NDMA Drought Early Warning System

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The Early Warning System (EWS) of the National Drought Management Authority (NDMA) aims to:

1. Give information that help trigger interventions to respond to a drought event in a timely manner.
2. Give continuous monitoring of the drought hazard on livelihoods and changes
3. Offer information to the communities for early action
Current Needs to Improve Early Warning

- Technology: Internal processing of remote sensed data is low due to limited capacity and infrastructure (hardware and software)
- There is a need to have better infrastructure in terms of hardware and software for data processing
- There is urgent need to improve on technology like use of mobile phone/devices for data collection to improve on efficiency
- Funding of the EWS especially at the end of KRDP–ASAL–DM (in two years)
The EWS covers 23 counties across Kenya.

This covers appx. 80% of Kenya's landmass.

The area covered includes Arid and Semi Arid areas.

EWS exist in Northern Uganda (Karamoja)
Who?

- Kenya Rural Development Programme (KRDP-ASAL/DM) – Financial Support for EWS system
- UNDP – Promoting Resilience programmes
- Kenya Met Services – Seasonal forecast and weather updates
- Regional Centre for Mapping of Resources for Development – Technical support
- UNEP CLIM–WARN community information feedback pilot Kwale
When?

- Socio economic data is collected on a monthly basis at the household and the community levels.
- Selected households are monitored on a monthly basis for one full year, when there is a change in the households selection.
- Monitoring has been done for over 10 years now.
- The EWS looks at the short term seasonal variability, and impacts to livelihoods and food security. However data collected can be used for long term climatic analysis.
Currently data is collected in three broad categories of indicators

- **Biophysical/Environmental Indicators**—Trends on Env Stability

- **Rural Economy Indicators**—They look at the food availability and effects to food security (timeliness and stability of food production systems,

- **Human Welfare Indicators**—deal with access and utilization of food (Prices, Markets functionality, trends in food consumption, health and nutrition e.t.c)
How? – Data collection process

- Data collected across sentinel sites in 23 counties, appx 320 sentinel sites are covered in total
- 30 households (HH) interviewed per household
- Each Sentinel Site has a field monitor
- Tools: HH questionnaire and Key Informants questionnaire
- Secondary Data – Trends Building
- Use of Geo Technology (RFE, SPI, VCI) this is currently limited
- Analysis done and monthly bulletin produced
Information sharing

- County level stakeholders though the county steering groups
- Communities through community feedback meetings. Plans underway to develop simplified bulletins for the communities
- National level: National stakeholders, Kenya Food Security Steering group
- County monthly bulletins available online [www.ndma.go.ke](http://www.ndma.go.ke)
- Input into the national food security assessments conducted biannually
Specific challenges – Need to be addressed

- Crop and rangeland modelling to improve the remote sensed data – Challenge: Lack of homogeneity across the Arid and semi Arid Areas (ASALs)
- Training of both the field monitors and the early warning officers on technology (Especially geo technology)
- Provision of more hardware and software for data collection and processing
- Availability of RS data/products
- Strengthening of the feedback mechanism to the communities
Thank You