AgriChains

Initiative For Climate Smart Supply Chains

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PROJECT

LOW CARBON AGRICULTURE FOR SMALLHOLDER COCOA FARMERS IN ECUADOR

Sustainable Development Goals

Consortium

- Olam Ecuador S.A.
- Rikolto International
- GIZ on behalf of the Ministerio Federal de Cooperación Económica y Desarrollo (BMZ) de Alemania

Cooperantes

- Ministerio de Agricultura y Ganadería (MAG)
- Ministerio del Ambiente, Agua y Transición Ecológica (MAATE)
- Escuela Superior Politécnica del Litoral (ESPOL)
- Fundación de Apoyo Comunitario y Social del Ecuador (FACES)
- Cooperativa de Ahorro y Crédito Jardín Azuayo
- Cooperativa de Ahorro y Crédito Manuel Esteban Godoy (COOPMEGO)

Duration: January 2024 - March 2027

Investment: € 3,000,000

Region: Esmeraldas, Santo Domingo, Manabí, Los Ríos, Guayas and El Oro

Responsible for the program:
Paula Rueda (Olam Ecuador S.A.), José Luis Cueva Cango (Rikolto International), Florian Reil (GIZ)

CONTEXT

Climate change is having an increasing impact on agriculture, with extreme temperatures and erratic rainfall altering growing seasons, reducing yields and increasing pests and diseases. As a result, smallholder cocoa farmers worldwide are facing existential challenges. At the same time, agricultural supply chains are a significant driver of climate change, contributing to around a quarter of global greenhouse gas emissions through unsustainable farming practices and deforestation.

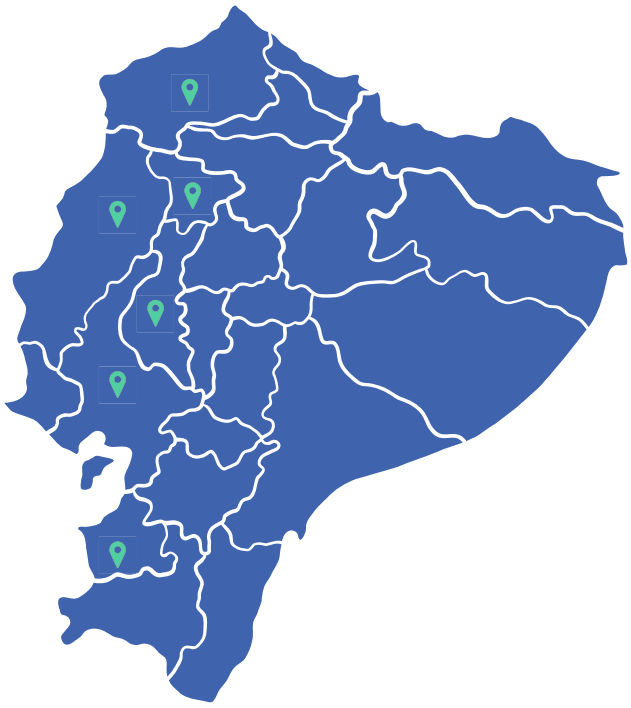
Global companies are aware of these issues and are allocating resources to have a positive impact on the environment and to manage risk to ensure the security of their supply chains. These supply chains support millions of smallholder farmers, so collaboration between all stakeholders is essential to achieving international development goals.

Initiative For Climate Smart Supply Chains

The Initiative for Climate-Smart Supply Chains (I4C) supports innovative projects by multi-stakeholder consortia, including the private sector, and works to develop climate-resilient supply chains. To combat climate change, I4C brings together a wide range of actors along the supply chain of selected agricultural products and finances their projects in partner countries of the German Federal Ministry for Economic Cooperation and Development (BMZ).

I4C aims to make global agricultural supply chains from field to market more climate-friendly and resilient to climate change. The initiative was launched by the GIZ Global Programme 'Sustai-

nability and Added Value in Agricultural Supply Chains' ('Agrichains'), which will end in 2029.



Project: "Low Carbon Agriculture for smallholder cocoa farmers in Ecuador"

The project promotes an agroforestry approach, encourages regenerative practices and implements circular economy models at farm-level to improve efficiency, diversify and promote a low-carbon supply chain. Post-harvest management and quality will also be key aspects to increase incomes at farm-level. Participating farmers will benefit from training, investment and advice to sustainably improve efficiency, yields and income. The project will design a strategy to reduce the carbon footprint of coffee in Ecuador using the Climate Positive strategy of Olam Ecuador as a tool, based on the calculation of the existing footprint by outsourcing and the identification of scenarios to reduce CO_2 emissions and promote low carbon agriculture. Farmers who adhere to the sustainability and certification standards will receive a cash prize according to the standard, based on the volume delivered to ofi-Olam's certified/verified supply chain. The project will benefit 2,800 farmers in ofi-Olam Ecuador's sustainable supply chain who participate in the sustainability programme.

