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Report Highlights:

Over a dozen Caribbean countries are Parties to the Cartagena Protocol on Biosafety. With an aim toward meeting their obligations under this agreement, many have been working toward establishing their National Biosafety Frameworks for many years. To date none have completed this work and a de facto prohibition exists on the research and production of GE products. However, no significant barriers to trade of GE products used for food, feed, or processing currently exist in the region.

Executive Summary:

With only a few exceptions, agriculture in the CBATO region¹ takes a back seat to tourism, banking and financial services, oil and gas (in Trinidad and Tobago and Guyana), and other economic sectors. Farm activity in the region is constrained by a long list of factors which include limited land and freshwater resources, an aging farmer population, lack of modern technology, tropical cyclones and other natural disasters, and a regional transportation system which inhibits air and maritime trade, among others.

In this context, modern agricultural biotechnology has yet to take root in the Caribbean. Moreover, without any functioning regulatory structures to govern the use of agricultural biotechnology, there is no introduction into the environment or commercial production of genetically engineered (GE) crops, animals, or microbes. Given the regulatory void, research institutions focus on more traditional tissue culture techniques rather than on genetic engineering.

Nonetheless, recognizing the continued development of modern agricultural biotechnology and the value that such technology could have in transforming the region's farm sector, several CARICOM² countries have been working on biosafety regulation in order to meet their commitments under the Cartagena Protocol on Biosafety.³ Most of this work has been encapsulated in a United Nations Environment Programme/Global Environment Facility (UNEP/GEF) Regional Project for Implementing National Biosafety Frameworks (NBFs) in the Caribbean Sub-Region⁴. However, with the project concluding in 2019 and the emergence of other more urgent priorities in recent years (i.e., grappling with the COVID-19 pandemic and addressing growing food insecurity throughout the region), biosafety regulatory efforts have lost steam. It remains to be seen whether the UNEP/GEF project participants can garner the political will and funding to conclude the work they started. In the interim, there are no significant barriers to the trade of GE products.

[1] The CBATO region of coverage is comprised of: Anguilla, Antigua & Barbuda, Aruba, The Bahamas, Barbados, Bermuda, BES Islands (Bonaire, St. Eustatius & Saba), British Virgin Islands, Cayman Islands, Curaçao, Cuba, Dominica, Guadeloupe, Guyana, Martinique, Grenada, Montserrat, St. Kitts & Nevis, St. Lucia, Saint Martin, St. Barthélemy, St. Vincent & the Grenadines, Sint Maarten, Trinidad & Tobago, and Turks & Caicos Islands. For purposes of this report, Cuba is excluded.

[2] CARICOM Member States are: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago (CARICOM Associate Members are: Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Turks and Caicos Islands).

[3] CARICOM Member States that are Parties to the CPB are: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

[4] CBATO region participants in the 2012-2019 UNEP/GEF Regional Project for Implementing NBFs in the Caribbean included Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Guyana, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The other non-CBATO region participants were Belize and Suriname.

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CHAPTER 1: PLANT BIOTECHNOLOGY

PART A: PRODUCTION AND TRADE

a) RESEARCH AND PRODUCT DEVELOPMENT:

There are no GE plants or crops under development in the CBATO region that are poised to be commercialized soon. Overall, agricultural production throughout the region is limited, and countries import most of their agricultural product needs. Total land area is 220,632 sq. km. (85,186 sq. miles), with Guyana representing 89 percent of this area and the 23 island markets that make up the rest of the region accounting for the remaining 11 percent. The percentage of arable land ranges between two and seven percent in most countries. Commercial production in Guyana is concentrated in sugarcane and rice while in the island markets' crop production is focused to a large extent on fruits, vegetables, tubers and spices.

Research institutions throughout the Caribbean have recognized that production of GE plants and crops could lead to increased yields and reduced use of water and inputs. These institutions have identified several local products (sugarcane, cotton, rice, coconut, sweet potato, cassava, cocoa, coffee, peppers, spices, and anthuriums among others) that could be improved using agricultural biotechnologies. The most prominent institutions conducting research on these plants and crops include the University of the West Indies (UWI), the Caribbean Agricultural Research and Development Institute (CARDI), and the National Agriculture Research Institute (NARI) in Guyana.

b) COMMERCIAL PRODUCTION:

In the absence of a fully functioning biosafety legal framework to oversee the production or release of GE products, countries in the region are cautious when it comes to GE crop cultivation. There are no known field trials or commercial production of GE products taking place in the CBATO region.

c) EXPORTS:

Not applicable.

d) IMPORTS:

Currently, the United States is the region's main supplier of food and agricultural products. In some cases, particularly regarding consumer-oriented products, imports from third countries are often transshipped through the United States. The following tables show the region's imports of some key GE products, including the consumer-oriented products category, which largely represents products derived from or containing GE corn, soybean and/or canola.

Reporting Countries Corn Exports to CBATO Islands Participating in the Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	188,686	189,791	189,159
Brazil	Tons	1,885	1,710	1,565
Belize	Tons	635	1,350	643
Canada	Tons	248	203	250
Barbados	Tons	4	70	4
Argentina	Tons	78	0	0
EU 27 (Brexit)	Tons	1,900	0	0
TOTAL	Tons	193,436	193,124	191,621

Source: Trade Data Monitor.

Reporting Countries Soybean Exports to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	25,333	24,386	21,467
Brazil	Tons	0	8	73
Canada	Tons	100	60	60
TOTAL	Tons	25,433	24,454	21,600

Source: Trade Data Monitor.

Reporting Countries Soybean Meal Exports to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	84,661	83,868	77,217
Brazil	Tons	18,069	10,038	2,327
Barbados	Tons	2,544	1,930	364
Canada	Tons	56	108	107
India	Tons	0	3	0
TOTAL	Tons	105,330	95,547	80,015

Source: Trade Data Monitor.

Reporting Countries Soybean Oil Exports to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	10,819	5,805	3,914
EU 27 (Brexit)	Tons	2,512	5,416	11,467
Argentina	Tons	2,936	5,522	6,814
Brazil	Tons	4,135	3,295	2,683
Canada	Tons	837	378	1,063
Barbados	Tons	1,046	1,265	805
Malaysia	Tons	71	376	553
Belize	Tons	135	23	136
UK	Tons	136	101	134
Taiwan	Tons	4	2	4
China	Tons	0	0	0
Mexico	Tons	251	278	0
Ukraine	Tons	0	96	0
TOTAL	Tons	22,882	22,557	27,573

Source: Trade Data Monitor.

Reporting Countries Exports of Rapeseed, Colza or Mustard Oil and their fractions to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	1,772	2,034	3,063
EU 27 (Brexit)	Tons	159	316	172
Canada	Tons	307	252	160
India	Tons	3	4	5
Brazil	Tons	5	10	5
Mexico	Tons	5	7	0
Malaysia	Tons	25	0	0
Turkey	Tons	1	0	0
TOTAL	Tons	2,277	2,623	3,405

Source: Trade Data Monitor.

Reporting Countries Cotton Exports to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	86	20	36
EU 27 (Brexit)	Tons	0	0	2
TOTAL	Tons	86	20	38

Source: Trade Data Monitor

Reporting Countries Exports of Consumer-Oriented Products to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Value		
		2020	2021	2022
United States	USD	636,112,643	714,331,998	944,626,338
EU 27 (Brexit)	USD	169,498,502	201,923,528	266,065,533
New Zealand	USD	84,211,845	92,633,605	97,224,070
Brazil	USD	58,855,789	75,623,035	93,374,311
UK	USD	58,968,088	71,110,926	75,883,771
Canada	USD	53,566,123	61,943,505	72,479,567
Costa Rica	USD	44,043,997	55,091,212	59,535,394
Dominican Republic	USD	21,727,744	24,872,683	36,761,166
Australia	USD	14,589,040	23,534,405	23,332,311
Barbados	USD	14,571,424	18,283,073	19,436,534
Other	USD	183,756,586	167,361,518	144,666,683
TOTAL	USD	1,339,901,781	1,506,709,488	1,833,385,678

Note: Numbers above shown in US dollars to avoid inconsistencies created by different units of measure for quantity.

Source: Trade Data Monitor

e) FOOD AID:

The CBATO region is not a regular food aid recipient, and the importation of GE food aid is not contemplated in any country's biosafety legislation nor in the CARICOM regional policy. Further, it is unknown whether any GE products have been part of any food aid programs in the region.

f) TRADE BARRIERS:

Post is not aware of any specific requirements related to the importation of GE products in the region. Within the Caribbean region, CARICOM is focused on establishing the Caribbean Single Market and Economy to facilitate the free movement of CARICOM-origin products between Member States. It remains to be seen whether CARICOM will develop and implement regional rules affecting trade in GE products.

