THE HIDDEN COST OF CLIMATE CHANGE ON

Girls' Education at Risk in Kenya

giem
Gender in Education Movement
Towards a Gender Equal Society

Dedication

This report on **Climate Change and its Impact on Girls' Education in Kenya** is dedicated to all the **girls and young women** whose resilience, perseverance, and dreams shine despite the immense challenges posed by climate change. It is also dedicated to the educators, community leaders, and advocates who tirelessly work to ensure that no girl is left behind, even in the face of environmental adversity.

Commissioned by **Gender and Education Dialogues,** September 2024, this report stands as a tribute to the countless efforts aimed at creating a more just, inclusive, and sustainable future for Kenya's young girls.

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Executive Summary

Climate change is significantly affecting education in Kenya, with girls being disproportionately impacted. Recurring climate shocks such as droughts, floods, and erratic rainfall patterns result in food insecurity, displacement, and economic challenges, forcing families to deprioritize girls' education in favour of survival strategies. Girls are often pulled out of school to assist with household responsibilities, leading to high dropout rates, especially in rural and marginalized communities.

The most vulnerable regions to climate shocks in Kenya are the **Arid and Semi-Arid Lands (ASALs),** which include counties such as Turkana, Garissa, Mandera, and Wajir. These areas experience prolonged droughts and unpredictable rainfall patterns, leading to severe water scarcity, food insecurity, and displacement. Coastal areas are also susceptible to flooding and rising sea levels, which disrupt both livelihoods and schooling.

Indicate here, the source of the data reviewed. i.e the various documents and reports, and other literature materials i.e. policy documents, and documents existing and completed projects and reports, and assessment data, on Gender and girls' education in Kenya that you reviewed.

Key findings on the impact of climate change on girls' education include: Increased Dropout Rates: Girls are more likely to drop out of school during climate-induced crises due to their roles in fetching water, managing domestic chores, and caregiving; **Early Marriages and Child Labor:** As economic conditions worsen, many girls are forced into early marriages or child labour to help alleviate their families' financial burdens, further reducing school attendance; and **Poor School Infrastructure:** Climate shocks often damage school infrastructure, especially in vulnerable regions.

This makes it challenging for girls to attend school regularly, particularly when schools lack adequate sanitation facilities, which affects menstruating girls.

The current key actions and interventions in place to mitigate the impact of climate change on girls' education include: School Feeding Programs: These programs, implemented by organizations like UNICEF and the World Food Programme, are crucial in keeping children, especially girls, in school during food crises. By providing meals, these programs reduce the need for families to withdraw their daughters from school; **Climate-Resilient Infrastructure Development:** Several government and NGO-led initiatives focus on building climate-resilient schools with water harvesting systems, proper sanitation facilities, and solar power to ensure that education continues even during extreme weather events; **Awareness Campaigns and Gender-Sensitive Education Programs:** Community sensitization campaigns are being conducted to raise awareness about the importance of girls' education, even during climate crises. Gender-sensitive curricula are being developed to equip girls with adaptive skills to cope with climate change.

Both boys and girls are impacted negatively by climate shocks. However, due to pre-existing patriarchal cultural practices and norms alongside economic hardships girl's education suffers more rolling back the gender parity gains that have been made so far

The review identified systemic barriers key among them are: Patriarchal Cultural Norms and Gender Inequality; Inadequate Policy Implementation; and **Limited Funding for Climate Education**

Finally the key recommendations include: Strengthening Policy Implementation: Increasing Investment in School Infrastructure: Scaling Up School Feeding Programs: Continuous community engagement; and **Promoting Gender-Sensitive Climate Education.**

1. Introduction

Climate change has become a significant global challenge, with far-reaching impacts on multiple sectors, including education. In Kenya, the effects of climate change have exacerbated gender disparities, particularly in education, where girls are disproportionately affected. As extreme weather events, such as droughts, floods, and food insecurity, become more frequent and severe, girls in affected regions face higher risks of school dropout, child marriage, and diminished access to quality education. These challenges threaten to undo years of progress in promoting gender equality in education.

This report focuses on the intersection of climate change, gender, and education, with a particular emphasis on how these dynamics affect girls' education in Kenya. Specifically, it documents the ways in which climate change disproportionately impacts girls' education in Kenya. It highlights the disproportionate burden on girls, and provides insights into the unique barriers girls face and explores efforts by various stakeholders to mitigate these challenges. It examines the existing interventions by both governmental and non-governmental organizations (NGOs) in addressing these issues, while identifying gaps and areas that require further action and policy development. A specific focus is made to the geographic regions most impacted by climate change, the scope also includes reviewing national and county-level plans and strategies aimed at promoting gender equality in education amidst the growing climate crisis.

The findings presented in this paper are based on a comprehensive literature review of academic studies, policy reports, and case studies that explore the relationship between climate change and education in Kenya. Data gathering efforts included

identifying areas most affected by climate-induced disruptions and mapping out interventions by various organizations. The report also analyses national and county government strategies to address the barriers girls face in accessing education due to climate change. By synthesizing available evidence, this report aims to provide a clear picture of the challenges and opportunities in addressing gender disparities in climate-affected areas.

The paper is organized into six key sections. First, it provides an overview of the available evidence on how climate change disproportionately impacts girls' education in Kenya. Next, it maps out the regions most affected by climate-induced disruptions and highlights organizations providing educational interventions. The report then presents a detailed literature review, summarizing key findings from existing research on climate change, gender, and education. Following that, it reviews national and county-level plans and strategies aimed at addressing these challenges. Finally, the report identifies systematic barriers and gaps in existing studies and policies, providing recommendations for future research and action.

2. Evidence on Climate Change, Gender, and Education

2.1 Climate Change and its Impacts in Kenya

Climate change refers to long-term shifts in temperature and weather patterns, primarily due to human activities such as burning fossil fuels. **A climate shock** is a sudden and extreme weather event like droughts or floods. Kenya is highly vulnerable to climate shocks, particularly in ASALs, which affect agriculture, health, and education.

Kenya has recently experienced several significant climate shock events, particularly prolonged droughts, erratic rainfall, and floods. These events have had profound social, economic, and environmental effects, especially in the vulnerable Arid and Semi-Arid Lands (ASALs) regions.

1. El Niño related flooding

From October 2023 to January 2024, the country also saw El Niño related flooding. This led to the deaths of at least 174 people and the displacement of more than 500,000 households. More than 17,000 acres of farmland were destroyed, and the floods also led to more than 13,400 livestock deaths. In 2024 severe **flooding** occurred across the country, especially in flood-prone and riverine areas, from early May due to the high-intensity rains in April and high soil moisture content accumulated over consecutive above-average rainfall seasons since the 2023 March to May long rains. According to a report by the Kenya Red Cross Society (KRCS), the flooding occurred in 43 counties, affected about 82,000 households, and displaced about 49,000. The

floods have resulted in an estimated 300 human fatalities, destruction of 61,000 acres of cropland, and 11,300 livestock deaths. In particular, it has affected the Nairobi, Kisumu, Mandera, Garissa, and Tana River areas, where about 60 percent of the total flood-affected households are located.

2. Prolonged Drought (2021-2023)

Kenya has faced its worst drought in 40 years, particularly in the ASAL regions, due to four consecutive failed rain seasons between 2021 and 2023. This severe drought:

— **Affected 4.35 million people**, including 3.5 million in need of food assistance (UN OCHA, 2023).

— Caused **2.5 million livestock deaths** due to lack of water and grazing land, impacting pastoralist communities (FAO, 2022).

— Led to school closures and a **22% increase in school dropout rates** in ASAL counties, especially for girls, due to migration and the need to support household survival according to a survey conducted by Save the Children in 2022. https://reliefweb.int/report/kenya/kenya-impact-ongoing-drought-education-dg-echo-save-children-ndma-echo-daily-flash-9-december-2022

— **Increased malnutrition rates to 31%** among children under five in affected areas, undermining children's health and educational outcomes (UNICEF, 2023).

3. Flash Floods (March-May 2023)

After a prolonged drought, flash floods struck several parts of Kenya during the March-May rainy season in 2023, mainly affecting the Rift Valley, Western Kenya, and Nairobi:

Over 165,000 people were displaced, with homes, schools, and infrastructure severely damaged according to the Kenya Red Cross

The floods caused widespread destruction to crops, further exacerbating food insecurity in previously drought-hit areas.

At least 87 schools were damaged, and many had to close temporarily, disrupting education for thousands of students (UN OCHA, 2023).

4. Locust Invasion (2020-2021)

The 2020-2021 desert locust invasion, one of the worst in decades, compounded the effects of the ongoing drought in Kenya:

— Over **70,000 hectares of crops** were destroyed, impacting food security for millions of people (FAO, 2022).

— The invasion led to **USD 8 billion in losses** in agriculture across East Africa, with Kenya among the worst-affected countries (World Bank, 2021).

2.2 Policy framework on Climate Change Action in Kenya

Kenya is a signatory to global agreements such as the **Paris Agreement (2015)** and **Kyoto Protocol (1997).** These have been domesticated through the **Climate Change Act (2016)**, the **National Climate Change Action Plan (2023-2027)**, and the **National Climate Finance Policy (2018).** The education sector is addressed in the **National Climate Change Framework Policy (2016),** promoting climate education in schools and green skills training.

The **National Climate Change Council** coordinates climate action in Kenya, with the **Ministry of Education** playing a role in integrating climate education. Kenya has allocated **USD 2.8 billion** towards climate action (National Treasury, 2023), but funding for education-specific climate.

The government has put in place the **Education for Sustainable Development Policy for the Education Sector** (Ministry of Education, 2017). Education for Sustainable Development (ESD) relates to a whole range of other educations that touch upon sustainable development. Such sustainable development-oriented types of education include: climate change education, environmental education, global citizenship education (GCED), human rights education, health education, multi-cultural education, peace education, HIV & AIDS education, biodiversity education,

gender education, and inclusive education, education for disaster risk reduction and values education. ESD provides a broad framework for developing the knowledge, skills, values and attitudes learners need to secure more just, peaceful, tolerant, resilient and inclusive societies.

