffective implementation of policies and strategies** such as county-integrated plans and natural resource management plans, including inadequate political will and corruption has delayed the allocation of resources to identified state and security agents tasked with responding to the insecurity issues in the counties. Gender desks at police stations, in particular, are understaffed and underfunded. Inclusivity, which ensures that women, children, and people with disabilities are fully included in the design and implementation of National Adaptation Plans and that these plans specifically address their unique experiences, risks, and opportunities was viewed as an effective way of building their resilience.

#### 4.7.3 Opportunities in Responding to Issues of Climate Change Insecurity

According to key informant interviews, several opportunities exist for responding to climate change insecurity issues including programmes for women and youth empowerment. As in Baringo County, this entails developing their capacity in entrepreneurship, drought-resistant crop farming, and other livelihood opportunities for example horticulture, poultry keeping, and beekeeping. There are programmes in Kajiado County aimed at encouraging women to participate in the milk value chain, from milk and skin processing to value addition. In Baringo County programmes, livelihood diversification includes using the Mathenge

tree to make cakes, chapatis, and sweets, as well as renting out land during dry periods. Similarly, in Kajiado County, there are deliberate efforts to include women in the water user's association, where men and women are represented 60/40 respectively.

Some programmes empower women with renewable energy sources. Women are educated on energy-saving jikos, biogas, and waste recycling, as well as being empowered as clean energy producers and entrepreneurs.

Other identified opportunities include encouraging communities to undertake alternative farming practices, for example, smart farming and irrigation where for example in Baringo, community members practice irrigation farming and using the Kerio Valley for maize, kales, and beans farming. Similarly, the provision of water through the creation of water pans, pumps, and tanks for irrigation is promoted.

Both county and non-state actors provide relief programmes, which include food feeding programmes and the distribution of relief food during periods of extreme drought. County governments also promote restocking programmes for families who lost livestock due to recent droughts.

Peace-building programmes are undertaken in various forms. First, some work with local leaders and security forces to resolve conflicts such as chiefs, nyumba kumi and baraza of elders in Isiolo and Garissa counties. In Kilifi County, there is a Bunge la wananchi which is a committee tasked with identifying security risks and solutions. Garissa County also implements programmes to foster relationships between security forces and youth. Others seek to strengthen the community's role and participation as duty-bearers in promoting security in their respective areas. Moranism programmes, for example, are used in Samburu County to encourage intergenerational community dialogues for peace.

*“Communities are now willing to work together to put an end to cattle raiding.” Recently, in April 2023, the Pokot and Elchamus elders met to honor a Pokot member who refused to hide cattle stolen from the Elchamus. They requested that the Pokot return the stolen cows to the Elchamus people, and half of the cows were returned. This demonstrates that there is still hope for resolving the conflict.”- (KII: Baringo County).*

Similarly, the national government for example through the peacebuilding and conflict management directorate facilitates dialogues and peace agreements between communities. Some of the identified opportunities for action along the Samburu-Marsabit border (covering Layangalani, Laisamis, Samburu North, and Samburu East) include county facilitation of title deeds, inter-communal dialogues to avoid retaliatory attacks, and formulation of livestock branding policies through county governments. The peace agreement specifically calls for stakeholder collaboration to create more water points, support in harmonising grazing policies, and support for elders to negotiate for migrating communities to resolve cattle rustling and natural resource conflicts. Environmental conservation programmes are also implemented, such as the establishment of commercial tree nurseries, mangrove restoration in Kilifi County, and grass-growing programmes in Kajiado County.

Education programmes, including support for tertiary education for youth and PWDs, are used to reduce the rate of dropouts and youth participation in banditry activities. To increase access and participation, these tertiary programmes are located near their homes.

Legal, counseling and medical assistance are also available to victims of sexual violence. This includes increasing the capacity of gender desks in police stations. Non-state actors conduct advocacy programmes to advocate for women's land ownership, the right to engage in alternative livelihood practices, and family planning to dispel some of the negative cultural practices that limit women's participation.

There are women's networks that enable women to use local knowledge and capacity to implement climate adaptation and mitigation strategies. The networks are also used by actors to support women's economic empowerment through training and resource provision for climate-resilient sustainable livelihoods.



**Gender-sensitive climate change adaptation policies-** Adapting policies informed by women and addressing the realities of women’s needs could help reach underserved ASAL communities. These should address broader systemic gender issues such as land rights, property and equal access laws, and political participation as well as ensure that gender dimensions of climate-related security risks are taken into account in further policy development. They should encourage and support the meaningful participation of women, men, children, and PWDs in natural-level climate change policy and planning in the ASAL areas.

#### 4.7.4 State and Non-State Actors Supporting Counties Climate Security

Table 4-6 shows some of the mentioned state and non-state actors promoting the aforementioned programmes. According to the findings of this study, these organisations collaborate to provide opportunities to scale up their efforts.

