Project objective

The project aims to improve the situation and resilience of small producers of the Central American Dry Corridor, through the validation and extension of innovative agricultural technologies and practices with multistrata agroforestry system for the production of basic staple foods, as maize and beans.

Background

The Central American Dry Corridor comprises an area of dry tropical forests and degraded lands in the pacific basin, running from Chiapas through the dry provinces in the Pacific Coast of Panama. It is an area highly vulnerable to natural phenomena and climate change, with low precipitation and difficult scenarios for agricultural production; it shows two well-defined dry and rainy seasons.

Decreased precipitation and climate variability, often with the presence of South Oscillation El Niño phenomena, shown over the last years, presents a more complicated scenario that threatens Food and Nutritional Security for the population, often living under subsistence economy.

The use of unsustainable agricultural practices with low productivity and profitability for basic staple crops like maize and beans, widespread poverty among small producers, abandonment of agricultural production by new generations, lack of systems innovation and limited technology transfer, economic factors as high production costs, absence of stable marketing and value chains lead to the loss of farms and migration in search of new opportunities.

Theory of change to achieve the objectives

AgroInnova promotes the use of innovations among small producers, to improve their resilience to climate variability. Innovations adapted for the Central American Dry Corridor will be based on the wealth of previous experiences in the region. However, it is required to perform a field validation and adaptation of diverse technologies to become innovations developed by farmers.

AgroInnova promotes multistrata agroforestry systems and diversification of crops to increase productivity, incomes and the resilience of small producers against climate change. Selected and validated technologies will be tested and implemented with the participation of producers' associations and cooperatives, including water management, improved drought resistant seeds, new crops associated with agroforestry systems, space management for optimal parcel design, placement of trees among other. To support the improvements of agroforestry systems, the project will develop at least 90 demonstrative parcels in six countries of the region, to use as field schools to reach over 3,000 small producers in the extension of improved and innovative agricultural technologies.

Small producers are reached through associations and cooperatives that serve as the main counterpart for the project, for planning, design, validation and implementation of improved production technologies and for marketing of the products. Previous experiences with small producers in the coffee sector have proven successful.

AgroInnova will create an "Innovation Hub" as a public good based in CATIE to gather previous experiences and innovative solutions developed in the region and elsewhere to be used by academic and research institutions, producers and producer associations. The hub will be developed in close cooperation with researchers and academic institutions in the region through diverse instruments and agreements to ensure their active involvement.

The implementing partner "Interamerican Institute for Cooperation in Agriculture", IICA is a key link to the ministers of agriculture and decision makers of the region and mainstreams policy and strategy proposals for the agricultural sector. The link with ministries will be used to include the results of the projects in agricultural policies.

The main challenge faced by the project is to bridge the gap existing between the academic and research work on one hand and to the production practice of small producers on the other hand. Research needs to improve its practice to better work with farmers and farmers' organizations by taking into account their needs and their local knowledge. Farmers need support to change their behaviour, and rooted practices, as well to increase their capacities for the absorption of new technologies.

Main activities

- ✓ Institutional coordination with partner countries authorities.
- ✓ Establishment of a regional network of Technical Committees, with the participation of partner organizations and specialists from relevant national institutions.
- ✓ Development of a baseline survey with data on participants regarding the productive, environmental, social and economic dimensions.
- ✓ Participative design of small scale agroforestry systems for small producers of staple food.
- ✓ Selection of suitable and resistant varieties for corn, beans and pastures and establishment of community seed banks with improved post-harvest management of seeds stored for next season.
- ✓ Promote sustainable water management technologies in demonstrative parcels, as collection of rainwater, and micro irrigation systems and transfer technologies to small producers.
- ✓ Implement multistrata agroforestry systems in demonstrative parcels and validate technologies.
- ✓ Technology transfer to participants through the use of a wide variety of instruments, from traditional extension and field schools, to virtual platforms through the associations and organizations.
- ✓ Design and development of a virtual regional platform to share experiences (Innovation Hub)
- ✓ Training and capacity development for producers and participating institutions

Organization

The highest authority of the project is the Comité Tecnico Asesor (technical Advisory Committee) with the participation of IICA, CATIE, a representative of the National Research Institutes and the EU.

The project is implemented by IICA, with Technical Support from CATIE. IICA has its headquarters in Costa Rica, and permanent representations in all countries of the region that will provide support during the implementation. IICA will establish a Regional Implementation Unit based in Costa Rica for the general coordination of the project. IICA has signed an agreement with CATIE for the implementation of the project.

Implementing organizations

Interamerican Institute for Cooperation in Agriculture, IICA

Project partners

Centro Agronómico Tropical de Investigación y Enseñanza, CATIE

Other stakeholders

- ✓ Instituto del Café de Costa Rica (ICAFE)
- ✓ ANACAFE Guatemala
- ✓ INTA, Nicaragua
- ✓ MAG, Honduras
- ✓ CENTA, El Salvador
- ✓ MAGA, Panamá
- ✓ Universities
- ✓ Farmers organizations to be identified upon initiation of activities

Region

Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panamá

Funding and co-funding

EU	€ 6,000,000
IICA	€ 600,000
Total budget	€ 6,600,000

Duration

48 months (2020-2023)