

DOWN2EARTH: Translation of climate information into multilevel decision support for social adaptation, policy development, and resilience to water scarcity in the Horn of Africa Drylands



Aim: To improve regional climate services delivery and climate change adaptation through new decision-support tools, capacity building, information dissemination, expansion of data networks, and climate change adaptation policy development.



BBC Media Action



down2earthproject.org/



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In some places, water scarcity also causes food insecurity.

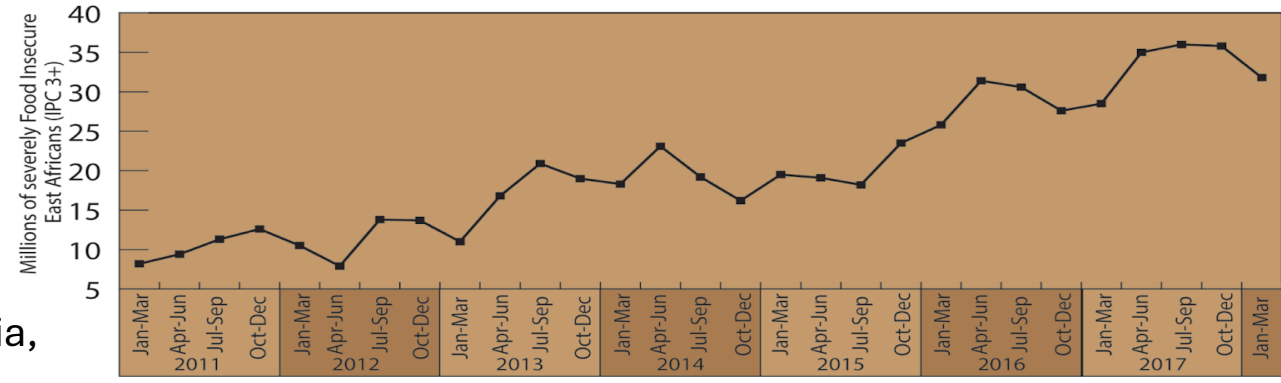
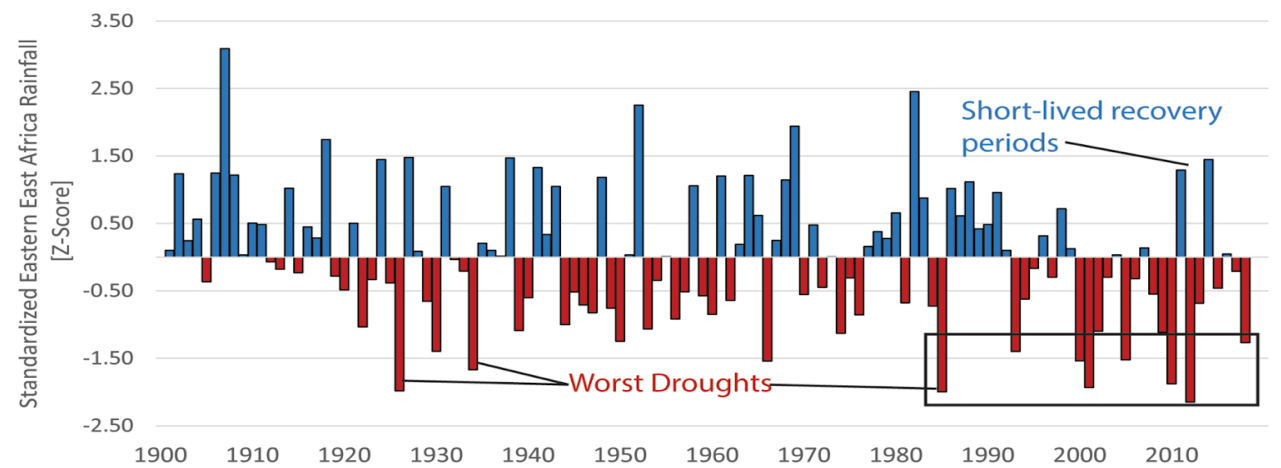


BBC Media Action

Our project is focused on the water scarcity and food insecurity challenges in rural communities within the Horn of Africa Drylands (HAD).

