Climate Information Services (CIS) innovations in Africa

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CIS Innovations

The case studies of innovations selected in this compendium cover key climate-sensitive sectors of **Agriculture, Energy, Health, And Water**. They reflect new ways of employing weather and climate information to help communities, governments and private businesses.

Case Study 1:
LandInfo Technology - Nairobi, Kenya

The LandInfo app allows individuals and organisations to use a smart mobile phone to determine the potential of any given piece of land in supporting crop and pasture production as well as predict its vulnerability to erosion under the prevailing climatic conditions.

This is based on the accurate soil and climatic information provided by the LandInfo app based on global and local knowledge which enables users to identify the suitability of any given piece of land for any particular crop in order to obtain maximum productivity under the prevailing climate.

Case Study 2:

Trans-African Hydro-Meteorological Observatory (TAHMO) – Regional

TAHMO is a program that aims to develop a vast network of weather stations across Africa. TAHMO provide stations to projects, at own costs, across Africa for teams seeking weather data.

The data collected by TAHMO stations are always made available to the National Meteorological Agencies first. The meteorological agencies have free access to the data and can use it for any purpose they deem fit.

The data is free for government and scientific use.

Case Study 3:
Circle Time Initiative/ G-Power - Nairobi, Kenya

The initiative is aimed at using climate information to empower women living with HIV to make informed decision on agriculture practices (enterprises) to improve their nutritional levels besides enhancing livelihoods, and therefore reducing HIV related opportunistic diseases, delay disease progression and improve their psychological health. The initiative (also referred to as G-Power), is premised on the cognition of climate change impacts on socio-economic status and psychological health, in particular of vulnerable populations.

Case Study 4
Elum Africa - Morocco

Elum developed a software that enable to monitor and control energy assets (PV, Battery, Diesel, Grid) in order to reduce the OPEX for buildings, microgrids or telecom companies.

Elum uses a powerful algorithm based on artificial intelligence (AI) that forecasts the consumption of the plant coupled with the weather forecasts. This software also can be plugged in any kind of photovoltaic technology or brand.

Challenges and Lessons Learned:

- Resource allocation for climate change interventions

- Lack of knowledge about existing innovations due to gaps in communication and connection between key stakeholders

- Complexity of down-scaling climate information for end users who are mainly interested in obtaining readily usable information and not technical or general climate information

Challenges and **Lessons Learned :**

- Need to formulate a business model

- Need to invest in end-users capacity on using CIS so that they can reap maximum benefits of the solutions and technologies being developed.   Inserted: the
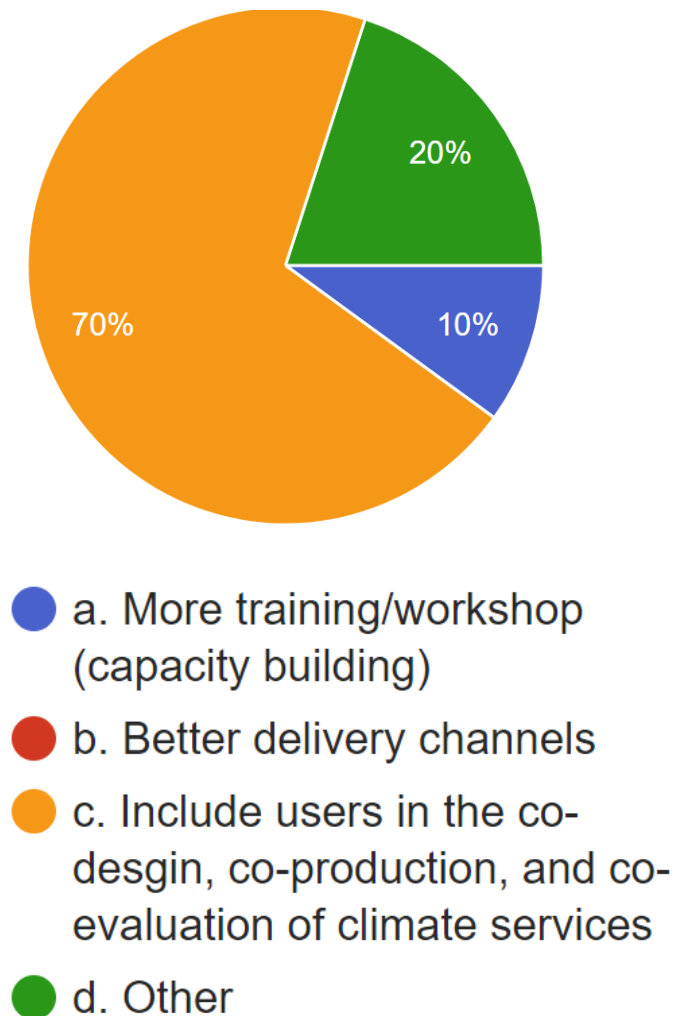
WHAT IS BEING DONE

- The government of Tunisia, for instance, passed a law that supports startups, by providing the ones that qualify with grants, tax exemptions, and government incentives as well as help them file for international patents.

- Training on participatory scenario development (also known as fore-sighting) for instance, made a strong impression on national and basin water management stakeholders to the extent that they are planning to integrate the training into their workplans.

  - Training provided by Airtel Malawi's M'chikumbe to over 1,100 agricultural extension department officers (AEDOs) and other government officials.

Conclusion

How could the climate service you receive be improved?

Pie chart:
- 10% (blue)
- 70% (orange)
- 20% (green)

Legend:
- a. More training/workshop (capacity building) — blue
- b. Better delivery channels — red
- c. Include users in the co-desgin, co-production, and co-evaluation of climate services — orange
- d. Other — green

- Integrate ongoing and future policy planning that encourages and facilitates the scaling-up of CIS innovations and technologies.

- Foster the co-design and co-production of CIS innovations and technologies using a nexus approach between information producers, translators and user communities to improve uptake of CIS.

- Enhance synergy between public institutions and the private sector to strengthen their capacities and understanding of weather and climate information services.

Merci
Thank You