



INTER-AMERICAN INSTITUTE FOR COOPERATION IN
AGRICULTURE (IICA)

CENTER FOR KNOWLEDGE MANAGEMENT AND
HORIZONTAL COOPERATION



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2021

CENTRAL AMERICAN PROGRAM FOR INTEGRATED COFFEE RUST MANAGEMENT (PROCAGICA)

Climate change mitigation and adaptation measures and natural disaster risk reduction



CHALLENGE ADDRESSED

The purpose of PROCAGICA is to promote the adoption of climate change mitigation and adaptation measures and natural disaster risk reduction in support of regional and national efforts to control coffee rust. The end goal is to build resilience among coffee-dependent families to the adverse effects of climate change and climate variability through sustainable agricultural practices, crop diversification and strengthening their livelihoods.

The program's core issue is to tackle the deterioration of the quality of life of coffee-growing families in poor rural areas who have been affected by the low productivity of their farms as a consequence of aging plants; inadequate plague and disease protection due to a lack of technology; the impact of climate variability on their farms; gender inequality; the lack of timely information on climate predictions and the market; and the absence of a vision and added value.

GENERAL INFORMATION

Project name: Central American Program for Integrated Coffee Rust Management (PROCAGICA)

Countries involved: Central America and the Dominican Republic

Supported by: European Union (EU), Agricultural Research Center for International Development (CIRAD), Tropical Agricultural Research and Higher Education Center (CATIE), Central American Agricultural Council (CAC)

Executing entity: IICA

Status: In progress

Period: 2016-2021

IICA PROGRAMS

Bioeconomy and Production Development

Climate Change, Natural Resources and Management of Production Risks

Territorial Development and Family Farming

Agricultural Health, Safety and Food Quality

TOWARDS A SOLUTION

The Program promotes the development of more sustainable coffee production models within the social, economic and environmental contexts to facilitate adaptation to the impacts of climate variability and change in the region. The comprehensive approach includes farm renovation activities, technical extension and education, creating connections to the financial sector and firm actions aimed at strengthening local production organizations and the national entities responsible for improving the competitiveness and sustainability of the coffee sector.

It is framed in the Regional Action Plan with Immediate Measures: An integrated program to combat coffee rust and recover production capacity in Central America and the Caribbean, drafted by the Institute and the Cooperative Program for the Protection and Modernization of Coffee Growing in Central America, Panama and Dominican Republic, approved by the Central American Agricultural Council (CAC) and presented at the Summit on Coffee Rust held in Guatemala in April of 2013, where the individual governments committed to implementing actions aimed at managing funding to tackle the problems facing coffee production in the region.

The Program addresses the following Sustainable Development Goals: Zero Hunger; Climate Action; and Decent Work and Economic Growth.

Moreover, it implements a strategy of technological innovation aimed at achieving the resilience, sustainability, and competitiveness of coffee farming. It promotes and applies production transformation and innovation processes and works to strengthen the capacities of present and future producers and national extension networks that provide training and technical assistance for farmer families in the region.

Within the framework of the Program, technological modeling aimed at improving production viability has been implemented on 9,910 hectares of coffee crops, including environmentally-friendly practices and crop diversification, with the potential to increase income for farmer families, contribute to food and nutritional security and generate additional benefits for the conservation of ecosystem biodiversity.

SUSTAINABLE DEVELOPMENT GOALS



[Program link](#)

To date, 7,059 small-scale coffee producers (of which 35% are female and 10% are young people under the age of 30) affiliated with 199 farmer organizations across 69 municipalities, 13 provinces and four countries have strengthened their capacities to cope with climate change and mitigate its effects on their coffee plantations based on the comprehensive management of the crop.

In collaboration with CATIE, CIRAD and national research entities, the Program created a regional research platform with stakeholders from Guatemala, El Salvador, Honduras, Nicaragua, Panama, Costa Rica and the Dominican Republic to monitor and scientifically study coffee rust races and issue disease control recommendations for small- and medium-scale farmers. Additionally, a network of 224 demonstration plots was established in Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica.

In terms of gender, youth and multiculturalism, PROCAGICA increased the capacities of local technical assistance networks—in which 698 technicians participate in the region—and benefitted 209 students at five agricultural technical institutions across four countries, strengthening their curricula.

One of the pillars of the Program is food security with a focus on the vulnerability of the target population. By diversifying coffee farms with temporary, perennial and semi-perennial plants and having permanent production throughout the year, the Program contributed significantly to alleviating the food insecurity of small- and medium-scale farmers, exacerbated in 2020 by the COVID-19 pandemic. The Program also benefited from the complementarity and synergy with other projects implemented in the region, including those financed by the International Fund for Agricultural Development, the Food and Agriculture Organization of the United Nations, the Canadian and South Korean cooperation and government programs in Honduras and Nicaragua.

A positive impact was made in terms of competitiveness and sustainability, creating greater cohesion among associated producers. The number of members of farmers organizations rose; several informal farmer groups were formalized; and administrative capacities to manage microcredits were improved, resulting in a positive impact on the capitalization of many organizations that previously were unable to have credit funds. Currently, 150 farmer organizations have a revolving fund used to finance activities to support farm management, renew coffee farms and establish new ventures, especially for women and young associates.

In addition, the Program's beneficiary organizations are now able to offer members more services (such as technical assistance, loans, biofertilizer sales, coffee drying and roasting services and equipment rentals for automated practices on coffee farms), generating additional income.

Likewise, the local economy was reactivated in the Program's focus areas, leading to new job opportunities for young people and contributing, in turn, to reducing migration, primarily to the United States.

All of these efforts, in addition to the situation facing the coffee sector on a global scale over the last five years as a result of low coffee prices, have created an important space for regional integration and for PROCAGICA to contribute to the development of regional strategic actions that prioritize the sector. To that end, by means of a political consensus spearheaded by the

CAC, the Program supported the preparation of the Regional Strategic Plan for Coffee Farming in Mesoamerica and the Caribbean—the result of a regional effort arising from a constructive technical dialogue process with a number of different public and private stakeholders tied to the coffee sector in the region of the Central American Integration System and Mexico.

MATERIAL PRODUCED







Image descriptions (from left to right and top to bottom):

- The Secretary of Agriculture and Livestock of Honduras visits with coffee farmers benefited by PROCAGICA.
- Continuing to teach farmers how to increase production and fight coffee rust is a legacy of PROCAGICA.
- Celia Zeledón noted that: “The biggest difficulty we face as coffee farmers is the lack of financial resources to work”.
- PROCAGICA, a program sponsored by the UE and implemented by IICA, presents its achievements to the Ministers of Agriculture of Central America.
- Central American coffee farmers hold a virtual meeting with the support of PROCAGICA.
- Inauguration of the diploma in Sustainable and Commercial Coffee Production by PROCAGICA-RD.
- Producers from the Dominican Republic make a technical visit to Costa Rica.

- With the support of the Ministry of Agriculture, the Institute implements training models in organic production.
- The Mesoamerican Coffee Forum: Innovation opportunities for Mesoamerican and Caribbean coffee production.

RELATED RESOURCES

Resource	Title	Year	URL
Document	Healthy, Productive and Environmentally-Friendly Coffee Farms	2017	 Guia Productor PROCAGICA.pdf
Document	Actions to strengthen the adaptation and mitigation of climate change in Nicaragua's coffee-growing sector	2018	 Manual Nicaragua.pdf
Document	Forecast models of coffee leaf rust symptoms and signs based on identified microclimatic combinations in coffee-based agroforestry systems in Costa Rica	2019	Link
Plataforma	Coffee risks platform	2020	Link
Poster	Birds, bees and coffee crops	2020	 Póster Aves abejas y café_v.f._alta resoluc
Infographic	Toolbox based on the Protocol for the implementation of anti-COVID-19 sanitary guidelines and procedures in the coffee sector	2020	Link
Document	Coffee growing manual	2020	 Guía café el Salvador.pdf
Document	Organic input preparation guide for sustainable coffee farming	2019	Link
Document	Implementation of an early warning system for coffee in the Dominican Republic within the framework of PROCAGICA-RD	2019	Link
Document	Coffee production systems modeling within the Dominican Republic Component of the Central American Program for Integrated Coffee Rust Management	2018	Link