



Ipas staff and research assistants speak with young male warriors. [Photo by Ipas]

**RESEARCH BRIEF**

# Impacts of the climate crisis on communities, the health system, and sexual and reproductive health and rights in Samburu County, Kenya



## The climate crisis in Kenya’s arid and semi-arid lands

Kenya is highly vulnerable to the climate crisis, with a climate future characterized by rising temperatures, increasing frequency and intensity of extreme rainfall events, and decreasing rainfall in arid lands. Seventy percent of natural disasters in Kenya are attributable to extreme climatic events, including drought and flood. Communities living in arid and semi-arid lands, which make up 80% of the country, are disproportionately vulnerable to the climate crisis due to their dependence on natural resources and nomadic pastoralism as a main source of livelihood. At present, northern Kenya’s arid and semi-arid lands are in the grip of a prolonged drought that has killed millions of livestock and caused widespread crop failures. Access to comprehensive sexual and reproductive health and rights (SRHR) is an essential ingredient in building resilient, healthy communities that can adapt, recover, and thrive in the face of the climate crisis. However, sparse evidence exists on the impact of these conditions on local health systems and the SRHR of communities living in arid and semi-arid lands.

### Our aim

We aimed to understand the perceived resilience of communities and health systems in Samburu County to the climate crisis, which we defined as acute and slow-onset climate stressors including drought, extreme heat, and flood. Specific objectives included exploring the impacts of the climate crisis on SRHR outcomes and service delivery and evaluating the extent to which SRHR and gender are integrated into local and national climate change adaptation policies and procedures.

### Our method

A qualitative, participatory research design was implemented in April–May 2023 through a partnership between Ipas Africa Alliance, Pastoralist Community Initiative and Development Assistance (PACIDA), and the Samburu County government. Research assistants were young men and women from Samburu County with backgrounds in research, environmental justice, community outreach, and SRHR. Ethical approval was obtained from AMREF Health Africa’s Ethics and Scientific Review Committee.

Implemented in East and Central Samburu County, the methodology included:

1. A desk review and content analysis of 13 national and county-level policies and procedures (Table 1).



A focus group discussion with young women ages 15–17, facilitated by PACIDA and Ipas at the Sirata Health Centre. [Photo by Ipas]



2. 11 in-depth interviews with women and girls, ages 15-49, who had experienced an unintended pregnancy during a time of drought, flood, or heatwave
3. 9 focus group discussions with 53 women and girls and 38 young male warriors (henceforth called Moran)
4. 15 key informant interviews with 2 health facility managers, 8 sexual and reproductive health (SRH) providers, 4 county government representatives, and 1 member of a community women's group.

Interview transcripts were translated to English from Samburu and Swahili, coded, and analyzed thematically using Dedoose. Among 102 participating community members, the majority had no formal education (40%) or primary-level education (28%), and most had no source of income (66%). Most were under the age of 25 (74%), with one-quarter under 18 years old.

## Key findings

### Impacts of the climate crisis on community members' SRHR

Increasing frequency and intensity of drought, floods, and heatwaves are creating conditions that undermine the health and well-being of Samburu communities (Figure 1). The climate crisis is contributing to the loss of traditional, natural resource-dependent livelihoods and is increasing economic insecurity, migration, and conflict. The need to search for water and pasture for livestock at farther distances is pushing pastoralist communities farther away from health facilities and dispensaries, reducing their access to SRH services. For Moran, this means decreased access to condoms and treatment for sexually transmitted infections (STIs), leading to perceived increases in unprotected sex and spread of STIs, including HIV. For women and girls, this was also connected to increases in unintended pregnancy and complications from unsafe abortion.

*“The number of STI clients has gone high and the drought has actually been a factor... people don't have time to come and seek health care. You know we provide condoms here, but people are not coming.” —Key informant, SRH provider*

*“For contraception, it is just that there is low utilization during drought season because even these young women who use family planning, they will also move away with the community, so they will be away from health facilities. Abortion also, the services when you move and you get a complication and the facilities are very far you will not be able to get services, so utilization also gets affected because you move away from the health facility. Basically, drought means moving away because these communities they survive on their livestock, so their everything rotates around the livestock and their priority is getting their livestock water and grass, so wherever there is water and grass they move, and the more they move they usually move away from the health facility.” —Key informant, Samburu County Government*

Women linked rising poverty rates and migration to significant increases in their workload. To adapt, women must travel longer distances to collect water, under increasingly harsh climate conditions, and engage in new economic activities, like collecting and selling firewood. At the same time, communities are facing worsening malnutrition and dehydration due to rising food prices and declining safe water access. Women explained that seeking preventive health care, including prenatal care and other SRH services, must be deprioritized due to their increased workloads. Health facility managers and SRH providers explained that this has caused community members to only seek health care during emergency situations, causing overcrowding and long waits in health facilities when crises like flooding occur. The combination of these factors is particularly detrimental to pregnant women, who experience pregnancy complications like preterm birth and miscarriage as a direct result.