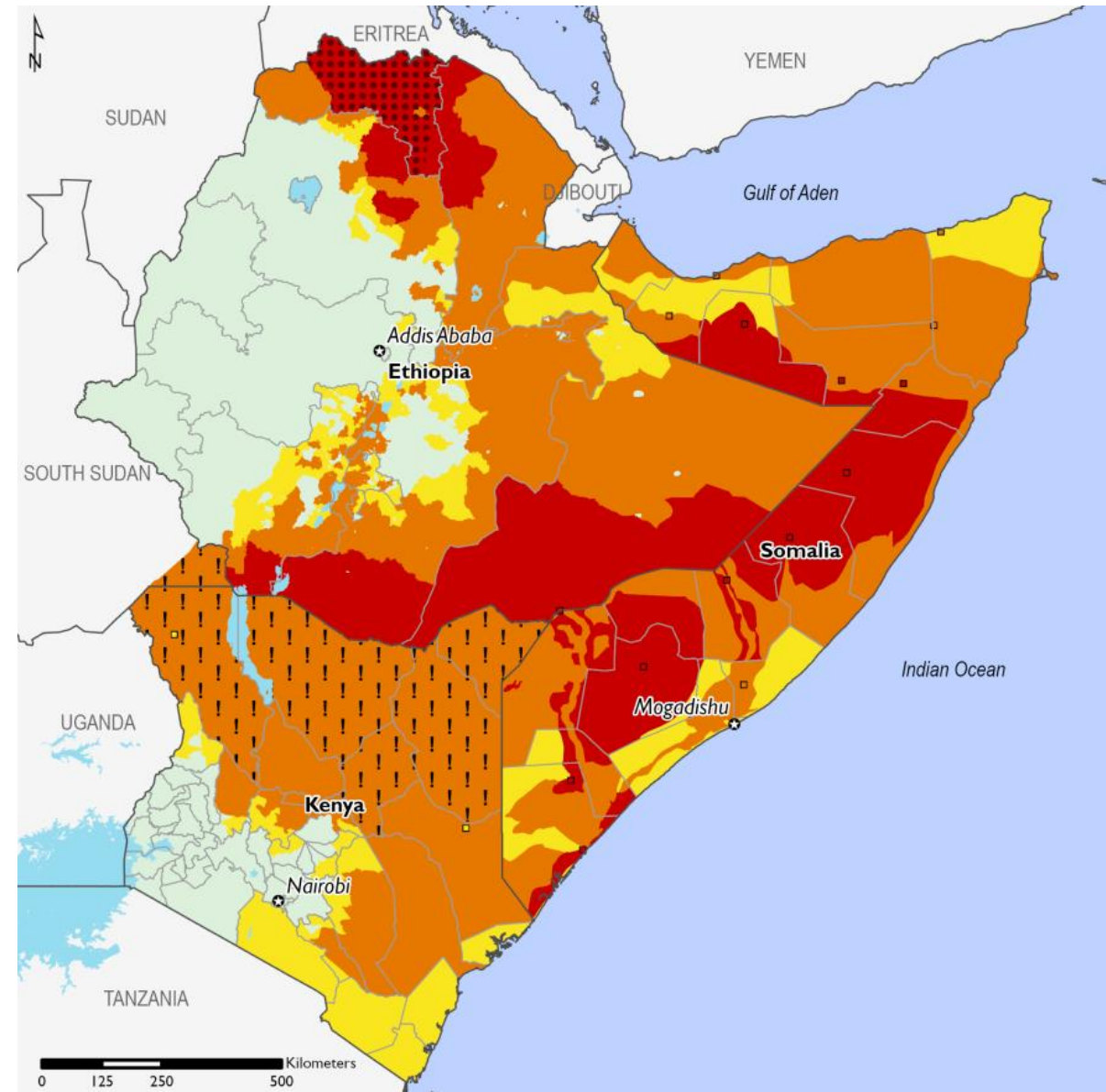