The **Education for Sustainable Development (ESD) Policy for the Education Sector in Kenya** aims to integrate sustainable development principles into the country's education system. The policy aligns with global commitments like the **Sustainable Development Goals (SDGs)**, specifically **SDG 4 (Quality Education)** and **SDG 13 (Climate Action)**. It emphasizes the role of education in addressing challenges such as environmental degradation, climate change, and social inequality.

The key objectives of the ESD Policy:

1. **Curriculum Integration:** The policy promotes incorporating ESD concepts into all levels of education, ensuring students acquire knowledge, skills, and values necessary for sustainable development.
2. **Capacity Building:** The policy seeks to train educators and administrators to effectively teach and manage sustainable development topics in the education system.
3. **Community Engagement:** It encourages schools to engage with communities to promote sustainable practices, such as environmental conservation, energy efficiency, and social equity.
4. **Climate Change Education:** The policy addresses the need to prepare learners for the impacts of climate change and equips them with skills to mitigate and adapt to climate-related challenges.
5. **Green Schools Initiative:** Schools are encouraged to adopt sustainable practices such as waste management, water conservation, and the use of renewable energy.

1.3   Education in Kenya

Kenya's education system consists of three levels: primary, secondary, and tertiary education, governed by the **Basic Education Act (2013).** The government provides free and compulsory primary and secondary education under the **Constitution of Kenya (2010),** Article 53. Other key policies include the Sector Policy for Learners and Trainees with Disabilities and the School Health Policy.

In 2023, public education financing was approximately USD 5.7 billion (KES 800 billion), accounting for 25.9% of Kenya's budget, with 53% allocated to primary and secondary education. However, funding remains inadequate, particularly in marginalized areas like ASALs (Arid and Semi-Arid Lands).

Kenya's overall literacy rate stands at 81.54% (UNESCO, 2022). Education attainment rates show 95% primary school enrolment with 79% for boys and 75% for girls transitioning to secondary education (Kenya National Bureau of Statistics, 2022). However, dropout rates in ASAL regions remain high, particularly for girls due to poverty, early marriages, and other socio-economic challenges.

The government has implemented free primary education and free day secondary education policies, leading to increased enrolment rates. There has also been a focus on digital learning and infrastructure development in schools. Despite progress, challenges remain in terms of quality of education, regional disparities, and access to higher education.

National statistics on education 1:

— At national level, the Gross Enrolment Rate (GER) stood at 97.5%, a drop from 99.6% in 2019. The overall primary GER has continued to show improvement moving from 104% in 2018, 99.6% in 2019 but dropped to 97.3% in 2020 an indication of fluctuating number of overage and underage learners in the primary schooling cycle. Boys with a GER of 98.6 percent were approaching the desired 100% level as compared to girls with 96.0%

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- The completion rate in primary school level increased from 84 percent in 2017 to 84.2% in 2018 and to 85.4% in 2019. In 2020 the completion rate increased to 94.6% and later declined to 85.8% in 2021. The completion rate at the secondary school level was 65.4% in 2019, rose to 91.0% in 2020 and declined to 78.5% in 2021. The number of registered (Kenya Certificate of Secondary Education (KCSE) candidates rose by 10.4% to 830,991, with the number of males and females registering growths of 10.4 per cent and 10.3 per cent. The Government is emphasizing on a 100% transition rate from primary to secondary level and is putting in place measures to ensure 100 percent retention in schools. Among other initiatives the presidential bursary supported 22,300 OVC in public secondary schools.

Though good progress has been made in the Education Sector, various challenges continue to hinder realization of inclusive and equitable quality education and promote lifelong learning opportunities for all in the Country. Key among them include: Existence of high burden of school expenses on parents and guardians; disparities in access and participation to education and training; radicalization and incidents of violent extremism among learners; Drug and Substance Abuse (DSA); adverse effects/impact of HIV/AIDS on teachers and other staff in education institutions; inadequate capacity to handle students with special needs; low enrolment in some regions especially marginalized regions, poverty-stricken slum areas and among female students particularly in (Science Technology and Mathematics (STEM) related disciplines; and cultural norms, teenage pregnancies, early marriage and Menstrual Hygiene Management (MHM) that affects girl school attendance and completion.

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2.4 The Gendered Impact of Climate Change on Education in Kenya

Climate change in Kenya—manifested through prolonged droughts, erratic rainfall, severe floods, and even locust invasions—is not only disrupting livelihoods and infrastructure but is also having distinct and profound gendered effects on education. In regions like the Arid and Semi-Arid Lands (ASALs), where communities are already vulnerable, prolonged droughts between 2021 and 2023 forced families to prioritize immediate survival over education, leading to school closures and a 22% increase in dropout rates, particularly among girls. Girls are disproportionately affected as they are often expected to shoulder additional domestic responsibilities and support household survival during these crises, which, coupled with displacement from events such as the El Niño-related and flash floods, disrupts their education and exacerbates pre-existing gender inequalities.

Moreover, the destruction of educational infrastructure—evident in the damage to over 87 schools during the March-May 2023 flash floods and repeated losses from recurrent flooding—further undermines access to quality education. These climate shocks not only interrupt learning but also place girls at greater risk of exploitation and gender-based violence, as families under economic stress may resort to practices like early marriage or child labour, thereby permanently curtailing girls' academic prospects. While national policies on climate change and Education for Sustainable Development strive to integrate climate and gender sensitivity into the curriculum, the increasing frequency and intensity of climate shocks call for more robust, targeted interventions that directly address the unique challenges girls face. Without such gender-sensitive strategies, the cycle of educational disruption and social inequality will likely persist, undermining Kenya's broader goals for sustainable development and gender equity.

3. Mapping of Affected Areas and Intervention Organizations

3.1 Geographic Mapping of Climate Change Effects

The areas in Kenya most affected by climate change are primarily concentrated in the northern, eastern, and coastal regions of the country. These areas are experiencing more frequent and severe climatic events, including droughts, floods, and rising temperatures, which significantly impact livelihoods, food security, and education.

Northern Kenya (Arid and Semi-Arid Lands - ASALs)	
Counties Affected: Turkana, Marsabit, Mandera, Wajir, Garissa, Samburu, and Isiolo.	Climate Impact: These regions are highly vulnerable to prolonged droughts and extreme heat, which have exacerbated water scarcity, reduced pasture availability, and increased food insecurity. The repeated failure of rainy seasons has led to significant displacement and loss of livelihoods, particularly for pastoralist communities.
Eastern Kenya	
Counties Affected: Kitui, Makueni, Machakos, and parts of Meru and Tharaka-Nithi.	Climate Impact: These counties face irregular rainfall patterns, leading to both droughts and floods. The unpredictability of rains has severely affected agriculture, the primary livelihood in these areas, leading to crop failures and food shortages.

Coastal Region	
Counties Affected: Mombasa, Kilifi, Kwale, Lamu, and Tana River.	Climate Impact: The coastal region is vulnerable to rising sea levels, coastal erosion, and flooding. These impacts threaten infrastructure, settlements, and livelihoods, particularly in tourism and fishing, which are crucial economic activities in these areas. Additionally, saltwater intrusion affects freshwater supplies, exacerbating water scarcity.
Western Kenya	
Counties Affected: Kakamega, Bungoma, Busia, and parts of Kisumu.	Climate Impact: Western Kenya is prone to frequent and intense flooding, particularly along the Lake Victoria Basin and the Nzoia River. These floods disrupt agriculture, displace populations, and damage infrastructure, including schools and homes.
Central Kenya	
Counties Affected: Nyeri, Murang'a, and Kirinyaga.	Climate Impact: The central highlands experience irregular rainfall and occasional droughts, affecting tea and coffee production, which are vital to the local and national economy. Changes in temperature and precipitation patterns also increase the risk of landslides in the hilly terrains.

Source: Kenya Meteorological Department, 2023; National Climate Change Action Plan (NCCAP) 2023-2027; World Bank, Climate Change Country Profile: Kenya, 2023; Kenya Red Cross, 2023; National Drought Management Authority (NDMA), 2023

These regions represent the areas' most severely impacted by climate change in Kenya, affecting not only the environment but also the socio-economic conditions, particularly in terms of food security, water availability, and educational continuity.

3.2 Climate Action Interventions in the Education Sector

The Ministry of Education (MoE) established a national ESD coordination desk in 2012 and collaborates with the Ministry of Environment and Natural Resources and the National Environment Management Authority (NEMA) to promote ESD activities. A national steering committee comprising of representatives from government, civil society organizations and the private sector has been spearheading the process of ESD implementation in the country.

ESD is being implemented in schools through non-formal learning activities that include general clubs such as 4 K (Young Farmers Club), wildlife, scouts, girl guides, environmental, music, drama, journalism, and bakers clubs among many others. Schools have also established subject-based clubs (for example, Mathematics, life skills, games, Science) that are useful in addressing emerging and contemporary issues as part of ESD implementation. UNESCO Clubs, Associated Schools Project Network (ASPNet) and ESD model schools are major sites for environmental learning in the country.

There has been mainstreaming of sustainability issues across higher education curricula and integration of ESD into institutional policies towards implementing whole-institution approaches. The Kenya Green University Network (KGUN) has been launched in collaboration with NEMA and Commission for University Education (CUE). KGUN comprises five key areas – performance contracting, green campus, green curriculum, community engagement and student engagement – that provide the basis for KGUN activities in the country. There are efforts in place to build capacities of educators and trainers on ESD alongside enhancing public awareness and understanding.

Kenya has made progress in integrating climate education into its curriculum and has launched school-based programs on climate resilience. However, challenges persist, including inadequate financing, lack of trained personnel, and poor infrastructure, particularly in ASAL regions. The ongoing droughts from 2021 to 2023 have worsened school dropout rates and food insecurity, significantly affecting children's education, especially for girls.

Despite policy frameworks, financing gaps, and climate shocks continue to hinder the full implementation of climate-responsive education. Addressing these challenges requires sustained investment and coordinated efforts between government, donors, and communities.

