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WORKSHOP ON DEVELOPING CAPACITY FOR NATIONAL BORDER CONTROLS ON LIVING MODIFIED ORGANISMS IN SMALL ISLAND DEVELOPING STATES IN THE CARIBBEAN Saint Augustine, Trinidad and Tobago, 17-19 October 2016

REPORT OF THE WORKSHOP

INTRODUCTION

1. The Workshop on Developing Capacity for National Border Controls on Living Modified Organisms in small island developing States in the Caribbean was held at the St. Augustine Campus of the University of the West Indies, Trinidad and Tobago, from 17 to 19 October 2016. The workshop was jointly organized with the UNEP-GEF Regional Project for Implementing Biosafety Frameworks in the Caribbean Sub-Region. The participation of representatives from Parties was funded by the Government of Japan through the Japan Biodiversity Fund and supported by the UNEP-GEF Regional Project.

2. The workshop was attended by 25 participants from 11 countries and one participant from the Caribbean Public Health Agency (CARPHA). The list of participants is presented in annex I below.

3. The following countries were represented: Antigua and Barbuda, Belize, Cuba, Dominican Republic, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago.

4. The Secretariat of the Convention on Biological Diversity and resource persons from the University of the West Indies/UNEP-GEF Regional Project for Implementing Biosafety Frameworks in the Caribbean Sub-Region facilitated the workshop.

5. The objective of the workshop was to introduce customs officers and related border control officials to:

(a) The Cartagena Protocol on Biosafety and its requirements regarding the identification and documentation of living modified organisms (LMOs) and their role in enforcing those requirements;

(b) Techniques and methodologies that may be used for the implementation of the above requirements, in particular the sampling of shipments and the detection of living modified organisms;

(c) Activities and experiences of the Green Customs Initiative.

6. The workshop also sought to facilitate the exchange of information and national experiences on the implementation of the identification and documentation requirements under the Protocol and to identify subregional needs and gaps.

ITEM I. OPENING OF THE WORKSHOP

7. The workshop was officially opened by Mr. Charles Gbedemah, on behalf of Mr. Braulio Ferreira de Souza Dias, the Executive Secretary of the Convention on Biological Diversity (CBD). Mr. Gbedemah

thanked the Japan Biodiversity Fund for its financial contribution to the workshop. He also thanked the UNEP-GEF Regional Project for its collaboration in organizing the workshop and the University of the West Indies for providing the laboratories for the practical exercises scheduled for later in the week. Mr. Gbedemah recalled the difficulties encountered when negotiating Article 18 of the Cartagena Protocol on Biosafety, and urged participants, as the practical personnel in the field, to share freely their experiences at the workshop.

8. Ms. Michelle John welcomed participants to Trinidad and Tobago and noted that the issue of biosafety is one that has been engaging the region for quite a while, first under a development project and now within the context of the Regional Project for Implementing National Biosafety Frameworks in the Caribbean Sub-Region. She reminded participants that, as border control officers, they have a critical role to play in terms of regulating the transboundary movement of GMOs. She informed participants of a sensitization workshop on biosafety for regional customs and plant quarantine officers that had been held in Guyana recently and the importance of maintaining efforts to increase awareness of the issue among border control personnel and to include them in future biosafety training opportunities. She encouraged participants to continue to raise awareness of the issue upon their return to their countries. Finally, she urged participants not to view the inclusion of the regulation of GMOs in their portfolios as an additional burden, but rather to embrace it as something that fits into their daily operations.

9. Participants were invited to introduce themselves.

ITEM 2. OVERVIEW AND OBJECTIVES OF THE WORKSHOP

10. Mr. Peter Deupmann from the Secretariat of the Convention on Biological Diversity introduced the objectives for the workshop and provided an overview of the programme and expected outcomes. He then invited participants to make brief statements about their expectations for the workshop. The workshop programme is presented in annex II.

11. A film introducing the Cartagena Protocol was shown to participants.

ITEM 3. INTRODUCTION TO THE CARTAGENA PROTOCOLON BIOSAFETY

12. Mr. Deupmann provided a brief background on the Protocol and its relationship with the Convention on Biological Diversity. He described the objective and scope of the Protocol, the different categories of LMOs recognized under the Protocol, the different procedures applying to the transboundary movement of different categories of LMOs, and other provisions of the Protocol intended to foster the safe transfer, handling and use of LMOs. Finally, he briefly introduced the Biosafety Clearing-House (BCH).

