BRIDGES

RESEARCH BRIEF

ENHANCING CLIMATE COMMUNICATION FOR COMMUNITIES IN KENYA

Understanding how people experience climate and use weather information

BBC MEDIA ACTION

Norway

About the briefing

This briefing summarises key findings from a survey of 1,175 adults (18 years+), across 9 counties[1], and 26 focus groups and 6 key informant interviews[2], conducted between August and December 2024. This study aimed to assess how people are experiencing the impacts of climate change – specifically preparing for and responding to extreme weather events and making longer term adaptations in response to changes in local weather patterns and climate conditions, and how they are accessing and using weather and climate information.

How to use this briefing

The research findings can be used by practitioners from across the government, media and technical sectors working on weather and climate communication, preparedness and adaptation. The briefing can support the design of programmes that are tailored to people's engagement with weather and climate services, and address their specific needs related to climate adaptation and preparedness.

Context

Kenya was listed 36th most affected country in the Global Climate Risks Index 2025[3]. More than 80% of the country's landmass is arid and semi-arid land (ASAL) with generally poor infrastructure. The ASAL region has suffered three severe droughts in the past decade and there are currently more than 4.2m people facing acute food insecurity[4]. Seasonal floods affect the plains in the Lake Victoria basin and along the Tana River. While landslides and mudslides can occur usually in the north Rift Valley and western Nyanza. The situation is expected to continue to deteriorate as average temperatures in the region continue to rise.

Research has shown that there are significant gaps in the use of weather and climate information services. BBC Media Action research showed that audiences particularly struggle to understand the concept of probability in weather forecasting, which impacts their overall trust in its accuracy.

BBC Media Action, with funding support from the Norwegian Agency for Development Cooperation (NORAD), is responding to this urgent need to improve weather and climate information communication reaching the last mile users with timely, relevant and reliable weather and climate information and encouraging them to take positive actions to prepare and respond to the impacts of extreme weather events.

Research objectives

The research aimed to understand how people:

- Access and use weather and climate information
- Experience the impacts of climate change
- Prepare and respond to the extreme weather events
- Use media, and what their communication needs are

[1]A survey was conducted in Turkana, Marsabit, Samburu, Kisumu, Homabay, Busia, Kwale, Tana River) and Nairobi informal settlements (Kibera, Kawangware, Korogocho, Mathare).
[2]Key informant interviews (KIIs) with weather/climate experts and agricultural, livestock and fisheries sector experts in the different regions, and a desk review.
[3]Global Climate Risk Index 2025 (Climate Risk Index 2025.pdf)
[4]ReliefWeb 2022 (ASAL Humanitarian Network)

Key insights

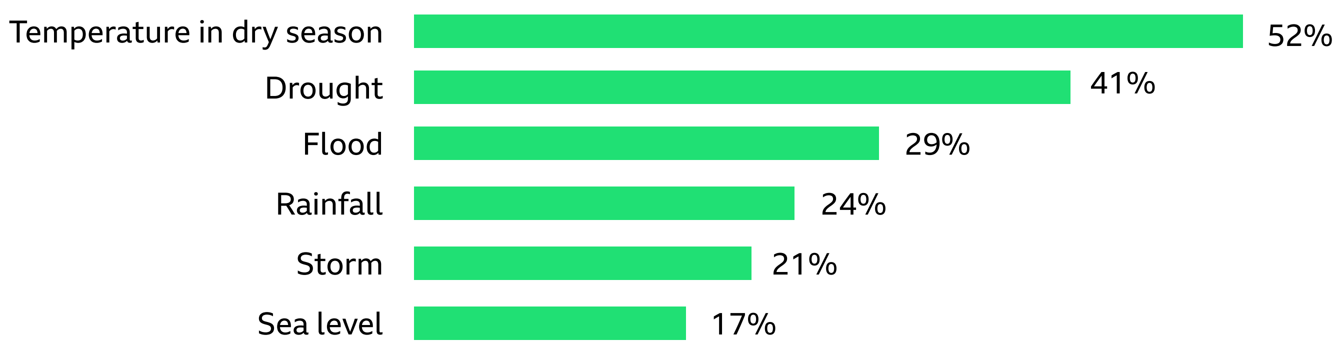
1. Experience and impact of extreme weather events

There is a widespread perception of changing weather patterns, particularly in relation to extreme heat, heavy rainfall, and prolonged droughts. Awareness of these changes varied across genders, locations and age groups

> "The weather has changed over the years. For example, growing up, rainy seasons were predictable and reliable. There was enough water and pasture for our animals, and they did not die as they do nowadays because of drought. We also had enough to eat, and animals could fetch good prices in the market. In recent years, however, things have changed. There are more droughts today."

