



Required Report: Required - Public Distribution **Date:** December 13, 2021

Report Number: VE2021-0010

Report Name: Agricultural Biotechnology Annual

Country: Venezuela

Post: Caracas

Report Category: Biotechnology and Other New Production Technologies

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Report Highlights:

The Venezuelan regime bans the use and research of modern biotechnology-derived agriculture. The United States is currently the leading exporter of biotech-derived crops to Venezuela, including corn, soybeans, soybean meal, and soybean oil.

Section I. Executive Summary:

Despite interest by Venezuelan farmers and agricultural researchers in using biotechnology to meet food demand, Venezuela has not adopted modern agricultural biotechnology on a commercial scale. The United States is currently the leading exporter of biotech-derived crops to Venezuela, including corn, soybeans, soybean meal, and soybean oil. In this product category, the United States maintained a total market share of 67.9 percent in 2020, supplying 913,124 MT of genetically engineered (GE) crops. In 2021, the United States will grow its market share to 50.9 percent of the market for biotechnology.

Due to legal constraints, no commercial biotechnology crops are grown or developed in Venezuela. Corn, the local crop that could benefit the most from agricultural biotechnologies, is grown entirely with conventional seeds. A Seed Law enacted in December 2015 prohibits plant biotechnology research and the use of biotech seeds in agricultural production, restricting any real technological progress and productivity gains in the agricultural sector.

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Chapter 1: Plant Biotechnology

Part A: Production and Trade

a) Product Development

As of October 2021, Venezuela has not yet developed any GE crops. The only ongoing biotechnology research is in molecular genetics and tissue culture conducted by public universities and private extension institutes with minimal government involvement.

b) Commercial Production

Officially, no commercial biotechnology crops are being grown or developed in Venezuela. The Venezuelan regime has prohibited the cultivation of biotechnology-derived or GE crops.

c) Exports

Given that there is no production of agricultural biotechnology, Venezula exported no biotechderived products in 2021.

d) Imports

There are no barriers to importing or marketing GE crops and processed products. Venezuela is a significant importer of biotech-derived soybeans, soybean meal, soybean and vegetable oil, and corn. The table below provides data on the volumes of likely GE imports of soybeans, corn, and derived products, in 2020 and January - August 2021:

Venezuelan Imports of Likely GE Products in 2020. MT

Country	Products						
	Corn	Soybeans	Soybean Meal	Soybean Oil	Total		
USA	560,625	37,895	244,352	70,251	913,124		
Brazil	111,403	30	100	90,507	202,040		
Argentina	166,639	-	-	-	166,639		
China	-	-	35,321	-	35,321		
Other Countries	64	-	20,581	6,894	27,539		
Total	838,731	37,925	300,354	168,267	1,344,663		

Source: Trade Data Monitor

Venezuelan Imports of Likely GE Products in January - August 2021. MT

Country	Products						
	Corn	Soybeans	Soybean Meal	Soybean Oil	Total		
USA	266,168	28,625	212,575	30,283	537,651		
Brazil	200,264	45	3,820	82,333	286,463		
Argentina	80,251	-	-	2,335	82,587		
China	-	-	-	-	-		
Other Countries	-	-	18,656	4,679	23,335		
Total	671,983	28,670	235,051	119,631	1,055,335		

Source: Trade Data Monitor

e) Food Aid

Since April 2021, Venezuela has been receiving food aid from the World Food Program for school meals. There is no information on the inclusion of food derived from GE crops in this aid.

f) Trade Barriers

On December 28, 2015, the regime published a law prohibiting the use and research of modern biotechnology in agriculture. This law also prohibits the manufacture, importation, use, release, and propagation of GE or transgenic seeds. The law also prohibits granting copyright and patent protection to any seeds, conventional or otherwise. Violations of this law may result in penalties ranging from fines to imprisonment.

