Info Note

CCAFS Contributions to Climate Services in Africa

Input to Regional Stakeholder Coordination Workshop: Defining a Common Roadmap for Scaling Up the Delivery of Weather, Water and Climate Services in Africa

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CCAFS work on climate services seeks to bridge the gap between National Meteorological and Hydrological Services (NMHS) and agricultural users, and engage the agricultural sector institutions. Our research targets key gaps in knowledge, methods, tools and evidence. We offer CGIAR expertise and experience in agricultural development, our presence through Regional Programs in East and West Africa, and climate research partner expertise.

Climate information services for increased resilience and productivity in Senegal (CINSERE)

- Country: Senegal
- Partners: ANACIM, ISRA, ICRISAT, IRI
- Funding: US\$ 3.5M from USAID
- Duration: 2016-2019

The project aims to build the capacity of organizations (ANACIM, bodies involved in USAID Feed the Future (FfF) projects) to develop and communicate tailored and salient climate information to in support of farmers, fisherfolk and pastoralists, including men and women, in their management decision-making. It supports the integration of climate information with FtF activities to facilitate the increased adoption of risk management tools, approaches and local adaptive practices (e.g., use of improved seeds, water harvesting, and safety at sea).

The ENACTS approach will be used to fill gaps and improve the spatial resolution of information provided by the NMS (ANACIM), and support development of high-resolution online information about growing season onset and cessation, dry spells, off-season rainfall, and false starts. Local multi-disciplinary working groups act as climate advisory bodies, and are trained to communicate climate information, relevant decisions and best management practices. Additional communication channels include community radio programming and mobile phone platforms.

Rwanda Climate Services for Agriculture

- Country: Rwanda
- Partners: Meteo-Rwanda, Rwanda Agriculture Board (RAB), CIAT, IRI (Columbia University), University of Reading, ILRI, ICRAF

- Funding: US\$ 5.0M from USAID
- Duration: 2015-2019

The project aims to contribute to the transformation of Rwanda's rural farming communities and national economy through climate services and improved climate risk management within the agriculture sector. Specific objectives are to: (a) develop systems and capacity to deliver climate services to farmers across Rwanda's 30 districts; (b) develop climate information tools and capacity for government decision-making; (c) expand capacity of Meteo-Rwanda to provide climate information tailored to the needs of the agriculture sector; and (d) facilitate the development of sustained climate services governance processes.

The project attempts to develop supply- and demand-side capacity in a balanced manner. Capacity to deliver climate services to rural communities and support their use is being developed by training agricultural extension staff, development NGOs and volunteer Farmer-Promoters to adapt and apply the PICSA approach – as one of several communication channels. This approach to embedding climate services into the "*Twigiri muhenzi*" national agricultural extension system is complemented by communication through radio, SMS, print and video materials.

Enhancing the capacity of Meteo-Rwanda to provide climate information tailored to agricultural needs leverages and extends ENACTS to introduce new Maproom products for agriculture, including historical rainfall frequency, dry and wet spells, extreme events, start and duration of the rainfed growing season, soil water balance and water requirements satisfaction index (WRSI); and downscaled gridded seasonal forecasts of a subset of these quantities. Project partners are integrating ENACTS and PICSA so that the graphical climate information that trained intermediaries bring to farming communities can be produced automatically and accessed for any 4-km grid-cell through online Maprooms. The use of gridded data and online Maprooms, effective training curriculum materials, training a core set of "trainers of trainers," and attention to governance aim to make scalable what would otherwise be a intensive, costly and contextspecific processes.



Climate Services for Africa

- Regional (IGAD and ECOWAS)
- Partners: ICPAC, AGRHYMET, IRI, ILRI
- Funding: \$1.35M from USAID
- Duration: 2014-2018

The project seeks to strengthen climate services for agriculture and food security through regional institutions and processes. Specific objectives are to: (a) strengthen the technical support that ICPAC and AGRHYMET provide to member country NHMS to expand climate services for the agriculture sector; (b) expand the suite of climate information, tailored to agriculture, through the RCOF processes; (c) enhance national and regional agriculture stakeholder capacity to use and communicate gridded climate products, and input into their design; and (d) strengthen economic evidence to inform climate service investments in Africa.

The project is developing expanded suites of online, gridded historical and seasonal forecast Maproom products tailored to the needs of agriculture, building on the IRI's ENACTS initiative. In both regions, new products will be introduced to country stakeholders through workshops associated with RCOFs, and serve as a basis for supporting the development of NMS Maproom products for member countries' agricultural sectors. In E Africa, the effort includes soil water balance tools for agricultural drought early warning. In W Africa, it includes adapting and testing the CCAFS Regional Agricultural Forecasting Toolbox (CRAFT) for early-season crop production forecasting.

An ILRI-led activity seeks to strengthen and apply costbenefit analysis methods to inform investment in climate services for agriculture in Africa.

Capacitating African Smallholders with Climate Advisories and Insurance Development (CASCAID)

- Countries: Ghana, Mali, Senegal
- Partners: CCAFS, ICRISAT, ICRAF, MANOBI, University of Reading, IRI, Univ. Ghana, NHMS and NARS of target countries, AGRHYMET
- Funded through CGIAR plus bilateral sources
- Duration: 2015-2018

CCAFS and Info Notes

The project aims to build the capacity of smallholders and their boundary partners (NHMS, NGOs, CSOs, private sector) with actionable climate advisories, index insurance and integrated climate services that reduce the impact of seasonal climate risk from farm to country levels. It is extending, through multi-stakeholder Communities of Practice, the use of climate information for agricultural decision making to farmers and other agricultural decisionmakers.

Research activities include: (a) elicitation of local information needs in the context of improved production technologies and practices, (b) co-development of standardized climate and yield prediction products that bridge spatial and temporal gaps (including CRAFT, TAMSAT), and (c) research on integrating the PICSA climate service communication approach with socially differentiated index insurance schemes for smallholders to reduce downside risk. Capacity development efforts include training NGOs, agricultural extension and NMS in the PICSA approach; and supporting development of NMS capacity to provide actionable climate information by leveraging ENACTS in Mali and Ghana.

This brief summarizes CCAFS-led projects in Africa that align with the Global Framework for Climate Services (GFCS). It was developed as an input to the Regional Stakeholder Coordination Workshop: Defining a Common Roadmap for Scaling up Climate Services Delivery in Africa, Saly, Senegal, 1-2 May 2017.

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The views expressed in this brief are those of the author, and are not necessarily endorsed by or representative of CCAFS, IRI, or of the cosponsoring or supporting organizations.

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