PART B: POLICY

a) REGULATORY FRAMEWORK:

Most of the countries within CARICOM are seeking to address their plant biotechnology requirements through a National Biosafety Framework (NBF). To date, only St. Kitts and Nevis and St. Lucia have enacted any biosafety legislation. While an important first step toward establishing comprehensive NBFs, implementing regulations have yet to be finalized and thus regulatory and institutional structures are not yet fully operational. None of the other CARICOM countries has enacted any biosafety legislation.

To ensure a unified stance on biosafety regulation, CARICOM has also set forth a “Regional Biosafety Harmonization Policy.” Some of the key elements of this harmonized policy involve making a distinction between which aspects of the policy will be managed at the country and regional levels. The regulatory system for biosafety will be country-based and will include decision-making for GE products intended for intentional introduction into the environment and GE products intended for contained use. Activities such as risk assessments, capacity building, public education, information management, and reference laboratory testing, are to be handled at the regional level. This will include risk assessments and decision making for GE products intended for food, feed, or processing.

i. Agricultural Biotechnology-related Regulatory Terms Used by Caribbean Countries and CARICOM

Legal Term	Laws & Regulations where used	Legal Definition
Modern Biotechnology	This term, as defined in the CPB, is used in St. Lucia’s Biosafety Act 200, in other draft biosafety legislation being developed throughout the Caribbean region, and in CARICOM’s Regional Biosafety Harmonization Policy.	Refers to the application of: a. In vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles, or b. Fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection;
Living modified organism (LMO)	This term, as defined in the CPB, is used in draft biosafety legislation being developed throughout the Caribbean region and in CARICOM’s Regional Biosafety Harmonization Policy.	any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology

Continued.

Legal Term	Laws & Regulations where used	Legal Definition
Living modified organism (LMO)	St. Lucia's Biosafety Act 200	any biological entity capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids that possess a novel combination of genetic material obtained through the use of modern biotechnology
LMO-FFP	This term, as defined in the CPB, is used in draft biosafety legislation being developed throughout the Caribbean region and in CARICOM's Regional Biosafety Harmonization Policy.	living modified organisms intended for direct use as food or feed, or for processing, if available.
Genetically modified organism (GMO)	SKN Biosafety Act 2012	any biological entity including plants, animals, bacteria and all other kinds of micro-organisms, cell cultures (prokaryotic or eukaryotic) created and propagated as such, virus, and plasmids and other kinds of vectors, in which the genetic material has been altered in a way that does not occur naturally, by means of cell or gene technology;
Genetically modified organism (GMO)	St. Lucia's Biosafety Act 200	(a) means an organism whose genetic material has been modified by the activity of manipulating recombinant deoxyribonucleic acid or ribonucleic acid molecules; and (b) includes –(i) a living modified organism; (ii) a product of a genetically modified organism; (c) does not include organisms arising from techniques that imply the direct introduction into an organism, or hereditary material, when this does not involve the use a recombinant deoxyribonucleic acid or ribonucleic acid molecules or genetically modified organisms, modified by processes, such as, in vitro insemination, conjugation, transduction or any other natural process.

ii. The Regional Project for Implementing NBFs

From 2012 to 2019 the UWI carried out a UNEP/GEF-funded Regional Project for Implementing NBFs in the Caribbean, which assisted 12 of the 13 CARICOM countries that are parties to the CPB with implementation of their obligations¹ under the Protocol. More information on the project, which came to a close in 2019, is available in the Agricultural Biotechnology Annual Reports for the Caribbean Basin for [2019](#), [2020](#), and [2021](#). Further funding is being requested from UNEP/GEF for another project that would allow interested CARICOM countries to conclude the work of developing and enacting their biosafety legislation and fully implementing their NBFs.

b) APPROVALS/AUTHORIZATIONS:

Without all the legal and regulatory frameworks in place, no GE plants or crops have been approved or registered in the region for food, feed, or processing.

c) STACKED OR PYRAMIDED EVENT APPROVALS/AUTHORIZATIONS:

Stacked or pyramided events are not contemplated in CARICOM's regional policy.

d) FIELD TESTING:

No field-testing of GE crops is currently taking place.

e) INNOVATIVE BIOTECHNOLOGIES:

The use of innovative biotechnologies (such as genome editing) in plants or plant products has not been fully contemplated in national legislation or regional policy. Thus, even when proposed biosafety regulatory systems become operational, the regulatory status of such biotechnologies will be undetermined and may require further assessment.

f) COEXISTENCE:

There is general recognition that GE products used in food, feed, and processing are widely imported throughout the region. Thus, risk assessments and decision-making are to be handled at the regional level to ensure CARICOM members are implementing a harmonized framework to facilitate trade. However, for GE products intended for introduction into the environment or contained use, the situation is different. Although no rules are currently in place for coexistence of GE and non-GE crops, individual countries in the region have indicated that once biosafety regulatory systems become operational, they will want to retain decision-making on this matter at the national level rather than at the regional level.