Focus group discussion with women ages 25–49 at Lodung'okwe Health Centre in Samburu East Sub County. [Photo by Ipas]

*“There is a lot that these women go through. Most will even lack resources to come for this [antenatal health] service. Mostly they will walk for long distances to come to hospital, and at times women even deliver on their way because they don’t even have money to hire motorbikes to the hospital and the distance is long ... Food scarcity has become a problem particularly to Samburu. I believe an expectant woman should eat at least rich food, but this is a problem for us because we have many small children in our home so there is a time that we decide to give them available food and stay hungry because they [are] very young, and I can survive as a mother only to ignore the health of a baby I’m carrying. This has only happened since there is persistent drought.” —Woman, focus group participant*

*“There are a lot of miscarriages because during drought people are carrying [pregnancies] while migrating. Then they come in saying they are feeling back pains, and then they end up miscarrying.” —Key informant, health facility manager*

*“I can give what I went through and experience of losing a baby in the stomach due to overworking.... After going to the hospital I was advised to stop working a lot but then again you find that you are just alone [with] no one to help you and the work has to be done.” —Woman, in-depth interview participant*

Cultural practices including male circumcision and dowry are directly impacted by unpredictable rainy seasons and prolonged drought. Marriages and rites of passage ceremonies are traditionally held during rainy seasons, when livestock are available for the celebrations and for dowry payments. Participants reported delays in initiation ceremonies into Moranhood (including male circumcision), and delayed marriages as communities wait for the rains to return. Delayed initiation into Moranhood was linked to later ages at marriage for affected Moran, impacting entire generations of young men.

*“Concerning circumcision, mostly in our culture these ceremonies happen during rainy seasons so this drought has really delayed this event. Also concerning marriages, many people will also wait because the Samburu believe in marrying during rainy season when everywhere is green.” —Moran, focus group participant*



Abdiah Lalaikipian of PACIDA demonstrates how to use washable sanitary towels and menstrual cups to members of the Namaiyana Youth Group. [Photos by Esther Sweeney]

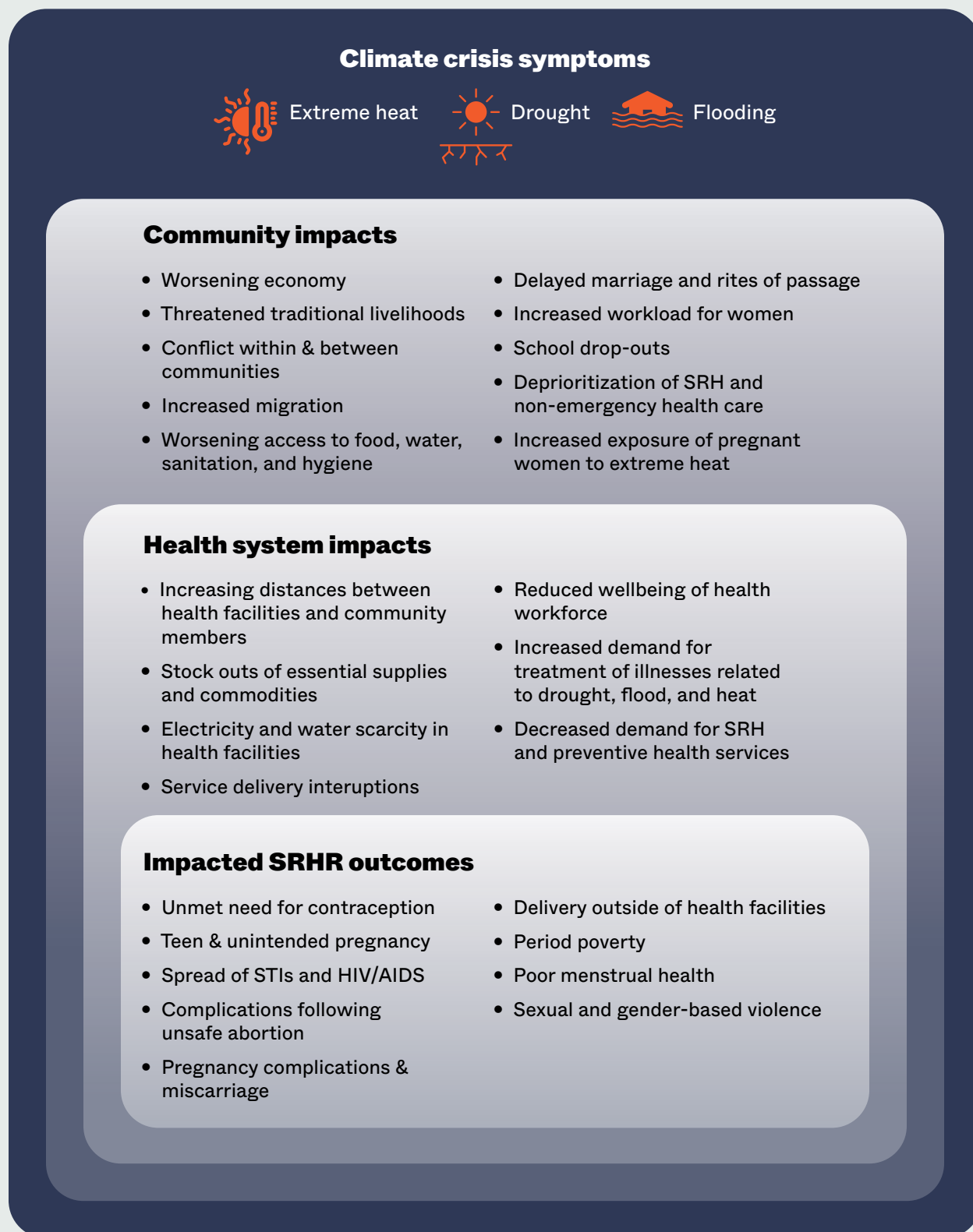


Abdiah Lalaikipian shares donated supplies and information on menstrual hygiene management with the interviewees. [Photo by Ipas]

Young girls reported high vulnerability to sexual and gender-based violence as well as period poverty—a lack of access to menstrual products, education, sanitation and hygiene facilities—due to the climate crisis. For example, child marriage was described as a coping mechanism in times of drought, whereby men could replenish their livestock using their daughter’s dowry. Girls also reported reduced access to clean water for bathing and menstrual pads (due to poverty), impacting their ability to attend school.

*“When drought swept the livestock, a man may decide to marry off a young girl in order to get back his cows” —Moran, focus group participant*

**FIGURE 1. Cascading impacts of the climate crisis in Samburu County**



## Impacts on the local health system and SRH providers

Health experts have witnessed increased service demands for the treatment of conditions related to drought, flood, and heat—such as infectious diseases, waterborne illnesses, malnutrition, noncommunicable diseases, and excessive heat exposure. Yet simultaneously, they described reduced health-care accessibility and availability. In addition to changes in health care-seeking trends, electricity outages during extreme weather events and clean water shortages interrupt service delivery. For instance, SRH providers described being unable to provide contraceptive or labor and delivery services without water to sanitize the health facility or wash their hands. Floods impact transportation infrastructure and create barriers to traveling to health facilities for staff and patients alike. Drought and flood were also linked to increased stock-outs of essential medicines and supplies. Heatwaves cause facility closures during the hottest parts of the day so that health providers can rest.

*“Samburu is a water-scarce county, but it’s worsened by the drought because in most places there is no piped water. In fact, there are dispensaries with no piped water. They just have a water tank, so if it doesn’t rain there’s no water source and you cannot provide some of the services, like even delivery, because you need a clean environment—even for family planning services.... When there is too much heat, the health worker is unable to work. I have come across stations where it is too hot to work. It will become uncomfortable and they will go home and rest; they will become exhausted, unable to breath.” —Key informant, Samburu Country Government*

The health workforce is also impacted, with SRH providers reporting negative consequences for their own physical and mental wellbeing. Like their patients, providers are experiencing waterborne diseases from floods, upper respiratory tract infections and worsening asthma and allergies during droughts, and heat stress and dehydration during heatwaves. Providers with comorbidities such as cardiovascular health issues are particularly vulnerable. Mental health impacts were also noted, including stress, depression, and trauma from experiencing many of the same impacts as their fellow community members. This leads to decreased productivity and service interruptions, compounded by a shortage of health-care staff, particularly those trained in SRH service delivery.

## Promising local strategies and policy entry points for building climate resilience

Community members, local government and organizations, and health providers are already adapting to the climate crisis, and their strategies provide important insights into what it takes to build climate resilient communities and health systems. Promising strategies undertaken and recommended by participants included:



- Controlled grazing programs and support for temporarily destocking livestock during prolonged droughts
- Alternative livelihoods and kitchen garden programs for men, women, and youth, including support to women’s savings groups
- Climate adaptation and disaster preparedness training and sensitization programs which integrate SRHR and other health education for health workforce and community members alike
- Mobile outreach health services, including “moonlight” services provided at night closer to where communities are migrating, including SRH services
- Training of outbreak notification and response teams including community health volunteers (CHVs), health workforce, and community members and leaders
- Institutionalizing SRH-specific preparedness into health systems resilience and disaster planning, including improved forecasting to prevent stock-outs and increased SRH training for providers to address understaffing
- Increase trained CHVs in the hardest-hit communities, including training Moran



Through the initiative with PACIDA, Julietta Lekinasia was able to travel to Makueni County to see how women there are farming. [Photo by Esther Sweeney]

Participants recommended that these strategies be implemented through partnerships between health systems, communities, government, and non-governmental organizations, integrating health and climate adaptation into holistic programs rather than siloed approaches. These strategies should be prioritized and institutionalized within policies and procedures related to climate adaptation, disaster preparedness, and health systems to build resilience and bolster climate-resilient development pathways.

*“If our county government can provide us with mobile clinics, we will really appreciate that, since women are suffering both physically and psychologically because of insecurity, food shortage, diseases and even thoughts of our young Morans in [places] fighting with enemies.” —Woman, focus group participant*

Among the 13 policies analyzed (see Table 1: Policy documents included in desk review), all but three mentioned gender and/or SRHR issues at least once, signifying multiple advocacy entry points for integrating the strategies above in policy implementation. For example, gender mainstreaming was recommended in the Samburu County Annual Development Plan, but a specific strategy for achieving this was not



identified. The Kenya National Adaptation Plan recommends “adaptation actions be implemented with gender considerations such that all data collected for monitoring and evaluation purposes is gender disaggregated and analysed accordingly”. The National Policy for Disaster Management calls for “mainstreaming women and children issues in all disaster management programmes” and aims to reduce gender-based violence and HIV/AIDS rates.

However, while gender and SRHR were mentioned in most policies reviewed, these mentions lacked enough depth to guide specific actions, and only one policy made explicit connections between the climate crisis and SRHR. By articulating the impacts of the climate crisis on SRHR, this study’s findings should inform future versions of these policies, by providing detailed evidence of the impacts of the climate crisis on SRHR and identifying gender-responsive strategies that improve both climate resilience and SRHR.

**TABLE 1. Policy documents included in desk review**

1. Samburu County Livestock Development Policy, 2015
2. National Policy for Disaster Management in Kenya
3. Samburu County Disaster Early Warning Communication Strategy, 2021
4. Samburu County Disaster Management Act, 2015
5. Samburu County Draft Climate Change Policy, August 2021
6. Kenya Climate Change Act, 2016
7. Samburu County Livestock Sales Yard Act, 2018
8. Samburu County Agricultural Machinery Services Bill, 2014
9. Samburu County Spatial Plan, 2021–2031
10. Samburu County Annual Development Plan, 2023–2024
11. Samburu County Integrated Development Plan, 2018–2022
12. Kenya National Adaptation Plan, 2015–2030
13. Kenya Updated Nationally Determined Contribution

## **We need locally led climate action that integrates SRHR**

Healthy people and communities are better able to cope, adapt, and thrive in the face of a changing climate, but the climate crisis is undermining the right to health, including SRHR. This study articulates the numerous pathways by which the men, women, and youth in Samburu County experience those impacts in different ways.

These impacts must be articulated and addressed within local and national policies and responses, in part by integrating local adaptation strategies identified in this research. Not doing so threatens the future health and development of Kenya’s arid and semi-arid land communities. Building resilient communities and health systems requires investing in comprehensive SRHR and the leadership of those most impacted: women, Moran, and youth.