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Lessons Learned from the Agricultural Climate Resilience Enhancement Initiative (ACREI) in Ethiopia, Kenya and Uganda



Food and Agriculture
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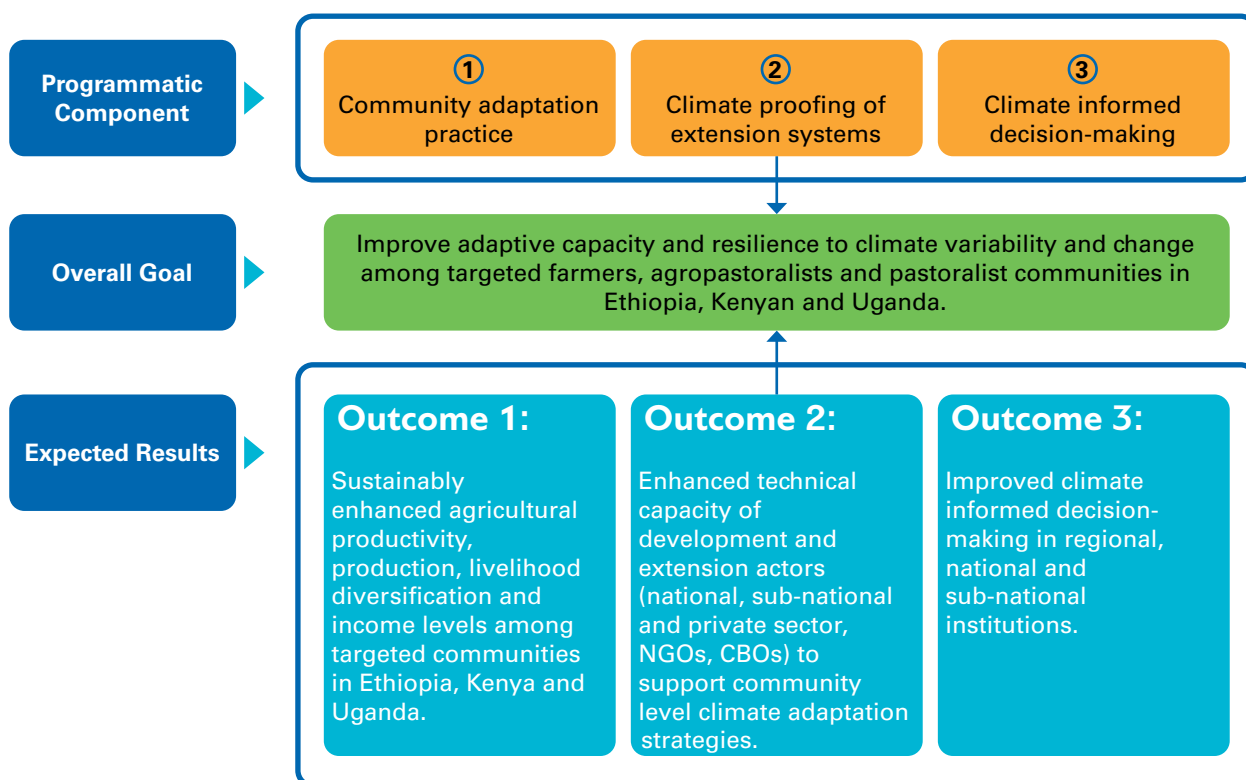


ADAPTATION FUND

The Agricultural Climate Resilience Enhancement Initiative (ACREI)

The Agricultural Climate Resilience Enhancement Initiative (ACREI) is a partnership programme that aimed to improve adaptive capacity and resilience to climate variability and change among targeted farmers, and agropastoralists communities in Ethiopia, Kenya and Uganda. Specifically, ACREI focused on strengthening climate services provided by National Meteorological and

Hydrological Services (NMHSs) to smallholder agricultural communities in East and West Hararghe Zones in Ethiopia, Taita Taveta County in Kenya, and Isingiro and Sembabule Districts in Uganda, while supporting extension agents and farming communities to use these climate services for enhanced agricultural resilience to climate variability and change.



The ACREI implementation framework

The project aimed to develop and implement adaptation strategies and measures to strengthen the resilience of vulnerable smallholder farmers, agropastoralists and pastoralists in the Horn of Africa to climate variability and change.

The first and second components, led by the Food and Agriculture Organization of the United Nations (FAO), sought to enhance community adaptation practices through participatory extension services using the Farmer Field School (FFS) approach and climate-proofing extension services.

The third component, led by the Intergovernmental Authority on Development (IGAD) Climate Prediction and Applications Centre (ICPAC) focused on the climate services capacity-building from regional to sub-national level, working closely with the NMHSs in the three target countries.

Partnering for resilience

The ACREI project was designed as an innovative partnership project to ensure that both the climate services aspects as well as the tangible adaptation aspects would be delivered through a chain of capacity-building and climate resilience actions from regional to community level. The project was led by the World Meteorological Organization (WMO) as a Multilateral Implementing Entity (MIE) accredited to the Adaptation Fund, while FAO and the IGAD ICPAC were executing entities.