ITEM 4. CARTAGENA PROTOCOL: IDENTIFICATION AND DOCUMENTATION, ILLEGAL AND UNINTENTIONAL TRANSBOUNDARY MOVEMENTS, AND BIOSAFETY CLEARING-HOUSE

13. A presentation was delivered by Mr. Deupmann, which focused on the documentation requirements set out in Article 18 of the Protocol and in related decisions. In the context of intentional transboundary movements, the Secretariat underlined that under the Protocol there are different requirements for the information that must be provided in documentation accompanying shipments of different categories of LMOs, i.e. (a) LMOs intended for direct use as food or feed, or for processing, (b) LMOs for contained use and (c) LMOs for intentional introduction into the environment. He outlined the specific information requirements contained in the Protocol and related decisions of the Conference of the Parties serving as the meeting of the Parties to the Protocol and described where to find information on LMOs in shipping documentation.

14. Participants also heard a taped presentation by the Secretariat providing an overview of unique identifiers for transgenic plants and demonstrating how these can be used to search the BCH for further information. Finally, the presentation also described situations that could constitute unintentional

transboundary movements of LMOs and explained that an illegal transboundary movement is a transboundary movement that is carried out in contravention of domestic measures to implement the Protocol.

ITEM 5. ROLE OF CUSTOMS AND BORDER CONTROL OFFICIALS IN IMPLEMENTING THE PROTOCOL

15. Under this item, the Secretariat made a presentation on the specific role of customs officers, including all related border services personnel, such as quarantine officers, inspection officers and plant health personnel, and the practical steps they need to take in the implementation of the Protocol when receiving shipments which may contain LMOs, such as (a) ensuring that LMO imports and exports have been approved before they are cleared, (b) ensuring that LMO shipments are accompanied by appropriate identification documentation, (c) inspecting incoming shipments of LMOs to verify the actual content and cross-check them against the accompanying documentation, (d) detecting illegal or unintentional transboundary movements, and (e) reporting to relevant authorities information concerning shipments of LMOs arriving at the ports of entry. In this presentation, the importance of collaboration with competent national authorities was highlighted as well as the use of the BCH as a resource.

ITEM 6. NATIONAL EXPERIENCES WITH TRANSBOUNDARY MOVEMENTS OF LIVING MODIFIED ORGANISMS

16. Prior to attending the workshop, participants had been invited to prepare short presentations on national experiences with transboundary movements of LMOs and the legal, policy and institutional framework within which border controls on LMOs are regulated. The presentations were to follow the structure below:

(a) Legal and policy framework applying to transboundary movements of LMOs in the country (applicable national laws and policies);

(b) Institutions involved in transboundary movements of LMOs, including, where applicable, competent national authorities on biosafety or LMOs and border control institutions, and their responsibilities and involvement;

(c) Collaborative arrangements between different institutions involved;

(d) Experience with transboundary movements of LMOs in the country, focusing on applicable requirements, approval procedures, information exchange, testing and detection;

(e) Description of national awareness and capacities for border controls on LMOs, including strengths, gaps, needs and recommendations.

17. Under this item, the participants from all the countries taking part in the workshop gave presentations on their national situations and experiences. The presentations were then shared with participants on USB keys.

ITEM 7. SAMPLING, DETECTING AND IDENTIFYING LIVING MODIFIED ORGANISMS

18. Under this agenda item, Mr. David Gopaulchan of the Regional Biosafety Project gave a presentation introducing participants to modern biotechnology and genetic engineering, also describing the process of making a living modified organism. He explained the purpose of GMO testing and how it is possible to detect a GMO through different methods. Mr. Gopaulchan gave a detailed overview of the different analytical methods for detecting and identifying LMOs, including DNA-based assays (e.g., qualitative PCR (gel-based) and quantitative real-time PCR) and protein-based assays (e.g., lateral flow strip (LFS) assays and ELISA (enzyme-linked immunosorbent assay), and explained the relative advantages of each method.