3.2.1 Institutions and Organizations working on climate change and education in Kenya

1. Ministry of Education (MoE), Kenya

ROLE: As the principal government body overseeing education in Kenya, the Ministry of Education is responsible for formulating national education policies, curriculum development, and implementing education reforms. It works to integrate climate change education into the curriculum, ensuring students are equipped with the knowledge to tackle climate-related issues.

Key Initiatives:

— Development of climate-resilient schools in arid and semi-arid lands (ASALs).

— Partnering with county governments to provide safe learning spaces during climate disasters.

— Working with other agencies to ensure continuity of education in regions affected by floods, droughts, or displacement.

2. National Drought Management Authority (NDMA)

ROLE: The NDMA coordinates Kenya's drought preparedness, early warning systems, and mitigation strategies, focusing on ASAL regions. NDMA works to reduce the impact of drought on education, particularly in rural areas where school attendance is disrupted by environmental stress.

Key Initiatives:

— Provision of water tanks and boreholes in drought-affected schools.

— Drought preparedness training in schools to build resilience in students and educators.

— Collaborating with NGOs to provide food aid in school feeding programs.

3. UNICEF Kenya

ROLE: UNICEF is a global organization that works to protect children's rights, including their right to education. In Kenya, UNICEF focuses on ensuring that children, especially girls', can continue their education in the face of climate-related challenges.

Key Initiatives:

— Supporting school feeding programs to combat malnutrition caused by food insecurity.
— Advocating for gender-sensitive climate change adaptation programs in schools.
— Developing safe learning spaces and mobile classrooms for children displaced by climate disasters.
— Providing technical and financial support for climate resilience programs in schools

4. Kenya Red Cross Society

ROLE: The Kenya Red Cross Society is one of the most active humanitarian organizations in the country, responding to emergencies such as floods, droughts, and other climate-induced disasters. It plays a significant role in ensuring access to education during emergencies

Key Initiatives:

— Emergency education programs that focus on ensuring continuity of learning in disaster-affected areas.
— Provision of learning materials, tents, and temporary classrooms for displaced children.
— Training communities in disaster risk reduction, with a special focus on ensuring that girls are able to return to school after crises.

5. Oxfam Kenya

ROLE: Oxfam works to address poverty and inequality, with a particular focus on empowering marginalized communities to cope with the impacts of climate change. In Kenya, Oxfam emphasizes gender equity, ensuring that climate change does not impede girls' right to education.

Key Initiatives:

— Promoting climate-resilient agriculture to support households and keep children, especially girls, in school.
— Conducting public awareness campaigns on the importance of girls' education amidst climate challenges.
— Collaborating with local organizations to advocate for policies that protect girls' education from climate disruptions.

6. World Food Programme (WFP)

ROLE: The World Food Programme works to combat hunger and ensure food security globally. In Kenya, WFP supports school feeding programs in climate-affected regions, ensuring that children can attend school without hunger being a barrier.

Key Initiatives:

— School feeding programs in ASAL areas, incentivizing parents to keep children, particularly girls, in school.
— Climate resilience training for schools to help manage food insecurity during droughts.
— Partnership with the Ministry of Education to provide meals in schools in exchange for attendance, targeting vulnerable populations.

7. Plan International Kenya

ROLE: Plan International is a development and humanitarian organization that promotes children's rights and gender equality. In Kenya, they focus on empowering girls to overcome barriers to education exacerbated by climate change.

Key Initiatives:

- — Implementation of "Girls' Education in Climate Emergency" programs that focus on the challenges girls face in climate-affected regions.
- — Establishing climate-resilient education facilities and supporting infrastructure in remote areas.
- — Advocacy for gender-sensitive policies that address the needs of girls in climate-affected areas.

8. Save the Children Kenya

ROLE: Save the Children is a global NGO focused on ensuring that every child has access to education and a safe, healthy environment. In Kenya, they are actively involved in providing education to children in regions affected by climate-induced displacement.

Key Initiatives:

- — Developing mobile schools to serve children displaced by floods and droughts.
- — Working with local governments to ensure continuity of learning in climate-affected regions.
- — Providing psychosocial support for children affected by climate disasters, ensuring they are able to continue their education despite challenges.

9. CARE Kenya

ROLE: CARE International is committed to fighting poverty and empowering communities to build resilience. In Kenya, CARE focuses on climate adaptation programs that benefit women and girls, ensuring that education remains accessible even in the face of climate change.

Key Initiatives:

— Supporting climate-smart agriculture projects that enable families to cope with climate impacts, reducing the likelihood of children dropping out of school.

— Providing educational support in areas affected by drought, such as water tanks and school infrastructure improvements.

— Advocacy for gender equality in climate adaptation policies, ensuring girls are not left behind.

10. FAO (Food and Agriculture Organization) Kenya

ROLE: FAO focuses on building sustainable agriculture and food systems in Kenya, helping communities adapt to climate change. Through its work, FAO indirectly supports education by promoting food security, which is crucial for school attendance.

Key Initiatives:

— Implementing climate-smart agriculture projects that stabilize family incomes, allowing children, especially girls, to stay in school.

— Collaborating with schools in ASALs to establish school gardens, providing both education and food for students.

— Advocacy and policy support for integrating climate resilience into education systems.

11. Kenya Climate Innovation Center (KCIC)

ROLE: KCIC supports innovative climate solutions and promotes green growth. Though its focus is not specifically on education, its work in promoting climate adaptation in communities indirectly benefits schools and education access.

Key Initiatives:

- — Promoting innovations that support water access, energy solutions, and agricultural resilience in climate-affected areas, which directly benefit schools.
- — Supporting schools with climate-smart innovations like solar power and water-saving technologies.
- — Engaging youth and students in climate resilience programs through entrepreneurship and environmental education.

12. African Wildlife Foundation (AWF)

ROLE: AWF focuses on the conservation of wildlife and natural resources, working with communities in Kenya to mitigate the impacts of climate change. AWF also supports educational initiatives as part of its community engagement strategies.

Key Initiatives:

- — Supporting environmental education programs in schools near conservation areas, raising awareness on climate resilience.
- — Partnering with local governments and NGOs to provide scholarships and school support for girls in climate-affected regions.
- — Promoting reforestation and conservation projects that involve schoolchildren, enhancing their understanding of climate change.

Additional Organizations

- — Ministry of Environment and Forestry: This ministry plays a crucial role in addressing climate change issues. They develop climate change policies, promote sustainable practices, and coordinate with other relevant agencies.
- — Kenya Meteorological Department: Provides weather forecasts, climate information, and early warning systems to support climate change adaptation and mitigation efforts.
- — United Nations Educational, Scientific and Cultural Organization (UNESCO): UNESCO focuses on promoting education, science, and

culture worldwide. They work with Kenyan partners to improve access to education and build resilience to climate change.

— World Bank: A global financial institution that provides loans, grants, and technical assistance to developing countries. They support projects related to climate change adaptation and education in Kenya.

— African Development Bank (AfDB): The AfDB supports various development projects in Africa, including those related to climate change and education.

— World Vision: A global humanitarian organization working on various issues, including climate change and education. They implement programs to improve access to education, particularly in vulnerable communities affected by climate change.

— Green Belt Movement: A Kenyan NGO founded by Nobel Peace Prize laureate Wangari Maathai. They focus on environmental conservation, women's empowerment, and community development, with a strong emphasis on climate change adaptation.

— Kenya Education Network (KENET): A national research and education network that connects Kenyan universities, research institutions, and schools to the global internet. They play a vital role in supporting online learning and distance education initiatives.

— Global Partnership for Education (GPE): An international partnership that aims to help developing countries achieve quality education for all children. They provide funding and support to education programs in Kenya.

— Climate Development Initiative (CDI): A Kenyan NGO that works on climate change adaptation and mitigation, with a focus on education and sustainable livelihoods.

— Centre for Sustainable Development (CSD): A Kenyan research and advocacy organization that works on issues related to climate change, sustainable development, and education.

These organizations are playing vital roles in addressing the intersection of climate change, gender, and education in Kenya, with a particular emphasis on ensuring girls' access to education despite climate-related disruptions. Through collaboration and targeted interventions, they aim to build resilience in communities and safeguard the future of girls' education.

3.2.2   Successful Climate Action Interventions in the Education Sector

Recent success stories in Kenya highlight how targeted climate action and resilience-building efforts are making a positive impact on girls' education and women's livelihoods in vulnerable communities.

National Council for Nomadic Education in Kenya (NACONEK) - Integrated Wash Food and Energy for Sustainable Schools (NIWFESS): The aim is to increase access to quality basic education and promote sustainable and resilient livelihoods within the community. Leverages technology to provide sustainable water, food, and energy solutions. Renewable energy through harnessing biomass and solar power has been used to facilitate access to water, and agriculture and provide electricity in schools. The community has been empowered economically to cope with and mitigate the effects of climate change by growing climate-smart and draught resilience crops, which are highly nutritious. Outcomes: Improved enrolment from 39% to 67%.; Attendance rates increased from 25% to 63%; and Malnutrition and stunted growth rates reduced by nearly 20%. The integration of green skills and sustainable practices in schools can significantly enhance resilience to climate change and improve educational outcomes for girls. (Source: Girl Child Network)

1. Operation Come to School Initiative: In 2023, UNICEF Kenya, in partnership with the Education Above All Foundation's Educate A Child (EAC) program, successfully reintegrated out-of-school children, including girls, into the education system in climate-affected regions. This initiative focused on 16 counties where children, especially girls, are at high risk of dropping out due to climate-induced hardships. The program provided essential learning materials and support, helping children like Octavia return to school despite economic challenges. The success of this initiative not only improves access to education but also contributes to long-term community resilience by keeping girls in school. (Source: UNICEF)

2. **LISTEN Project in Samburu and Isiolo Counties**: The LISTEN project, funded by the Embassy of the Kingdom of the Netherlands, has empowered women in climate-vulnerable areas through training in sustainable agricultural practices. In Samburu County, women have successfully adopted poultry farming as an alternative livelihood amidst drought and conflict, significantly improving their income and food security. Similarly, in Isiolo County, the project has enhanced women's agricultural productivity through training in climate-smart practices, leading to improved harvests and better resilience to climate shocks. These efforts demonstrate the crucial role of women in driving community resilience and ensuring food security, which indirectly supports the education of girls by stabilizing family incomes and reducing the need for child labour. (Source Home | SNV)

