

**Required Report:** Required - Public Distribution **Date:** November 04, 2024

**Report Number:** ES2024-0006

**Report Name:** Agricultural Biotechnology Annual

**Country:** El Salvador

**Post:** San Salvador

**Report Category:** Biotechnology and Other New Production Technologies

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## **Report Highlights:**

On October 1, 2019, El Salvador agreed to harmonize the biosafety technical regulation for "modified living organisms" for agricultural use with Guatemala and Honduras and designated the Ministry of Agriculture as the National Competent Authority to provide authorizations and keep registries related to biotechnology. However, El Salvador still lacks the norms and surveillance network to allow the use of biotechnology in agriculture. A new government administration that took office in June 2024 has shown interest in agricultural biotechnology and how it can help advance agricultural competitiveness in El Salvador. FAS San Salvador, in coordination with the Inter-American Institute for Agricultural Cooperation (IICA) and CropLife, has been working on technical training for Ministry of Agriculture (MAG) officials about the benefits of biotechnology for agricultural productivity and the environment.

#### **Executive Summary:**

El Salvador is a net food importer. The United States is the leading supplier of yellow corn, rice, wheat, vegetable oil, tallow, soybean meal, cotton and processed ready-to-eat products, most of these which are genetically engineered. Currently, there are no restrictions on imports of agricultural biotech products.

The Environment Law is the only law that addresses biotechnology. Article 21 "O" provides regulations for carrying out environmental impact studies to determine if genetically engineered (GE) organisms are harmful to the environment, and Article 68 provides guidance on procedures to create biosafety norms (Environment Law (Decree No. 233) El Salvador | (cepal.org) (in Spanish). El Salvador is also a member of the Cartagena Protocol.

El Salvador has developed a biotechnology regulatory system. The Ministry of Environment conducted a project to define the legal framework to regulate GE organisms and defined intergovernmental coordination between the Ministries of Agriculture, Environment, and Health. The implementation of this project was finished in March 2018, marking a significant milestone.

The presidential administration in El Salvador from 2004 to 2009 proposed regulations for the safe use and commercialization of GE organisms. This proposal was presented to the National Assembly and approved in 2008. Following this, a biosecurity committee was to be established to ensure compliance with the regulations (see Chapter 1, Part B: Plant Biotechnology Policy). However, the subsequent administration from 2009 to 2019 opposed this technology and stalled progress. The National Food Commission, composed of the Ministries of Agriculture, Environment, and Health, has formulated a proposal for the "Special Ruling for Food Safety of Modern Biotechnology Derived Products" intending to comply with Article 11 of the Cartagena Protocol.

The current administration's openness to facilitate trade and increase agricultural productivity presents an opportunity to advance the use of agricultural biotechnology. The National Center for Agricultural and Forestry Technology (CENTA) could take the lead on agricultural research and the use of new technologies.

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# CHAPTER 1: PLANT BIOTECHNOLOGY

#### PART A: PRODUCTION AND TRADE

## a) RESEARCH AND PRODUCT DEVELOPMENT:

El Salvador has a promising future for biotechnology, with potential applications including the cultivation of vegetable tissue and the propagation of in-vitro vegetable materials. CENTA of the Ministry of Agriculture (MAG) is at the forefront, offering tools to develop improved crop varieties. CENTA has mainly focused on creating enhanced white corn, rice, and red kidney bean varieties to increase productivity. However, up until now, this research has focused exclusively on conventional plant breeding techniques.

## b) COMMERCIAL PRODUCTION:

El Salvador does not produce biotech crops, and no crops under development will be on the market on the market in the coming year. However, El Salvador imports biotech products from the United States: yellow corn, white corn, soybean meal, cotton, and corn-soy blend.

#### c) EXPORTS:

Not applicable.

## d) IMPORTS:

There are no obstacles to importing or marketing genetically engineered (GE) crops and processed products in El Salvador. Being a densely populated developing nation with nearly 6.6 million inhabitants, El Salvador must rely on imported food to satisfy domestic demand. El Salvador depends upon imported soybeans, soybean meal, and yellow corn as feed protein sources. The United States is the leading partner for El Salvador, and U.S. products are regarded as being of higher quality and safer than others available in the market.

#### e) FOOD AID:

El Salvador is a food aid recipient and receives food assistance from the United States and Europe. Wheat, soybean meal, yellow corn, rice, and vegetable oil are the primary commodities sent to El Salvador as food assistance.

#### f) TRADE BARRIERS:

There are no biotechnology-related trade barriers that negatively affect U.S. exports.

#### PART B: POLICY

#### a) REGULATORY FRAMEWORK:

Table of legal terms:

Legal term	Legal term	Laws and Regulations	Legal Definition
(in Spanish)	(in English)	Where Term is Used	(in English)
Organismos	Genetically Modified	Environment Law,	No legal or regulatory
Modificados	Organisms	Article 21, "O"	definition provided.
Genéticamente			
Diversidad Biólogica	Native Biological	Environment Law,	Variability among all
Nativa	Diversity	Article 68	living organisms from
			all sources, including
			inter alia terrestrial,
			marine, and other
			aquatic ecosystems,
			and the ecological
			complexes of which
			they are part includes
			diversity within species
			or between species and
			ecosystems.