19. Mr. Gopaulchan also described the process of selecting samples and how best to ensure that the samples are a true representation of the entire lot or shipment. In this regard, he noted that the International Seed Testing Association (ISTA) produces internationally agreed rules for seed sampling and testing to promote uniform application of sampling procedures for evaluation of seeds moving in international trade. Mr.Gopaulchan further described the different sampling methods commonly used.

20. Participants raised concerns about the practicality of using these methods at the points of entry and the foreseen difficulties of selecting representative samples for testing.

21. Participants visited the laboratory at the University of the West Indies for a practical exercise in detection. The participants were led through the steps to detect Cry1Ab protein in maize using lateral flow strips. The participants were divided into small groups and provided with 3 samples of 700 previously ground kernels of maize to determine if the concentration of Bt Cry1Ab protein was greater than 1%. The samples were separated into different containers and tap water was added. The samples were then shaken vigorously for 30 seconds. When the liquid settled, participants transferred liquid from the top to fill a reaction vial, avoiding suspended particles. After the extract had settled, a test strip was inserted into each vial. After 5 minutes, the results were analysed. Two lines developing on the membrane strip showed that the sample was positive for greater than 1% Cry1Ab modified maize. If the extract was from a negative sample, the strip only showed the control line. If only the test line appeared, or if no lines appeared, then the results were invalid and the test would need to be repeated. Some participants observed negative results, while others observed the presence of modified maize.

ITEM 8. SUBREGIONAL NEED AND GAP ANALYSIS

22. Under this item, participants were divided into three small groups to discuss and identify common national needs and gaps in the area of border control of LMOs, using the synthesis of their national experiences shared at the workshop as guidance. The small groups then reported back to the larger group. The output of this exercise was compiled into a needs and gaps analysis for the subregion and is provided in annex III.

ITEM 9. INTRODUCTION TO THE GREEN CUSTOMS INITIATIVE AND THE E-LEARNING MODULES

23. Under this item, Mr. Deupmann gave a presentation introducing the Green Customs Initiative (GCI), a partnership of international organizations cooperating to enhance the capacity of customs and other relevant enforcement personnel to monitor and facilitate the legal trade and to detect and prevent illegal trade in environmentally-sensitive commodities. He mentioned the different multilateral environmental agreements whose secretariats are partners in the Green Customs Initiative, namely the secretariats of the Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention on Persistent Organic Pollutants, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Montreal Protocol on Substances that Deplete the Ozone Layer, as well as the Cartagena Protocol on Biosafety. He noted other international organizations that were also partners in the Initiative: the Organisation for the Prohibition of Chemical Weapons; the United Nations Environment Programme Division of Environmental Law and Conventions and Division of Technology, Industry and Economics; the World Customs Organization; INTERPOL; and the United Nations Office on Drugs and Crime.

24. Mr. Deupmann outlined the benefits of the Green Customs Initiative for customs officers, countries, the treaty secretariats and the global environment. He described a number of tools developed by the Initiative, including e-learning modules, the Green Customs Guide to Multilateral Environmental Agreements and the Green Customs website, and indicated where these resources could be found. Finally, Mr. Deupmann noted some further achievements by the Initiative, including integrating Green Customs into national training curricula for customs officers and the more than 45 regional, subregional and

national training workshops delivered by GCI Partners and other experts since 2004, enabling the capacity-building of more than 350 customs officers from almost 120 countries.

25. Mr. Deupmann also provided a general introduction to the e-learning modules on the Cartagena Protocol that had been developed in the context of GCI for border control officials. The modules would be further explored under the following agenda item.

ITEM 10. E-LEARNING MODULES: GROUP EXERCISE

26. Prior to the workshop, participants had been registered on the BCH and provided with passwords so as to familiarize themselves with the e-learning module introducing the Cartagena Protocol. They had also been invited to attempt the evaluation quiz of the first module. Under this agenda item, Ms. Paola Scarone of the Secretariat guided participants through the remaining four e-learning modules. Participants were then divided into small groups to carry out the evaluation quizzes of each module. The hands-on training allowed participants to try the e-learning tool and provided a summary of what had been discussed during the workshop. It also allowed participants to familiarize themselves with the e-learning materials as a tool for further training at the national level.