Male, Turkana

In the area that you live in, would you say over the past 5 years the following have increased, stayed the same, decreased?



*Percentages are for the response option 'increased a lot'

n = 1175

Women were more likely to report feeling an increase in droughts in the past 5 years compared to men (44% of women vs. 38% men).

44% of people in rural areas felt that droughts had increased a lot in the past 5 years compared to 33% of urban people. While more urban people than rural (38% vs. 24%) felt that floods had increased a lot in the last 5 years.

People attributed these climatic variabilities and changes mainly to human activities particularly deforestation and industrialization. Other human activities that were thought to exacerbate the impacts of climate change included farming/settling in riparian lands and failure by government institutions to enforce environmental conservation regulations (e.g. around forest conservation, pollution etc.).

Akiru's story: surviving increased droughts and heat in Turkana[4]

My name is Akiru. I live in the drylands of Turkana with my husband and seven children where we keep goats, sheep, and cows. These animals give us food, milk, and a way to earn money. This area has been hot and dry for as long as I remember, but nowadays the droughts are harsher, and the high temperatures are unbearable.

Last year, a drought dried up the grass, and 100 of our goats died. I wanted to sell some of the goats before things got worse, but my husband refused. "The rain will come soon," he said. It did not. The drought has brought severe hunger where we go days without food, and I blame all this on the government. If the government had allocated funds to assist us, then these droughts would not have affected us.

All I can do is live day by day, care for my children and animals, and pray that God will provide rain when we need it most. The weather has changed, and I don't see how I can do much about it. I can only pray to God to bring the rain soon.

[4]This story is an archetype based on an amalgamation of qualitative data

Extreme weather events are impacting the everyday lives and livelihoods of people

7 in 10

respondents reported experiencing extreme heat, heavy rainfall and drought in the past 5 years.

When asked about the impact of the last extreme weather events they had experienced:

36%	32%	30%	24%
reported crops damage or reduction in yields	reported loss of livestock	reported reduced food security	reported reduce or loss of income

Q. Thinking about the last extreme weather event you experienced, how did it affect your household/community?

n = 1175

Negative impacts of extreme weather events on family and community life

Conflict: Community and intercommunity conflicts over water and food resources were reported, particularly among pastoralist communities.

Relationships: Family life was impacted when men moved away from home for many months in search of water and pasture for their animals. Women have to become the breadwinner, and children were dropping out of school to help parents source food or water.

Physical stress: Women have to walk longer distances to find water and suffered stress when there was no food at home for their children.

Social status: Pastoralist communities said that people were losing their status in the community due to reduced herd sizes and loss of income.

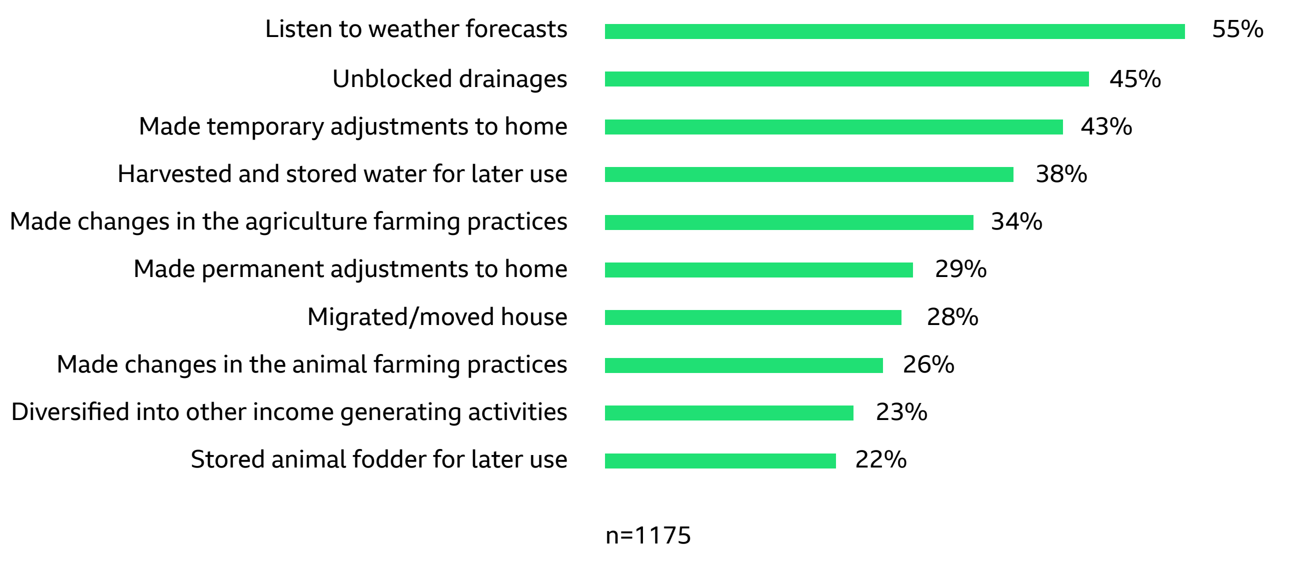
2. Adaptive actions, barriers and motivators

