Comprehensive alternatives for cadmium reduction in cocoa beans in Latin America and the Caribbean

The technological solution

The establishment of multidisciplinary technologies and methodologies for the reduction of cadmium in cocoa beans are mechanisms that help to promote cocoa activity, access and maintenance to regulated markets (Cd) of cocoa from Latin America, thus contributing to the sustainability of the cocoa chain in the region.

Description

The Platform promotes strengthening the capacities of the countries to position LAC as a producer of quality cocoa and a low level of Cd, generating knowledge and alternatives for the management of Cd, the establishment of laboratory methodology for the measurement of Cd, strategies for the value chain and knowledge exchange.

Results

- An analytical baseline of the network’s laboratories was established to strengthen analytical methodologies and an inventory of bacteria to mitigate cadmium in contaminated cocoa soils in Colombia.
- Seven demonstration farms with soil amendments have been implemented in Colombia, Ecuador and Costa Rica.
- There are three point layer of cadmium levels for cocoa in Costa Rica. In Ecuador and Colombia, a map with cadmium hotspots in cocoa beans has already been developed.
- Trainings have been organized with the participation of 1857 people, of which 33% are women.
- There is an approved and standardized laboratory methodology.
- A 33% reduction of Cd was found due to potential varietal effect in cocoa in Costa Rica.
- A protocol for the asexual production of cocoa was developed.

1587
Participants in training activities.

527
Trained women.

7
Experimental farms established by the platform.

3
Annual workshops developed.

1
Approved and standardized laboratory methodology.

3
Cd level dot map.
ABOUT FONTAGRO

FONTAGRO is a unique cooperation mechanism for agricultural innovation in Latin America and the Caribbean (ALC) and Spain, that works through regional platforms. It is composed of 15 countries that have contributed capital exceeding 100 million dollars and the Inter-American Development Bank (IDB), which is its legal representative.

ORIGIN OF RESOURCES

- Counterpart contribution: 90,549,266
- FONTAGRO: 27,869,468
- IDB: 9,922,700
- Other agencies: 9,479,078

PARTICIPATION AND ROLE IN CONSORTIUMS SINCE 1998

- Number of projects approved: 193
- Approved total amount US$: 137.8 MILLONES
- Contribution from other agencies: 9.5 MILLONES
- Benefited countries: 32
- Generated technologies: 63
- New technologies for ALC: 15
- Technology of global relevance: 8

MEMBER COUNTRIES

- Argentina
- Bolivia
- Chile
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- Honduras
- Nicaragua
- Panama
- Paraguay
- Peru
- Spain
- Uruguay
- Venezuela