ITEM 11. OTHER MATTERS

27. Prior to attending the workshop, participants had been invited to join the online forum that the Secretariat had established for the workshop. During the last session of the workshop, participants noted and agreed that the online forum for the workshop, created on the Collaborative Portal for Customs Officials in the BCH, would allow them to keep in touch and share national experiences on an ongoing basis. The forum can be accessed here: http://bch.cbd.int/onlineconferences/portal_art18/Caribbean.

28. Finally, participants undertook an evaluation of the workshop. The results of the evaluation are summarized in annex IV.

ITEM 12. CLOSURE OF THE WORKSHOP

29. After some closing remarks by Mr. Gbedemah on behalf of the Secretariat and Ms. Michelle John for the Regional Project, the workshop was concluded at 5 p.m. on Wednesday, 19 October 2016.

Annex I

LIST OF PARTICIPANTS

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Annex II

WORKSHOP PROGRAMME

Date and time	Agenda item							
Monday, 17 October 2016								
9.30 – 10 a.m.	1. Opening of the workshop and introduction of participants.							
10 – 10.30 a.m	2. Overview and objectives of the workshop.							
10.30 – 10.45 a.m	Coffee/Tea break							
10.45 a.m – 12 p.m.	3. Introduction to the Cartagena Protocol on Biosafety							
12 – 12.30 p.m.	4. Cartagena Protocol: identification and documentation, illegal and unintentional transboundary movements, and Biosafety Clearing-House							
12.30 – 1.30 p.m.	Lunch break							
1.30 – 2.30 p.m.	4. Cartagena Protocol: identification and documentation, illegal and unintentional transboundary movements, and Biosafety Clearing-Hous (<i>continued</i>)							
2.30 – 3 p.m.	5. The role of customs and border-control officials in implementing the Protocol							
3 – 3.30 p.m.	Coffee/Tea break							
3.30 – 4 p.m.	5. The role of customs and border-control officials in implementing the Protocol (<i>continued</i>)							
4 – 5 p.m.	6. National experiences with transboundary movements of living modified organisms (participants)							
Tuesday, 18 October 2016								
9 – 10.30 a.m	6. National experiences with transboundary movements of living modified organisms (participants) <i>continued</i>							
10.30 – 10.45 a.m	Coffee/Tea break							
10.45 a.m – 12.30 p.m.	7. Sampling, detecting and identifying living modified organisms.							
12.30 – 1.30 p.m.	Lunch							
1.30 – 3 p.m.	7. Laboratory exercises							
3 – 3.30 p.m.	Coffee/Tea break							
3.30 – 5 p.m.	8. Group work on subregional needs and gaps and preparation of needs and gaps analysis							

Date and time	Agenda item					
Wednesday, 19 October 2016						
9 – 10.30 a.m	8. Report back from group work on subregional needs and gaps analysis and finalization of needs and gaps analysis					
	9. Introduction to the Green Customs Initiative and introduction of e-learning modules					
10.30 – 10.45 a.m	Coffee/Tea break					
10.45 a.m – 12.30 p.m.	10. Group exercise: e-learning modules					
12.30 - 1.30	Lunch					
1.30 – 3 p.m.	10. Group exercise: e-learning modules (<i>continued</i>)					
3 – 3.30 p.m.	Coffee/Tea break					
3.30 – 4 p.m.	11. Other matters					
4 – 5 p.m.	12 Closure of the workshop					

Annex III

REGIONAL CAPACITY NEEDS AND GAPS ANALYSIS

1. Introduction

Most Caribbean small island developing States (SIDS) regulate LMOs and transboundary movements of LMOs under existing non-specific legislation, including for example legislation pertaining to quarantine, plant protection and food safety. The notable exceptions are Saint Kitts and Nevis, which adopted a Biosafety Act in 2012; Cuba, which adopted Decree Law 190 on Biosafety in 1999; and the Dominican Republic, which adopted Law 219-15 on Biosafety in 2015. Other countries that have developed or are currently developing biosafety-specific legislation, although that legislation has not yet been adopted, are Antigua and Barbuda, Belize, Grenada, Guyana, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. An overview of the status of legal and policy instruments of the participating SIDS is provided in the appendix to this annex.