[1] CBATO Islands that participated in the UNEP/GEF project were Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Guyana, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago. The other CARICOM participants were Belize and Suriname.

g) LABELING AND TRACEABILITY:

As a general pragmatic approach to trade (in recognition of the large volume of food imports from the United States), project participants have reportedly agreed to implement voluntary rather than compulsory negative labeling requirements for foods containing GE ingredients. Food manufacturers will be allowed to voluntarily identify those products that do not contain GE products, with the critical level or limit for negative labeling being five percent GE content. Labeling standards would need to be approved by the appropriate labeling enforcement authority in each country before implementation of any such standards could take place. So far, the CBATO is not aware of any project participants undertaking efforts to this end.

h) MONITORING AND TESTING:

As part of the UNEP/GEF project, the region has developed testing capability for GE events. At the country level, participating countries have acquired laboratory equipment and trained laboratory personnel to conduct basic testing. UWI also has three regional laboratories with more advanced equipment, which national laboratories can use to conduct more advanced tests or validate their results. As a third option, the region would rely on accredited U.S. reference labs. To date, no trade has been affected by any monitoring or testing that may be taking place.

i) LOW LEVEL PRESENCE (LLP) POLICY:

The draft regional biosafety policy calls for countries to implement a five percent LLP allowance.

j) ADDITIONAL REGULATORY REQUIREMENTS:

Not applicable.

k) INTELLECTUAL PROPERTY RIGHTS (IPR):

Given the lack of commercial production of GE crops in the region, Post is not aware of any GE-related IPR issues.

l) CARTAGENA PROTOCOL RATIFICATION:

Ten countries in the CBATO region are parties to the CPB, and while they are all in the process of trying to meet their biosafety obligations under the protocol, none has fully implemented them to date.

Status of Ratification and Entry into Force of the CPB

	Date of Signature	Date instrument of ratification or accession was deposited	Accession Mode	Date of entry into force
Antigua and Barbuda	May 24, 2000	Sep 10, 2003	Ratification	Dec 9, 2003
The Bahamas	May 24, 2000	Jan 15, 2004	Ratification	Apr 14, 2004
Barbados	n/a	Sep 6, 2002	Accession	Sep 11, 2003
Dominica		Jul 13, 2004	Accession	Oct 11, 2004
Grenada	May 24, 2000	Feb 5, 2004	Ratification	May 5, 2004
Guyana	n/a	Mar 18, 2008	Accession	Jun 16, 2008
St. Kitts and Nevis	n/a	May 23, 2001	Accession	Sep 11, 2003
St. Lucia	n/a	Jun 16, 2005	Accession	Sep 14, 2005
St. Vincent and the Grenadines	n/a	Aug 27, 2003	Accession	Nov 25, 2003
Trinidad and Tobago	n/a	Oct 5, 2000	Accession	Sep 11, 2003

Source: Convention on Biological Diversity <https://bch.cbd.int/protocol/parties/>

m) INTERNATIONAL TREATIES AND FORUMS:

Post is not aware of any markets in the Caribbean Basin region taking positions pertaining to agricultural biotechnologies, the use of such technologies, and products thereof in international treaties/fora other than the Convention on Biological Diversity and the Cartagena Protocol.

n) RELATED ISSUES:

None.

PART C: MARKETING

a) PUBLIC/PRIVATE OPINIONS:

As part of the UNEP/GEF project, participating countries engaged in “awareness raising activities” at the national level to educate the public on biosafety, biotechnology, biosecurity and invasive species. The project also supported stakeholder consultations as part of the national processes to enact biosafety regulations. Nonetheless, overall awareness of agricultural biotechnology and GE products is quite limited. There is practically no public discussion on the matter and there are no NGO’s or public campaigns lobbying for or against agricultural biotechnology, whether for planting GE crops or for consuming foods derived from GE crops.

b) MARKET ACCEPTANCE/STUDIES:

There are no significant marketing issues that currently affect U.S. agricultural products.