3. **"Climate-Smart Schools" in Kilifi County**: In 2023, Kilifi County introduced "Climate-Smart Schools" as part of its efforts to improve resilience to climate change. These schools incorporate water harvesting systems, tree planting, and sustainable energy solutions like solar power. The initiative has helped keep girls in school by ensuring a stable supply of water, which reduces the time they would otherwise spend fetching water and allows them to focus on their studies. The schools also provide climate education, empowering students to become advocates for sustainability within their communities. (Source: Home | SNV)

4. **BRAC's Empowerment and Livelihood for Adolescents (ELA) Program**: BRAC's ELA program, operating in several Kenyan counties, combines life skills training with financial literacy and climate resilience education. In 2023, the program reported significant success in areas like Homa Bay and Siaya, where girls have been able to stay in school and avoid early marriage by learning how to manage small businesses and participate in community climate action projects. The program's holistic approach has led to improved educational outcomes and greater economic independence for adolescent girls, contributing to their long-term resilience. (Source: World Bank)

5. **Garissa County's Integrated Climate Action and Education Program**: In Garissa County, an integrated climate action program focusing on drought resilience and education has successfully kept girls in school despite the harsh environmental conditions. The program, supported by the World Food Programme (WFP)

and local NGOs, provides school meals sourced from climate-resilient crops grown in community farms. This initiative has improved school attendance and nutrition for girls, who are often the first to drop out when food is scarce. The program also includes training for girls on sustainable agriculture, ensuring they gain skills that can help their communities adapt to climate change. (Source: UNICEF)

6. **Cash Transfer Programs**: Initiatives like the Kenya Hunger Safety Net Programme (HSNP) have provided financial support to families in climate-affected areas, enabling them to continue sending their children, particularly girls, to school.

7. **School Feeding Programs**: The World Food Programme (WFP) and other partners have implemented school feeding programs in drought-prone regions, which have been successful in keeping children, especially girls, in school.

8. **Gender-Sensitive Education Policies**: Kenya's Ministry of Education has developed policies aimed at ensuring girls' education remains a priority in disaster management frameworks, such as the **National Policy for Disaster Risk Reduction in the Education Sector**.

9. **Water and Sanitation Projects**: NGOs have also initiated projects to improve water access and sanitation in schools, which helps reduce the burden on girls to collect water and improves attendance.

4. Literature Review on Climate Change, Gender, and Education

4.1 Overview of Literature Reviewed

Research on the intersection of **climate change, gender, and education in Kenya** is growing, with significant contributions from academic institutions, government reports, and international organizations such as UNESCO, UNICEF, and NGOs. Much of the literature highlights the vulnerability of marginalized populations, particularly women and girls, to the effects of climate change. Key documents reviewed include:

— **National Climate Change Action Plan (NCCAP) 2023-2027**, by Ministry of Environment and Forestry, Government of Kenya (2023). This plan focuses on national strategies on climate resilience and adaptation.

— **National Adaptation Plan (NAP) 2015-2030**, by Ministry of Environment and Forestry (2015). Focuses on climate change adaptation strategies across various sectors, including education.

— **Education in the Face of Climate Change in Kenya: A Case Study on Gender Equity**, by Save the Children (2021). Focuses on the impact of climate change on education access and gender equity in Kenya.

— **Climate Change and Gender in Kenya: Addressing Challenges for Equality**, by Oxfam (2022). Focuses on the disproportionate impact of climate change on women and girls, with an emphasis on education.

— **Kenya's Climate Smart Agriculture Framework Program 2017-2026**, by Ministry of Agriculture, Government of Kenya (2017). It focuses on adaptation strategies related to agriculture and their effects on rural livelihoods and education.

Education for Sustainable Development Policy for the Education Sector, by Ministry of Education (2017). The policy emphasizes the role of education in addressing challenges such as environmental degradation, climate change, and social inequality.

— **"Climate Change, Gender, and Education in Kenya: Challenges and Opportunities"** by Wanjiru Njoroge (2021). This report investigates the broader effects of climate change on education with a focus on girls in arid and semi-arid regions (ASALs).

— **"Gender and Education Inequalities in the Face of Climate Change: Evidence from Kenya"** by Fatuma Ahmed (2020). The study highlights gender disparities exacerbated by environmental stressors, such as drought and flooding, which directly affect schooling outcomes.

— **"The Impact of Climate Change on Education Systems: A Kenyan Perspective"** by Odhiambo, G. and Nyang'ori, R. (2019). This research focuses on how climate-induced disruptions in agriculture lead to higher dropout rates among girls.

— **"Adapting Education Systems in Response to Climate Change: A Focus on Gender"** by UNICEF Kenya (2021). This paper looks at institutional efforts to support education in regions affected by climate change, with particular attention to girls' retention and completion.

4.2 Key Findings

4.2.1   Qualitative Thematic Analysis of Literature and Documents Reviewed

The intersection of climate change and girls' education in Kenya reveals complex dynamics influenced by socio-economic, cultural, and environmental factors. As climate shocks such as droughts and floods intensify, the education system—particularly girls' education—faces increasing disruptions. This thematic analysis synthesizes findings from literature and policy documents to identify key themes, barriers, and gaps in climate action and its implications for girls' education.

Key Themes Identified
Theme 1: Impact of Climate Shocks on School Attendance and Retention

Findings: Across the reviewed documents, a consistent theme was the **disruptive effect of climate shocks** (such as droughts and floods) on school attendance, especially for girls. These shocks result in loss of livelihood, food insecurity, and migration, which leads to increased school dropout rates for girls.

Evidence

— The NCCAP 2023-2027 reports that drought conditions have affected over 2 million children across Kenya, with girls particularly affected due to increased household responsibilities and the need for families to prioritize male education during economic hardships (Ministry of Environment and Forestry, 2023)(Source: UNEP LEAP).

— **Drought-Related Displacement:** In regions like northern Kenya, severe droughts have led to increased migration and displacement, which directly affects school attendance. A 2023 report by the **National Drought Management Authority (NDMA)** found that drought conditions caused a 20% increase in school dropout rates, with girls being disproportionately affected due to their roles in fetching water and taking care of the household. (Source: NDC Partnership)

— According to a June 2022 report by Save the Children on impact of the drought in 17 counties, significant decrease in enrolment is seen in all the counties with an average of 52% affected schools across all levels (Early Childhood Education (ECE), primary and secondary). The most affected population of children are those aged between 7 to 10 years. During the 2022 drought in West Pokot, there was a notable decrease in enrolment within ECE 54,144, primary 22,107 and 3,881 secondary respectively. The total enrolment for term 3, 2021 was 96,120. This went down to 41,976 in term 1 2022.[3]

— **Economic Hardship:** The **United Nations Children's Fund (UNICEF) Kenya** reported in 2023 that in areas heavily impacted by climate change, such as the Arid and Semi-Arid Lands (ASALs), economic pressures

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3   NDMA LRA report, July 2022, pg 59

force families to prioritize boys' education over girls'. This has led to a significant rise in dropout rates among girls, particularly during prolonged droughts. *(Source: UNICEF).* Severe droughts leading to loss of livelihood assets such as livestock or crop failure leads to poor purchasing power among farmers, including lowered ability to meet school enrolment costs such as uniforms, books and school levies. For children and adolescents out of school, they face economic deprivations due to lowered economic capacity on the part of their parents. This forces them to engage in activities such as transactional sex that may lead to teenage pregnancy, disease transmission and early marriage. They are also at elevated risk of early marriage and delinquent behaviours such as drugs and substance abuse. **Odhiambo and Nyang'ori (2019)** found that in agricultural communities where livelihoods are heavily dependent on rainfall, climate shocks like droughts lead to reduced income, forcing families to prioritize boys' education over girls' education due to cultural norms. This results in lower attendance and higher dropout rates for girls.

— **Health and Nutrition:** Climate change contributes to food insecurity, increasing the risk of malnutrition among children, particularly girls. Malnutrition negatively affects cognitive development and school performance. Data from **Kenya's Ministry of Education** shows that malnourished children, especially girls, are more likely to drop out of school or perform poorly due to poor health. The immediate effects of droughts on children under five years is body wasting, normally accompanied by ill-health. For example, in July 2022, Global Acute Malnutrition (GAM) for Turkana was 34.8 percent, which was an increase in children malnourished from 20.8 percent reported in June 2021. Children who are at the age of school enrolment and are affected by acute malnutrition have lowered chances of joining school due to poor health and thus delayed enrolment. Further, recurrent and prolonged droughts lead to stunting which leads to cognitive impairment and thus poor learning capacity of the child. This increases the chances of dropping out of school thus more children out of school.

— <u>Water Scarcity and School Attendance</u>: A 2023 study by the **Kenya Climate Innovation Center (KCIC)** found that water scarcity due to drought has led to girls spending up to 6 hours daily fetching water, severely impacting their school attendance and performance. The report indicated that this issue is particularly severe in the ASALs, where girls' attendance rates dropped by 30% during the worst drought periods. *(Source: <u>Home | SNV</u>)*

Theme 2: Climate change exacerbates existing gender inequalities

Findings: This theme identifies a link between climate shocks and increased instances of **child marriages; early pregnancy** and **gender-based violence (GBV)**.

Evidence

— Studies suggest that in times of environmental stress, families may resort to marrying off girls early as a coping strategy to reduce economic burdens (NDC Partnership)

— <u>Child marriage:</u> According to **Plan International Kenya**, drought and flooding have forced families in some regions to marry off their daughters at a young age to reduce household burdens. The report highlighted a 15% increase in child marriages in drought-affected counties like Turkana and Samburu between 2020 and 2023. (Source: Home | SNV). In Wanjiru Njoroge's (2021) study, girls in ASALs are twice as likely to drop out of school compared to boys during droughts due to household labor demands and child marriage. Displacement caused by floods or droughts often results in long-term educational disruptions for girls.