Some Caribbean SIDS have been modestly involved in importing LMOs, for example Cuba, which approved imports of maize and soy for food and feed. One country has implemented a moratorium on imports and use of LMOs (Belize).

At the regional level, under the UNEP-GEF regional project, a draft policy is under development, which seeks to harmonize the regulation of biosafety towards facilitating the full implementation of the Cartagena Protocol on Biosafety in an effective, efficient and pragmatic manner, while reducing the regulatory burden on individual countries. Under the auspices of CARICOM, Caribbean States are also developing a regional biotechnology and biosafety policy and strategy.

2. Status of capacity for national border controls at national level

Each of the participating SIDS presented its national legal and policy framework, as well as an overview of the status of national capacities for border controls. On the basis of those presentations a summary is provided below of the status of border control capacities. The challenges are provided in table 1.

Antigua and Barbuda

Border procedures follow non-biosafety specific legislation. Specific documentation requirements exist for LMOs including Import Permits and AIAs. Inspection and clearance of documentation and consignments are carried out by the respective competent authorities upon referral to the CNA by customs and subsequently cleared by customs. There has been an increase in Internet purchases of seeds which are sent through the postal service, and at least two instances of illegal importation of LMOs in passenger's luggage.

Belize

Moratorium in place until Government can adjust the text of the current policy to be in greater conformity with the Cartagena Protocol. National Biosafety Policy established a national biosafety council to make recommendations to Cabinet on matters relating to biosafety. Legislation is in place that addresses biotechnology in general. Belize Agricultural Health Authority is the competent national authority. In principle, this legislation would address LMOs, but due to the moratorium, LMOs cannot be imported. Soya bean was found planted in fields which BAHA destroyed.

Cuba

Border control courses are held for different authorities. A manual, including for customs, is in the editing process. The customs enforcement is based on priorities. A coordination mechanism for different authorities was established. Customs control mechanisms have been strengthened. International standards for GMO declaration are accepted.

Dominican Republic

No LMO approvals so far. Legislation (Biosafety Law) is in place. The establishment of a Biosafety Committee is in process. Good working relationship between Customs and CNA. Laboratory facilities are in place, but we need more capacity development for customs personal.

Grenada

No customs experience so far with LMOs with regards to transboundary movement. Good arrangements between customs authorities and the plant quarantine division of the Ministry of Agriculture in particular and the Biosafety Committee in general. Excellent collaboration among various key stakeholders (Bureau of Standards, the Police, Ministries of Trade, Agriculture, Legal Affairs and Finance, NGOs, etc.).

Guyana

No facilities at border for detection of LMOs. No legislation in place yet although a draft Biosafety Law has been developed. Customs officers have no or little knowledge of LMOs. Open borders with Venezuela, Suriname and Brazil. There are limited technical, institutional and financial resources available. There is also a lack of technical expertise. In Guyana, Biosafety is not treated as a national priority and is therefore not supported politically.

Jamaica

Biosafety committee has been established but has not been active since 2011. Customs works together closely with Ministry responsible for agriculture, which takes decision on the LMO. LMOs are not yet in HS system,¹ but can be implemented. No scanners for detection. Specific legislation needs to be passed and enacted.

Saint Kitts and Nevis

No experience with imports of LMOs. Although the Saint Kitts and Nevis Biosafety Act 2012 states that the Biosafety Board will serve as the National Competent Authority for Biosafety, the Biosafety Board has not yet been established. The National Executing Agency for Implementing the National Biosafety Framework, and thus the agency currently handling biosafety matters, is the Department of Environment, whom, as stated in the Act will function as the Secretariat of the Biosafety Board. Bureau of Standards laboratory has been equipped to carry out ELISA detection methods. Trained personnel and improved institutional capacity for management and administration of biosafety.

Saint Lucia

There is no experience with the approval of LMOs. Coordination between Customs and the competent national authorities (Ministry of Agriculture and Ministry of Health) works well.

Saint Vincent and the Grenadines

Legal framework is incomplete. There is no experience with the transboundary movement of LMOs. Training of custom officers takes places regularly and includes elements of awareness on LMOs provided by the competent national authority. As a result, such customs officers are aware of biosafety issues. Laboratory equipment has been procured to outfit a laboratory (Saint Vincent and the Grenadines Bureau of Standards) with the capability to test for LMO.