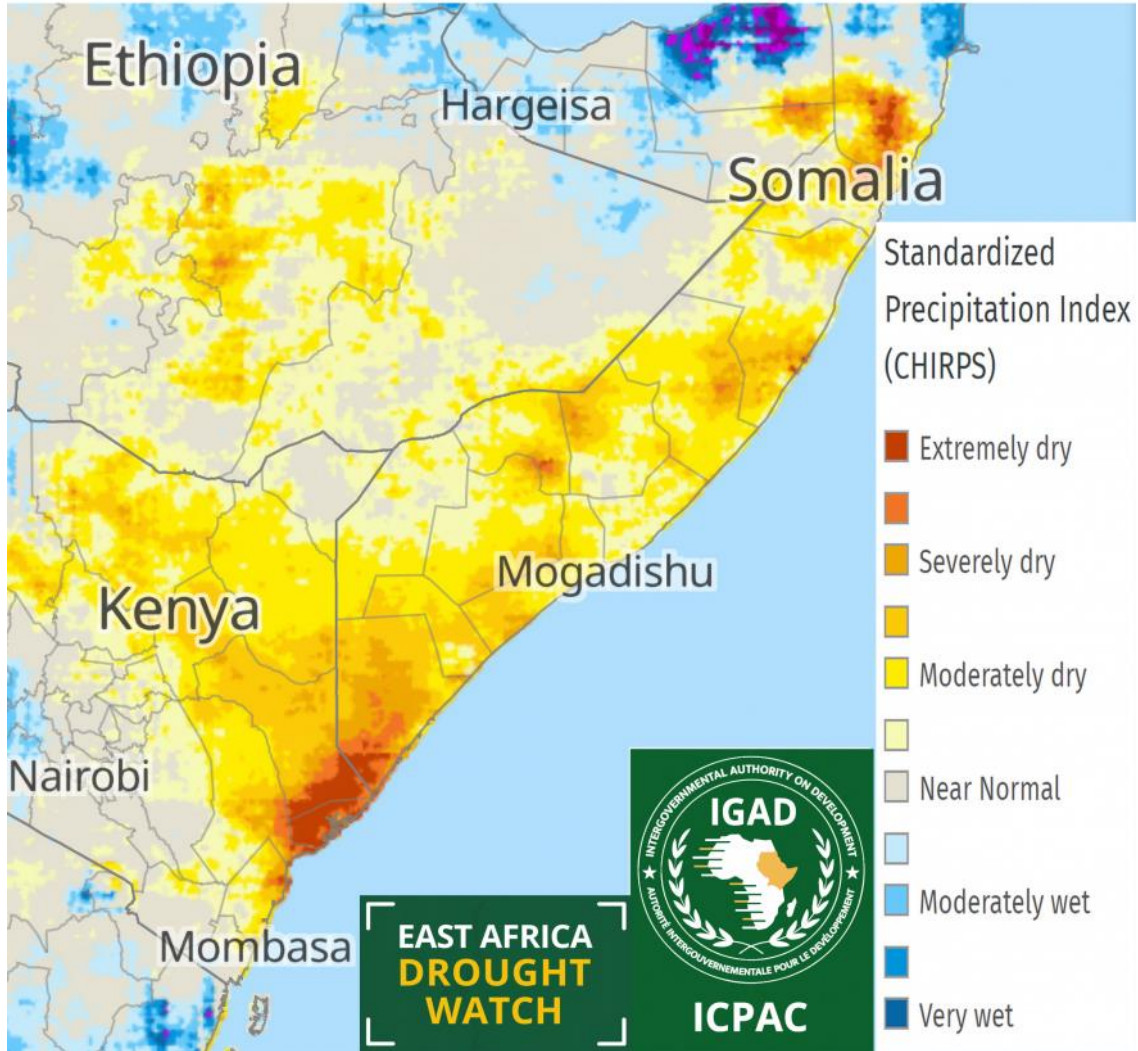