Significantly, the ACREI project was the first ever regional project approved by the Adaptation Fund through its Pilot Programme for Regional Projects and led the way for multiple regional projects to be designed, funded and implemented as part of the Adaptation Funds portfolio of projects.

Summary of impact data from the end line survey

 Ethiopia	 Kenya	 Uganda
Smallholder farmers accessing climate information increased by 75%	Smallholder farmers accessing climate information increased by 7%	Smallholder farmers accessing climate information increased by 42%
Uptake of CSA practices • Quality seeds (27% to 51%) • Crop diversification (18% to 51%) • Organic farming (18% to 44%), intercropping (9% to 32%) • IPM (6% to 32%) • Mulching (11% to 24%) • Minimum tillage (7% to 21%) • Improved livestock breed (11% to 30%)	Uptake of CSA practices • Mulching (14% to 31%) • Cover cropping (6% to 28%) • Minimum tillage (13% to 37%) • IPM (7% to 12%) • Improved livestock breed (19% to 41%)	Uptake of CSA practices • Quality seeds (11% to 16%) • Crop diversification (36% to 47%) • Mulching (23% to 54%) • Minimum tillage (8% to 19%) • IPM (8% to 15%) • Improved livestock breed (3% to 8%)
Positive impact on resilience. RCI increased by 15%	Positive impact on resilience. RCI increased by 7%	Positive impact on resilience. RCI increased by 29%

Key lessons and recommendations

- To reach the last mile with climate services collaboration and multistakeholder partnership across the agricultural and meteorological spectrum proved critical, in this case between WMO, FAO and IGAD ICPAC, complemented by various stakeholders at local levels such as NMHSs, Ministries of Agriculture, Local Government Offices, Agricultural Research Institutes and more. This ensured a coordinated approach to climate services and support for climate change adaptation. Such multistakeholder partnerships, particularly in the co-production of climate services, must be enhanced.
- At the centre of the ACREI model was the careful and well-structured integration of multiple proven participatory and user-centred adaptation and climate services approaches applied in synergy, that jointly contributed to the impact observed in a way that individual approaches applied alone, would not. Community based adaptation action planning was complemented with more in-depth participatory learning in FFS, informed by the set of climate context appropriate advisories.
- Sustaining support for extension delivery that reaches community levels is vital. Supporting and maintaining a pool of both public and private extension workers who are competent on climate services communication and have the necessary resources to undertake their work is important.
- Kenya having a decentralized NMHS structure (inadequate staffing notwithstanding), demonstrated consistent and closer interactions between NMHS staff, intermediaries (like agricultural extension officers and the media) the media and the farming communities. Other countries could aspire to a similar decentralized NMHS system.
- Appropriate packaging and communication of agrometeorological information is crucial, with opportunities to engage local media, extension and other organizations to support this using local languages and understandable and actionable terminology.
- The co-production approach was a key pillar of the climate services component of ACREI and should continue, where possible creating permanent user-interface platforms that are not only reliant on project funding for their operations and sustainability.
- The project demonstrated the value of allowing a broad technical scope of interventions based on farmers preferences and informed decision-making and thus not prescribing the technical nature of project activities and indicators at project formulation or start but allow this to evolve during the project life. This is in sharp contrast to how most projects are set up.
- Social networks were found to contribute greatly to community resilience. The FFS along with registering of cooperatives and village savings and loans associations all contributed to this and will likely support resilience long after the project ends.
- The ACREI project overall achieved its intended aim for gender balance in project activities, however, with a higher women engagement at the community level than at the more up-stream district/county forums platforms. It remains clear that a concerted effort on women's empowerment and involvement is needed, by approaching project design and implementation through a Gender, Equity and Social Inclusion (GESI) lens.
- Future opportunities exist for bundling climate services with other services, such as agricultural marketing information. These could be explored along with efforts to enhance digital agrometeorological advisories, noting still the preference for and ease of access to simple technology like local radio for rural farmers.
- Systematic monitoring of the socioeconomic benefits of climate services linked to its adaptation outcomes among farmers must be integrated into project design, as was done by using the Resilience Index Measurement and Analysis (RIMA) methodology in the ACREI project.

Conclusion

The ACREI project demonstrated the importance of a comprehensive approach to climate adaptation. By integrating climate information into decision-making, climate-proofing extension systems, and fostering community-driven adaptation practices, the project has significantly enhanced agricultural productivity and resilience. The lessons from the project offer valuable insights for future climate services and climate resilience initiatives, highlighting the need for a holistic approach that combines scientific knowledge with local expertise and strong engagement of participating communities.

For more information, please contact:

World Meteorological Organization

7 bis, avenue de la Paix – P.O. Box 2300 – CH 1211 Geneva 2 – Switzerland

Strategic Communications Office

Tel.: +41 (0) 22 730 83 14 / Fax: +41 (0) 22 730 80 27 | Email: communications@wmo.int | public.wmo.int

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