

## Evidences

### Study #2923

**Contributing Projects:**

- P1604 - Digitally integrated approaches for managing climate risk and increasing food security
- P262 - Research and engagement for scaling climate-smart agriculture in Latin America

**Part I: Public communications**

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

**Status:** Completed

**Year:** 2021

**Title:** Climate services impact assessment generates evidence of more than 500,000 farmers reached by a comprehensive Climate Risk Management (CRM) strategy of eleven Latin American countries

**Short outcome/impact statement:**

Co-developed, tested, and scaled out by CCAFS scientists, climate services approaches are helping assess, produce, translate and transfer climate information to enable agricultural decision making to 420+ institutions in eleven countries in Latin America (LAM), reaching 501,000 farmers in a comprehensive national Climate Risk Management (CRM) from the local level to the national and regional levels, and allowing the generation of a powerful governance structure for rural development and community-level resilience.

## **Outcome story for communications use:**

Local stakeholders and farmers in Latin America (LAM) generally have limited access to agro-climatic information and/or the mechanisms to relate it to the impact that climate can generate at the local level. This precludes the translation of information into actionable knowledge. We have co-developed, tested, and scaled out the Local Technical Agroclimatic Committees (LTAC) approach to assess, co-produce, translate and transfer climate information to enable agricultural decision-making. Through LTAC users access information about climate variations at multiple timescales, understand how these can affect crops, and design measures to reduce crop loss. We systematically describe their process of evidence generation, partner engagement, scaling up, and monitoring.

Co-designed between CCAFS scientists and 420+ institutions in 11 countries in LAM, the LTACs are now reaching 501,000 farmers (ref.1) in a comprehensive CRM strategy from the local to the national and regional levels, as follows,

- \* Colombia: 15 LTACs deliver tailored agroclimatic information to 224,000 farmers in a climate service network of 140+ institutions;
- \* Guatemala: 19 LTAC covers the entire country territory and 90+ institutions deliver advisory to 37,000 farmers;
- \* Honduras: 12 LTAC reaches 77,000 farmers with 90+ institutions involved;
- \* Other countries: in Mexico, El Salvador, Panama, Nicaragua, Paraguay, Chile, Ecuador, and Peru, 163,000 farmers receive information from 190+ organizations.

The participatory nature and diverse composition of LTAC at the territorial level (i.e., public sector, NGOs-private sector, farmers-civil society among other types of institutions) allowed the generation of a powerful governance structure for rural development and community-level resilience. In Guatemala, next users apply gender- and youth-sensitive communication of climate services within their organizations (~79% of the institutions with gender/youth programs) and with farmers' groups. In a country with a poor situation of gender equality, climate services are helping to close the gap of access to information to vulnerable groups including women (30% of farmers) and indigenous (30%). Confidence in climatic information, a major transformation area reported (ref.3), has incrementally grown and about 88% of users perceive that the rainfall forecast is correct in the previous seasons, showing confidence in its use in decision-making (ref.4). The NextGen forecast system developed by IRI-CCAFS scientists has been key for this purpose. The development of LTACs in countries such as those mentioned has led to a sphere of political influence causing their institutionalization in Honduras and Guatemala or their inclusion in the National Determined Contributions (NDC) in the case of Colombia.

## **Links to any communications materials relating to this outcome:**

- <https://tinyurl.com/y6frxwax>
- <https://tinyurl.com/y5cqmgw9>
- <https://tinyurl.com/yygrqzgz>
- <https://tinyurl.com/yypdojx8>
- <https://tinyurl.com/y2vs8rus>
- <https://tinyurl.com/y9r4awa6>
- <https://www.fao.org/publications/card/en/c/CB6941EN>

## **Part II: CGIAR system level reporting**

**Link to Common Results Reporting Indicator of Policies :** Yes

**Policies contribution:**

- 648 - The Food Security Decision Support System is integrated into a national food security strategy
- 650 - National Framework for Climate Services (NFCS) development for Guatemala and Honduras
- 824 - The Ministry of Agriculture, Livestock and Nutrition (MAGA) led the Local Technical Agroclimatic Committees (LTAC) officialization in Guatemala

**Stage of maturity of change reported:** Stage 3

**Links to the Strategic Results Framework:**

Sub-IDs:

- Reduced smallholders production risk
- Increased resilience of agro-ecosystems and communities, especially those including smallholders

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

SRF 2022/2030 targets:

- # of people, of which 50% are women, assisted to exit poverty

Description of activity / study: <Not Defined>

**Geographic scope:**

- Multi-national

Country(ies):

- El Salvador
- Guatemala
- Mexico
- Peru
- Honduras
- Panama
- Paraguay
- Ecuador
- Nicaragua
- Chile
- Colombia

Comments: This is a continuously growing outcome. Currently, more LTACs are being established in the eleven countries and in South East Asia countries (Vietnam, Cambodia, Laos).

**Key Contributors:**

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security

## Contributing Flagships:

- FP4: Climate services and safety nets

## Contributing Regional programs:

- LAM: Latin America

## Contributing external partners:

- CDRO - Asociación de Cooperación para el desarrollo Rural de Occidente
- USAC - Universidad de San Carlos de Guatemala
- sermarnat - Secretaría de Medio ambiente y Recursos naturales (Mexico)
- GREPALMA - Gremial de Palmicultores de Guatemala
- URL - Universidad Rafael Landívar
- COPECO - Comisión Permanente de Contingencias (Honduras)
- Helvetas
- MIDA - Ministerio de Desarrollo Agropecuario (República de Panamá)
- SAG - Secretaría de Agricultura y Ganadería (Honduras)
- CRRH - Comité Regional de Recursos Hidráulicos
- ANACAFE - Asociación Nacional del Café
- MAGA - Ministerio de Agricultura, Ganadería y Alimentación (Guatemala)
- SADER - Secretaría de Agricultura y Desarrollo Rural (México)
- WFP - World Food Programme
- CIV - Ministerio de Comunicaciones, Infraestructura y Vivienda (Guatemala)
- CAC - Consejo Agropecuario Centroamericano

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

N/A

## **Innovations:**

- 1911 - Assessment tool to identify the effects of COVID-19 on food security
- 1741 - Quick appraisal monitoring and evaluation tool for the Local Technical Agroclimatic Committees (LTACs) in Latin America (LAM)
  - 1742 - R-CPT interface for the automation and improvement of seasonal forecasts
  - 1739 - Tailored outreach communications for farmers in Guatemala and Mexico
  - 289 - Local Technical Agroclimatic Committees (LTACs) approach generating climate forecasts and crop response
    - 1248 - Competencies for Climate Risk Management: making climate-smart agriculture operational
    - 1139 - NextGen seasonal forecast system

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

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Co-designed between CCAFS scientists and 420+ institutions in 11 countries in LAM, the LTACs are now reaching 501,000 farmers (ref.1) in a comprehensive Climate Risk Management (CRM) strategy from the local to the national and regional levels, as follows,

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The participatory nature and diverse composition of LTAC at the territorial level (i.e., public sector, NGOs-private sector, farmers-civil society among other types of institutions) allowed the generation of a powerful governance structure for rural development (ref.2) and community-level resilience. In Guatemala, next users apply gender- and youth-sensitive communication of climate services within their organizations (~79% of the institutions with gender/youth programs) and with farmers' groups. In a country with a poor situation of gender equality, climate services are helping to close the gap of access to information to vulnerable groups including women (30% of farmers) and indigenous (30%). Confidence in climatic information, a major transformation area reported (ref.3), has incrementally grown and about 88% of users perceive that the rainfall forecast is correct in the previous seasons, showing confidence in its use in decision-making (ref.4). The NextGen forecast system developed by IRI-CCAFS scientists has been key for this purpose (ref.5). The development of LTACs in countries such as those mentioned has led to a sphere of political influence causing their institutionalization in Honduras and Guatemala (ref.6-7) or their inclusion in the National Determined Contributions (NDC) in the case of Colombia (ref.8).