The consortium leverages Rikolto's more than 40 years of experience working with producers and other food chain actors in Latin America, Africa, Asia and Europe, as well as the existing infrastructure and proven impact of ofi-Olam Ecuador's sustainability and market leadership programmes.

Our Approach

The key theme of the proposal is the impact of climate change on the suitability of cocoa production in Ecuador. In addition, it addresses the lack of crop and tree diversity on farms, which limits the potential for carbon sequestration. Eighty-five percent of cocoa produced in Ecuador comes from small-scale producers who manage plots of approximately 5 hectares, with an average productivity of 0.585 (MT/ha).

Production costs are estimated at approximately 600 USD/ha, of which between 30% and 50% are for agricultural inputs. About 60% of the farmers depend on cocoa as their main source of income. Our project therefore aims to improve efficiency, productivity and incomes by helping farmers to become more resilient to increasing climatic extremes.

Government data indicate that the participation of women in Ecuador's cocoa sector is less than 20%. In addition, the sector has an ageing workforce, with an average age of 57 years. This trend is mainly due to limited income and lack of job

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opportunities in agriculture, which drives young people to migrate to urban areas, a need that needs to be addressed along the chain.

Ecuador is currently the third largest cocoa producer in the world, with a projected production of 460,000 to 500,000 tonnes by 2025. To ensure the sector's resilience to climate change, it is essential to take advantage of climate mitigation opportunities and nature as a source of solutions to the identified gaps. Furthermore, the growth of the cocoa sector must be aligned with improving the prosperity of farmers, thus making cocoa production an attractive business in the long term. It is crucial that the entire cocoa supply chain makes a stronger commitment to ecological sustainability.

OBJECTIVES

The overall objective of the project is to strengthen cocoa production systems to reduce the income gap for farmers in ofi-Olam Ecuador's sustainable supply chain, in line with the European Union Deforestation Free Regulation (EUDR) and international market requirements.

Objetivos específicos:

a. Improve the efficiency of cocoa production systems by strengthening the capacities of producers in sustainable agriculture.
b. Promote low-carbon agriculture footprint through agroforestry and regenerative practices to increase resilience to climate change.
c. Standardise post-harvest cocoa quality processes and protocols according to international market standards.

To mitigate climate change, the main objective is to reduce the carbon footprint of cocoa production by implementing sustainable practices such as agroforestry, regenerative agriculture and circular economy models. These practices aim to build sustainable supply chains that promote low-carbon agriculture, ensuring the long-term sustainability and resilience of farmers.

To promote adaptation to climate change, the main objective is to increase farmers' environmental and economic resilience and production efficiency by adopting nature-based solutions (NBS). This includes developing emission abatement scenarios for low-carbon agriculture (At-Source approach), increasing the adoption of good agricultural practices (GAP) to improve yields, improving cocoa quality and post-harvest practices, diversifying income with cocoa and non-cocoa products, and providing economic incentives for compliance with legal sustainability requirements.

Scope

In Ecuador, the area of intervention comprises the provinces of El Oro, Esmeraldas, Santo Domingo, Manabi, Los Rios and Guayas.

Participants

The project works with producers in the cocoa sector and other participants along the supply chain "from field to fork", especially with women and young people who are part of the sustainable supply chain ofi-Olam Ecuador.

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LINES OF ACTION

1. To sustainably increase efficiency, agricultural productivity and farmers' incomes:

- Promote the proper agronomic management of cocoa production systems through Farm Development Plans (FDPs).
- Encourage the incorporation of best agricultural practices through Farmer Field Schools (Escuelas de Campo para Agricultores - ECAs).
- Promote the protection of the national cocoa variety.

2. To improve the quality and export readiness on post-harvest management:

- Standardisation and improvement of cocoa quality by strengthening post-harvest processes.

3. To adapt smallholder farming systems to climate change and reduce or eliminate greenhouse gas emissions:

- Promotion of a low-emission supply chain.
- Promotion of agroforestry models.
- Reduction of production costs by obtaining bio-inputs.
- Promotion of regenerative practices for integrated soil and production system management.

4. Disseminate technical knowledge and cooperation with national stakeholders:

- Ensure the impact of the project beyond the participating farmers.
- Bridging the gap between project implementation and national climate policy.

MAIN RESULTS

Farmer-centred pillar: prosperous producers and farming systems

- Dignified income for cocoa farmers in our supplier network
- Number of farmers trained to improve farming practices.
- Number of hectares of cocoa land rehabilitated.
- Changes in average production of trained farmers.
- Number of farmers lifted out of poverty.
- Number of farmers earning a decent income.

Investing in nature pillar: regeneration of the living world

- Number of farmers meeting No Deforestation criteria and aligned with EUDR.
- Net change in tree carbon stocks.
- Number of trees distributed for agroforestry and income diversification.

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