From 2002 to 2004, the Ministry of Environment conducted a project to define the legal framework for regulating GE organisms and intergovernmental coordination between the Ministries of Agriculture, Environment, and Health. The Global Environment Fund (GEF) and the United Nations Environment Program financed the project.

In addition, this initiative was complemented by the creation of the National Biosafety Commission in 2003, composed of members of the Ministries of Agriculture (MAG), Environment (MARN), Public Health (MSPAS), the National Commission for Science and Technology (CONACYT), and private sector representatives. Also, El Salvador created the Biotechnology Clearing House (BCH-El Salvador), available at the MARN's website <a href="http://www.marn.gob.sv/">http://www.marn.gob.sv/</a> (in Spanish).

Through the first phase of the GEF-funded project, GOES wrote a proposal for a regulatory framework that includes a national policy for biotechnology and biosafety, an administrative and regulatory system for imports of GE products, a decision-making support system, and a mechanism for social participation and consultation. Public consultations concluded and a "Special Ruling for the Safe Handling of GMOs" to provide an environmental permit for any activity or project that implies genetic handling or production was published in the Official Gazette in 2008.

The Ministry of Environment created the Scientific Committee for Biosecurity in 2009. The committee will serve an advisory role and comprises representatives from the Ministries of Agriculture, Environment, Health, the Chamber of Agriculture (CAMAGRO), the Agricultural Input Association (APA), and the National University. However, this Committee has not met since its creation due to a lack of regulations outlining its function.

In 2011, the Ministry of Environment launched the second phase of the GEF program with a four-year project on "Safety of Modern Biotechnology." The implementation of this project was extended and finished in March 2018.

This phase implemented a regulatory framework and strengthened the capacity of the governing agencies involved directly or indirectly in implementing the Cartagena Protocol. Other results included a document with the results of an institutional capacity evaluation and proposal for an institutional framework, instructions for application of the framework, including guidelines for technical rulings regarding consumption of GE organisms (for direct use as human food, animal feed, or for processing), a proposal for conformation and guidance of operation by the Scientific Committee for Biosafety, a flow chart for institutional channels, user guides and forms, and a proposal for a digital information and administrative system. Under the proposed regulatory framework, the Ministry of Environment would b enforce the safe handling of GE organisms and coordinate with MAG and MSPAS on appropriate biosafety applications.

El Salvador officially joined the customs union with Guatemala and Honduras in November 2018. On October 1, 2019, the three countries agreed to harmonize the biosafety technical regulation for "modified living organisms" for agricultural use and designated the ministries of agriculture as the National Competent Authority to provide authorizations and keep registries related to the use of biotechnology Resolución 60 - 2019 (Instancia Ministerial) — Secretaría de Integración Económica Centroamericana (SIECA) (in Spanish).

In 2023, FAS San Salvador collaborated with IICA and CropLife and partnered with MAG officials to revise a new Plant Health law. The updated aimed to incorporate new technologies such as gene editing and to provide technical assistance for El Salvador to join the biotech protocol of the Customs Union with Guatemala and Honduras.

Additionally, IICA assisted MAG in updating the Plant, Animal and Food Safety Law. The revised law designates MAG as the primary government institution overseeing agricultural biotechnology, replacing the Ministry of Environment. GOES legal advisors are reviewing this law before the National Assembly approves it.

FAS San Salvador has also collaborated with GOES to develop a roadmap for the adopting agricultural biotechnology. This roadmap, a crucial step in implementing a science-based regulatory approach, outlines the necessary steps and activities for El Salvador to begin utilizing this technology, enhance the competitiveness of its agricultural sector, and access climate-resilient crops.

## b) APPROVALS/AUTHORIZATIONS:

El Salvador does not approve plants or crops for cultivation or export. However, imports of GE crops or processed products are not restricted.

Not applicable.
d) FIELD TESTING:
In 2008, two companies were authorized to import two varieties of GE corn for experimental field testing. A cost/benefit analysis carried out by CENTA and the Ministry of Environment was made public and provided positive findings. However, there was no subsequent follow-up.
e) INNOVATIVE BIOTECHNOLOGIES:
Not applicable.
f) COEXISTANCE:
Not applicable.
g) LABELING AND TRACEABILITY:
El Salvador requires labeling for packaged foods, mainly for health and consumer information. Nutrition facts and ingredient lists are part of the label. Labeling for foods that contain GE is required under Article 128 of the Consumer Law. For additional information on labeling regulations, please refer to El Salvador's Food and Import Regulations and Standards report (Food and Agricultural Import Regulations and Standards Country Report San Salvador El Salvador ES2023-0006) (in Spanish).
h) MONITORING AND TESTING:
Currently, there is no GE testing in El Salvador. MARN monitors planting fields in the north to prevent involuntary introduction of GE corn from neighboring Honduras.
i) LOW LEVEL PRESENCE (LLP) POLICY:
El Salvador does not have an LLP policy.
j) ADDITIONAL REGULATORY REQUIREMENTS:
Not applicable.

c) STACKED OR PYRAMID EVENT APPROVALS:

k) INTELLECTUAL PROPERTY RIGHTS (IPR):

Not applicable.