Table 4-6: Stakeholders Working in Surveyed Counties

Baringo	Garissa	Kajiado	Kilifi	Samburu	Isiolo
National government	NGOs and CBOs	County Government	County Government	National government	County Government
County government departments	White Ribbon Alliance	FIDA	VSOs	County Government	Isiolo Peace Link
NGOs (DFID, local communities)	Hope Beyond Foundation	JIPC	Danish Family Planning Association	DANIDA	CEED
Churches	Women Peace Committees	Red Cross	Police	FAO	OXFAM
KEFRI	Ijara Women for Peace	JIPC	Schools	Green Belt Movement	APFO
Give Directly	Ayani Women Group	Nasaru Ntoiye	KECOSCE	World Vision	SRIC
UNICEF	Pastoralists Girls’ Initiative	Isinya Water Resource Association	Haki Africa	SABALAI Counties - 4 pastoralists Counties	CJPC
	World Vision		World Vision	CSI – Local CBO	Safer World
	Muhuri		Plan International		CRS NAWIRI
	Nature conservancy				Government security agents
	NDMA				District Peace Committees (DPCs)
	Peace Link				Conservancies & Northern Range Land Trusts
	Care International				FBO’s
	USAID				NSC
	World Bank				Red Cross
	World Food Program				World Vision
	ILRI				MID_P
	NDMA				WFP
	Mercy Corps				
	ACDI/VOCA				
	FAIDA				

#### 4.7.5 Lessons Learned

The following are the key lessons learned from this study, which focused on ASAL areas in Kenya and issues of gender dimensions in climate security incidents:

1. Promotion of women’s participation in climate security intervention and mitigation. Intervention processes have some aspects of empowerment and liberation both for women and men particularly those in leadership positions.

- Climate security intervention is unstable unless the question of what comes next after the intervention is addressed. Inadequate coverage of intervention and mitigation programmes in ASAL areas and among farmers and pastoralists jeopardises the long-term viability of project accomplishments and intervention and mitigation achieved thus far.
- There is a need for proper and sustainable food programmes including full-time relief food for PWDs and HIV patients.

There is a need to include women, children, PWDs, and men from pastoral communities in decision-making forums (leadership) to ensure full community representation.

#### 4.8 Applied Responses and Measures to Curb Insecurity Incidences by Men and Women

According to the report, both men and women have taken several steps to address the above-mentioned insecurity incidents. Participation in peacebuilding programmes was one of the measures taken by both men and women. In particular, there is a need to implement the WPS agenda in Kenya by prioritising women as actors in peace and security programmes.

Communities seek assistance from security forces, reduce frequent travels to work, and self-organization into groups such as ‘nyumba kumi’ for easy neighborhood monitoring, fortifying their bomas, and participation in conservation efforts. Also, as shown in Figure 4-9 below, communities responded by pursuing alternative livelihoods, employing early warning tools, acquiring or employing weapons, joining formal security forces, employing early warning systems, or providing money or food to security forces in exchange for security services.