Respondents reported taking a variety of short-term and longer-term actions to prepare for extreme weather events

> “I heard them say on the radio that we could buy and install gutters and water tanks to collect water when it rains. I told my husband about it, but he was hesitant because in order to purchase the gutters and water tank, he had to sell off some of our livestock to raise the cash. “Do you want to waste our animals? What if it does not rain, what will you do with an empty tank?” After some time, however, some of our neighbours installed theirs and my husband was convinced so he sold off two cows and bought the gutters and a 5000-litre tank.”

Female, Samburu

Have you or your household done any of the following to prepare for extreme weather events that we have been discussing?



People reported rationing food and water during drought seasons, cleaning water tanks and gutters in advance of rain to avoid water contamination, planting trees in homesteads/ farms, and learning critical skills such as swimming.

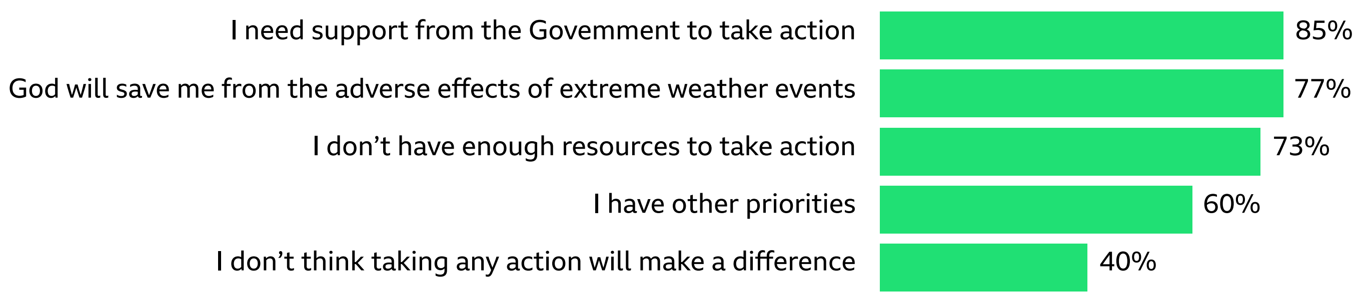
The main motivators for the uptake of these measures were to be prepared (64%) and to survive (63%).

A lack of government support, inadequate resources and fatalistic attitudes are the key barriers for adaptive actions uptake

> “You hear the weather people saying that there will be floods, you should move away etc. Sometimes it happens as they predict, other times it doesn't. I believe we shouldn't burden ourselves trying to do this or the other - only God knows tomorrow and whatever happens is his will.”

Male, Tana River

Do you agree or disagree with these reasons for you not taking action to respond to changes/impacts of weather?



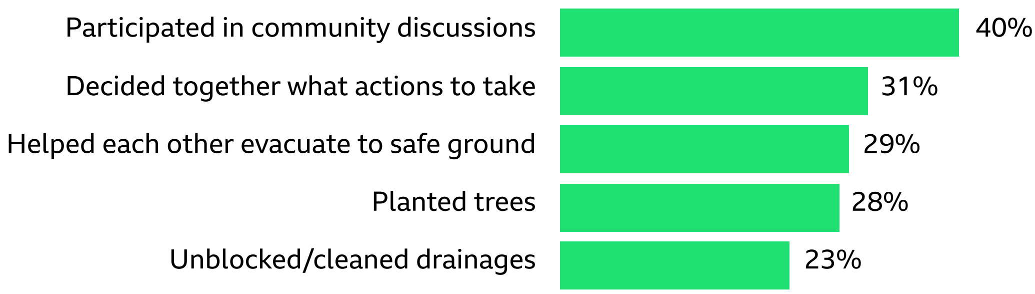
% show respodents who agree with the statements

n= 1175

3. Communal efforts in adapting to climate change

Half of respondents said they have worked together with other community members to respond to extreme weather events, and more than half (60%) 'strongly agreed' that they could count on support from others in their community.