#### 1) CARTAGENA PROTOCOL RATIFICATION:

El Salvador signed and ratified the Cartagena Protocol on April 23, 2003, but this has not impacted trade.

Progress towards implementing biotechnology laws and regulations has been slowed due to the legislative branch's lack of access to scientific information about biotechnology. Until recently, political party agendas affected the government's ability to obtain approval from the National Assembly for new government policies.

In addition, El Salvador still has many gaps in the National Administrative and Regulatory System to be able to respond to the current challenges presented by the movement across borders of modern biotech products, especially concerning import requests, their movement through the proper channels, and the authorizations to carry out activities related to agricultural biotechnology.

#### m) INTERNATIONAL TREATIES AND FORUMS:

Due to a lack of resources, El Salvador does not participate in international forums such as the International Plant Protection Convention (IPPC) or the Codex Alimentarius (Codex) discussions related to GE plants.

## n) RELATED ISSUES:

Not applicable.

#### PART C: MARKETING

#### a) PUBLIC/PRIVATE OPINIONS:

Occasionally, local environmental NGOs publish articles in written media opposing GE products. However, the public is not familiar with GE technology and science.

#### b) MARKET ACCEPTANCE/STUDIES:

There are no obstacles to marketing biotech products in El Salvador. The country must rely on imported food to satisfy local demand. The United States is El Salvador's main trading partner, and U.S. products are regarded as being of higher quality and safer than others available in the market.

Biotechnology is not a main priority of the government or the public, and food safety issues that could affect product marketing are more related to foodborne diseases.

# **CHAPTER 2: ANIMAL BIOTECHNOLOGY**

# Part D: PRODUCTION AND TRADE

Not applicable.

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a) RESEARCH AND PRODUCT DEVELOPMENT:
El Salvador lacks research capabilities, and GE animals have yet to be developed in El Salvador.
b) COMMERCIAL PRODUCTION:
Not applicable.
c) EXPORTS:
Not applicable.
d) IMPORTS:
Not applicable.
e) TRADE BARRIERS:
Not applicable.
PART E: POLICY
a) REGULATORY FRAMEWORK:
Currently, no legislation or regulation exists regarding the development, commercial use, import, and/or disposal of genetically engineered animals and products derived from these animals.
b) APPROVALS/AUTHORIZATIONS:
Not applicable.
c) INNOVATIVE BIOTECHNOLOGIES:
Not applicable.
d) LABELING AND TRACEABILITY:
Not applicable.
e) ADDITIONAL REGULATORY REQUIREMENTS:

f) INTELLECTUAL PROPERTY RIGHTS (IPR):
Not applicable.
g) INTERNATIONAL TREATIES AND FORUMS:
El Salvador does not generally participate in discussions related to the genetic engineering of agriculturally relevant animals in international organizations, mainly because it lacks funds for this type of activity.
h) RELATED ISSUES:
Not applicable.
PART F: MARKETING
a) PUBLIC/PRIVATE OPINIONS:
No active organizations lobby for or against the genetic engineering of agriculturally relevant animals. However, a group of NGOs that generally opposes any type of genetic engineering or biotechnology.
b) MARKET ACCEPTANCE/STUDIES:
The Salvadoran public is little to no aware of GE animals, and the government of El Salvador does not prioritize GE animal biotechnology.
CHAPTER 3: MICROBIAL BIOTECHNOLOGY
PART G: PRODUCTION AND TRADE
a) COMMERCIAL PRODUCTION:
FAS San Salvador unaware of any commercial production of food ingredients derived from microbial biotechnology in El Salvador. However, processed foods made in El Salvador may contain imported ingredients or processing aids derived from microbial biotechnology.
b) EXPORTS:
Not applicable.
c) IMPORTS:

Not applicable.

Not applicable.
PART H: POLICY
a) REGULATORY FRAMEWORK:
Please refer to Part B.
b) APPROVALS/AUTHORIZATIONS:
Not applicable.
c) LABELING and TRACEABILITY:
Please refer to Part B.
d) MONITORING AND TESTING:
Not applicable.
e) ADDITIONAL REGULATORY REQUIREMENTS:
Not applicable.
f) INTELLECTUAL PROPERTY RIGHTS (IPR):
Not applicable.
g) RELATED ISSUES:
Not applicable.
PART I: MARKETING
a) PUBLIC/PRIVATE OPINIONS:
See Part C: Plant Biotechnology Marketing
b) MARKET ACCEPTANCE/STUDIES:
The Salvadoran public is little to no aware of microbial histotechnology. Microbial biotechnology is not

a high priority on the local political agenda. The focus of public policy is on food security and producing

as much of the local food needs as possible.

d) TRADE BARRIERS:

