

U.S. DEPARTMENT OF AGRICULTURE







Cacao for Peace II (CfP) Strengthening the Colombian Cacao Sector through Applied Research and a better Trade Enabling Environment

Overview

Cacao for Peace supports the development of a self-reliant and thriving Colombian cacao industry through scientific support to universities and public and private sectors. CfP supports research that addresses urgent problems impacting Colombia's cacao value chain and addresses technical barriers limiting cacao trade. The activity is implemented by the United States Department of Agriculture's Foreign Agricultural Service (USDA/FAS) and is funded through an inter-agency agreement with the United States Agency for International Development in Colombia. CfP works with Colombian and U.S. technical and scientific partners toward achieving its two objectives:

- 1) Strengthen Cacao Research, Innovation and Development
- 2) Promote a trade enabling environment for Colombian cacao



8 Post Graduate Degrees supported



8 Lab Exchange Grants



9 Gene Edited Cacao plants under testing



4 Government to Government Research Projects

Objective 1: Strengthen Cacao Research, Innovation and Development

- **Gene Editing for Cadmium Uptake Elimination** CfP is supporting the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) to conduct gene editing that reduces the uptake of cadmium. To date, CIAT successfully established nine gene edited cacao plants in a greenhouse setting and has initiated cadmium absorption trials to determine which plants are absorbing cadmium at a reduced rate.
- <u>Cacao Research Foundation</u> CfP is working to establish a cacao research foundation that will coordinate cacao research in Colombia beyond the life of the CfP activity.

CACAO FOR PEACE

SCIENTIFIC SUPPORT FOR THE COLOMBIAN CACAO SECTOR

> Scientific exchanges to grow scientific knowledge that benefit the Colombian cacao sector

- Exchanges between U.S. and Colombian Government Researchers CfP is partnering with the U.S. Agricultural Research Institute (ARS) and Colombia's counterpart, Agrosavia to conduct research exchanges in four areas: to survey the genetic diversity of cacao populations; evaluate cocoa clones; assess common cacao diseases; and address cacao toxicities such as cadmium contamination.
- Scientific Technical Exchanges CfP and the Partners for the Americas 100k Strong Initiative are awarding competitive grants for scientific exchanges between Colombian and US. Universities in the cacao sector. Grants are scheduled to be awarded in June 2023. CfP also received funding from the U.S. Department of State Public Affairs Section in Colombia toward this initiative.

Scholarships to support new scientists to conduct innovative cacao research

- o CfP and Fulbright Colombia are recruiting applicants to award three Fulbright scholarships to students to receive master's degrees from U.S. universities related to cacao research.
- o CfP and the University of Córdoba are partnering to award five scholarships for Ph.D. students to pursue doctorate degrees at the university in agricultural sciences that focus on cacao research.

Objective 2: Promote a Trade Enabling Environment for Cacao

Optimizing cacao production through applied research

USDA's Natural Resources Conservation Service (NRCS) is the world's leading soil research institution and is collaborating with CIAT and other Colombian institutions to conduct soil and cacao genetic analysis to improve cacao yields and productivity. The project will also identify the presence and precise location of cadmium (Cd) and other heavy metals in the soil and cacao plants and digitally map soil conditions and cadmium locations at a higher resolution scale than produced by the Colombian government. Use of the digital map generated through this activity will promote the optimization of new and existing cacao cultivation.

Reduce trade barriers by addressing food safety gaps in the cacao value chain



Collection of cacao samples for pesticide trials.

- CfP is working to provide farmers with low-risk pesticide and biopesticide options to control two common Cacao diseases: Black Pod Rot and Frost Pod. Registration of these products would also allow Cacao farmers to export their product according to an international standard or Maximum Residue Limit established at Codex Alimentarius.
- CfP is conducting a series of risk analysis and food safety communication workshops designed for government and non-governmental and cacao value chain international development actors as well as food safety workshops for extension agents and farmers.

Heirloom cacao designation

The Heirloom Cacao Preservation fund (HCP) is mapping the world's finest cacao, designating growers of these endangered trees as "heirloom cacao." Despite the prevalence of high-quality cacao in Colombia, no samples from Colombia have been submitted for review. HCP and CfP are working with local partners to assist Colombian cacao producers obtain Heirloom cacao designation.