What have you done together with your community?



Number of respondents who reported to have engaged in communal efforts (n) = 592

Fisherfolk reported helping one another to secure fishing boats and other gear when strong winds were anticipated. Pastoralists were contributing capital (in cash or in kind e.g., livestock) to help other community members start over after losing their livestock.

Others contributed money to hire private water bowsers during dry seasons, contributing and distributing relief materials, and sharing critical information.

4. Perceived preparedness and informed levels

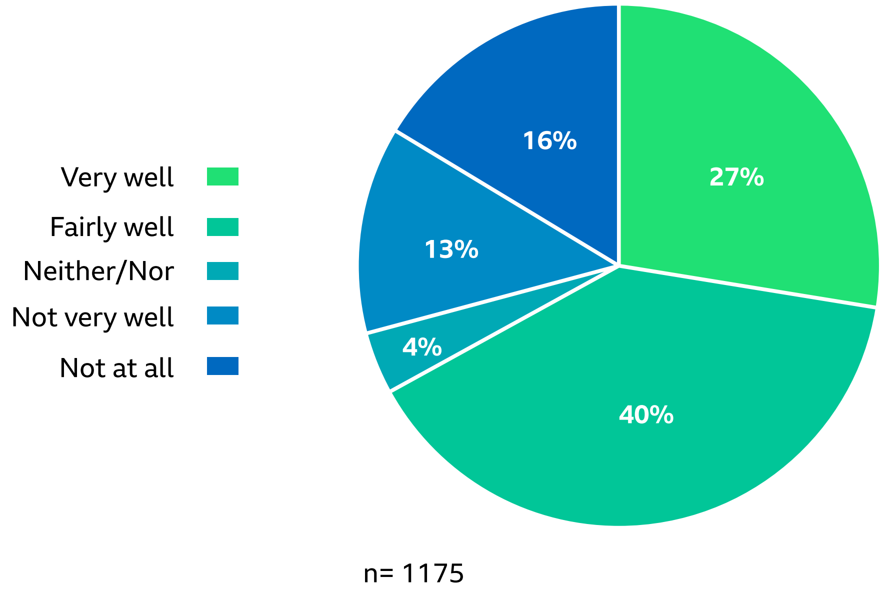
Overall, 4 in 10 people felt not at all prepared to deal with extreme weather events

- 54% of urban people said they were 'not prepared at all', compared to 37% of rural.

People mostly felt fairly well informed about how to cope with difficult weather conditions, but gaps remain.

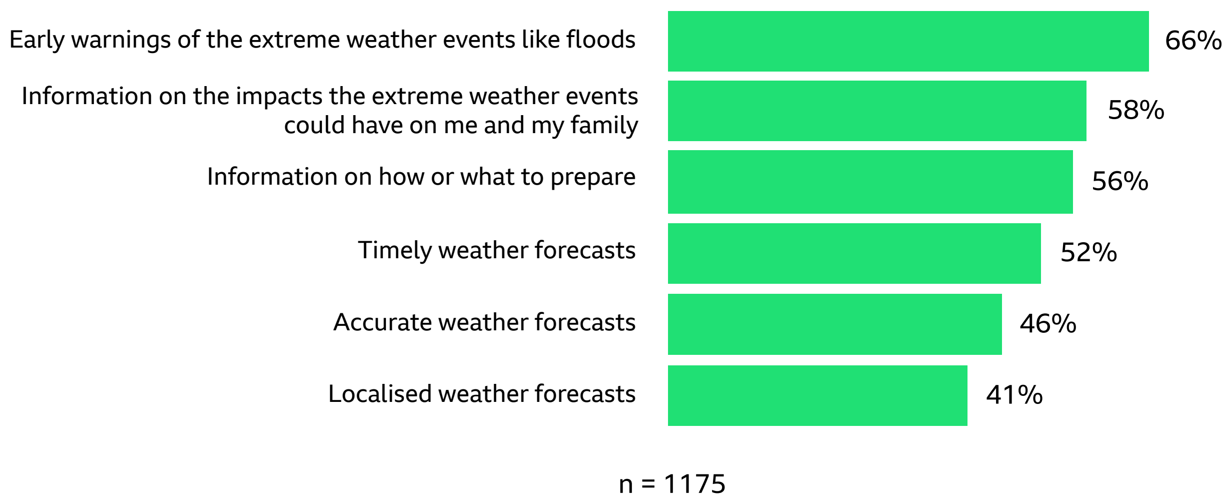
- 27% felt 'very well informed' and 40% felt 'fairly well informed' on how to cope with extreme weather events such as droughts and floods.
- However, disparities were evident – 20% of women felt 'not at all informed' compared to 12% of men. Those over 65 years of age and people with disabilities were also likely to feel 'not at all informed'.

