

POLICY BRIEF: EARLY WARNING INFORMATION AT SUB-NATIONAL LEVEL

Recommendations Based on Experiences from Samburu and Kitui Counties

Summary

Within the national plans and programmes, Kitui and Samburu Counties have policies, institutions, and programs supporting drought early warning, with forecasts from KMD and NDMA shared via SMS, radio, WhatsApp, and community forums. They also face challenges such as limited infrastructure, low literacy, cultural barriers, and insufficient resources. This brief includes recommendations such as integrating indigenous knowledge, expanding dissemination channels, strengthening capacity, monitoring impact and use of information, and establishing County Climate Outlook Forums (CCOFs).

Status of Early Warning Information Delivery and Use at County-Level

In **Kitui County**, drought early warning information is supported by a relatively strong policy and institutional framework, including the County Climate Change Policy (2023), the Climate Change Fund Regulations (2018), and a draft Climate Change Bill. Structures such as the County Climate Change Unit and ward-level planning teams help coordinate climate services, while initiatives like the Financing Locally-Led Climate Action (FLLoCA) program strengthen community-level engagement. Climate information is shared through multiple channels—SMS, radio, leaflets, public barazas, and agro-advisories—reaching both government and non-government actors. The Kenya Meteorological Department (KMD) and the National Drought Management Authority (NDMA) provide seasonal, monthly, and weekly forecasts as well as drought

About DRESS EA

Funded by the Adaptation Fund and implemented by the Sahara and Sahel Observatory (OSS) and the Global Water Partnership (GWP), the DRESS-EA (Drought Resilience in East Africa) project supports countries in developing proactive drought management plans through capacity building, stakeholder engagement, and applied research. It promotes integrated, community-centered approaches to enhance resilience, reduce vulnerability, and strengthen early warning systems across drought-prone regions in East Africa.

bulletins, which are accessed by government agencies, NGOs, farmer organizations, and communities. However, challenges such as poor terrain, limited weather stations, lack of ICT equipment, inadequate staffing, and low uptake of digital tools constrain the effectiveness and reach of these services.

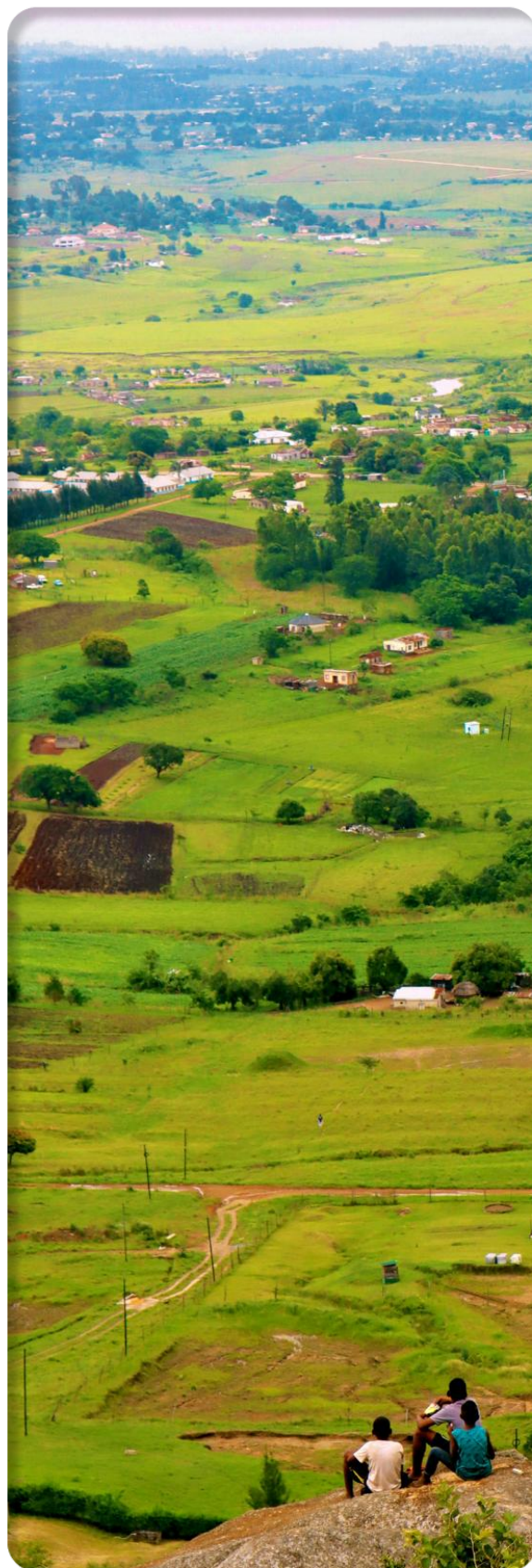
Samburu County has also put in place policies and structures to support climate services, including the Samburu County Climate Change Act (2022), a Climate Change Coordination Unit, and ward-level committees. The county benefits from multiple resilience-focused projects such as FLLoCA, TWENDE, and USAID-STAWI, which promote climate-smart agriculture and livelihood diversification. Early warning information is provided mainly by KMD and NDMA, complemented by sector departments in agriculture, livestock, and water. Dissemination occurs through SMS, WhatsApp, radio, barazas, and digital platforms, targeting government agencies, NGOs, conservancies, and local communities. Despite this progress, Samburu faces serious constraints, including insecurity, vast distances, low literacy levels, weak network coverage, and cultural beliefs that sometimes limit community trust in scientific forecasts. These challenges, alongside high poverty levels and limited technical capacity, hinder the timely uptake and application of drought early warning information.