Figure 4-9: Applied Responses to Insecurity Incidences by Men and Women

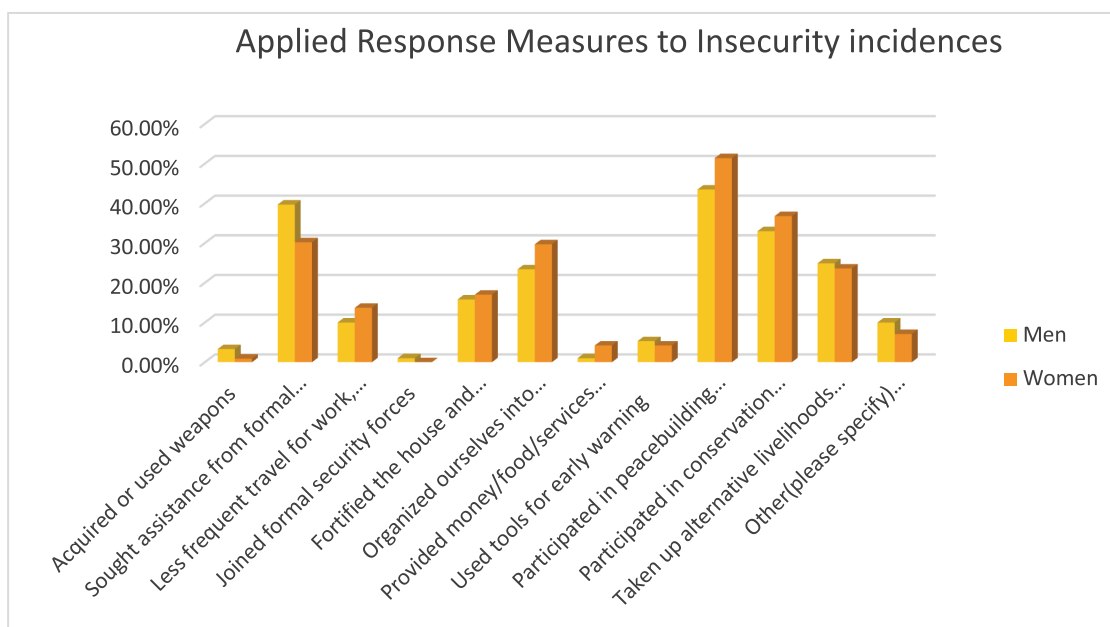



Figure 4-9 shows that the most popular measures taken by both men and women to combat insecurity incidences in their communities were: participation in peacebuilding (women 50 percent and men 43 percent), seeking assistance from formal security forces (men 39 percent and women 30 percent) and participation in conservation measures (women 35 percent and men 31 percent). The least popular methods were joining formal security forces (men 3 percent and women 1 percent) followed by acquiring or using weapons (men 4 percent and women 2 percent).





Other measures used by their communities and actors to counter security incidents, according to key informant interviews (KIIs), were women and youth empowerment, peace-building, conservation, and water conservation.

**Women and Youth Empowerment Programmes;** These include entrepreneurship training, drought-resistant crop farming, and other livelihood opportunities in Baringo County such as horticulture, poultry keeping, and beekeeping. There are programmes in Kajiado County aimed at encouraging women to participate in the milk value chain, from milk and skin processing to value addition. In Baringo County programmes, livelihood diversification includes using the Mathenge tree to make cakes, chapatis, and sweets, as well as renting out land during dry periods.

Similarly, in Kajiado County, there are deliberate efforts to include women in the water user's association where there is 60/40 representation for men and women, respectively. Women could also be encouraged to participate in the clean energy value chain which includes development and production. This would provide an alternative to charcoal burning and increase additional sources of income. Thus funding for this training must be prioritised.

Youth may pursue employment opportunities in the technology sector. Access to the Internet via data centers can be improved through private-sector collaboration. This will expose the youth to online training and jobs, as well as allow them to market their products and expertise via social media, among other things.

**Community Peace Education Programmes;** Peace education programmes are being implemented in communities that experience frequent insecurity incidents in ASAL regions. The goal of peace education programmes is to provide understanding and exposure to what women, men, children, and people with disabilities can do to remain resilient in the future.

**Intergenerational Community Dialogues;** Moranism programmes for men, for example, are being used in Samburu County to encourage young men to promote intergenerational community dialogues for peace. Although Morans are expected to protect their communities and adhere to their age-sets, KIIs from Samburu proposed an intergenerational (inter-age-sets) community dialogue as a countermeasure to insecurity incidents in their area. This is a call to all those involved in moranism - both young and old - to come and work together to find community solutions to cattle raiding, banditry, robbery, abductions, and all other problems confronting the community. The intergenerational community dialogues aim to bring all Morans, regardless of age, together to work on agreed-upon modalities of organised livestock grazing, use of forests, use of water points, and engagement with other communities who may be viewed as 'enemies' because they raid cattle from the Samburu people.

Furthermore, these intergenerational community dialogues could be avenues for establishing proper and organised methods of engaging other actors in Samburu County such as county government, national government, NGOs, civil society, and development partners who are working on the areas such as environment, peace, agriculture, and water – which are the major concerns of pastoral groups to harmoniously work together to eradicate the challenges of insecurity in the area.

In support of intergenerational community dialogues, a KII reported,

*“Communities are now willing to work together to put an end to cattle raiding.” Recently, in April 2023, the Pokot and Elchamus elders met to honor a Pokot member who refused to hide cattle stolen from the Elchamus. They requested that the Pokot return the stolen cows to the Elchamus people, and half of the cows were returned. This demonstrates that there is still hope for resolving the conflict.”- (KII: Baringo County).*

According to the KII from Baringo, elders were able to persuade an 'enemy' to return stolen cows. This example demonstrates that the solution to insecurity in the ASAL regions lies in communities coming

together and solving their problems. Globally, police, armed forces, and UN peacekeeping missions have been deployed in conflict-affected regions such as Somalia, South Sudan, Sudan, and Congo, among others in Africa. However, there are opportunities to promote community dialogues as a means of bringing peace, as in the case of Baringo County.

**Peace Agreements;** The national and county governments have facilitated community dialogues and peace agreements between climate security conflicting communities through the peacebuilding and conflict management directorate. Some of the identified opportunities for action along the Samburu-Marsabit borders (covering Layangalani, Laisamis, Samburu North, and Samburu East) include county facilitation of title deeds, inter-communal dialogues to avoid retaliatory attacks, and formulation of livestock branding policies through county governments.