How informed do you feel about the things you could do to cope with difficult weather conditions such as droughts or floods?



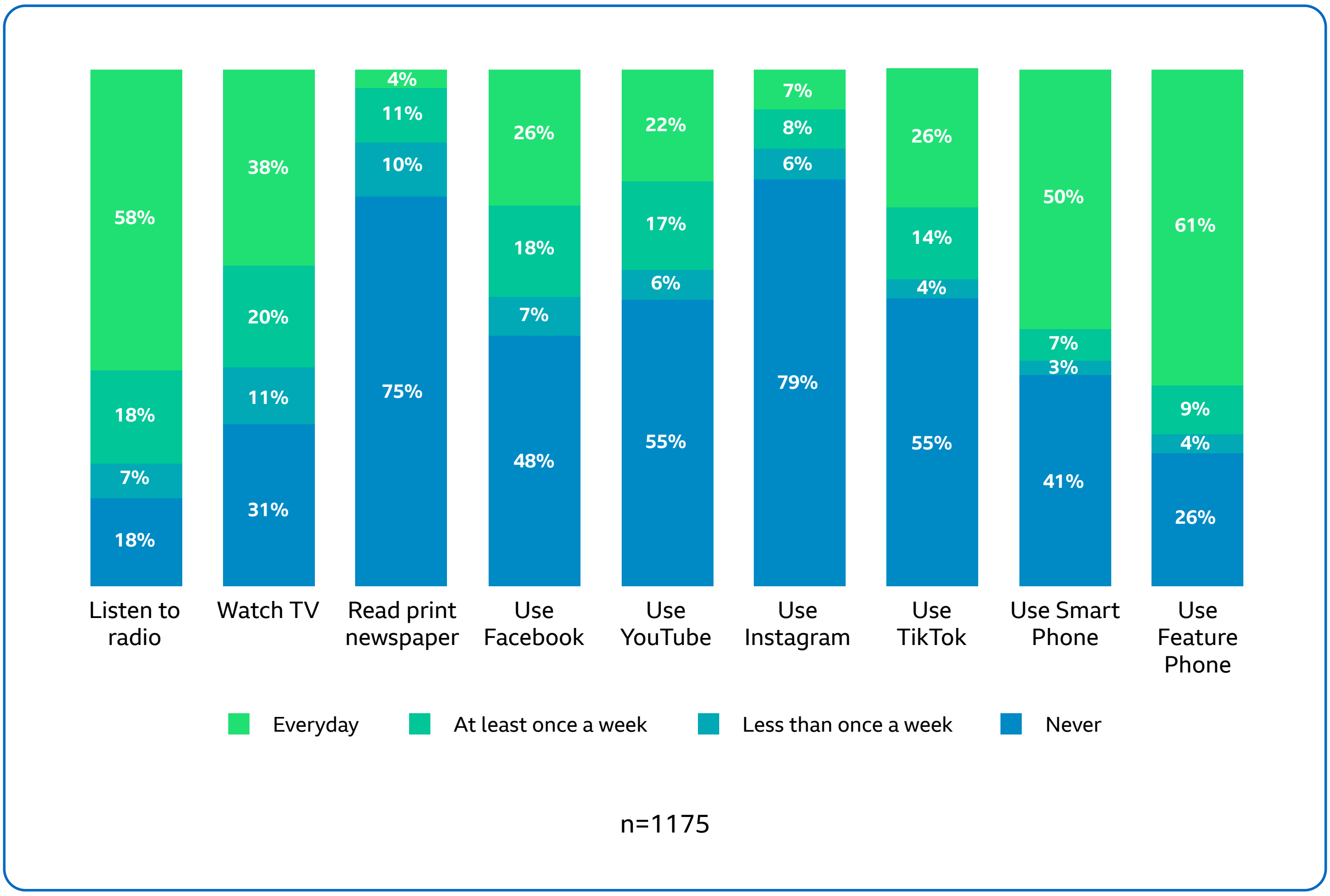
Over half of respondents indicated that they need more information to help them prepare for extreme weather events.

