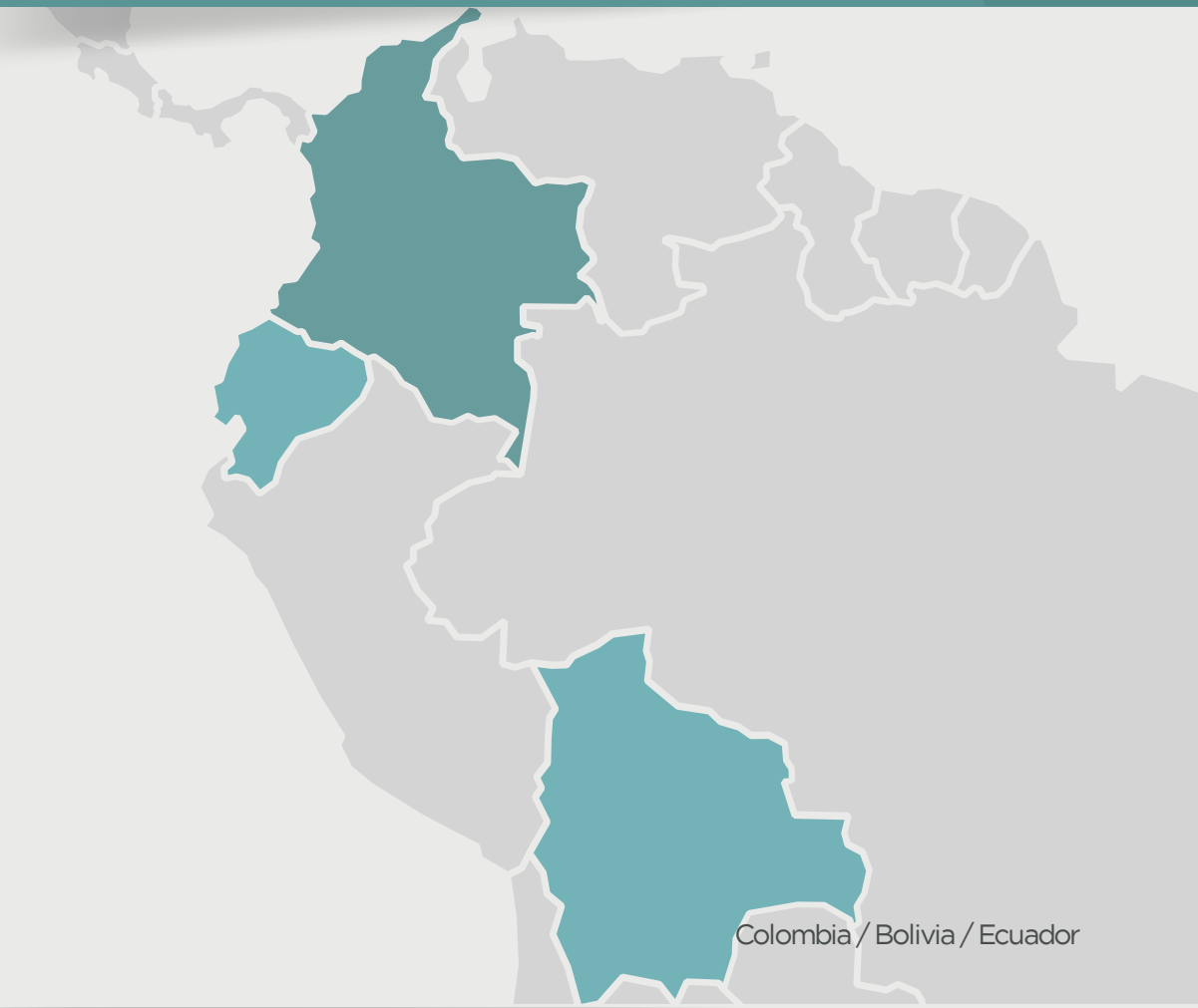



Strengthening the potato production system in response to climate change


Apply potato breeding processes in the Andean region to obtain early maturing and drought-tolerant cultivars, to reduce climate vulnerability and contribute to food security.






2

Trainings




+500

People trained




+8

It is expected to select potato clones




+1

Student



+31

Farmers engaged in the project



120

Trained women



Technical cooperation to strengthen genetic breeding programs in the Andean region, reduce vulnerability of family farming to climate change, and promote food security for communities

The implemented initiative

The Colombia, Ecuador, and Bolivia consortium, along with the actors of the potato production chain in the Andean Region, is addressing climate change vulnerability by incorporating new families and advanced clones, with early maturity and resilience to drought, into breeding programs to promote sustainability in food production and enhance food security. To this end, advanced clones previously

identified by the International Potato Center (CIP) are being evaluated in diverse environments. Participatory breeding programs are being strengthened to support the selection of promising materials and their future adoption as cultivars. Additionally, a regional breeding platform has been established to promote the use of standardized phenotyping and genotyping methods.

Strategies for the evaluation and identification of early maturing and drought-tolerant materials aimed at ensuring sustainable production and food security

The technological solution

The project focuses on the selection and adoption of new elite lines and advanced potato clones that are drought-tolerant, through participatory plant breeding processes.

Participatory selection processes will be implemented, involving both men and women in the evaluation of materials adapted to the agroclimatic conditions of each country, with special attributes for consumption, thereby promoting their adoption by farmers.

The incorporation of these new elite lines and advanced materials will reduce production costs by eliminating

the need for irrigation infrastructure and decreasing the use of labor and agrochemicals.

The goal is to provide farmers with greater harvest security, ensuring that potato production is at least 1.5-3% higher than current cultivars in conditions of low precipitation.

This initiative is establishing a communication platform to promote the generation of knowledge, standardized methodologies, and the exchange of regional experiences.

Project plan



MÁS INFO



Results

*Each country has imported between 30 and 31 advanced in vitro potato clones, selected for their outstanding agronomic traits. Additionally, the Central University of Ecuador (UCE) imported 17 families in the form of botanical seed.
*Currently, each country is multiplying the material with the goal of obtaining enough tubers to establish observation and evaluation plots under drought conditions.
*A communication platform for genetic improvement,

involving 26 project members, has been established to promote the use of common methodologies across countries and the exchange of regional experiences.
*Two virtual workshops have been held to train human talent in strategic areas of the project, targeting researchers, students, and stakeholders in the potato value chain.
*Two in-person workshops were conducted to engage with farming communities in Ecuador and Bolivia.

Main donors

Participating Organizations