In particular to resolve cattle rustling and natural resource conflicts, the peace agreement calls for stakeholder collaboration to create more water points, support in harmonising grazing policies, and support for elders to negotiate for migrating communities.

**Environmental Conservation Programmes;** Some counties use environmental conservation programmes for men, women, youth, and people with disabilities as climate security interventions. These include the establishment of commercial tree nurseries in Samburu County, mangrove restoration in Kilifi County, and grass-growing programmes in Kajiado County.

Both men and women FGDs in Samburu County reported that they had been doing commercial tree nurseries for a while but had disappointing results,

*Men: “We have planted many trees in our groups. As you can see, we continue to water, apply manure, and care for our tree nurseries daily. On weekends, we even take turns going to the tree nursery to protect the trees from animals. However, we lack a sustainable market. Few people come to buy them in bulk to provide us with enough funds for our use and future expansion of the project.” (FGD men, Samburu County).*

*Women: “We’ve been planting trees for over ten years. Because we don’t have many benefits to show, the project allows us to come together as members. But we wish we could get help finding a market and growing other trees that are multi-purpose and do well in our soils. We need trees that everyone in their shamba can grow for fruits and other products. This could be extremely beneficial.” (FGD women, Samburu County).*

Because commercial tree nurseries already exist in some counties, such as Samburu, the groups could be assisted in finding markets and growing multi-purpose trees focusing on fruits, oil plants, beauty products, and so on.

**Programs to Improve Access to Education for Youth and PWDs;** Education programmes, including support for tertiary education for youth and PWDs, are implemented to reduce the rate of dropouts and youth participation in banditry activities. These tertiary programmes are located near their homes to increase access and participation.

Legal, counseling and medical assistance are also available to victims of sexual violence. This includes increasing the capacity of gender desks in police stations. Non-state actors conduct advocacy programmes to advocate for women’s land ownership, the right to engage in alternative livelihood practices, and family planning to dispel some of the negative cultural practices that limit women’s participation.

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Recommendations

This section highlights study recommendations divided into themes, including cross-cutting recommendations that apply to all counties studied and country-specific recommendations. Each theme includes a list of suggestions based on the study findings that, if implemented, will go a long way toward reversing some of the climate security challenges that women, men, children, and people with disabilities face across the country and in specific counties.

#### 5.1.1 Women

- Climate security interventions should address the underlying factors that contribute to GBV, provide safe spaces, and ensure access to justice and support services for survivors.
- Robust data collection and analysis that disaggregates information by gender can provide insights into how climate change affects women differently, inform evidence-based policies, and support targeted interventions.
- It is critical to promote women's participation and leadership in climate security interventions to develop context-specific and gender-responsive strategies.

#### 5.1.2 Men

- Men's economic resilience should address their livelihood challenges and provide alternative income-generating opportunities.
- Integrating mental health support and psychosocial services within climate security interventions can help address men's specific needs.
- Ensuring occupational safety measures, access to healthcare services, and training on climate-resilient practices to help mitigate these risks.
- Men can actively participate in climate security interventions if gender stereotypes are challenged and inclusive gender roles are promoted, encouraging them to become allies and agents of change. To close these gaps, equitable access to resources must be promoted, as well as inclusive decision-making processes that take into account the needs and perspectives of all genders.

#### 5.1.3 Children

- Access to safe drinking water, adequate sanitation, nutritious food, and healthcare services are critical for protecting children's well-being in the face of climate change.
- Addressing these issues necessitates the construction of climate-resilient school infrastructure, the development of contingency plans for education continuity during emergencies, and the promotion of gender-responsive education policies.
- Developing child-centered strategies that address the specific needs and rights of displaced children, including psychosocial support and access to education, is critical
- Integrating child protection mechanisms within climate security interventions, strengthening child protection systems, and raising awareness about children's rights can help mitigate these risks.
- Promoting child-friendly spaces, facilitating child-led initiatives, and integrating child participation in climate planning and policy-making processes to foster their empowerment and ensure their voices are heard.

#### 5.1.4 People With Disabilities

- Incorporating universal design principles and ensuring inclusive infrastructure to enhance the accessibility and usability of climate security interventions for people with disabilities.
- To protect their lives and well-being, it is critical to develop inclusive emergency preparedness strategies, provide accessible evacuation routes and facilities, and ensure communication accessibility during emergencies.
- Climate security interventions should consider inclusive economic development strategies that promote accessible livelihoods, skills development, and entrepreneurship opportunities for people with disabilities.
- Ensuring inclusive communication channels, providing information in accessible formats (e.g., braille, sign language, audio), and promoting assistive technologies can help PWDs better understand climate risks and enable their active participation in decision-making processes.
- Ensuring representation of people with disabilities in climate governance structures and promoting their involvement in community-based adaptation initiatives.