Part B: Policy

a) Regulatory Framework

Venezuela's Ministry of Eco-Socialism (MINEC) is charged with agricultural biotechnology policy and regulations. The Directorate of Bio-security and Bio-commerce at MINEC administers and regulates all genetic resources and bio-security issues within Venezuela. MIMEC also encourages activities that improve biodiversity within the country. Its specific functions include:

- Assess all biotechnology and biosecurity issues, as well as traditional biological diversity knowledge.
- Sign contracts to provide access to genetic resources.

The Seed Law of December 2015 (https://www.fao.org/faolex/results/details/en/c/LEX-FAOC151761) effectively bans any transgenic or modern biotechnology research in agriculture. The National Seed Commission (CONASEM) drafted the Seed Law under the authority of the National Institute of Agricultural Research (INIA), which registers and certififies the seeds that are permitted by law.

The Seed Law forbids the use, application, and research of modern agricultural biotechnology. The following techniques are illegal under the law:

- In vitro nucleic acid techniques, including the recombinant DNA technique and the direct injection of nucleic acids into cells or organelles.
- The fusion of cells of species beyond the taxonomic family, which exceeds the natural reproduction or recombination barriers and are not used in traditional reproduction and selection.

The Seed Law also forbids the production, importation, use, release, and multiplication of GE seeds. Furthermore, the law prohibits granting copyrights and patents on any GE or naturally-produced seed. Violators may face a variety of penalties, including fines and imprisonment for violating the Seed Law. The regime opposes obtaining private profits from biotechnology research and commercialization of its results.

b) Approvals

There are no GE plants approved for cultivation or export in Venezuela. Imports of GE crops or processed products are not restricted.

c) Stacked Events or Pyramided Event Approvals

Not applicable.

d) Field Testing

Not applicable.

e) Innovative Biotechnologies

Not applicable.

f) Coexistence

Not applicable.

g) Labeling and Traceability

Not applicable.

h) Monitoring and Testing

A reference laboratory, located in the city of Marcay, has been used for the detection of GE products. The laboratory's operational status is unknown at this time.

i) Low-Level Presence (LLP) Policy

No LLP policy.

j) Additional Regulatory Requirements

Not applicable.

k) Intellectual Property Rights (IPR)

The Seed Law prohibits-copyright protections and patents on any biotechnology seeds.

1) Cartagena Protocol Ratification

On May 24, 2000, Venezuela signed the Cartagena Protocol on Biosafety (CPB) and ratified the agreement on September 11, 2003. To date, the CPB has not impacted trade.

m) International Treaties and Forums

Venezuela is a member of Codex Alimentarius. The regime's Codex representation is managed by the Ministry of Industry and Commerce's National Autonomous Service for Norms, Quality, Metrology, and Technical Regulations

(http://www.sencamer.gob.ve/sencamer/documents/codex.htm). Venezuela is a signatory to the International Plant Protection Convention (IPPC). The Ministry of Agriculture and Land's National Institute of Agricultural Health (INSAI - http://www.insai.gob.ve) represents the regime to the IPPC.

n) Related Issues

None.

Part C: Marketing

a) Public/Private Opinions

The regime maintains public campaigns in traditional and social media against GE products and the "dangers" of their use in the environment and as food. Private organizations, such as the Venezuelan Federation of Agricultural Producers (FEDEAGRO) and the Venezuelan Livestock Federation (FEDENAGA), publicly support agricultural biotechnologies to improve production levels and capabilities.

b) Market Acceptance/Studies

Despite the regime's prohibition on the development and marketing of agricultural biotechnology, Venezuelan producers continue to express a need for and acceptance of biotechderived products and crops. Farmers, agro-industry, academic institutes, and university researchers are all interested in harnessing the potential of animal and plant biotechnology.

FEDEAGRO predicts that domestic production could double in two years if a regulatory framework for agricultural biotechnology allowed the use of biotech-derived seeds. Some

agricultural leaders have criticized the regime for not allowing local use of agricultural biotechnology while allowing the importation of biotechnology-derived products and crops, thereby undermining domestic production.

In general, Venezuelan consumers are unconcerned about the consumption of biotechnology-derived foods, especially as Venezuelans adapt to the country's ongoing food security crisis. Venezuela imports significant volumes of biotech-derived soybeans, soybean meal, soybean and vegetable oil, and corn, primarily from the United States, Brazil, and Argentina.