— <u>Early Pregnancy</u>: Girls who drop out of school due to climate-related issues are at a higher risk of early pregnancy, further hindering their return to education. **UNICEF** noted that early pregnancies rose by 10% in climate-stressed regions of Kenya from 2019 to 2023 (Source: UNICEF)

— <u>Gender based violence:</u> The National Adaptation Plan (NAP) 2015-2030 identified that during prolonged droughts, girls are more likely to face early marriages, female genital mutilation/cutting (FGM/C), and other harmful practices, increasing their vulnerability and decreasing school

retention (Ministry of Environment and Forestry, 2015) _{(Source: UNEP LEAP).} Fatuma Ahmed (2020) highlights that during climate-related crises, girls often experience increased vulnerability to gender-based violence (GBV), including early marriages and trafficking, which directly impedes their ability to continue with formal education.

— Oxfam (2022) further highlighted that girls in climate-affected areas are twice as likely as boys to miss school during extreme weather events due to their roles in fetching water or caring for younger siblings _{(Source: UNEP LEAP).}

Theme 3: Lack of Climate-Resilient Education Infrastructure

Findings: Many rural schools in Kenya lack climate-resilient infrastructure, which leads to frequent school closures during extreme weather events. The absence of resilient infrastructure disproportionately impacts girls' access to continuous education.

Evidence:

— The Education in the Face of Climate Change report by Save the Children (2021) pointed out that 35% of schools in ASAL regions have no access to clean water or adequate sanitation facilities, which is a particular challenge for adolescent girls managing menstruation _{(NDC Partnership).} This report noted that girls in drought-prone regions are often forced to miss school during their menstrual periods due to inadequate sanitation, increasing absenteeism rates and reducing academic achievement.

— **Infrastructure Damage:** Flooding and other extreme weather events have damaged school infrastructure, particularly in coastal and western regions. The **Kenya Ministry of Education** reported in 2023 that over 500 schools had been affected by floods in the past five years, leading to the closure of some institutions for extended periods. This disproportionately impacts girls, who are less likely to return to school after prolonged closures. _(Source: NDC Partnership; World Bank)

Theme 4: Mental Health and Academic Performance

Finding: The compounded stress of dealing with climate impacts at home and in school has affected girls' mental health, contributing to poor academic performance.

Evidence

Psychosocial Stress: The **World Health Organization (WHO)** highlighted in 2023 that climate change is increasingly being recognized as a driver of mental health issues, which in turn affects educational outcomes for girls'.

Theme 5: Impact of Climate Change on Girl's Education

— Save the Children (2021) highlighted that in rural, drought-prone areas like Turkana and Garissa, 42% of girls aged 10-15 have dropped out of school in the last decade, citing climate-related disruptions as a major factor (NDC Partnership)

— Oxfam (2022) further highlighted that girls in climate-affected areas are twice as likely as boys to miss school during extreme weather events due to their roles in fetching water or caring for younger siblings (Source: UNEP LEAP).

— According to the population census of 2019 the levels of education attainment in counties that experience climatic shocks are low. Garissa and Turkana counties had some of the worst education indicators against national indicators. For example, they have high percentage of population that has never been to school with Garissa registering 75.2% and Turkana 68.7% against a national rate of 16.3%.   Table 1 below demonstrates the gender disparity, females remain disadvantaged in most of the indicators across a sample of counties affected by regular climate shock events.

County	At School/ Learning Institution (%)	Left School/ Learning Institution (%)After Completion	Left School/ Learning Institution (%)Before Completion	Never Been to School/ Learning Institution (%)
Garissa				
Male	38.9	32.6	10.7	16.4
Female	37.7	30.4	11.2	19.5
Kwale				
Male	44.9	21.7	12.9	19.7
Female	40.7	17.3	12.3	29.1
Kajiado				
Male	32.8	47.5	11.3	5.6
Female	33.3	46.3	12.0	5.8
Mombasa				
Male	34.3	44.0	13.5	7.3
Female	34.5	39.2	14.5	11.1
West Pokot				
Male	43.9	7.6	10.3	37.1
Female	41.1	5.7	10.2	42.0
Turkana				
Male	22.4	4.8	3.3	67.0
Female	20.8	2.9	3.5	70.5
Elgeyo Marakwet				
Male	49.4	23.2	15.2	11.3
Female	48.0	21.4	16.1	13.6

Table 1: Distribution of Population Age 3 Years and Above by School Attendance Status, by gender.

Source: KPHC, 2019

5. National and County Plans (GOK and Non-State Actors)

5.1 Analysis of National Policies, Strategies, and Plans

1. Kenya Climate Change Act (2016)

Overview: The Kenya Climate Change Act provides a legal and institutional framework for climate change mitigation and adaptation. It outlines the roles of national and county governments in implementing climate resilience strategies and establishes a Climate Change Council to oversee these efforts.

Gender and Education Focus: While the Act emphasizes the need for climate resilience, it does not explicitly address gender or the education sector. There is little focus on how climate change uniquely affects girls' education or how educational institutions can adapt to these challenges.

Extent to Which it Addresses Girls' Needs: The Act lacks specific provisions targeting the educational impacts of climate change on girls, and there are no mechanisms to ensure that girls' education is prioritized during climate emergencies. This represents a significant gap in addressing the needs of girls, particularly in climate-affected areas.

2. National Climate Change Action Plan (NCCAP) 2023-2027

Overview: The NCCAP 2023-2027 serves as Kenya's overarching policy to address climate change through mitigation and adaptation actions. It builds on previous versions and emphasizes inclusivity, resilience, and sustainable development across various sectors, including education.

Gender and Education Focus: The plan highlights gender equality as a cross-cutting issue and recognizes the importance of education in building climate resilience. It promotes climate change education and awareness as crucial tools for adaptation.

Extent to Which it Addresses Girls' Needs: While the NCCAP includes provisions for gender equality and the inclusion of vulnerable groups, it does not specifically focus on how climate change impacts girls' education. The plan generally advocates for capacity building in climate knowledge through schools but lacks targeted strategies to mitigate the specific educational challenges girls face in climate-affected areas, such as increased dropout rates due to extreme weather events.

3. Kenya National Adaptation Plan (NAP) 2015-2030

Overview: The NAP is Kenya's key strategic plan for climate change adaptation, focusing on building resilience across different sectors, including agriculture, water, and infrastructure. It aims to enhance the country's ability to cope with the impacts of climate change through a series of short-, medium-, and long-term actions.

Gender and Education Focus: The NAP recognizes gender as a key factor in vulnerability to climate change and calls for gender-responsive adaptation actions. However, the primary focus is on livelihoods and economic empowerment, rather than directly addressing education.

Extent to Which it Addresses Girls' Needs: The NAP provides limited attention to how climate change affects girls' education specifically. While it highlights the importance of integrating gender-sensitive approaches into adaptation actions, there is a gap in terms of addressing the direct educational impacts on girls. The plan focuses on broader gender issues like economic participation and health, without providing explicit measures to support girls' continued access to education in climate-affected areas.

4. Basic Education Act, 2013

Overview: The Basic Education Act is a legal framework that governs the provision of education in Kenya. It guarantees the right to free and compulsory basic education for every Kenyan child. The Act emphasizes inclusivity and aims to eliminate any form of discrimination, ensuring equitable access to education for all children, regardless of gender or socioeconomic background.

Gender and Education Focus: The Basic Education Act mandates the inclusion of marginalized and vulnerable groups, including girls, in education. It also provides measures for enhancing gender equity by addressing cultural practices, such as early marriage and child labour that hinder girls' access to education.

Extent to Which it Addresses Girls' Needs: While the Act guarantees equal access to education, it does not explicitly consider climate change as a barrier to education. Girls in climate-affected regions face additional challenges, such as increased domestic responsibilities and school dropouts during droughts or floods. The Act focuses on ensuring general access and equity but lacks specific provisions for how climate change impacts girls' educational outcomes. There is an opportunity to strengthen this policy by integrating climate resilience measures, particularly for girls who are disproportionately affected by climate change.

5. Education for Sustainable Development (ESD) Policy for the Education Sector in Kenya (2017)

Overview: The ESD Policy aims to integrate principles of sustainability into the education sector, preparing learners to address current and future environmental challenges, including climate change. It seeks to enhance climate literacy and foster environmentally conscious citizens.

Gender and Education Focus: The policy promotes inclusivity and gender equity in education, recognizing the importance of ensuring that all students, regardless of gender, have access to quality education that incorporates sustainability principles.

Extent to Which it Addresses Girls' Needs: The ESD Policy makes general provisions for gender inclusivity in climate education but does not specifically address the vulnerabilities of girls in climate-affected areas. Although it emphasizes the role of education in climate adaptation, there are no clear strategies to support girls who face increased barriers due to climate-related disruptions, such as forced early marriage or increased domestic labour responsibilities that can hinder school attendance.

6. National Education Sector Strategic Plan (NESSP)

Overview: The National Education Sector Strategic Plan (NESSP) serves as Kenya's guiding framework for addressing challenges and setting priorities in the education sector. It includes goals such as increasing access to education, improving quality, and promoting gender equity. NESSP aligns with Kenya's Vision 2030 and other international commitments like the Sustainable Development Goals (SDGs).

Gender and Education Focus: NESSP emphasizes gender inclusivity and aims to eliminate gender disparities in education. It promotes equal access to education for both boys and girls, especially in marginalized areas, and calls for strategies to improve retention and transition rates for girls.

Extent to Which it Addresses Girls' Needs: While NESSP provides a strong framework for addressing gender disparities in education, it does not explicitly address the specific educational challenges that girls face due to climate change. The plan highlights the importance of access and retention, particularly in marginalized areas, which may include climate-affected regions, but it lacks targeted strategies to mitigate climate-induced disruptions like droughts or floods that disproportionately affect girls' schooling, such as increased household responsibilities or early marriage.

7. School Health Policy

Overview: The School Health Policy provides guidelines on promoting the health and well-being of students through school-based health programs. The policy includes strategies for improving nutrition, sanitation, reproductive health education, and protection against diseases, all of which have an impact on student attendance and performance.

Gender and Education Focus: The policy acknowledges the importance of addressing gender-specific health needs, particularly in relation to adolescent girls. It promotes menstrual hygiene management, access to reproductive health education, and the provision of sanitary facilities, which are critical in ensuring that girls attend school regularly.

