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Report Highlights:

Access to the benefits of modern agricultural biotechnology in the Caribbean Basin remains stifled by the unfinished work of implementing a science-based, risk-management approach to regulate its use. A handful of Caribbean countries are now planning to seek funding to complete this work, which could possibly open the door to future research, field trials and eventually commercial production of GE crops in the region.

Executive Summary:

The road to comprehensive and harmonized biosafety regulation in the Caribbean Basin¹ has been a long and arduous one, spanning over two decades. Jump-starting stalled regulatory efforts and seeing them to the finish line after years of hiatus may prove just as challenging. So far, multi-year efforts have resulted in the Caribbean Community (CARICOM²) developing a harmonized Regional Biosafety Policy. The United Nations Environment Program/Global Environment Facility (UNEP/GEF) funded a Regional Project for Implementing National Biosafety Frameworks (NBFs) in the Caribbean Sub-Region³, which concluded in 2019, yielding several accomplishments, including among others: a) developing model biosafety legislation that can be tailored to each country's specific circumstances; b) coordinating a network of national and regional laboratories for GMO detection (including providing the necessary equipment and training for their operation); c) establishing a Caribbean Centre for Biosafety (CCB) to act as a virtual information hub and possibly as a "regional" Biosafety Clearing House (BCH); and d) conducting numerous training activities in several countries to build biosafety regulatory capacity in the region. Despite these important strides forward, the work of establishing and fully implementing NBF's remains unfinished and the timeline to conclude the process remains unclear.

Within this regulatory context, imports of living modified organisms for use as food, feed or processing (LMO-FFP) into the Caribbean face no significant biosafety-related trade restrictions. In fact, the United States is the main supplier of LMO-FFP products to the region, including corn, soybeans, soybean meal, cotton and processed food products. However, introduction into the environment of genetically engineered (GE) crops, animals, or microbes do face more scrutiny and a de facto ban. Consequently, research institutions in the region tend to focus their efforts on more traditional tissue culture techniques rather than on genetic engineering.

The possibility of continued work on the regulatory front that could lead to leveraging the tools of modern biotechnology to improve the agricultural landscape of the Caribbean still remains, however. The Caribbean Agricultural Health and Food Safety Agency (CAHFSA), which is charged with shepherding regional biosafety regulatory efforts going forward, is aiming to have a subset of countries that participated in the UNEP/GEF-funded Regional Project for Implementing NBFs, make a funding application for a second phase of the project that would see them conclude their implementation work in its entirety.

[1] For purposes of this report, the Caribbean Basin refers to the Caribbean Basin Agricultural Trade Office's region of coverage, which 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 include 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 include Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Turks and Caicos Islands.

[3] 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 85,186 square 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 2-7 percent in most countries. Commercial production in Guyana is concentrated in sugarcane and rice, while in the island markets' crop production is focused 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 Agricultural Research and Extension Institute (NAREI) 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 have been no known field trials or commercial production of GE products 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, soybeans, and/or canola.

Corn Exports to CBATO Markets Participating in the Biosafety Project

Reporting Country	Unit	Quantity		
		2021	2022	2023
United States	Tons	189,781	189,159	150,115
Brazil	Tons	1,710	1,565	42,014
Canada	Tons	203	250	4,740
Belize	Tons	1,350	643	474
Barbados	Tons	70	4	5
Guyana	Tons	0	28	0
TOTAL	Tons	193,124	191,649	197,348

Source: Trade Data Monitor

Soybean Exports to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2021	2022	2023
United States	Tons	24,386	21,467	25,974
Canada	Tons	60	60	95
Brazil	Tons	8	73	5
TOTAL	Tons	24,455	21,600	26,074

Source: Trade Data Monitor

Soybean Meal Exports to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2021	2022	2023
United States	Tons	83,868	77,217	58,505
Brazil	Tons	10,038	2,327	32,079
Canada	Tons	108	107	59
Belize	Tons	0	0	28
Barbados	Tons	1,930	364	0
India	Tons	3	0	0
Mexico	Tons	1	0	0
TOTAL	Tons	95,948	80,015	90,671

Source: Trade Data Monitor

Soybean Oil Exports to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2021	2022	2023
EU 27 (Brexit)	Tons	5,416	11,400	10,906
Brazil	Tons	3,295	2,683	3,359
United States	Tons	5,805	3,943	2,455
Argentina	Tons	5,522	6,814	909
Barbados	Tons	1,265	805	782
Malaysia	Tons	376	553	738
Serbia	Tons	0	0	545
Belize	Tons	23	136	435
Canada	Tons	378	1,063	267
United Kingdom	Tons	101	134	134
Other	Tons	376	28	107
TOTAL	Tons	22,556	27,559	20,637

Source: Trade Data Monitor

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

Reporting Country	Unit	Quantity		
		2021	2022	2023
United States	Tons	2,034	3,067	1,352
Malaysia	Tons	0	0	381
EU 27 (Brexit)	Tons	316	172	162
Canada	Tons	252	160	140
Brazil	Tons	10	5	11
India	Tons	4	5	2
Mexico	Tons	7	0	0
TOTAL	Tons	2,623	3,409	2,048

