

## Evidences

### Study #2144

#### Contributing Projects:

- P363 - Climate Services for Agriculture: Empowering Farmers to Manage Risk and Adapt to a Changing Climate in Rwanda
- P266 - [Flagship Leader] FP4: Engagement, synthesis and support

#### Part I: Public communications

**Type:** OICR: Outcome Impact Case Report

**Status:** On-going

**Year:** 2018

**Title:** Delivery of climate services through Rwanda's national agricultural extension service extended to 106,000 farmers, and deepened through climate service Radio Listening Clubs

#### Short outcome/impact statement:

Rwanda Climate Services for Agriculture supported the Twigire Muhinzi agricultural extension service to scale up Participatory Integrated Climate Services for Agriculture (PICSA) in 27 of Rwanda's 30 districts, facilitating 106,000 Rwandan farmers to understand and act on climate information. Climate service delivery was deepened through the launch of 225 Radio Listening Clubs that convene PICSA participant farmers to listen to and discuss biweekly climate services radio broadcasts, take turns participating in call-in shows, and provide input to future programming content.

## Outcome story for communications use:

In western Rwanda, Uwimana Marie Gorethi is a farmer and head of her household of five children in the Ngororero District. She has been trained through the Rwanda Climate Services for Agriculture project on how to use new climate information products in her farming decisions. The timing of planting is one of her decisions that's been newly informed by the climate products. She also uses the information on how much total rainfall is expected for the upcoming season to guide her decision on which crops to plant. Gorethi is a Farmer Promoter, meaning that she's charged with training and helping her fellow farmers in her village to understand and use climate information. Gorethi said that she's trained 75 people in her village, and that about 70 of those people now use the information. She said those who use the climate information are getting better harvests than those do not use it.

Gorethi is one of the 1612 Twigire Muhinzi agricultural extension workers, in 27 of Rwanda's 30 districts, who were trained in the Participatory Integrated Climate Services for Agriculture (PICSA) approach. These trained extension workers have in turn trained and facilitated more than 106,000 of Rwanda's farmers to access, understand and incorporate climate information into their management decisions. The project partnered with four local faith-based NGOs to facilitate the training and support implementation in farming communities in their respective provinces.

An initial assessment showed that most participating farmers change their agricultural or livelihood management as a result, and most perceive improvements in their confidence as farmers and in household food security and income (6).

The project works with the Radio Huguka community radio network to produce climate service programming. Climate service delivery has been deepened through the launch of 225 Radio Listening Clubs in November 2018, led by Farmer Promoters who already facilitate the PICSA process. The roughly 5000 farmers involved in the pilot activity meet to listen and discuss biweekly climate services radio broadcasts, take turns participating in call-in shows, and through representatives provide input to future broadcast content.

The innovative approach to meeting farmers' climate information needs at scale has received considerable attention beyond Rwanda, and recognized with the first Climate Smart Agriculture Project of the Year Award, at the inaugural Africa Climate Smart Agriculture Summit (7).

**Links to any communications materials relating to this outcome:** <Not Defined>

## Part II: CGIAR system level reporting

**Link to Common Results Reporting Indicator of Policies :** No

**Stage of maturity of change reported:** Stage 2

**Links to the Strategic Results Framework:**

Sub-IDs:

- Enhanced adaptive capacity to climate risks (More sustainably managed agro-ecosystems)

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- # of more farm households have adopted improved varieties, breeds or trees

Description of activity / study: <Not Defined>

**Geographic scope:**

- National

Country(ies):

- Rwanda

Comments: <Not Defined>

**Key Contributors:**

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security

Contributing Flagships:

- FP4: Climate services and safety nets

Contributing Regional programs:

- EA: East Africa

Contributing external partners:

- University of Reading
- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)
- The Earth Institute, Columbia University

**CGIAR innovation(s) or findings that have resulted in this outcome or impact:**

The outcome builds heavily on the Participatory Integrated Climate Services for Agriculture (PICSA) methodology and training materials, developed by the University of Reading in partnership with CCAFS.

**Innovations:** <Not Defined>

### **Elaboration of Outcome/Impact Statement:**

The Rwanda Climate Services for Africa project is working with national partners to integrate climate services into the country's Twigire Muhinzi agricultural extension service, by training extension staff and volunteer farmers in a process known as Participatory Integrated Climate Services for Agriculture (PICSA). PICSA is a structured participatory process, developed by University of Reading in partnership with CCAFS, to enable smallholder farmers to understand and incorporate local climate information into their decision-making. By 2018, the project trained 1612 trained government staff and volunteer Farmer Promoters in the PICSA process. They in turn trained and facilitated 106,541 Rwandan farmers in 27 of Rwanda's 30 districts to understand climate information and incorporate it into their decision-making (1).

The CCAFS-led effort has enabled scaling through a well-structured curriculum (2), a training-of-trainer approach, and training and facilitation by the project in partnership with four local faith-based NGOs (3). In order to address the challenge of providing at a national scale the high-quality, location-specific information that the PICSA process requires, the project has worked with the Rwanda Meteorological Agency to fill major gaps in their historical records (4), and to develop online Maproom tools that make high-resolution historical analyses and seasonal forecast information available in the graphical formats required (5).