Chapter 2: Animal Biotechnology

Part D: Production and Trade

a) Product Development

There are no animal biotechnology events under development in Venezuela, and the regime has not granted approval for animal biotechnology from any source. Research centers and universities have expressed interest in these techniques to improve the quality of cattle and goats. Currently, in vitro fertilization and embryo transfer is used in cattle genetic improvement, and several companies that use Brazilian biotechnology offer it commercially. The use of modern animal biotechnology techniques is less developed. Animal cloning techniques are not being researched in public or private institutions, nor are they used to improve animal genetics. Modern animal biotechnology has been used in Venezuela to diagnose diseases, most of which are viral in nature.

b) Commercial Production

Not applicable.

c) Exports

Not applicable

d) Imports

Venezuela imports recombinant vaccines and diagnostic kits for animal diseases. The primary markets for these products are the poultry, swine, and livestock industries.

e) Trade Barriers

Not applicable.

Part E: Policy

a) Regulatory Framework

Because there is no policy governing animal biotechnology, no regime entity is in charge of regulating GE animals or livestock clones for food safety, animal welfare, or environmental safety issues. Animal biotechnology is mentioned in the <u>Seed, Animal Reproductive Material</u>, and <u>Biological Inputs Law of 2002</u>. However, no regulations have been implimented to address animal biotechnology research and commercialization.

b) Approvals

Not applicable

c) Innovative Biotechnologies

No Regulation at this time.

d) Labeling and Traceability

Not applicable

e) Additional Regulatory Requirements

Not applicable.

f) Intellectual Property Rights (IPR)

Not applicable.

g) International Treaties and Forums

Not applicable.

h) Related Issues

None.

Part F: Marketing

a) Public/Private Opinions

There is no information about public or private sector opinions on using livestock cloning, GE or genome-edited animals.

b) Market Acceptance, Studies

The Venezuelan livestock sector routinely uses advanced techniques of genetic improvement through in vitro fertilization and embryo transfer. As a result, the industry maintains a favorable attitude toward any technological innovations that help to improve production and operations.

Chapter 3: Microbial Biotechnology

Part G: Production and Trade

a) Commercial Production

The only microbial biotech-derived food ingredients in Venezuela are those traditionally used to make alcoholic beverages, dairy products, and processed food products.

b) Exports

Venezuela exports alcoholic beverages, beer, and dairy products that may contain food ingredients derived from microbial biotechnology. In 2020, Venezuelan exports of distilled spirits, mostly Venezuelan rum, reached \$52.5 million.

c) Imports

In 2020, Venezuela imported \$138 million of processed products (prepared foods, wine, and beer, condiments and sauces, fruit juices, cheese, infant foods) and enzymes that may contain microbial biotech-derived food ingredients.

d) Trade Barriers

None.

PART H: Policy

a) Regulatory Framework

The Ministry of Health of Venezuela (MINSALUD) enforces food safety standards and regulations. It is responsible for regulating food ingredients for human consumption, through its Sanitary Health Service (in Spanish: Servicio Autónomo de Contralora Sanitaria) and the Directorate for Food Safety and Inspection (in Spanish: Direction de Inocuidad e Inspeccion de Alimentos y Bebidas Alcoholicas). No specific regulations cover the use of microbial biotechderived ingredients.

b) Approvals

Not applicable

c) Labeling and Traceability

In Venezuela, no labeling regulations for microbial biotech-derived ingredients or food products have been developed.

d) Monitoring and Testing

Venezuela does not perform tests for evidence of genetic engineering in biotechnology-derived food products or ingredients.

e) Additional Regulatory Requirements

There are no additional requirements at this time.

f) Intellectual Property Rights (IPR)

Not applicable

g) Related Issues

None.

Part I: Marketing

a) Public/Private Opinions

There is no information about public or private sector opinions regarding microbial biotechnology and its use in food production.

b) Market Acceptance, Studies

The information provided above regarding plant biotechnology acceptance generally applies to microbial biotechnology as well.

Attachments:

No Attachments