#### 5.1.5 Cross-Cutting Recommendations

##### **Advocacy programmes for women to have access to land and to take up alternative livelihood options:**

According to the study, women continue to have limited access/representation in natural resource management decision-making tables across the surveyed ASAL counties. Such programmes would seek to reduce these barriers by ensuring their representation in grazing committees, peace committees, water and resource users associations, and local structures such as baraza la wazee and nyumba kumi.

**Support to the development of locally designed agreements and policies:** The programme through the NSC could pilot the development of locally designed resource management policies, such as grazing plans, grazing and paddocking committees, forest scouts, and environment women leagues, to carefully plan, protect, and control resource usage for the benefit of all community members.

**Support implementation actions of peace agreements:** This could include supporting the implementation of actions outlined in the Samburu-Marsabit peace agreement or the Amaya Triangle Initiative (which includes the counties of Baringo, Isiolo, Laikipia, and Samburu). This support would include, among other things, gathering community members, particularly youth, men, and security agents, for interagency and intergenerational dialogues, such as quarterly or annual joint barazas and peace caravans.

##### **Support through the NCIC and NSC to adopt the legal framework on Alternative Dispute Resolution:**

According to the study, local groups are used to resolve climate change-related conflicts, some of which have been accused of denying or delaying justice for victims. Supporting the NSC and NCIC in adopting the legislative framework on Alternative Dispute Resolution mechanisms is thus recommended at the national level. Given these challenges in ADR, additional mediation and arbitration training could be provided for local leadership groups charged with resolving disputes, particularly those involving livestock, water, and natural resources as well as sexual assault allegations filed in courts.

**Gender-responsive policy measures can assist in overcoming existing systemic barriers identified in the study.** Enacting GBV and gender policies in respective counties is a critical step toward gender parity in climate leadership. To further strengthen the Act! involvement in the implementation of the SDG-5 Strategy on Gender Equality and Empowerment of All Women and Girls (2020-2025), the findings,



outcomes, and lessons learned from this study can contribute to gendered research and policy strengthening.

The existing effects of climate change on livelihoods have exacerbated the risk of gender-based violence. Therefore, a project to integrate a GBV prevention intervention in the pilot counties is recommended.

**Climate-smart farming adaptations are now increasing men's and women's resilience to climate shocks in the ASALs**, a precursor for protecting food security, water security, and livelihoods. Act! can lobby for the enactment of the Climate Change Act 2022 in the counties where it is in the Drafting stage. It is also critical to amend the Climate Change Act of 2016 to accommodate the carbon credit framework.

The study documented an increase in child abuse cases as well as several street children as a result of neglect and absence of caregivers due to death or migration. Act! could **participate in the implementation of child protection policy in respective counties, as well as apply to be a member of the core technical group led by the National Council of Children Services**, to represent climate-related issues in ASAL regions affecting children in the implementation of the National Care Reform Strategy for Children in Kenya 2022-2032. As a result, Act! should lobby for the implementation of PWDs policy in all counties, as well as engage in multi-stakeholder engagement to ensure the realization of the National Health Implementation Plan, which provides a framework for addressing PWDs health issues based on the effects highlighted in this study.

## 5.2 Conclusion

As a response to climate change security risks, several measures and strategies have been tested. Some interventions use a gender lens and work with marginalised groups to slow or stop the effects of climate change, or to achieve climate security by rehabilitating and restoring depleted or degraded resources. Conflict management is hampered in ASALs by the presence of small arms and easy cross-border movement, poorly harmonised disarmament policies, and lax border surveillance. To build the resilience of these communities, any interventions to address climate change-security risks must be intricately linked to development agendas aimed at addressing poverty, unemployment, illiteracy, a lack of alternative livelihoods, climate change impacts, and inequality. Women and girls are increasingly vulnerable to all forms of gender-based violence, including conflict-related sexual violence, human trafficking, child marriage, and other forms of violence, as climate change drives conflict across the ASALs. Women's adaptive capacity will be strengthened by measures that improve their access to healthcare, education, and political representation. Additional gender-responsive policy measures can aid in overcoming the existing systemic barriers identified in the study.



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## 7.1 County Profiles

### 7.1.1 Baringo County

Baringo County is located in the Northwest parts of Kenya, the county lies within the ASAL regions bordered by Turkana and Samburu counties to the North, Laikipia to the East, Nakuru and Kericho to the South, Uasin-Gishu to the South-West, and Elgeyo-Marakwet and West Pokot to the West. Further, the climate in Baringo County varies from humid highlands to arid lowlands with rainfall between 600mm (lowlands) and 1500mm (highlands).