Overall, while both Kitui and Samburu Counties have established legal frameworks, coordination structures, and diverse dissemination mechanisms for climate and drought information, persistent gaps in resources, infrastructure, and community-level trust and adoption reduce the impact of these systems. Addressing these challenges is essential for strengthening anticipatory action and building resilience against recurrent droughts.

Policy Recommendations

To strengthen the production, dissemination, and use of drought early warning information in Kitui and Samburu, several key actions are recommended.

1. Greater integration of scientific forecasts with Indigenous and Traditional Knowledge (ITK) is needed. Documenting ITK and harmonizing it with meteorological data would make drought information more relevant and trusted at the community level. Using local languages and sharing success stories of households or communities that have benefited from acting on early warnings would also help increase uptake.



2. Dissemination channels should be expanded and diversified. This includes enhancing the use of mobile applications, web-based platforms, and social media outlets such as X and Facebook, while also scaling up traditional media through community radios, live coverage of Participatory Scenario Planning (PSP) forums, and regular radio talk shows. Ensuring broader access requires investment in infrastructure, such as expanding the network of Automatic Weather Stations (AWSs), rain gauges, and manual weather stations, while providing laptops, forecasting tools, and training for County Disaster Management staff and field monitors.

3. Institutional and financial capacity must be strengthened. KMD should deploy more staff to the counties, while PSP forums—at both county and sub-county levels—require increased funding to ensure wider community reach. In addition, training for voluntary observers, extension officers, and NDMA monitors should be prioritized. Partnerships with donors should be structured more inclusively from the start, with clear involvement of county-level stakeholders in design and implementation. NDMA personnel should be capacitated in setting communication plan and undertaking effective communication activities

4. Mechanisms should be established to monitor and evaluate how early warning information is being used and what impact it has on decision-making. The inclusion of media in both the production and dissemination stages would help improve public understanding of climate information. User Interface Platforms (UIPs)—such as PSPs, the Husika platform, stakeholder forums, community barazas, radio programs, and NDMA’s field assessments—are envisioned as critical tools for two-way communication, ensuring that feedback from users informs future improvements. Together, these measures would make early warning systems more accessible, trusted, and impactful in helping communities anticipate and respond to drought.



Call to Action: Establish CCOFs

The establishment of County Climate Outlook Forums (CCOFs) under Kenya’s NFCS is essential for enhancing the relevance and application of climate information at the county level. These forums will provide structured platforms for regular dialogue between climate service providers, county governments, communities, and development partners. Through CCOFs, national forecasts can be translated into actionable, sector-specific advisories for agriculture, livestock, water, and disaster management. The DRESS-EA Early Warning Information Sharing Framework, including the Husika platform, will support these forums by facilitating timely dissemination of drought early warning information and capturing feedback from end users.

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