## References cited:

- [1] [D19847] Giraldo et al. 2020. Outcome Harvesting: Assessment of the transformations generated by Local Technical Agroclimatic Committees In Latin America. CCAFS Working Paper No.299. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). (<https://hdl.handle.net/10568/108492>)
- [2] [D26944] Goddard L, et al. 2020. Climate Services Ecosystems in times of COVID-19 In: WMO at 70 - Responding to a Global Pandemic. WMO Bulletin 69(2):39-46. (<https://cgspace.cgiar.org/handle/10568/111389>)
- [3] Letter from the office of the Minister of the Ministry of Agriculture, Livestock and Nutrition of Guatemala (MAGA), indicating commitment for the support of the LTAC. (<https://bit.ly/maga-oficio-circular-10-2021>)
- [4] Ministerial agreement of the Secretary of Agriculture of Honduras (SAG) for the creation of Participatory Agroclimatic Committees (LTAC). (<https://bit.ly/sag-acuerdo-392-2017>)
- [5] Government of Colombia (2020). Update of the Nationally Determined Contribution of Colombia (NDC). (<https://tinyurl.com/y97xe5mr>)
- [6] [D33139] Ramirez-Villegas, J., Martinez-Baron, D., Navarro-Racines, C. Digitally integrated approaches for managing climate risk and increasing food security. Executive Summary. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). (<https://hdl.handle.net/10568/116850>)
- [7] Loboguerrero, A. M., et al. 2018. Bridging the gap between climate science and farmers in Colombia. *Climate Risk Management*, 22, 67–81. <https://doi.org/10.1016/j.crm.2018.08.001>. (<https://doi.org/10.1016/j.crm.2018.08.001>)
- [8] [27629] Navarro-Racines C, et al. 2020. Desarrollo de un instrumento de monitoreo y evaluación para las Mesas Técnicas Agroclimáticas (MTA). CCAFS Working paper No.352. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). (<https://cgspace.cgiar.org/handle/10568/111714>)

**Quantification:**

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)

**Number:** 501462.00

**Unit:** # Farmers

**Comments:** Actual count based on 2020 outcome harvesting study, the application of an M&E instrument designed for LTACs and attendance list reports. References as follows: [D19847] Giraldo et al. 2020. Outcome Harvesting: Assessment of the transformations generated by Local Technical Agroclimatic Committees In Latin America. CCAFS Working Paper No.299. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). <https://hdl.handle.net/10568/108492>; [27629] Navarro-Racines C, et al. 2020. Desarrollo de un instrumento de monitoreo y evaluacion para las Mesas Tecnicas Agroclimaticas (MTA). CCAFS Working paper No.352. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). <https://cgspace.cgiar.org/handle/10568/111714>

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)

**Number:** 434.00

**Unit:** institutions

**Comments:** Actual count based on 2020 outcome harvesting study and the application of a M&E instrument designed for LTACs. References as follows: [D19847] Giraldo et al. 2020. Outcome Harvesting: Assessment of the transformations generated by Local Technical Agroclimatic Committees In Latin America. CCAFS Working Paper No.299. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). <https://hdl.handle.net/10568/108492>; [27629] Navarro-Racines C, et al. 2020. Desarrollo de un instrumento de monitoreo y evaluacion para las Mesas Tecnicas Agroclimaticas (MTA). CCAFS Working paper No.352. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). <https://cgspace.cgiar.org/handle/10568/111714>

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

### **Gender relevance:** 1 - Significant

Main achievements with specific **Gender** relevance: Since 2019, the LTAC and Participatory Integrated Climate Services for Agriculture (PICSA) approaches has an explicit gender component, which has led to producing gender-sensitive climate information.

### **Youth relevance:** 1 - Significant

Main achievements with specific **Youth** relevance: Since 2019, the LTAC approach has produce young-sensitive climate information.

### **CapDev relevance:** 2 - Principal

Main achievements with specific **CapDev** relevance: The LTAC approach sought to strengthen participants' capacities by conducting training workshops on agro-climatic information and tools which are used to inform crop management decisions. To build skills, it also focused on empowering members of the committees by assigning alternating roles and tasks among participating organizations.

### **Climate Change relevance:** 2 - Principal

Describe main achievements with specific **Climate Change** relevance: By enhancing farmers capacity to understand and access agro-climatic information, they are able to make better decisions, thus increasing their resilience in the face of climate variability and climate change.

**Other cross-cutting dimensions:** No

**Other cross-cutting dimensions description:** <Not Defined>

**Outcome Impact Case Report link:** [Study #2923](#)

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