According to the 2019 census, the population of Baringo County is 666,763, with a gender split of 50/50. Similarly, the majority of the population lives in rural areas. According to the Baringo County Integrated Development Plan 2018-2022, the human incidence is 52 percent compared to the national average of 45 percent, with low literacy levels and underdevelopment. Dominant land uses include nomadic pastoralism, wildlife conservation, urban development, and crop farming. The study finds that most of the population relies on livestock keeping (47 percent) agriculture and crop farming (28 percent). For the main reported sources of livelihood crop farming, 74 percent are reported to be women and 26 percent men. For livestock farming, 90 percent are men while 10 percent are women. Decreased production was reported in both sources of livelihood. Water shortage in the county is prevalent with the average distance to the nearest water point at 5km caused by low rainfall and cyclic droughts (NDMA, 2023). The main source of energy is wood fuel.

Specific environmental challenges include soil erosion, vegetation degradation, deforestation, and sedimentation of open water sources posing a threat to local livelihoods according to the CIDP 2018-2022. This is a result of overgrazing, uncontrolled charcoal burning, and cultivation on steep slopes. Similarly, the county is prone to droughts, flooding, wildfires, and landslides (NDMA, 2023). Most residents in the study reported having observed several extreme weather changes over the past years including hotter temperatures (36 percent), and increased droughts (53 percent), among other changes (11 percent).

In terms of insecurity, the county faces natural resource-based conflicts which are ranked as the county's second most serious environmental hazard after droughts (the leading hazard). These conflicts occur in the county's north and east and involve cattle rustling, rape, arson, and killings. These conflicts have spread to Elgeyo Marakwet, Turkana, and Samburu counties in addition to Laikipia as previously stated. Other common insecurity incidents include gender-based violence and theft. The most common experiences reported by survey respondents were killings, cattle raiding, robbery, and forced migration. During dry periods, which are exacerbated by climate change, men are forced to relocate to neighboring counties in search of water and pasture for livestock, resulting in skirmishes at times from invading other people's lands. Women are forced to migrate to towns to sell vegetables and grains (small-scale scale businesses), while others relocate to areas with jobs, such as harvesting tomatoes and vegetables from irrigation schemes around Lake Baringo, where much farming occurs.

### 7.1.2 Garissa County

Garissa County is one of the three counties in the Northeastern region of Kenya. The county borders the Republic of Somalia to the East, Lamu County to the South, Tana River County to the West, Isiolo County to the Northwest, and Wajir County to the North. Garissa County is principally a semi-arid area and receives an average rainfall of 275 mm per year. Changes in the weather patterns in the past years were reported by 73 percent of respondents. These include extreme weather events such as increased droughts (33 percent), flooding (28 percent), hotter temperatures (22 percent), and other changes (18 percent).

According to the 2019 census Garissa County has a population of 841,253 with 45 percent men and 55 percent women. The literacy levels stand at 8.2 percent, while the human development index and gender inequality index are indicative of underdevelopment in the county. Firewood is the main energy source

with 1.5 percent having access to electricity according to the 2018-2022 CIDP.

The main livelihood activities include livestock keeping, crop farming, charcoal burning, and business, where livestock and crop farming are the main sources of livelihood. In the study, livestock farming is the most common reported source of livelihood, with 62 percent of respondents (90 percent of whom are men and 10 percent are women), followed by crop farming, which is practiced by 22 percent of respondents (88 percent of whom are men and 12 percent are women). Finally, 10% of respondents engage in business, while 6% engage in charcoal burning. It was reported that production in the two main sources of livelihood had decreased. The county is prone to drought and flood emergencies, putting livelihoods at risk, and is classified as a water-scarce, with normal distances to water sources of 16 Kilometres (NDMA, 2023).

In terms of insecurity, the county experiences assault, theft, burglary, rape, and terrorism. the most crime-prone areas are in urban centers, along the Somali/Kenya Border, and in rural areas where rape cases are on the rise. Conflicts over grazing areas and access to watering points along the Tana River have also been reported.

During the dry season, livestock migrate from the hinterland to areas near the Tana River, where water is readily available. Some pastoralists, however, move their livestock to neighboring Tana River and Lamu counties in search of pasture. According to survey respondents, cattle raiding, killing, gender-based violence, and forced marriages are among the most serious security incidents they or their families have witnessed in the county, while beatings and torture are among the least serious.

### 7.1.3 Isiolo County

Isiolo County borders Marsabit County to the North, Samburu, and Laikipia counties to the West, Garissa County to the Southeast, Wajir County to the Northeast, Tana River, and Kitui counties to the South, and Meru and Tharaka Nithi counties to the Southwest. Average rainfall ranges from 400-650mm. According to the 2019 census, Isiolo County had a population of 268,002 with 48 percent men and 52 percent women. Literacy levels are low with 20 percent of the population not having gone to school and 10 percent reaching post-secondary education. Human development index and gender inequality index are low indicating underdevelopment in the county according to the 2018-2022 CIDP. The county's main source of energy is wood fuel with 29 percent having access to electricity.