Extent to Which it Addresses Girls' Needs: The School Health Policy is more directly aligned with addressing some of the barriers girls face due to climate change. For instance, during climate-induced crises, access to clean water and sanitation becomes more critical, and this policy emphasizes the need for improved infrastructure in schools. However, it does not link these health concerns to climate change adaptation efforts or provide specific interventions for girls in climate-affected regions. Nonetheless, the focus on menstrual hygiene and health is crucial for girls' education continuity in such regions.

8. Kenya Vision 2030

Overview: Kenya's Vision 2030 is the national long-term development plan aimed at transforming Kenya into an industrializing, middle-income country. It covers sectors like education, health, infrastructure, and climate resilience.

Gender and Education Focus: The Vision acknowledges the need for gender equality and education access as drivers of socio-economic growth. It also highlights climate resilience as a priority but does not explore the intersection of climate, gender, and education in detail.

Extent to Which it Addresses Girls' Needs: Vision 2030 offers a broad framework for addressing gender disparities and climate challenges but does not provide specific strategies for mitigating the impact of climate change on girls' education. While the vision promotes inclusive development, there is limited attention to the unique vulnerabilities girls face in climate-affected areas.

9. Kenya's National Gender and Equality Commission (NGEC) Strategic Plan (2019-2024)

Overview: The NGEC Strategic Plan promotes gender equality and women's empowerment across various sectors, including education, health, and climate change adaptation.

Gender and Education Focus: The Plan addresses gender disparities and advocates for policies that ensure equal opportunities for girls and women in education. It also recognizes the importance of gender-sensitive climate adaptation policies.

Extent to Which it Addresses Girls' Needs: While the Plan emphasizes gender inclusion and education, it does not comprehensively address the impact of climate change on girls' education. There is an acknowledgment of the need for gender-sensitive climate policies, but specific actions related to girls' educational challenges in climate-affected regions are not well defined.

10. County Integrated Development Plans (CIDPs)

Overview: Each county in Kenya develops a CIDP that outlines local development priorities, including climate resilience, education, and gender equality. Counties such as Turkana, Marsabit, and Garissa, which are prone to climate-related challenges, have CIDPs with a focus on climate adaptation.

Gender and Education Focus: Many CIDPs include provisions for gender inclusion and education but vary in the extent to which they integrate climate change adaptation measures. ASAL counties often prioritize climate resilience but may not explicitly address the intersection of climate, gender, and education.

Extent to Which it Addresses Girls' Needs: The integration of climate adaptation and gender-sensitive policies in CIDPs is uneven across counties. Some counties have begun to address the unique challenges faced by girls, such as improving school infrastructure and providing school feeding programs, but these efforts remain localized and insufficient in scale. Many CIDPs still lack comprehensive strategies to ensure girls' continued access to education during climate crises.

11. Financing Locally-Led Climate Action Program (FLLoCA)

Overview: FLLoCA is a World Bank-supported initiative aimed at empowering local governments in Kenya to implement climate action at the community level. It emphasizes locally-led, inclusive, and sustainable climate solutions across various sectors.

Gender and Education Focus: The program includes provisions for gender-responsive climate action, ensuring that women and marginalized groups are involved in decision-making processes. It also aims to fund locally-driven solutions that address community-specific climate challenges, which could indirectly benefit the education sector.

Extent to Which it Addresses Girls' Needs: While FLLoCA supports inclusive and locally-led approaches, it does not specifically address the educational needs of girls affected by climate change. There is potential for the program to indirectly support girls' education through community-driven projects, but explicit strategies focused on ensuring girls remain in school during climate crises are not articulated.

12. Kajiado County Climate Change Action Plan 2023-2027

Overview: As a county-level initiative, the Kajiado County Climate Change Action Plan focuses on localized responses to climate change, with an emphasis on resilience in agriculture, water resources, and education. Kajiado, a semi-arid region, is particularly vulnerable to climate-related challenges such as droughts.

Gender and Education Focus: The plan recognizes the importance of addressing the needs of vulnerable groups, including women and girls, and emphasizes building resilience in sectors like education. It advocates for gender-sensitive approaches in adaptation strategies, including ensuring that schools are equipped to handle climate impacts.

Extent to Which it Addresses Girls' Needs: The Kajiado County Climate Change Action Plan offers a more targeted approach compared to national policies, recognizing the specific challenges faced by girls in accessing education during climate disruptions. It includes provisions for building climate-resilient infrastructure in schools and promoting school feeding programs to ensure attendance. However, the plan still lacks comprehensive strategies to address systemic barriers such as early marriage or increased domestic labour, which are often exacerbated by climate change in rural areas.

Summary: Assessment of How These Plans Address the Specific Needs of Girls Affected by Climate Change

Across these national and county-level policies, there is a general acknowledgment of gender as a critical factor in climate vulnerability, but the specific needs of girls, particularly in relation to education, are often inadequately addressed. Many of the policies and plans provide general recommendations for inclusivity and gender

sensitivity, but they fall short of offering concrete, targeted strategies for ensuring girls' education is protected in the face of climate change. The key gaps identified include:

— **Limited Climate-Specific Focus**: Most of the policies, such as NESSP and the Basic Education Act, emphasize gender equality in education but do not specifically address the challenges posed by climate change. Girls in climate-affected areas, such as arid and semi-arid regions, face increased vulnerability due to environmental shocks that exacerbate existing educational barriers, like increased dropout rates and early marriages, which are not directly addressed in these frameworks.

— **Health and Well-being Linkages**: The School Health Policy is more directly relevant to girls' education in the context of climate change, as it addresses health and sanitation issues that are often worsened by climate-induced disasters. However, it stops short of explicitly linking these issues to climate change adaptation or providing comprehensive strategies to protect girls' education during climate crises.

— **Gaps in Climate Resilience Measures**: None of the analysed policies provide a clear framework for integrating climate resilience into the education system, particularly for girls. There are no targeted strategies for ensuring that girls in drought-prone or flood-affected regions remain in school during climate crises. This highlights a major gap in the current education policies, as climate change is increasingly affecting school attendance and educational outcomes, especially for girls.

— **Need for Targeted Interventions**: While the policies aim to address gender disparities broadly, they lack targeted interventions for girls in climate-affected regions. The absence of specific measures to address climate-induced barriers, such as family displacement, increased domestic burdens, or the pressure to leave school due to economic hardship, means that girls in these regions remain vulnerable to educational disruptions.

— **Lack of targeted interventions**: While policies like the NCCAP and NAP recognize gender as an important factor, they do not offer specific measures to address the unique challenges girls face, such as early dropout rates caused by climate-induced hardships like drought and

displacement.

— **Limited focus on education**: The education sector is often underrepresented in climate adaptation strategies, with most policies focusing on livelihoods, health, and economic empowerment. The role of education, especially for girls, is not emphasized as a critical area for climate resilience, leaving girls in vulnerable regions at risk of being left behind.

— **County-level progress**: County-specific plans, such as the Kajiado County Climate Change Action Plan, show more promise in addressing localized challenges that disproportionately affect girls. However, these initiatives still require more robust frameworks and coordination with national policies to fully protect girls' educational rights in climate-affected areas.

— **Gaps in implementation**: Even where policies mention gender or education, the implementation of these strategies remains weak, with little follow-through on ensuring girls' access to education in the wake of climate disruptions. Without clear, enforceable actions, the vulnerability of girls in climate-affected regions is likely to persist.

5.2. Non-State Actors Programms

Non-State Actors' Initiatives

Title and Description	Source and Date of Publication
UNICEF Kenya's Education in Emergencies (EiE) Program: UNICEF's EiE program in Kenya includes components that address the impacts of climate change on education, especially for girls. The program provides temporary learning spaces, distributes learning materials during droughts and floods, and supports the continuation of education in climate-affected areas.	**UNICEF Kenya** Date of publication: Ongoing program with updates aligned with annual reports
Kenya Climate Innovation Center (KCIC) Programs: KCIC supports innovations that address climate change, including projects that focus on education. It promotes the development of climate-resilient infrastructure and supports educational programs that teach students, especially girls, about climate change and sustainability.	**Kenya Climate Innovation Center** Date of Publication: Various projects initiated since 2012
Plan International Kenya's "Because I am a Girl" Program: This program addresses the barriers to girls' education exacerbated by climate change, including early marriage and economic hardships. It focuses on providing safe learning environments, improving water and sanitation in schools, and supporting families economically to keep girls in school.	**Plan International Kenya** Date of Publication: Ongoing program, established in 2012 with periodic updates

Girl Child Network's "Green Skills" Program: This program is promoting the **training learners in schools on Green Skills** - these are the knowledge, abilities, values, and attitudes needed to live in, develop, and support a sustainable and resource-efficient society.	**Girl Child Network** Date of Publication: On-going program established in 2023

Youth engagement is a key focus in Kenya's future resilience plans, particularly as the country seeks to address the impacts of climate change on education and broader socio-economic development. Here are some key initiatives:

— **Youth Climate Action Networks**: The formation of youth-led climate action networks is another significant development. Organizations like the **Kenya Youth Climate Network (KYCN)** and the **Kenya Red Cross Youth** are actively involved in climate advocacy, environmental conservation projects, and educating their peers on climate change. These networks are crucial in raising awareness and mobilizing youth to participate in community-based climate resilience projects. (Sources: UNICEF; Home | SNV)

— **Youth Empowerment in Green Technologies**: As part of the broader push towards a green economy, the Kenyan government and partners are promoting youth engagement in green technologies. Training programs are being developed to equip young people with skills in renewable energy, water conservation, and waste management. The goal is to create a generation of climate-conscious entrepreneurs who can drive sustainable development. (Source: World Bank)

— **Integration of Climate Change in Education**: The National Climate Change Action Plan (NCCAP) 2023-2027 emphasizes integrating climate change into the national curriculum. This effort ensures that students, including youth, are educated on climate science, sustainability, and resilience from an early age. By embedding these topics into the education system, Kenya aims to foster a generation of informed citizens who are prepared to tackle climate challenges. (Source: NDC Partnership)

— **Youth in Policy Advocacy**: Kenyan youth are increasingly involved in climate policy advocacy. Through platforms like the **Kenya Climate**

Innovation Centre (KCIC) and participation in international forums such as the UN Climate Change Conferences, young Kenyans are advocating for stronger climate policies and the inclusion of youth perspectives in national and international climate dialogues.