Trinidad and Tobago

No specific legislation in place. There have not been any approvals of LMOs. There is a biosafety coordination unit. Already a mechanism in place linking government agencies with regards to release and exam of imports (ASYCUDA).

¹ HS: The Harmonized Commodity Description and Coding System, generally referred to as "Harmonized System" or simply "HS", is a multipurpose international product nomenclature developed by the World Customs Organization (WCO) (http://www.wcoomd.org/en/topics/nomenclature/overview/what-is-the-harmonized-system.aspx).

Country	Lack of awareness of LMOs at customs	Limited detection and identification capacities		LMOs not included in the HS system	Insufficient equipment for detection (scanners, etc.)	Lack of laboratory capacity	Lack of sustainability of initiatives	Limited human resources	Absence of specific legislation (or need for improvement)
Antigua and Barbuda	X	Х		X					X
Belize	X	Х	Х	Х	Х	Х	X	X	X
Cuba		Х		X		X			
Dominican Republic	X	Х						Х	X
Grenada	X	Х		X	X	X	X	X	
Guyana	X	Х		X	Х		Х	X	X
Jamaica	X	Х		X	Х				X
Saint Kitts and Nevis				X			X		
Saint Lucia	X				X				X
Saint Vincent and the Grenadines		Х		Х				Х	
Trinidad and Tobago	Х	Х				Х		Х	X

Table 1. Border control challenges at the national level reported by countries

3. Regional trends in border control capacities

Participants reported that the main obstacle to carry out border controls on LMOs is the absence of legislation. In a few States, biosafety legislation has been adopted (Cuba, Dominican Republic, and Saint Kitts and Nevis). In many countries draft biosafety legislation has been developed but has not yet been adopted due to what participants described as lack of political will.

In addition to the lack of legal frameworks, participants indicated that border control officials in general are not aware of developments pertaining to LMOs or of any transboundary movements of LMOs in their country. Participants indicated that in general there seems to be a lack of awareness of LMOs in their countries, comprising importers, brokers and the general public alike.

Participants reported that coordination with national competent authorities for biosafety is insufficient. Some participants reported the same on coordination between customs and plant quarantine and food and drug authorities.

Participants of many countries indicated that customs officials are not trained on matters related to biosafety, let alone simple detection techniques. In addition, customs officials reported that the capacity at the national level to carry out detection and identification tests is insufficient due to limited human and financial resources.

The lack of sufficient human and financial resources was reported as being a main cause for insufficient capacities on biosafety.

4. Recommendations

Participants provided a number of recommendations to address the weaknesses and gaps indicated above. Some participating countries provided specific national level recommendations (presented under "A" below) All countries agreed to a number of regional recommendations that are relevant for both the national and regional level (presented under "B").

A. National-level recommendations

Saint Lucia:

- More training for customs and other stakeholders
- Fast-track biosafety legislations
- Continue public sensitization on the effects of biosafety on one's country ecosystems
- Refurbish and operationalized biosafety testing facility
- Build capacity among CNA

Belize:

- Specialized training in laboratory methodologies
- Public awareness and education campaign
- Cross-training of other personnel
- Support to monitoring programmes
- Risk analysis

Cuba:

Create accredited laboratory capacities for detection and identification of GMOs. Continue improving coordinated decision-making process with other authorities. Develop capacities at borders for quick identification. Develop guidelines for sampling at borders.

Trinidad and Tobago:

There is a need for training and sensitization of Competent Authority personnel (plant quarantine, food and drug etc.)

B. Regional level

The recommendations that are relevant for both the national and regional level are presented under the issue to which they relate and apply to all participating countries.