DOWN2EARTH Geographical Focus: Drylands of Kenya, Somalia, Ethiopia



Funk, Omond

Map of East Africa showing significant prevalence of moderately to extremely dry conditions in Somalia, Kenya and Ethiopia, ICPAC
November 2020-December 2021

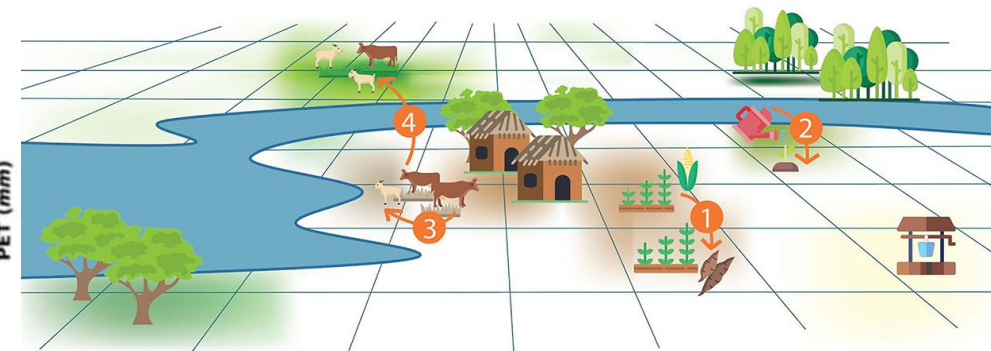
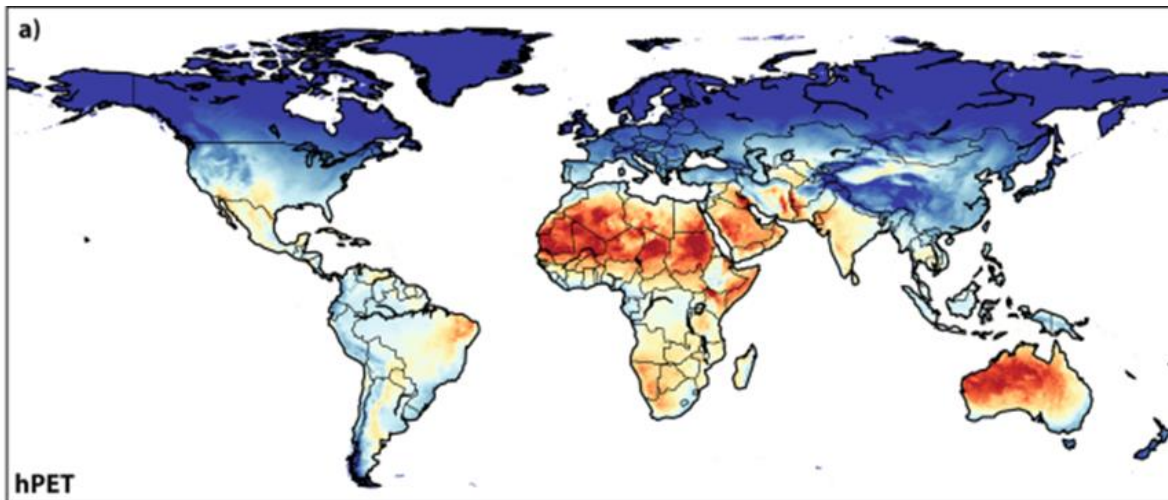
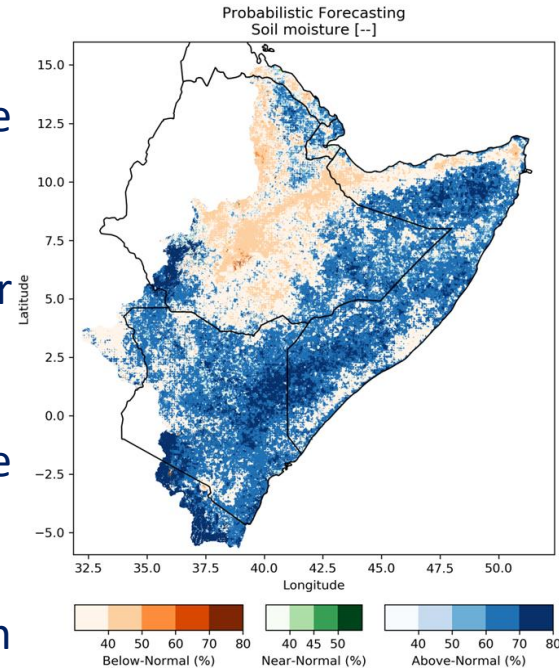


Famine Early Warning System (FEWS NET), <https://fews.net/>

DOWN2EARTH addresses the multi-faceted challenges of water scarcity and food insecurity under climate change in Horn of Africa Drylands (HAD) - Ethiopia, Somalia and Kenya.

Main Achievements (technical):

- New open-source, impact-based modelling system focused on dryland simulating climate impacts on hydrology/vegetation from seasonal forecasts and projections at ICPAC
- Incorporation of new impact-based forecasts into desktop and mobile phone app chatbots for broad dissemination
- Generation of novel datasets on rainfall and potential evaporative demand for the globe and the HAD region
- New agent-based model (ABM) for identifying suitable climate-related policies arising from interactions between humans and the environment



Main Achievements (beyond technical):

- New impact-based modelling capacity embedded at ICPAC, including training and open-access training materials
- Somali language MOOC and mentoring to train and support journalists to report on climate-related issues
- Films in the Living with Climate Change series documenting impacts of climate change in rural communities (Kenya, Somalia, Ethiopia)
- Climate adaptation policy frameworks based on analysis from the ABM and 'last mile' perspectives research
- New automatic weather stations installed in Somalia to fill data gaps and support the creation of a new Somali met service