CHAPTER 2. ANIMAL BIOTECHNOLOGY:

PART D: PRODUCTION AND TRADE

a) RESEARCH AND PRODUCT DEVELOPMENT:

The Caribbean region is not yet developing animal genetic engineering or cloning of animals. Although there has been some biotech research in Barbados on Blackbelly sheep, the region is far from having the capability to engage on specific animal biotechnology projects. However, experts in the region believe that an expansion of animal breeding using conventional and new embryo techniques as well as DNA techniques to characterize regional species would be a positive development. The use of molecular techniques to identify genes for breeding purposes will be high on the research agendas of several countries in coming years.

b) COMMERCIAL PRODUCTION:

Not applicable.

c) EXPORTS:

Not applicable.

d) IMPORTS:

Not applicable.

e) TRADE BARRIERS:

Although there are no known barriers to trade, it is believed that animal health and food safety authorities would treat requests for imports of GE animals, livestock clones, and offspring of clones or products from these animals, with an abundance of caution prior to granting import approval.

PART E: POLICY

a) REGULATORY FRAMEWORK:

The UNEP/GEF Regional Project for Implementing NBFs in the Caribbean was originally designed to address plant biotechnology only. However, seeing the potential benefits of using biotechnology on mosquitoes, several of the project participants have broadened their legislation so that it is no longer specific to plants.

Refer to “Chapter 1, Part B., Sub-paragraph a. Regulatory Frameworks” for a glossary of commonly used terms.

b) APPROVALS/AUTHORIZATIONS

None.

c) INNOVATIVE BIOTECHNOLOGIES:

Not applicable.

d) LABELING AND TRACEABILITY:

Not applicable.

e) ADDITIONAL REGULATORY REQUIREMENTS:

Not applicable.

f) INTELLECTUAL PROPERTY RIGHTS (IPR):

Post is not aware of any GE-related IPR issues.

g) INTERNATIONAL TREATIES AND FORUMS:

Not applicable.

h) RELATED ISSUES:

None.

PART F: MARKETING

a) PUBLIC/PRIVATE OPINIONS:

As mentioned previously, overall awareness of agricultural biotechnology and animal biotechnology specifically, is quite limited. There is no public discussion on the matter and there are no NGO’s or public campaigns lobbying for or against agricultural biotechnology. However, it is believed that the public is more sensitive to animal biotechnology and would treat issues related with livestock clones, offspring of clones, and GE animals with greater caution.

b) MARKET ACCEPTANCE/STUDIES:

Post is unaware of any studies regarding the marketing of animal biotechnology products in the region. Overall acceptance of animal biotechnology by government regulators, producers, the trade and

consumers remain unknown, but as mentioned above the subject is likely to be treated with a great deal of caution.

CHAPTER 3. MICROBIAL BIOTECHNOLOGY

PART G: PRODUCTION AND TRADE

a) COMMERCIAL PRODUCTION:

As mentioned earlier, agricultural production in the CBATO region is quite limited. The main agricultural producer in the region is Guyana, where commercial agricultural production is largely concentrated in sugarcane and rice. In the Caribbean islands, farm activity is constrained by a long list of factors which results in limited domestic agricultural output and a large volume of imported consumer-oriented food products. Consequently, food processing in the CBATO region is also quite limited. Thus, the use of food ingredients derived from microbial biotechnology is a new subject in the region with few known applications in the food processing sector at present.

b) EXPORTS:

There are neither official statistics nor estimates on exports of microbial biotechnology products. However, the CBATO region exports alcoholic beverages, dairy products, and processed products that may contain microbial biotech-derived food ingredients.

c) IMPORTS:

There are neither official statistics nor estimates on imports of microbial biotechnology products. The CBATO region imports microbial biotech-derived food ingredients, such as enzymes that are traditionally used in alcoholic beverages, dairy products, and processed products. Likewise, the region imports alcoholic beverages, dairy products, and processed products that may contain microbial biotech-derived food ingredients.

Reporting Countries Exports of Enzymes, Prepared Enzymes NESOI to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	Tons	59	46	58
EU 27 (Brexit)	Tons	7	12	15
Brazil	Tons	1	1	1
Thailand	Tons	0	0	1
Turkey	Tons	1	0	0
UK	Tons	19	0	0
India	Tons	3	7	0
Mexico	Tons	5	5	0
TOTAL	Tons	95	71	75

Source: Trade Data Monitor.