6.0. Systematic Barriers and Gaps

6.1. Systemic Barriers

Systemic barriers to climate change adaptation responses significantly hinder girls' education in Kenya, particularly in climate-affected regions such as arid and semi-arid lands (ASALs). These barriers include patriarchy, inadequate integration of gender-sensitive approaches in national climate policies, limited infrastructure in schools to cope with extreme weather events, and a lack of coordination between education and climate sectors. Moreover, socio-economic factors such as poverty, early marriage, and household labour demands are exacerbated by climate change, disproportionately affecting girls and limiting their access to education. In many cases, cultural norms and entrenched gender inequalities also prevent effective climate adaptation strategies from addressing the specific needs of girls, leading to high dropout rates and compromised educational outcomes.

Systemic barriers related to climate change adaptation responses that affect girls' education in Kenya include:

1. Patriarchy

Patriarchy plays a significant role as a **systemic barrier** to girls' education in Kenya. Rooted in deeply entrenched gender norms and societal structures, patriarchy limits girls' access to education in various ways:

a. **Gender Roles and Expectations:** In patriarchal societies, girls are often viewed as future homemakers rather than individuals entitled to education and career opportunities. This leads families to prioritize the education of boys over girls,

as boys are seen as future breadwinners. Girls, on the other hand, are expected to engage in domestic chores, care for younger siblings, or work to supplement household income, especially in rural and low-income households. Patriarchal norms remain one of the strongest barriers to achieving gender parity in education in sub-Saharan Africa, particularly in Kenya (**UNESCO, 2022**)

b.   **Early Marriages and Childbearing:** Patriarchy perpetuates the notion that a girl's value lies in marriage and childbearing, often leading to **early marriages**. Girls are married off at a young age, sometimes in exchange for dowries, effectively ending their education. Early pregnancies, which often follow early marriages, compound the issue, as pregnant girls are frequently stigmatized or barred from returning to school. **23% of girls in Kenya are married before 18**, with many dropping out of school to assume the role of wife and mother (UNICEF, 2019).

c.   **Power Dynamics and Decision-Making:** In many Kenyan households, decisions regarding education are predominantly made by male heads of families. This leaves little room for women, including mothers, to advocate for their daughters' education. The unequal power dynamics ensure that boys are often chosen to continue schooling when resources are limited. **The Kenya National Commission on Human Rights (KNCHR, 2019)** found that male-dominated decision-making in families often favours boys' education over girls', especially in rural communities.

d.   **Gender-Based Violence (GBV):** Patriarchy also manifests in widespread **gender-based violence (GBV)**, including sexual harassment, assault, and exploitation, which discourages girls from attending school. Fear of GBV at school or on the way to school further limits girls' access to education. According to a **UNICEF 2020 report**, many girls in Kenya experience harassment both within and outside the school environment, leading to higher dropout rates among girls.

e.   **Cultural Practices:** Certain **cultural practices** that are patriarchal in nature, such as **female genital mutilation (FGM)**, are still prevalent in some Kenyan communities. FGM often results in girls dropping out of school, either due to the physical and psychological effects or because it often coincides with early marriage. An estimated **21% of girls aged 15-19 in Kenya have undergone FGM**, and these girls are less likely to complete their education (UNICEF, 2019).

f.   **Resistance to Gender Equality Policies:** Although the Kenyan government has implemented policies like the **Basic Education Act (2013)** and **free primary education**, patriarchal attitudes in communities often resist these policies, viewing education for girls as less important. As a result, these policies are often poorly implemented at the grassroots level, particularly in patriarchal rural settings. **In 2019 a UNESCO report** highlighted the difficulty of enforcing gender equality policies in deeply patriarchal regions of Kenya, where local leaders and families resist educating girls.

1. **Economic Barriers:**

Poverty: Climate change exacerbates poverty, particularly in ASAL regions. Families may prioritize boys' education over girls', viewing it as a better investment, especially when resources are limited. 35% of Kenyan children live below the poverty line, with school dropout rates higher among girls in low-income households.

Cost of Education: Even with free primary education, associated costs (uniforms, books, transport) can become prohibitive during times of climate stress, leading to higher dropout rates among girls.

2. **Inadequate Infrastructure and Resources**

School Infrastructure: Schools in ASALs are often poorly equipped to handle climate-related challenges, such as extreme heat or flooding. The lack of climate-resilient infrastructure can lead to frequent school closures, disrupting education. **65% of schools in ASAL regions** lack adequate sanitation, making it difficult for adolescent girls to attend school regularly (Global Partnership for Education, 2021).

Teacher Shortages: Drought and other climate impacts often force teachers to relocate, leaving schools understaffed. This disproportionately affects girls, who may be less likely to return to school after disruptions.

3. **Limited Awareness and Education**

Climate Change Education: There is a lack of comprehensive climate change education that is integrated into the school curriculum. Girls, in particular, may lack access to information on how climate change affects their lives and education.

Community Awareness: Low levels of awareness among communities about the importance of girls' education during climate crises further perpetuate the cycle of gender inequality.

These systemic barriers create a challenging environment for girls' education in Kenya, particularly in regions most affected by climate change. Addressing these gaps and barriers require a coordinated effort that includes improving resource allocation, enhancing community awareness, and integrating gender considerations into all aspects of climate adaptation policy and practice.

6.2. Missing Interventions and Underfunded Areas

The analysis of climate change and its effect on girls' education in Kenya reveals several **missing interventions** and **underfunded areas** that hinder progress in addressing in Climate Change and its effects on girls' Education in Kenya

1. Gaps in Policy Implementation and Gender-Sensitive Climate Action: While Kenya has developed policies such as the NCCAP and NAP, there are significant gaps in implementation at the county level. Despite various climate adaptation plans, there is a notable absence of gender-specific programs targeting girls' education. Most climate interventions in Kenya, such as the National Climate Change Action Plan (NCCAP) 2023-2027, focus on broader societal impacts without addressing the unique challenges girls face, such as increased dropout rates during droughts or floods due to domestic responsibilities or early marriages. *Funding for* gender-responsive climate education *is inadequate*. The majority of climate finance is directed toward energy and infrastructure, while minimal funding is allocated to ensuring girls' continuous access to education in climate-affected areas (Source: NDC Partnership). Climate adaptation programmes are grossly underfunded. For instance meeting Kenya's ambitious National Adaptation Plan (NAP) 2015-2030 will require an investment of up to USD 62 Billion over the period running up to 2030. School feeding programs also exists but are also underfunded. Although legislation was introduced to create a Climate Change Fund over five years ago, the fund does not appear to exist. Climate expenditures remain fragmented across the budget, making it hard to identify and track.

2. Gaps in Monitoring Evaluation and Learning; Limited Data and Monitoring: There is a lack of comprehensive data collection and monitoring on the specific impacts of climate change on girls' education. Most policies and reports focus on broad impacts without providing gender-disaggregated data. (NCCAP 2023-2027, Ministry of Environment and Forestry, 2023)

3. Limited Focus on Climate Education in Curriculum: The current education system lacks a comprehensive climate change curriculum that addresses the gender-specific impacts of climate change. There is little emphasis on equipping girls with knowledge on climate resilience, which could empower them to participate in mitigation efforts and better adapt to changing conditions. (National Adaptation Plan (NAP) 2015-2030, Ministry of Environment and Forestry, 2015)

4. Weak Integration of Climate Adaptation in Education Policies: The Basic Education Act and other education policies do not sufficiently integrate climate adaptation measures that target girls. Current adaptation efforts are often reactive rather than proactive (Source: UNEP LEAP)

5. **Underfunding of School-Based Climate Adaptation Initiatives:** While, NGOs such run programs like school feeding to keep girls in school during droughts, there is inadequate **scaling and sustainability** of such programs due to limited funding.

6. Lack of Community-Based Approaches: Although community-based interventions are acknowledged in Kenya's climate action plans, there is limited involvement of local communities in designing and implementing education programs that address the needs of girls during climate shocks. Further, the few community-led adaptation initiatives, which could provide local, culturally relevant solutions to the challenges girls face in accessing education during climate shocks, are not sufficiently supported or funded

7. **Absence of Robust Policy Coordination between Education and Climate Change:** National climate change policies and education policies are often developed in isolation, lacking an **integrated approach** that addresses the unique vulnerabilities of girls in climate-vulnerable regions. The **Ministry of Environment and Forestry, 2023**, "NCCAP 2023-2027" mentions education as a vulnerable sector but does not provide specific, actionable strategies for integrating climate resilience into the education system

6.3. Gaps in the Studies and Literature

While the available literature provides valuable insights into the links between climate change, gender, and education in Kenya, several data gaps remain:

1. **Insufficient Gender-Disaggregated Data**: Most studies lack comprehensive data broken down by gender, making it difficult to quantify the exact number of girls affected by climate-induced educational disruptions.

2. **Lack of Longitudinal Studies**: There is a shortage of long-term studies tracking the sustained impacts of climate change on girls' education over several years. Most data are short-term or based on specific climate events, limiting understanding of long-term educational outcomes.

3. **Geographical Limitations**: Existing literature focuses mainly on arid and semi-arid regions (ASALs), where climate shocks are more prominent. However, there is limited research on urban areas and how climate change affects girls' education in these settings, particularly in informal settlements.

4. Integration of Climate Change and Education Policies: There is a gap in research that explores the intersection between national climate change strategies and education policies. Studies that evaluate how well climate adaptation strategies align with educational interventions, especially for girls, are limited.

6.4. Barriers to Research and Data Collection

The collection of reliable data on the intersection of climate change, gender, and education in Kenya faces numerous challenges, including limited gender-disaggregated data, regional variability, and socio-cultural factors that are difficult to quantify.