What kinds of support and/or information will help you be more prepared for extreme weather events such as droughts, floods, etc.?



Radio dominates the media landscape

How often do you do the following?



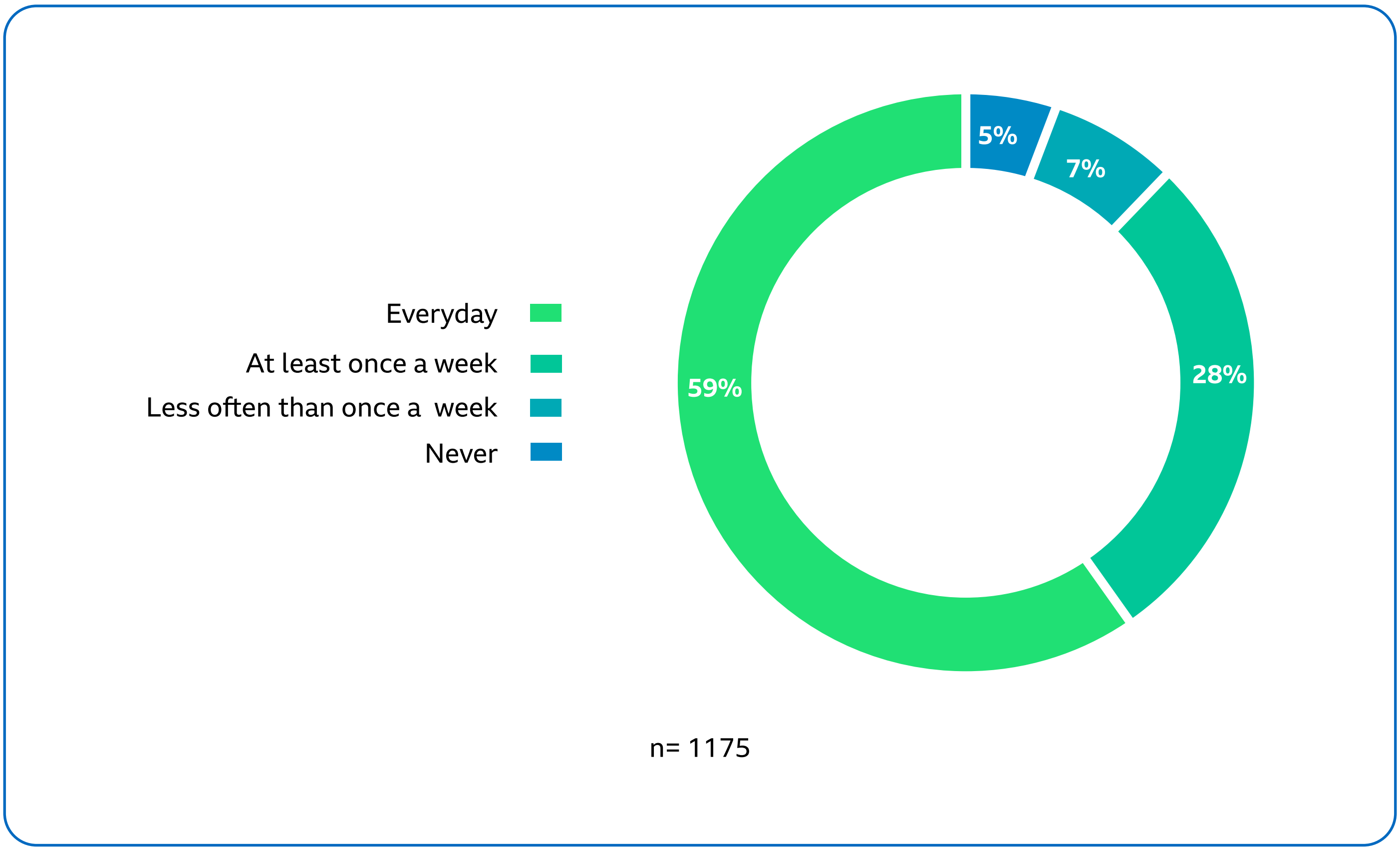
Women are significantly less likely to use digital sources than men:

Female		Male
43%	Daily smartphone use	53%
17%	Daily use of online news	32%
21%	Daily use of Facebook	30%
14%	Daily use of online search engines	25%

6. Sources and platforms for weather information

The majority of people reported checking weather forecasts every day

How often do you read, watch, listen to or check the weather forecast for your local area?