Reporting Countries Exports of Dairy Products* to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
New Zealand	Tons	9,076	9,784	8,447
United States	Tons	4,364	5,190	6,058
UK	Tons	2,219	2,706	2,111
EU 27 (Brexit)	Tons	664	1,301	1,337
Australia	Tons	280	1,098	280
Canada	Tons	628	37	43
Malaysia	Tons	194	65	25
Turkey	Tons	10	11	15
Brazil	Tons	7	9	8
Belize	Tons	2	0	0
Russia	Tons	0	1	0
TOTAL	Tons	17,444	20,202	18,324

*Includes products from HS code 0406 (Cheese and Curd).

Source: Trade Data Monitor.

Reporting Countries Exports of Alcoholic Beverages* to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2020	2021	2022
United States	L	4,229,005	6,836,379	18,614,438
EU 27 (Brexit)	L	2,595,934	4,413,700	6,184,397
Chile	L	678,341	474,478	907,914
South Africa	L	370,832	364,450	419,621
UK	L	332,797	253,408	341,516
Australia	L	275,130	390,096	251,300
Barbados	L	0	0	86,469
New Zealand	L	25,814	54,640	47,598
Brazil	L	37,609	39,458	46,916
Turkey	L	20,011	24,950	19,369
Other	L	1,114,203	1,179,708	3,915
TOTAL	L	9,679,676	14,031,267	26,923,453

*Includes products from the following HS codes: 2203 (Beer made from Malt) and 2204 (Wine Of Fresh Grapes, Including Fortified Wines; Grape Must (Having An Alcoholic Strength By Volume Exceeding 0.5% Vol.) NESOI. Source: Trade Data Monitor.

Reporting Countries Exports of Processed Products* to CBATO Islands Participating in Biosafety Project

Reporting Country	Unit	Value		
		2020	2021	2022
United States	USD	155,187,011	156,563,303	201,445,753
Costa Rica	USD	31,866,761	41,856,359	44,490,487
UK	USD	16,544,606	20,123,460	20,659,054
EU 27 (Brexit)	USD	7,835,239	10,050,059	15,239,028
Canada	USD	7,516,001	8,413,985	13,760,753
Dominican Republic	USD	6,896,321	7,162,001	9,184,726
Barbados	USD	8,462,748	8,765,594	8,844,645
Belize	USD	6,541,256	5,368,232	5,923,007
Chile	USD	5,717,238	5,617,882	5,396,286
Turkey	USD	2,672,067	3,427,219	3,262,925
Thailand	USD	3,002,001	2,166,243	2,904,206
Colombia	USD	2,157,209	2,182,208	2,374,334
Other	USD	23,511,132	24,771,102	14,558,044
TOTAL	USD	277,909,590	296,467,647	348,043,248

*Includes products from the following HS codes: 190110,1904,1905,2009,2103, and 2106.

Note: Numbers above shown in US dollars to avoid inconsistencies created by different units of measure for quantity.

Source: Trade Data Monitor.

d) TRADE BARRIERS:

Not applicable.

PART H: POLICY

a) REGULATORY FRAMEWORK:

The UNEP/GEF Regional Project for Implementing NBFs in the Caribbean was originally designed to address plant biotechnology only. Currently, there is no regulatory framework in place for dealing with products derived from microbial biotechnology.

Refer to “Chapter 1, Part B., Sub-paragraph a. Regulatory Frameworks” for a glossary of commonly used terms.

b) APPROVALS/AUTHORIZATIONS:

None.

c) LABELING AND TRACEABILITY:

Not applicable.

d) MONITORING AND TESTING:

Not applicable.

e) ADDITIONAL REGULATORY REQUIREMENTS:

Not applicable.

f) INTELLECTUAL PROPERTY RIGHTS (IPR):

Not applicable.

g) RELATED ISSUES:

None.

PART I: MARKETING

a) PUBLIC/PRIVATE OPINIONS:

Just as with plant and animal biotechnology, overall awareness of microbial biotechnology is quite limited. There is no public discussion on the matter and there are no NGO's or public campaigns lobbying for or against agricultural biotechnology.

b) MARKET ACCEPTANCE/STUDIES:

There are no studies that we are aware of regarding the marketing of microbial biotechnology products in the region. Overall acceptance of microbial biotechnology by government regulators, producers, the trade and consumers remain unknown.

Attachments:

No Attachments