1. **Limited Availability of Gender-Disaggregated Data**: One of the key challenges in collecting reliable data on climate change, gender, and education in Kenya is the lack of comprehensive, gender-disaggregated data. While some data exists on climate impacts and education, it is often not broken down by gender, making it difficult to assess how girls, in particular, are affected by climate-related events. This absence of specific information on how climate change uniquely impacts girls' education limits the ability to design targeted interventions.

2. **Lack of Longitudinal Studies**: The impacts of climate change on education are long-term and cumulative, but there is a lack of longitudinal studies that track how these impacts evolve over time. Many existing studies provide only a snapshot of the situation at a particular point, making it difficult to understand trends and the long-term effects of climate-related disruptions on girls' education. Without consistent data collection over time, it becomes challenging to make informed policy recommendations.

3. **Variability in Climate Impacts Across Regions**: Climate change affects different regions of Kenya in varying ways, with arid and semi-arid areas, such as Turkana and Kajiado, experiencing more severe climate shocks than others. The localized nature of climate impacts means that national data collection efforts often overlook regional disparities, particularly in marginalized or hard-to-reach areas. This variability in climate impacts makes it difficult to collect representative data that can inform nationwide policies on education and gender.

4. **Underreporting of Cultural and Societal Factors**: Socio-cultural factors, such as early marriage and traditional gender roles, play a significant role in how climate change affects girls' education. However, these factors are often underreported or not adequately captured in data collection efforts. The complex interplay between climate change and societal norms is challenging to quantify, leading to a lack of reliable data that reflects the root causes of educational disparities for girls in climate-affected regions.

5. **Inadequate Resources and Infrastructure for Data Collection**: Collecting accurate and reliable data on the intersection of climate change, gender, and education requires significant resources and infrastructure. In many parts of Kenya, particularly in rural and marginalized areas, there is limited capacity for regular data collection due to poor infrastructure, lack of funding, and insufficient human resources. This results in data gaps and inconsistencies, making it difficult to create an accurate picture of the issue.

6. **Fragmented and Inconsistent Data Sources**: Data related to climate change, gender, and education is often collected by different government ministries, NGOs, and international organizations, leading to fragmentation and inconsistencies in data sets. This lack of coordination between different agencies results in incomplete data and makes it difficult to draw comprehensive

conclusions or develop cohesive policies.

7. **Political and Institutional Barriers**: Political factors can also hinder data collection. For instance, there may be reluctance on the part of local governments or institutions to acknowledge the full extent of climate-related challenges, particularly where it reflects poorly on local governance. Additionally, data collection efforts may be compromised by a lack of institutional collaboration or a lack of priority given to climate change's intersection with gender and education in national policy frameworks.

8. **Impact of Emergencies on Data Continuity**: Climate-related emergencies such as droughts, floods, or extreme weather events disrupt data collection processes, particularly in remote or disaster-affected areas. During such emergencies, resources are often diverted towards immediate relief efforts, making long-term data collection on education or gender disparities less of a priority. This leads to significant gaps in the data, particularly in regions most affected by climate change.

6.5. Recommendations

1. Strengthen Policy Integration and Enforcement: Climate adaptation measures should be fully integrated into education policies. National and county governments should ensure that girls' education is prioritized in climate resilience programs, with specific targets and budget allocations.

2. Increase Funding for Girls' Education in Climate Action Plans: Additional resources should be allocated to education in climate finance policies, with a focus on vulnerable populations, particularly girls in ASAL regions. National and county climate policies must include specific interventions targeting girls' education in climate-vulnerable regions, such as the provision of scholarships for girls affected by climate shocks

3. Improve Data Collection and Gender-Disaggregated Monitoring: There is a need to improve data collection systems to better monitor the impact of climate change on girls' education. This should include gender-disaggregated data to inform more targeted interventions. There is a need for coordinated efforts among government agencies, NGOs, and international bodies to create comprehensive, long-term data collection strategies that take into account the unique ways in which climate change affects girls' education. This will enable

more effective policy interventions and ensure that the most vulnerable populations, particularly girls in climate-affected regions, receive the necessary support.

4. To address these gaps, there is a need for coordinated efforts among government agencies, NGOs, and international bodies to create comprehensive, long-term data collection strategies that take into account the unique ways in which climate change affects girls' education. This will enable more effective policy interventions and ensure that the most vulnerable populations, particularly girls in climate-affected regions, receive the necessary support.

5. Enhance Community Participation in Program Design: Engage local communities, especially women and girls, in the design and implementation of climate education programs to ensure interventions are contextually relevant and sustainable. This should be through raising awareness about the importance of girls' education, especially during climate crises, and providing economic support to affected families can help mitigate the adverse effects.

6. **Investment in Climate-Resilient Infrastructure**: Strengthening school infrastructure to withstand extreme weather events is crucial. This should include expanding water access in schools and communities can reduce the burden on girls and improve attendance.

7. Heightened advocacy around climate change because the most salient fact about climate commitments at both the global and national level is that they are often not implemented.

6.6 Opportunities for the Gender in Education Movement to intervene

1. Strengthen Policy Integration and Advocacy
   — **Advocate for Gender-Sensitive Climate Policies**: Work with policymakers to ensure that national and county-level climate adaptation plans (e.g., NCCAP, NAP) explicitly address the unique challenges girls face in accessing education during climate shocks.

- — **Promote Inter-sectoral Collaboration**: Advocate for better coordination between the Ministry of Education and the Ministry of Environment to integrate climate resilience into education policies, ensuring girls' education is prioritized during climate crises.
- — **Push for Gender-Disaggregated Data Collection**: Lobby for the inclusion of gender-disaggregated data in climate and education policies to better understand and address the specific needs of girls.

2. **Community Engagement and Awareness**
   - — **Community Sensitization Programs**: Conduct awareness campaigns in climate-affected regions to educate communities on the importance of girls' education, especially during climate shocks.
   - — Engage Local Leaders: Work with community leaders, including religious and cultural leaders, to challenge harmful gender norms and practices (e.g., early marriage, FGM) that hinder girls' education.
   - — Parental Support Programs: Provide economic incentives or support to families in climate-affected areas to reduce the financial burden of educating girls, such as conditional cash transfers or school feeding programs.

3. **Climate-Resilient School Infrastructure**
   - — **Improve** Water and Sanitation Facilities: Advocate for and support the construction of climate-resilient water and sanitation facilities in schools, particularly in ASAL regions, to ensure girls can attend school during droughts and floods.
   - — Build Climate-Resilient Schools: Partner with government and NGOs to construct schools that can withstand extreme weather events, ensuring continuity of education during climate shocks.
   - — Menstrual Hygiene Management (MHM): Provide menstrual hygiene products and facilities in schools to reduce absenteeism among adolescent girls during their menstrual cycles.

4. **Economic Empowerment and Support**
   - — **Sch**olarships and Bursaries: Establish scholarship programs specifically for girls in climate-affected regions to cover school fees, uniforms, and

other associated costs.

— Livelihood Support for Families: Implement programs that provide alternative livelihoods for families in drought-prone areas, reducing the economic pressure to marry off girls or pull them out of school.

— School Feeding Programs: Expand and sustain school feeding programs in ASAL regions to ensure girls have access to nutritious meals, which can improve attendance and performance.

5. Capacity Building and Teacher Training

— **Teacher Training on Gender and Climate Issues**: Train teachers on gender-sensitive pedagogy and how to support girls affected by climate-related disruptions, such as displacement or trauma.

— Climate Change Education: Integrate climate change education into the curriculum, equipping girls with knowledge and skills to adapt to and mitigate climate impacts.

— **Psych**osocial Support: Provide training for teachers and school counselors to offer psychosocial support to girls dealing with the stress of climate-related challenges.

6. Addressing Cultural and Social Barriers

— **Combat Early Marri**age and Pregnancy: Partner with local organizations to implement programs that reduce early marriage and teenage pregnancy, such as community dialogues, legal support, and reproductive health education.

— Challenge Gender Norms: Launch campaigns to challenge patriarchal norms that prioritize boys' education over girls', emphasizing the long-term benefits of educating girls.

— Safe Spaces for Girls: Establish safe spaces in schools and communities where girls can discuss issues affecting them, access mentorship, and receive support to stay in school.

7. Research and Data Collection

— **Conduct Gender-Disaggrega**ted Research: Partner with universities and research institutions to conduct studies on the specific impacts of climate

change on girls' education, particularly in ASAL regions.

— Longitudinal Studies: Support long-term research to track the effects of climate change on girls' education over time, providing evidence for targeted interventions.

— Community-Based Data Collection: Work with local communities to collect data on the barriers girls face in accessing education during climate shocks, ensuring interventions are contextually relevant.

8. Advocacy and Movement Building

— **Youth Engagement**: Mobilize youth, particularly young women, to advocate for gender equality in education and climate resilience, leveraging platforms like the Kenya Youth Climate Network.

— Intergenerational Dialogue: Facilitate dialogues between older and younger generations to share knowledge and experiences on gender and education, fostering a collective approach to systemic change.

- **Global Advocacy**: Engage in international forums (e.g., UN Climate Change Conferences) to advocate for global support and funding for girls' education in climate-affected regions.

9. Partnerships and Collaboration

— Collaborate with NGOs and CSOs: Partner with organizations like Save the Children, Plan International, and UNICEF to implement programs that address the intersection of climate change and girls' education.

— Private Sector Engagement: Work with private companies to fund and support initiatives that promote girls' education and climate resilience, such as renewable energy projects in schools.

— Government Partnerships: Collaborate with county governments to implement localized climate adaptation strategies that prioritize girls' education, particularly in ASAL regions.

10. Monitoring and Evaluation

— Develop Gender-Sensitive Indicators: Create monitoring and evaluation frameworks that include gender-sensitive indicators to track the impact of interventions on girls' education.

- — Regular Reporting: Publish regular reports on the progress of GiEM initiatives, ensuring transparency and accountability in addressing systemic barriers to girls' education.
- — Feedback Mechanisms: Establish feedback mechanisms with communities to ensure interventions are meeting the needs of girls and can be adapted as necessary.

By implementing these interventions, the Gender in Education Movement (GiEM) can address the systemic barriers to girls' education in Kenya, particularly in the context of climate change, and work towards achieving its long-term vision of gender equity in education

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