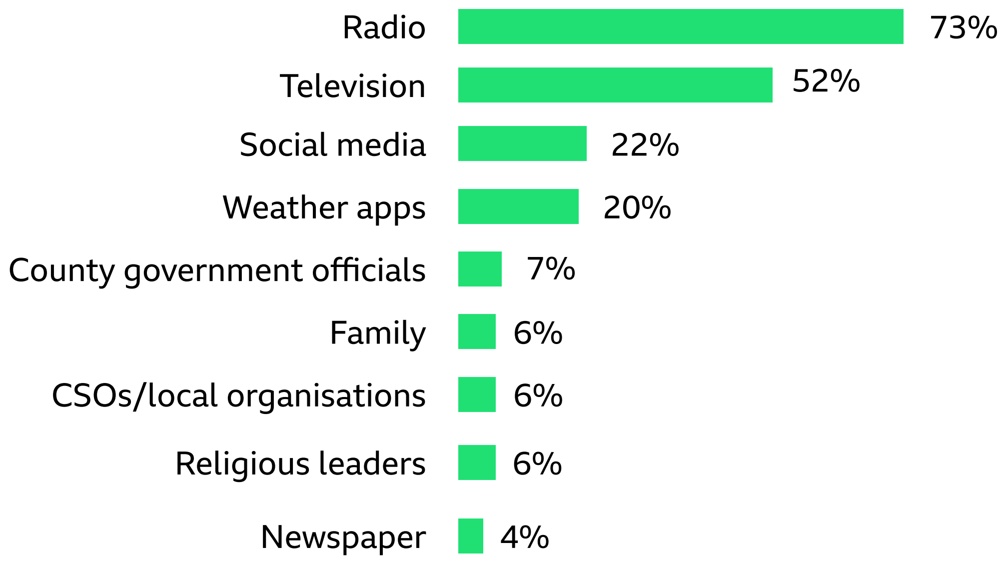


Women were less likely to report checking weather forecast daily than men (56% vs. 62%).

Radio and television are key sources of weather information for weather forecasts and early warnings

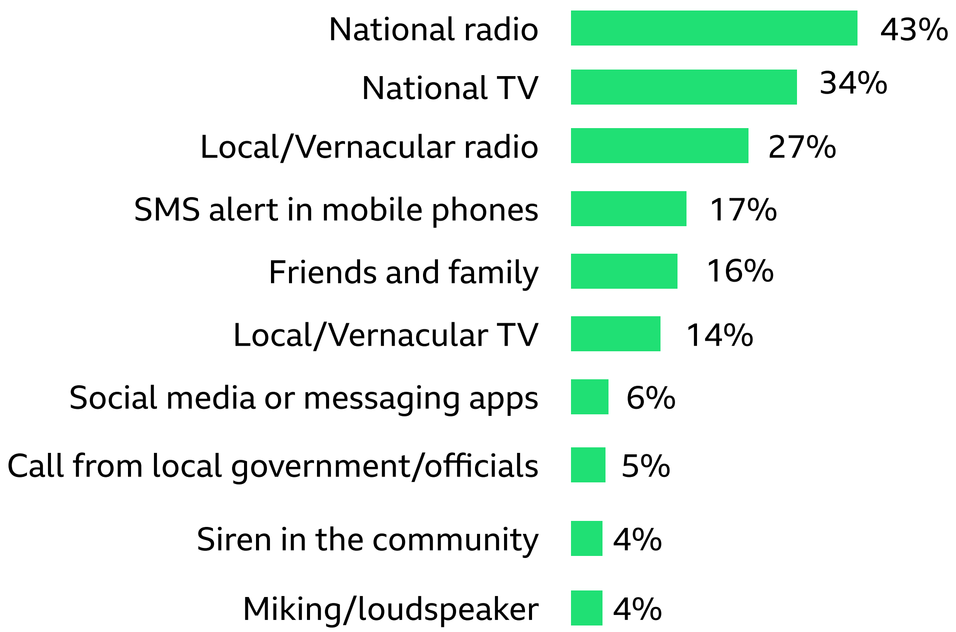
- 79% of respondents reported having received alerts about an impending extreme weather event in the last year.

Where do you get your weather forecasts and other weather information from?



n = 1175

From whom or where have you heard or received this alert?



n = 924

7. Traditional methods to predict weather

Respondents, particularly in rural areas also gave responses that included observing cloud patterns (55%) and the stars/moon/sky/sun (27%) to predict the weather. Qualitative research also showed that participants relied on the traditional seasonal calendar characterised mainly by the start of the rainy season.