Adoption of regular daily weather forecasts and a new climate service education program into the programming of Radio Huguka, which reaches 2/3 of Rwanda's population, complements the face-to-face PICSA communication process. The two communication channels have been integrated through the launch of 225 Radio Listening Clubs in November 2018, led by Farmer Promoters who already facilitate the PICSA process [REF]. The roughly 5000 farmers involved in the pilot activity meet to listen and discuss biweekly climate services radio broadcasts, take turns participating in call-in shows, and through representatives provide input to future broadcast content.

Initial M&E results indicate that most (93%) participants change their agricultural or livelihood management in response; and most perceive improvements in their confidence as farmers and in household food security and income (6). Evidence that participating farmers share the information with peers (an average of 13 peers each) suggests a large multiplying effect through farmer-to-farmer exchange. The innovative approach to meeting farmers' climate information needs at scale was recognized by the first Climate Smart Agriculture Project of the Year Award, awarded to the project at the inaugural Africa Climate Smart Agriculture Summit (7).

## References cited:

1. Reports to USAID, Annual Progress Report: October 1, 2016 – September 30, 2017; Quarterly Progress Report, January – March 2018 (Attached)
2. Dorward P, Clarkson G, Stern R. 2015. Participatory Integrated Climate Services for Agriculture (PICSA): Field Manual. Walker Institute, University of Reading. <http://hdl.handle.net/10568/68687>
3. Kagabo MD, Nsengiyumva G, Clarkson G, Dorward P. 2017. Participatory Integrated Climate Services for Agriculture (PICSA) Intermediary Training in Muhanga, Rwanda. CCAFS Workshop Report (<http://hdl.handle.net/10568/83213>);  
Nsengiyumva G, Kagabo MD, Clarkson G, Dorward P. 2017. Participatory Integrated Climate Services for Agriculture (PICSA) Specialist Intermediary Training in Nyamata, Rwanda (<http://hdl.handle.net/10568/82750>)
4. Faniriantsoa, R. 2017. Training on IRI Climate Data Tools and developing a method for integrating climate data in Kigali, Rwanda. (<http://hdl.handle.net/10568/89123>);  
Reaching a million farmers in Rwanda with useful climate services (blog) (<https://ccafs.cgiar.org/blog/reaching-million-farmers-rwanda-useful-climate-services>)
5. <http://maproom.meteorwanda.gov.rw/maproom/Agriculture/index.html>;  
Del Corral J, Rose A. 2018. Training on ENACTS Data Library and Maproom software in Kigali, Rwanda. CCAFS Workshop Report (<http://hdl.handle.net/10568/92004>);  
Del Corral J, Rose A. 2017. Training in development and use of Growing Season Onset and Downscaled Seasonal Forecast Maprooms, Kigali, Rwanda, March 2017. (<http://hdl.handle.net/10568/80723>);  
Del Corral J. 2016. ENACTS, Data Library, Maproom and GIS Training at Rwanda Meteorological Agency, Kigali, Rwanda, July 2016. (<http://hdl.handle.net/10568/77321>);  
Dinku T, del Corral J. 2015. Training program on ENACTS climate time series, data library and maprooms, Kigali, Rwanda. CCAFS Workshop Report. (<http://hdl.handle.net/10568/76238>)
6. Clarkson G, Dorward P, Kagabo DM, Nsengiyumva G. 2017. Climate Services for Agriculture in Rwanda: Initial findings from PICSA monitoring and evaluation. CCAFS Info Note (<http://hdl.handle.net/10568/89122>)
7. Rwanda Climate Services for Agriculture project awarded the first ever Climate Smart Agriculture Project of the Year 2018 (press release) (<https://tinyurl.com/y68uxb2g>);  
Rwanda Climate Services for Agriculture wins Project of the Year Award: Aid & International Development Forum (blog) (<http://www.aidforum.org/Topics/food-security/rwanda-climate-services-for-agriculture-wins-project-of-the-year-award/>)

**Quantification:** <Not Defined>

### **Gender, Youth, Capacity Development and Climate Change:**

**Gender relevance:** 1 - Significant

Main achievements with specific **Gender** relevance: In 2017-2018, female farmers comprised 42% of the total numbers of farmers reached through the PICS training (Annual report to USAID, October 2017 - September 2018). Initial Monitoring and Evaluation results also show that among farmers who participated in the PICS training, an average of 93% of women reported that it influenced their planning and decision making in the past season (6).

**Youth relevance:** 0 - Not Targeted

**CapDev relevance:** 1 - Significant

Main achievements with specific **CapDev** relevance: The project provides training to enhance the capacity of government staff, volunteer Farmer Promoters, and farmers to understand climate information and incorporate it into their decision-making through the PICS process.

**Climate Change relevance:** 1 - Significant

Describe main achievements with specific **Climate Change** relevance: The project is supporting Rwandan farmers to understand and act on climate information.

**Other cross-cutting dimensions:** Yes

**Other cross-cutting dimensions description:** The project is collecting data and providing analyses that are disaggregated by gender to understand how men and women use and access climate services as well as impacts. See, for example, baseline report (<https://hdl.handle.net/10568/80820>) and initial findings from a PICS assessment (<https://hdl.handle.net/10568/89122>). See also a conference presentation exploring pathways for gender-responsive climate services based on analyses and data from the project (<https://hdl.handle.net/10568/96528>). Further analyses exploring equity dimensions are expected.

**Outcome Impact Case Report link:** [Study #2144](#)

**Contact person:**

James Hansen, CCAFS Flagship 4 Leader, IRI. [jhansen@iri.columbia.edu](mailto:jhansen@iri.columbia.edu)