Data for Children Collaborative

Impact Collaborations

Challenge Question

On behalf of

JAMEEL OBSERVATORY
FOR FOOD SECURITY EARLY ACTION

Challenge Question Information

Reference Number	CON01

Challenge Question
How can we bridge the disconnects between food security, climatic and natural disaster Early Warning Systems and the anticipatory actions that pastoral and agro-pastoral communities in the Horn of Africa can take to overcome recurring shocks and threats to their lives and livelihoods?

Background & Detail
Early warning (EW) and anticipatory action (AA) are fundamental to stronger drought resilience that guides early actions to prepare for, respond to, and recover from shocks. Improving the links between the two (so appropriate actions mitigate predicted impacts) is central to securing the livelihoods of pastoralist communities. Different countries use different tools and approaches to document and prepare for the onset of droughts. Since early warning systems have a good track record of predicting emerging food crises, EW systems are widely used to prepare and plan for humanitarian and other responses. However, there is a poor record of these warnings actually triggering timely anticipatory actions. Thus, the effectiveness of Early Warning Systems (EWS) to translate warnings into effective action, remains low in many arid and semi-arid parts of the region. Recent efforts to overcome late responses to hazards are increasingly based on linking forecast data and information with pre-agreed actions and funding. However, the disconnects between early warnings and anticipatory actions results in ineffective drought responses – by the many organizations set up to address these issues as well as by dryland communities themselves. The overall aim of this impact collaboration is to propose changes to the end-to-end processes linking the products of Early Warning Systems (their data, information, analysis and predictive impacts) with decision-making at community levels, so pastoral and agro-pastoral communities in the Horn of Africa can better manage seasonal variability and its effects on their food security, nutrition and livelihoods.

Desired Outcome

Resulting from this collaboration, pastoral and agro-pastoral communities will be able to take advantage of more relevant and reliable information, data and other products of Early Warning Systems, applying them as appropriate in their own decisions and anticipatory actions. The project should:

- characterize and understand the needs and preferences of pastoral and agro-pastoral communities for data and other products of Early Warning Systems and how trust and other factors determine the early and anticipatory actions taken by local communities.
- examine the drivers of anticipatory action and how these are shaped by operational programming, EWS and uncertainties in prediction and forecasted impacts.
- determine how the data and products of Early Warning Systems can be most effectively linked and tailored to meet the needs and local contexts of pastoral and agro-pastoral communities and decision makers.
- advocate for sustainable change (whether that be process, system, data, organisational or behavioral) in the actions of agencies working to deliver Early Warning Systems and anticipatory action for food security in the Horn of East Africa

Challenge Sponsor

The Food and Agriculture Organisation (FAO), together with support from the wider Food Security and Nutrition Working Group (FSNWG) - a regional platform co-chaired by ICPAC and FAO. Membership includes approximately 80 organisations (IGAD, UN agencies, NGOs, donors and research institutions).

Stakeholder(s)

Jameel Observatory for Food Security Early Action
FAO (Food and Agriculture Organisation)
Save the Children
UK Met Office
ILRI (International Livestock Research Institute)
NDMA (National Drought Management Authority)
FEWS NET (Famine Early Warning System Network)
ICPAC (IGAD Climate Prediction and Applications Centre)
Pastoralist Parliamentary Group
Centre for Research and Development in Drylands

Skill Sets

Below are the broad skill sets needed to meet this challenge. It is likely that there may be additional skills required. We encourage applicants to propose capabilities that may lie beyond the skill sets below, as these will also be considered when forming a collaboration.

SKILL SET 1: DATA VISUALISATION

Description: DATA VISUALISATION [Understanding user needs, simplifying complex data sets]

The collaborative team will need expertise in data visualisation, using communication skills to thoroughly understand end user and data producer's combined needs. There is a need to simplify complex data sets into consumable information for actionable insight. Information needs to be tailored to contexts and impact needs to be understood.

Estimated proportion of project time: 25%

SKILL SET 2: DRYLAND SYSTEMS AND PASTORALISM

Description: SUBSTANTIVE EXPERTISE IN THE PASTORALISM SECTOR [Knowledge on livestock management, impacts of climate stresses and hazards]

The collaborative team will need expertise in the pastoralist and agro-pastoralist communities to help with community / stakeholder engagement, defining the needs, understanding impacts on livelihoods, understanding contexts and local realities.

Estimated proportion of project time: 25%

SKILL SET 3: DISASTER PREPARDNESS AND ANTICIPATORY ACTION

Description: Programming experience in anticipatory action [Understanding the implementation of anticipatory action, understanding Early Warning Systems and impacts]

The collaborative team will need contextual expertise in anticipatory action and the impact, interactions and interfaces between early warning systems on anticipatory action. There is a need to understand operational planning, resourcing and capabilities.

Estimated proportion of project time: 15%

SKILL SET 4: CLIMATE SCIENCE

Description: CLIMATE PREDICTION & FORECASTING [Understanding key data and indicators relating to climate and weather forecasting]

The collaborative team will need contextual expertise in the domain of climate prediction and forecasting, data collection in manned and automatic weather stations and earth observation data.

Estimated proportion of project time: 10%

SKILL SET 5: SPATIAL DATA ANALYSIS

Description: SPATIAL DATA ANALYSIS [Understanding the mapping of population, food insecurity, socioeconomic mapping]

The collaborative team will need expertise in spatial data analysis to enable understanding of the mapping of climate risk, vulnerability and exposure.

Estimated proportion of project time: 10%

SKILL SET 6: COMMUNITY LED FACILITATION

Description: EXPERTISE IN PARTICIPATORY APPROACH FACILITATION AND GENDER SENSITIVITY [Understanding the best methods for effective community engagement across the Horn of Africa, with emphasis on inclusion]

The collaborative team will need expertise in community led facilitation, information gathering, reporting and ensuring inclusivity.

Estimated proportion of project time: 10%

SKILL SET 7: DATA ENGINEERING, COLLECTION & ANALYSIS

Description: EXPERTISE IN DATA ENGINEERING [Understanding the possibilities with the data pipelines available]

The collaborative team will need expertise in understanding the depth and breadth of the data sets under consideration and advise on ways in which they can be brought together to generate meaningful insight.

Estimated proportion of project time: 5%

Additional Information

Funding Availability

For this challenge question, The Jameel Observatory for Food Security Early Action can fund project partners a portion of up to £148,000. The funding available to individual organisations will be dependent on the agreed contribution to the project once the collaboration has been formed and delivery plan approved.

We welcome applications from all sectors (private / public / third / academia) and encourage submissions from any team looking to do any in kind Data for Good work to develop their expertise.
If possible, we encourage private sector partners to provide time pro-bono.

Funding is available at 70% of total contribution with 30% match funded through in-kind contributions.

This is an experimental development project and VAT will not apply to any agreed funding.

Academic partners will receive 80% of Full Economic Cost.

Timescales & Deliverability

We would aim for the collaboration to **begin work on a project by August/September 2023**. We envisage that a project addressing this challenge question should take approximately **18 months.**

The deadline for submissions is **31 May 2023** with the first collaboration workshop taking place week commencing **12 June 2023.**

For further information on how the Impact Collaborations process works, please visit:

https://www.dataforchildrencollaborative.com/impact-collaborations