Examples of livelihood activities include sedentary agro-pastoral activities, pastoral activities (67 percent), crop production (3 percent), and mining and tourism activities. For the main reported source of income, livestock farming, 93 percent are men and 7% are women. Crop farming is reported to be 77 percent male and 23 percent female. Production in livestock and crop farming has been reported to have reduced. The major environmental threats include drought, flooding, vegetation loss occasioned by charcoal burning, overgrazing, and overstocking according to the CIDP 2018-2022. The majority of the respondents have noticed several extreme weather changes in recent years, including increased droughts (63 percent) and flooding (7 percent) as well as hotter temperatures (30 percent) and other changes (6 percent).

The most serious insecurity issues are burglary, stock theft, banditry, robbery, killings, petty theft, and armed gangs. Major common crimes in Isiolo County are focused on resource-based conflict (e.g., land-based resources which may be both inter-communal and between pastoralists and other groups/entities using the land); Inter-County border conflicts which may be both political and inter-communal; ethno-political conflict; interpersonal violence such as gender violence and youth violence. Forced displacement has also been reported as a result of the over-flooding of the Ewaso Nyiro River. Similarly, inter-county migrations are common between Tharaka Nithi, Marsabit, and Samburu counties. The most commonly reported experiences by respondents and their families are killing (63 percent), cattle raiding (83 percent), robbery (60 percent), gender-based violence (67 percent) forced migration (60 percent), and forced marriage (40 percent).

#### 7.1.4 Kajiado County

Kajiado County is located in Kenya's southern region. It borders Nairobi County to the Northeast, Narok County to the West, Nakuru, and Kiambu counties to the North, Taita Taveta County to the Southeast, Machakos, and Makueni counties to the Northeast and East respectively, and the Republic of Tanzania to the South. The northern part of the county is part of the metropolis and thus highly cosmopolitan with rapid urbanisation and urban growth as a result of high migration from other parts of the country and within the borders.

The rainfall amount ranges from as low as 300mm in the Amboseli basin to as high as 1250mm in the Ngong hills and the slopes of Mt. Kilimanjaro. The county is considered water-scarce (NDMA, 2023). All respondents reported having observed changes in weather patterns including increased droughts (67 percent), flooding (2 percent), hotter temperatures (25 percent), and other changes (6 percent).

According to the 2019 population census, Kajiado County has a population of 1,117,840 with 50 percent male and female. The rural population is approximately 65 percent and 35 percent urban. The county HDI is 0.55, the gender development index is 0.60, and literacy levels of 65 percent as reported in the 2018-2022 CIDP.

Due to its partly metropolis nature, it has also seen tremendous growth in manufacturing industries, and large-scale farming, especially floriculture and horticulture. Other sectors that have developed include real estate development in major towns (Kitengela, Ngong, Ongata Rongai, Kiserian, Isinya) and the extraction industry. The county is also mineral-rich, with extractions of soda ash, limestone, and sand, as well as tourism. According to the CIDP 2018-2022, livestock farming is the most important source of income, with the majority practicing pastoralism.

The main source of income reported by study participants is livestock (73 percent), followed by crop farming (5 percent) and business (12 percent). For the main reported source of income, livestock farming, 91 percent are men and 9 percent are women. According to reports, 65 percent of crop farmers are men and 35 percent are women. Production has been reported to be down in both livestock and crop farming.

Drought, flash floods, and degradation are the most serious environmental threats (NDMA, 2023). In terms of insecurity, the most common types of crimes in the county are traffic offenses, theft, moral offenses, homicides, break-ins, robberies, vehicle and other thefts, dangerous drugs, criminal damage, and economic crimes.

To cope with climate change, the population moves to Makueni, Taita Taveta, Machakos, and Kitui counties. According to the CIDP 2018-2022, intra-county migration is also common in search of pasture and land, with livestock moving from Kajiado West and Central to Kajiado East and those from Kajiado South to Chyulu Hills. The most common types of violence reported by survey respondents were robbery (55 percent), cattle raiding (23 percent), gender-based violence (36 percent), and forced migration (26 percent).

#### 7.1.5 Kilifi County

Kilifi County is one of the six counties in the Coast region of Kenya. It borders Kwale County to the Southwest, Taita Taveta County to the West and Tana River County to the North, Mombasa County to the South, and the Indian Ocean to the East. Average rainfall ranges from 300mm-1300mm. The county has a population of 1,453,787 with 48 percent men and 52 percent women. The human development index stands at 0.569 as per the 2018-2022 CIDP. Water access is average with 60 percent having access to piped water and walking distances to the nearest water points on average being 3.5 km (NDMA, 2023).

The majority (80 percent) rely on wood fuel with electricity access at 21 percent. The most common livelihood activities are Improved pasture/forage production, subsistence, and commercial farming practices. Crop farming was reported as the primary source of income by 85 percent of women and 14 percent of men in the study. In business, women outnumber men by 53 percent to 47 percent. Men farm livestock 60% of the time and women 40% of the time. Tourism is another source of income in Kilifi County but crop farming output has been reported to have decreased.