Detection and identification

- Use of test strips at borders
- Prepare and make available sampling protocols/adapt existing ones; development of methodologies and protocols for sampling and detection of LMOs and/ or adapting existing ones
- Supportive laboratory services
- Closer collaboration/networking with the relevant CNA /exporting country
- Continuous training for local scientist and laboratory technicians
- Establishment /identification of sub/regional laboratory

Lack of awareness of GMO at customs /General public

- Use of billboards
- Utilization of BCH material
- Use artist (drama/music)

Coordination with competent national authority

• Explore possibility to link ASYCUDA with the regional biosafety node

Lack of training for customs officers and stakeholders

- National workshops for frontline Officers
- Develop specific modules at the M.Sc. level

Lack of ID code under the customs system

- Inclusion of GMO into HS system
- Explore possibility to employ HS system to classify GMO, in collaboration with CARICOM and WCO
- Understand the codification of GMO and incorporation into the ASYCUDA system

Limited resources (human and financial)

- Intensify collaborative efforts between BCA and CNA
- Explore the one window option where the CNA and border agencies can have a mechanism for real time alert

Policy, law and documentation

- Continue to impress the need for bringing into force
- Utilizing relevant data to convince policymakers
- Addition of a field on the Customs declaration form or the invoice that would indicate if the products are GMO-free or not.
- Regional Legal Framework including penalties to give guidance to national Customs Departments as it relates to individuals who make false declarations.
- More collaborative efforts between CARICOM members states which would aid in the communication of issues, including on regional CARICOM biosafety policy

Non-existence of compiled list of supplies of GMO

- Creation of a regional directory / database that consist of manufacturers, suppliers and importers
- Incorporate list of suppliers to the national node/ASYCUDA

Appendix to the regional capacity needs and gaps analysis

LEGAL AND POLICY FRAMEWORKS IN CARIBBEAN SMALL ISLAND DEVELOPING STATES

Antigua and Barbuda

- Biotechnology and biosafety policy
- Biosafety and Biotechnology Management Bill (3rd draft)
- Biosafety regulations (2nd draft) environmental release, labelling, import, export and transit, contained use
- National discussions to be convened on the most appropriate administrative system

Belize

- Policy draft expected by end June 2016. Document will also contain drafting instructions to inform the legal framework
- Legislation BAHA Act Chapter 211 has provisions for regulating import, export and use of GMOs
- No regulations in place
- New Biosafety Bill to be drafted (2008 draft Biosafety Law too many gaps and contradictions)

Cuba

- Decree law 190 for Biosafety approved in 1999
- Resolution 180 of 2007, revoking resolution 76 of 2000, Regulations for granting biosafety authorizations
- Resolution 112 of 2003, Requirements for containment of plants and animals with biological risk (including GMOs)
- Resolution 103 of 2008 Regulations for environmental inspections. (Including release areas and confined facilities for GMOs

Dominican Republic

- Law 219-15 on Biosafety of 2015 (Ley sobre la seguridad de la biotecnología 219-15 of 2015)
- Sectoral Law 333-15 on Biodiversity of 2015 (Ley sectorial de biodiversidad 333-15 of 2015)

Grenada

- Biosafety Bill submitted to the Ministry of Legal Affairs (January 2015)
- Anticipated that the Bill will be passed into Law within the next 6 months
- Biosafety Policy endorsed by Cabinet in 2014
- Biosafety regulations drafted and completed in 2015

Guyana

- Final Draft Bill (2015) and 4 draft Regulations (Placement on the market, Labelling, Contained use and Environmental Release) being finalized
- Draft Policy document prepared
- Feedback from key stakeholders to be incorporated into the policy document and finalized

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Jamaica

• Jamaica has a biosafety policy but it is presently in draft stage

Saint Kitts and Nevis

- Biosafety Act 2012 (in existence)
- Biosafety Amendment Bill 2016
- Final Draft of the Biosafety Regulations 2016 (under review)
- Biosafety Policy (under review)
- Draft Biosafety Administrative System (under review)

Saint Lucia

- Biosafety bill drafted (awaiting Cabinet approval)
- Biosafety regulations drafted
- Administrative system commenced conception of administrative arrangements and systems
- Online applications and submissions proposed

Saint Vincent and the Grenadines

- Draft policy completed
- Draft bill revised
- Draft administrative structure/system developed

Trinidad and Tobago

- Biosafety policy revised (to be submitted to Cabinet for consideration)
- Draft legislation prepared
- Work on the development of a draft administrative system in progress

Annex IV

WORKSHOP EVALUATION

1. At the end of the workshop, participants were asked to complete a workshop evaluation form. They were asked to rate, on a scale of 1 to 6, the extent to which the workshop had improved their understanding of the issues covered at the workshop. The participants were also invited to provide an overall assessment of the workshop in terms of how well it was organized and conducted and the extent to which it had met their expectations. The results of the evaluation are summarized in the table below.

