



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



Use of climate and weather information by various agencies, meteorological institutions, and farmers

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CCAFS Outcome Case

Unit	CCAFS Theme Leaders
Year	2013
Contacts	Philip Thornton; James Hansen
Themes	Data and tools; Climate Risk Management
Geographic focus	Global
Summary <p>CCAFS scientists and partners have developed participatory tools and approaches that enable organizations, such as national meteorological services, agricultural advisory services and NGOs, to provide information to large numbers of farmers, and support them to interpret and use the information in their agricultural planning. CCAFS research and capacity investment (with USAID, WMO, IRI and University of Reading) has supported the national meteorological services of Ethiopia, Tanzania and Madagascar to produce and deliver new historic and monitored climate information at a scale that is relevant to smallholder farmers, with complete national coverage.</p> <p>CCAFS efforts have to date influenced the policies and activities of organisations responsible for design and delivery of climate information and services in at least 10 countries in Africa, with beneficial impact reaching tens of thousands of farmers. Organizations which have taken up these approaches include the national meteorological services of Tanzania, Ethiopia, Madagascar, Malawi, Lesotho, Senegal and others; the AGRHYMET Regional Center in West Africa; and international organizations including the International Fund for Agricultural Development (IFAD), and the World Meteorological Organization (WMO).</p>	
Key facts <ul style="list-style-type: none">- Influence on the policies and activities of organisations responsible for design and delivery of climate information and services in at least 10 countries in Africa.- CCAFS scientists and partners have developed approaches, including participatory tools to provide information to large numbers of farmers and support them to interpret and use the information in their farm planning.- CCAFS efforts have enabled national meteorological services to provide new historical and monitored climate information at a scale relevant to farmers.	

Lessons: key elements of success

- Showcases the ability to replicate approaches across various countries.
- Evidence from CCAFS pilot projects and knowledge synthesis of farmers' climate information needs used effectively in achieving this outcome.
- Development of the capacity of national meteorological services to overcome gaps and produce new, high-resolution information.

Further reading

- [How can we reach a million farmers with climate services?](#)
- [Strengthening availability and use of climate services in Africa](#)
- Data and Tools [Theme leader technical report 2013](#)
- Climate Risk Management [Theme leader technical report 2013](#)

Related research outputs

- Osbah, H., Dorward, P., Stern, R., & Cooper, S. (2011). Supporting Agricultural Innovation in Uganda to Respond to Climate Risk: Linking Climate Change and Variability with Farmer Perceptions. *Experimental Agriculture*, 47(2), 293-316. doi: Doi 10.1017/S0014479710000785
- Dorward, P. Stern, R. (2012). Developing approaches to support smallholder decision making and planning through the use of: historical climate information; forecasts; and participatory planning methods. Synopsis presented at workshop on Scaling Up Climate Services for Farmers in Africa and South Asia December 10-12, 2012, Saly, Senegal, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- Muchedzi, H. Van den Ende, P. Dorward, P. Stern, R. Marovanidze, K. Nhongonhema, R. Mupuro, J. Unganai, L. (2012). Mainstreaming climate change adaptation in agricultural extension: A training manual on use of climate information, and vulnerability and capacity assessment, for agricultural extension staff in Zimbabwe. University of Reading and Practical Action.
- Van den Ende, P. Dorward, P. Muchedzi, K. (2013). Mainstreaming Climate Change Adaptation in Zimbabwe's Agricultural Extension System, Final Project Report. Agritex, University of Reading and Practical Action.
- Hansen, J.W., Mason, S., Sun, L., Tall, A. (2011). Review of seasonal climate forecasting for agriculture in sub-Saharan Africa. *Experimental Agriculture* 47:205-240.
- May, S., Hansen, J., Tall, A. (2013). Workshop Report: Developing a Methodology to Communicate Climate Services for Farmers At Scale. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. (Available online at: <http://hdl.handle.net/10568/33443>)
- Ndiaye, O., Moussa, A.S., Seck, M., Zougmore, R., Hansen, J. (2013). Communicating seasonal forecasts to farmers in Kaffrine, Senegal for better agricultural management. Case Study prepared for Hunger, Nutrition, Climate Justice 2013, A New Dialogue: Putting People at the Heart of Global Development. Dublin, Ireland: Irish Aid. (Available online at: <http://cgspace.cgiar.org/handle/10568/27888>)
- Tall, A., Jay, A., and Hansen, J.W. (2013). Scaling Up Climate Services for Farmers in Africa and South Asia Workshop Report. CCAFS Working Paper no. 40. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. (Available online at: <http://hdl.handle.net/10568/27833>)

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Strategic partner