The main environmental challenges include droughts, flooding, diseases, and conflicts. This leads to reduced rainfall and water availability and food insecurity. Most of the residents reported having observed several extreme weather changes over the past years including increased droughts (45 percent), flooding (3 percent), hotter temperatures (29 percent), and other changes (23 percent).

In terms of insecurity, the county faces intra-inter community conflicts, resource-based conflicts (over land and extractive industries including iron ore, pozzolana, barytes, and gypsum) radicalisation, and violence extremism. Gender-based violence and generational conflict between the young and the old have also been reported in connection with witchcraft. Conflicts between immigrants and natives have also been reported. These conflicts, particularly radicalisation, are linked to neighboring towns such as Watamu and Malindi. Resource-based conflicts arise as a result of livestock in-migration from Tana River and Malindi, which causes competition for resources and intra-migration from livestock zones to mixed farming zones. The most common experiences reported by survey respondents are robbery (40 percent), and beating or torture (23 percent).

### 7.1.6 Samburu County

Samburu County is in the northern parts of Kenya, bordered by Turkana (Northwest), Baringo (Southwest), Marsabit (Northeast), Isiolo (East), and Laikipia (South). It is further divided into Samburu West, East, and North. Furthermore, 75 percent of the land area is classified as low-potential rangeland, with annual rainfall ranging from 250 to 600 mm. Seven percent of the land is classified as medium potential, receiving 600-900mm of rain per year. In addition, agricultural zones range from low/mid highlands (potential for growing wheat, maize, barley, and so on) to intermediate lowlands (nomadic zones). Weather changes, particularly increased droughts, were reported by all interviewed households.

According to the 2019 census, Samburu County has a population of 310,327, with 51 percent men, and 49 percent women, with an average population growth rate of 4.45 percent per annum. According to the CIDP 2018-2022, the county is underdeveloped because the majority of the population lives in rural areas, the human poverty index is high, and literacy levels are at 34 percent.

Water shortage in the county is prevalent with the average distance to the nearest water ranging from 8-15 km depending on the season (NDMA, 2023). During the rainy season, there is a lot of water in many river streams and shallow earth dams built by pastoralists for their animals. However, the water evaporates immediately after rain, leaving dry land where humans and animals struggle to walk long distances in search of water.


The main source of energy is wood fuel (95 percent of the population) and charcoal. The dominant land uses include nomadic pastoralism, wildlife conservation, urban development, and crop farming with the majority being rangelands. The main reported livelihood and economic activity is pastoralism practiced by 93 percent of the population as per the CIDP 2018-2022. According to the findings of this study, livestock farming is the primary source of income for 70 percent of men and 30 percent of women in the county. Women are reported to majorly engage in charcoal burning.

There was no one in business, crop farming, or formal employment among the sampled participants. As a result, any climate change mitigation measure aimed at empowering Samburu community members in these three areas should prioritise livelihood diversification.

Environmental challenges in Samburu County include prolonged droughts that deplete pasture and water, land degradation (loss of forest cover, soil erosion, and invasive species) as well as illegal logging, and occasional flooding. These have contributed to increased outbreaks of diseases in livestock, human diseases, and increasing poverty.

In terms of insecurity, the county experiences mostly highway banditry, cattle rustling, and gender-based violence (GBV) as per the CIDP 2018-2022. Long dry spells have been linked to resource conflicts with





pastoral communities fighting over grazing land and water. In terms of migration, cattle movement occurs between Laikipia, Marsabit, Baringo, and Isiolo counties, sometimes leading to disagreements between these counties calling for peace agreements. Similarly, households' displacement as a result of flooding and insecurity is occasionally reported.

The most common crimes reported by survey respondents were forced migration (70 percent), robbery (53 percent), highway robbery (53 percent), cattle raiding (33 percent), sexual assault (30 percent), and killing (33 percent). Participants in the study reported that their young men (morans) are not coerced into joining armed groups; rather, Samburu morans are culturally expected to protect their community and animals with spears. This puts them in danger of being maimed or killed by cattle rustlers.

The 70 percent of study participants who experienced forced migration were families (men, women, children, and people with disabilities) fleeing insecurity caused by cattle raiders and bandits in some parts of the county. While men relocated to safe ground to care for their livestock in peace, women relocated to towns to engage in small-scale businesses such as beadwork, while others joined relatives in other parts of the county without fear of violence.

Even though the most commonly reported cases of insecurity in the county are forced migration and robbery, cattle raiding is also prevalent. For example, the Samburu women FGD participants reported being put in a difficult situation and losing both loved ones and animals to cattle raiders. In such cases of cattle loss, community members organised to retrieve their livestock in retaliation, causing more violence in some areas and forcing families to relocate to safer areas.








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