

NextGen seasonal forecast system

Project Title: P1604 - Digitally integrated approaches for managing climate risk and increasing food security

Description of the innovation: ACToday, in collaboration with CIAT/CCAFS Scientists has implemented the NextGen seasonal forecast system in Colombia and Guatemala in collaboration with the met agencies (IDEAM and INSIVUMEH, respectively). In Colombia, CIAT/CCAFS donated a computing server for the hosting of a data library and the NextGen platform itself. ACToday and CIAT/CCAFS scientists are now seeking opportunities to scale it to other countries in LAM.

New Innovation: No

Stage of innovation: Stage 4: uptake by next user (USE)

Innovation type: Biophysical Research

Geographic Scope: Global

Number of individual improved lines/varieties: <Not Applicable>

Outcome Impact Case Report:

- 2023 - 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 (<https://tinyurl.com/yypoej52>)

Description of Stage reached: The NextGen system developed by ACToday is now operational in Guatemala and Colombia as a result of inter-institutional collaboration between ACToday, CIAT/CCAFS, and national partners.

Name of lead organization/entity to take innovation to this stage: The Earth Institute, Columbia University

Names of top five contributing organizations/entities to this stage:

- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)
- IDEAM - Instituto de Hidrología, Meteorología y Estudios Ambientales (Colombia)
- CIV - Ministerio de Comunicaciones, Infraestructura y Vivienda (Guatemala)

Milestones:

- Expanded set of development organizations, sub-national initiatives testing climate services and using CCAFS outputs for climate risk management services

Sub-IDs:

- 2 - Reduced smallholders production risk
- 44 - Enhanced individual capacity in partner research organizations through training and exchange
- 34 - Enhanced capacity to deal with climatic risks and extremes (Mitigation and adaptation achieved)

Contributing Centers/PPA partners:

- CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (Centro Internacional de Agricultura Tropical)

Evidence link:

Deliverables associated:

- D9651 - Application of the seasonal climate forecast (Nextgen) in agricultural analysis (vegetation stress) (https://www.nws.noaa.gov/ost/STIClimateBulletin/CDPWDigest/45CDPW_Digest_IR.pdf)
- D19142 - Paper on improvement of the seasonal precipitation forecast for agriculture in the Orinoquía Region of Colombia (<https://hdl.handle.net/10568/106601>)

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security