8. Perception of the quality of weather forecasts

People felt that weather forecasts could be more local. Some people faced access challenges due to lack of media access or language barriers. Weather/climate experts felt that most people had limited understanding of how weather forecasting is done and what those forecasts mean which leads to misunderstandings and limited use.

A farmer reveals her delay in responding to weather forecasts[5]

My name is Amina, I'm a 45-year-old vegetable farmer living in Bukhuma village in Budalangi. My husband, Hamisi, and I run a huge farm where we grow tomatoes, spinach, and onions, which we sell at the local market.

Weather is unpredictable here, and the challenges seem to increase every year. One season, unexpected heavy rains flooded our farm, turning it into a muddy mess. The floods wiped out all my tomatoes. I have learned that farming is a constant gamble with nature.

I have access to weather and climate information through my phone, local radio, and government agricultural extension officers. While I trust the forecasts, I am cautious. I don't make decisions until I have double-checked the information with other sources or observed how other farmers react. Many times, I wait until what is predicted happens and I experience it myself before acting.

[5]This story is an archetype based on an amalgamation of qualitative data

Sometimes I prepare well for weather disasters, but not always. When flash floods struck last year, I acted at the last minute, scrambling to cover my crops with polythene bags. I believe I have a role to play in dealing with the floods in our area, but I need assurance that I'm doing the correct thing and also my community support to succeed.

9. Weather and climate information needs

Farmers need weather information for planting crops: Farmers need accurate information (mostly seasonal or annual) to plan when to plant and sow. Most farmers said that they rely on scientific forecasting alongside the traditional seasonal calendar to make decisions while others use indigenous forecasting methods. Most of them said that they could easily access scientific weather and climate forecasting (daily, monthly and seasonal) information, via radio, television, mobile phones and agricultural extension workers.

Fisherfolk safety: Fisherfolk needed information daily about wind direction and strength to make decisions about whether to go fishing and when. They relied mostly on indigenous forecasting like observing the clouds, the winds and stars for decision making. They could access daily and seasonal scientific forecasts, but they were more likely to trust stories from other fishermen. Often, they would ignore forecast warnings if they still needed to go and earn money.

“My local radio shares daily weather forecasts in my Kiturkana dialect, so it is easy to understand. As a fisherman, this weather information helps me make critical decisions on when to go fishing. In the past, one would realize the wind patterns when already in the lake, so every day was risky. Now I make sure not to go fishing when the weather is not good.”

Male, Turkana

Pastoralists need to protect their livestock: Pastoralists need early warning information on weather and security, to make decisions about where to migrate to keep livestock safe. Indigenous methods of forecasting - mostly examining goat's intestines - remained most trusted, despite growing apprehension on their reliability. Due to access and trust issues, they didn't usually follow formal weather forecasting and information was not prioritised for decision making. Access to information was hampered by limited media reach, weak connectivity and language barriers.

Informal settlements - plan their daily activities: In Nairobi's informal settlements, daily weather information, on whether it would be sunny or rainy, was needed for planning activities. Residents used this information to decide on how to move around in the city, and what hawking or other small-scale businesses to engage in. Most relied on weather apps on their smartphones. A few were familiar with indigenous forecasting.

10. Challenges faced by media & experts when communicating weather and climate

Challenges faced by weather/climate experts	Challenges faced by media practitioners
• Challenges translating scientific information into useful data for non-scientific audiences • Experts are often worried about how target audiences will interpret and apply climate information • Lack of resources particularly to disseminate information at localized levels	• Lack of understanding on how to communicate technical climate information • Most practitioners are usually not adequately trained or interested in climate reporting • Competing content priorities at radio stations • Lack of resources (e.g. equipment, fieldwork budget)

There is a disconnect between media and science: Interviews with journalists and climate scientists reveal a weak relationship between meteorological agencies and media. Journalists said they struggle to interpret and relay scientific information effectively, which tallies with findings from target audiences who expressed that weather and climate information services need to be more localised and communicated in a way that they can understand. Climate experts are cautious in their communication of weather and climate information due to risk of misinterpretation or political backlash.

The following activities are being implemented in Kenya under the BRIDGES project:

Capacity strengthening of media practitioners from 13 local radio stations across nine counties. BBC Media Action's mentors support radio stations to improve weather and disaster communication.

Production of content by local radio stations focused on weather and climate information, adaptation and preparedness measures.

Community outreach to reach the most vulnerable and marginalised communities through Community Based Organisations.

Engagement with climate scientists, technical experts and media practitioners at national and local level to support strengthen coordination between these experts.

Acknowledgements

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