Source: Trade Data Monitor

Cotton Exports to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Quantity		
		2021	2022	2023
United States	Tons	20	36	65
EU 27 (Brexit)	Tons	0	2	0
TOTAL	Tons	20	38	65

Source: Trade Data Monitor

Exports of Consumer-Oriented Products to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Value		
		2021	2022	2023
United States Consumption	USD	714,377,056	930,626,649	941,225,723
EU 27 (Brexit)	USD	201,923,535	266,122,042	289,071,917
Brazil	USD	75,623,035	93,374,311	92,218,689
New Zealand	USD	92,633,605	97,224,070	89,750,993
United Kingdom HMRC	USD	71,110,926	75,883,771	67,591,606
Canada	USD	61,943,505	72,544,949	67,156,333
Costa Rica	USD	55,091,212	59,535,394	66,026,198
Dominican Republic	USD	24,872,683	36,761,166	43,198,462
China	USD	15,322,479	19,382,124	23,767,112
Uruguay	USD	20,527,843	17,954,517	23,410,545
Other	USD	173,328,674	160,884,196	174,115,673
TOTAL	USD	1,506,754,554	1,830,293,189	1,877,533,251

Note: Numbers above are shown in U.S. 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. 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 an NBF. To date, only St. Kitts & 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 Term Used	Legal Definition
Modern Biotechnology	This term, as defined in the Cartagena Protocol on Biosafety (CPB), is used in St. Lucia's Biosafety Act, 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
Living modified organism (LMO)	St. Lucia's Biosafety Act	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
Living modified organism - Food, Feed, or Processing (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)	St. Kitts & Nevis Biosafety Act 2012	Any biological entity, including plants, animals, bacteria and all other kinds of microorganisms, 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

Legal Term	Laws & Regulations Where Term Used	Legal Definition
Genetically modified organism (GMO)	St. Lucia's Biosafety Act	<p>(a) an organism whose genetic material has been modified by the activity of manipulating recombinant deoxyribonucleic acid or ribonucleic acid molecules; and</p> <p>(b) includes – (i) a living modified organism; (ii) a product of a genetically modified organism;</p> <p>(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</p>

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 obligations 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](#), [2021](#), [2022](#). 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, the situation is different for GE products intended for introduction into the environment or contained use. Although no rules are currently in place for the 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 the matter at the national level rather than at a regional level.

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 5 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 5 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 NGOs 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 the 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 NGOs 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.

Exports of Microbial Group* to CBATO Markets Participating in Biosafety Project

Reporting Country	Unit	Value		
		2021	2022	2023
United States Consumption	USD	344,547,589	449,161,659	424,039,128
EU 27 (Brexit)	USD	170,866,555	196,548,714	203,642,097
Costa Rica	USD	49,079,059	52,134,784	57,943,983
New Zealand	USD	49,758,607	51,103,259	53,191,837
United Kingdom HMRC	USD	46,959,066	47,175,236	51,398,208
Dominican Republic	USD	17,607,364	18,395,769	24,407,511
Canada	USD	9,030,737	14,760,766	10,692,456
Barbados	USD	9,493,589	9,582,058	10,189,806
Brazil	USD	2,610,823	3,081,371	8,166,803
Chile	USD	8,005,049	9,297,949	7,943,353
Other	USD	58,723,002	40,784,657	44,485,151
TOTAL	USD	766,681,440	892,026,222	896,100,333

*Includes products from the following HS codes: 0406: Cheese And Curd; 190110: Food Preparations For Infant Use, Put Up For Retail Sale, Nesoi; 1904: Prepared Foods From Swelling Or Roasting Cereals Or Products; Cereals (Exc Corn), In Grain Form Flakes Or Worked Grain Prepared N.E.S.O.I; 1905: Bread, Pastry, Cakes, Biscuits And Other Bakers' Wares; Communion Wafers, Empty Capsules For Medicine Etc., Sealing Wafers, Rice Paper Etc.; 2009: Fruit Juices Not Fortified W Vitamins or Minerals (Incl Grape Must) & Vegetable Juices, Unfermented & Nt Containing Add Spirit, Whether Or Not Containing Added Sweetening; 2103: Sauces And Preparations Therefor; Mixed Condiments And Mixed Seasonings; Mustard Flour And Meal And Prepared Mustard; 2106: Food Preparations Nesoi; 2203: Beer Made From Malt; 2204: Wine Of Fresh Grapes, Including Fortified Wines; Grape Must (Having An Alcoholic Strength By Volume Exceeding 0.5% Vol.) Nesoi; 3507: Enzymes; Prepared Enzymes Nesoi.

Note: Numbers above are shown in U.S. 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 NGOs 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 remains unknown.

Attachments:

No Attachments