Table: Summary of the workshop evaluation

Item	Level of satisfaction
(i) Improving your understanding of the Cartagena Protocol on Biosafety?	85%
(ii) Improving your understanding of the role of customs officers under the Cartagena Protocol on Biosafety?	95%
(iii) Improving your understanding of what the identification and documentation requirements are under the Cartagena Protocol on Biosafety?	89%
(iv) Improving your understanding of the existing practices in shipments of bulk grains?	79%
(v) Improving your understanding of the process of sampling genetically modified organisms?	87%
(vi) Improving your understanding of detection and identification of genetically modified organisms?	90%
(vii) Improving your knowledge of existing practices in other countries?	89%
(viii) Improving your knowledge of existing gaps and needs in the subregion with regard to border control of LMOs?	92%
(ix) Improving your understanding of the Green Customs Initiative?	82%
Overall workshop assessment	
(i) Has the workshop met your expectations?	92%
(ii) Has the workshop improved your understanding of how to enforce the identification and documentation requirements of living modified organisms under the Cartagena Protocol?	91%
(iii) How useful has the workshop been in improving your understanding of how your country could handle a shipment of LMOs?	90%
(iv) How useful was the workshop for you as an individual?	94%
(v) How well organized was the workshop?	93%
(vi) How did you find the balance between presentations and the discussions?	90%
(vii) How useful are the e-learning modules introduced during the workshop?	94%
(viii) Overall, how would you rate the workshop?	90%

2. In the written comments, a number of participants considered the following to have been the most helpful parts of the workshop:

- (a) The laboratory exercises;
- (b) The exercises with the e-learning modules and their evaluation;

(c) The country presentations on experiences and challenges with the identification and documentation of LMOs;

(d) Identifying the gaps that are present in existing national legislation and the regional gaps and needs;

- (e) The interaction between participants;
- (f) The time allotted for discussion;
- (g) The introduction to LMOs and the requirements of the Biosafety Protocol;
- (h) Recognizing LMOs in shipments and the steps to follow with CNA;
- (i) The balance of participants from customs and competent national authorities;

A number of participants indicated that they found all the sessions in the workshop to be very useful and they could not select just one part.

3. A few participants considered the following to be the least helpful aspects of the workshop:

One participant noted that the emphasis placed on customs officers to do sampling at the ports of entry was not relevant to their national reality. Otherwise, participants did not feel that any part of the workshop was not helpful, only that further time could have been dedicated to laboratory exercises and familiarity with other relevant online tools or practical exercises.

4. The participants made the following suggestions for improving future workshops:

- (a) Invite additional stakeholders to workshops;
- (b) Allow more time for further laboratory exercises;
- (c) Explain the chemical components of LMO testing in further detail;
- (d) Expand on the articles of the Protocol that are relevant to customs officers;
- (e) Explain sampling techniques in greater detail;

(f) Simplify the presentation on biotechnology and GMOs for people who do not have a scientific background;

(g) Produce examples of actual customs documents to see how the biosafety requirements are presented;

(h) Provide more examples (role-play) of situations where customs officials are faced with possible shipments of LMOs and the interaction with CNAs;

(i) A number of participants commented that they found the workshop to have been very well planned and that they hope there will be more such workshops in the future to ensure continuity.

5. The participants described the following ways in which they intended to share the knowledge and experience gained at the workshop with colleagues in their countries:

(a) In train-the-trainer workshops or customs courses (either as lead or assisting) using the elearning modules, BCH and information on the Green Customs Initiative;

(b) Developing training modules;

(c) Making a presentation to and having discussions with colleagues;

(d) Preparing a report for the relevant Ministry/Agency and/or person occupying the post in the future;

(e) Requesting to be appointed to the National Biosafety Committee of their country;

(f) Keeping in better contact with the Competent National Authority and ensuring that customs officials are included in relevant meetings;

(g) Acting as the customs liaison person between the agencies;

(h) Sensitizing stakeholders;

(i) Raising general awareness of LMOs.