

Convention on Biological Diversity

Distr.
GENERAL

CBD/IAS/WS/2017/1/2
7 November 2017

ENGLISH ONLY

CAPACITY-BUILDING WORKSHOP FOR
CARIBBEAN SMALL ISLAND DEVELOPING
STATES TOWARDS ACHIEVING AICHI
BIODIVERSITY TARGET 9
Kingston, 18–22 September 2017

REPORT OF THE WORKSHOP **

INTRODUCTION

1. In response to paragraph 9(a) of decisions XII/17 and IX/4 A and B, the Capacity-building Workshop for Caribbean Small Island Developing States towards Achieving Aichi Biodiversity Target 9 was held in Kingston from 18 to 22 September 2017. The workshop was convened by the Secretariat of the Convention on Biological Diversity (CBD) with generous financial support from the Government of Japan, United Nations Environment Program (UN Environment), in kind contributions from the Great Britain Non-native Invasive Species Secretariat of the United Kingdom of Great Britain and Northern Ireland and the Centre for Agriculture and Biosciences International (CABI), and logistical assistance from the Government of Jamaica.
2. A total of 39 participants attended the workshop. These included representatives of the biodiversity conservation sector and the national plant protection organization from Small Island developing States in the Caribbean, United Kingdom Overseas Territories in the Caribbean, resource persons of the Great Britain Non-native Species Secretariat, CABI, the Secretariat of the Caribbean Community (CARICOM), UN Environment, and local observers from Jamaica. A full list of participants and their contact information can be found in annex I.

ITEM 1. OPENING OF THE WORKSHOP

3. Ms. Junko Shimura, Programme Management Officer for the Global Taxonomy Initiative and Invasive Alien Species at CBD Secretariat convened the workshop at 9:30 a.m. on Monday, 18 September 2017. Ms. Shimura invited the representatives of the Ministry of Economic Growth and Job Creation of Jamaica to open the workshop, and the Caribbean Sub-Regional Office of UN Environment, CARICOM Secretariat, and the Embassy of Japan to join in welcoming the participants.
4. Lt. Col. Oral Khan, Chief Technical Director of the Ministry of Economic Growth and Job Creation of Jamaica, welcomed the participants to Jamaica and formally opened the workshop. In his statement, Mr. Khan emphasized the impacts of invasive alien species on ecosystems, economies, livelihoods and public health in the region. He highlighted some of the initiatives that Jamaica is undertaking to reduce these impacts in the country such as the establishment of a National Working Group on Invasive Alien Species and the development of a National Invasive Species Strategy and Action Plan. Mr. Khan also highlighted that Aichi Biodiversity Target 9 will not be achieved solely from individual country actions but through international and regional cooperation and actions. Finally, he

** Issued without editing.

encouraged all participants to emerge from this workshop with project proposals and a Regional Action Plan that will sell itself and attract the necessary funding for implementation from multiple sources.

5. Mr. Vincent Sweeney, Head of the Caribbean Sub regional Office of UN Environment, also welcomed the participants and stated that the UN Environment, as overarching organization for the Rio Conventions, such as the CBD, is very keen to see more interaction between the CBD Secretariat and the Caribbean. Mr. Sweeney noted the importance of the collaboration among UN organizations to address the risks posed by invasive alien species in the Caribbean region, notably the control and management of lionfish and sargassum. To supplement this collaboration, Mr. Sweeney expressed the keen desire of the UN Environment to secure funding available through the Global Environment Facility (GEF) and elsewhere. Finally, Mr. Sweeney conveyed his best wishes to all participants.

6. Ms. Thérèse Yarde, Project Coordinator, Caribbean Hub Capacity Building ACP-MEAs of the CARICOM Secretariat, also welcomed the participants on behalf of the Secretariat General of the Caribbean Community. Ms. Yarde highlighted the collaboration between the CARICOM and CBD Secretariats in building regional capacity to achieve Aichi Biodiversity Targets on mainstreaming, National Biodiversity Strategies and Action Plans (NBSAPs), ecosystem restoration, access and benefit sharing, sustainable financing for biodiversity, and now Aichi Biodiversity Target 9 on invasive alien species. Ms. Yarde also mentioned the ongoing efforts of the Caribbean Community to formulate a regional biodiversity strategy. Conclusively, she emphasized the importance of participants as resource persons that will contribute information and expertise to develop project proposals and action plans during and after the workshop.

7. Mr. Shinichi Yamanaka, Deputy Head of Mission, Embassy of Japan to Jamaica, The Bahamas and Belize, welcomed the participants. In his statement, Mr. Yamanaka expressed his gratitude for the opportunity to support the organization of such important workshop for the Caribbean region. He stressed on the close collaboration between the Government of Japan and the Caribbean region in the recent past and congratulated the region on the workshop towards achieving Aichi Biodiversity Target 9.

8. On behalf of Ms. Cristiana Paşca Palmer, Executive Secretary of the Convention on Biological Diversity, Ms. Shimura welcomed the participants to the workshop and expressed her deepest sympathies to all participants, their families and friends who have had to endure the severe impacts of hurricane Irma. Subsequently, she noted the importance of cross-sectoral collaboration to put measures in place to prevent the introduction of invasive alien species, as well as to control or eradicate these species. She highlighted the challenges faced by islands as they are considered the most vulnerable places to the introduction, establishment, and negative impacts of invasive alien species. Finally, Ms. Shimura encouraged all participants to engage in the development of a vision that supports safe international trade and sustainable development in the Caribbean region.

9. A group photo was taken at the venue of the workshop (see Figure 1).



Figure 1. Participants at the opening of the workshop (Photo: Eric Salamanca).

ITEM 2. ORGANIZATIONAL MATTERS

10. Following the opening of the workshop, a representative of CBD Secretariat introduced the organization of work, including instructions for the poster session aimed at highlighting best practices on the progress towards achieving Aichi Biodiversity Target 9.

11. A representative of CARICOM Secretariat shared the action plan that will follow after the workshop.

12. Participants were invited to consider and adopt the agenda and organization of work shared by the Secretariat prior to the workshop. Both documents were adopted without amendments.

ITEM 3. WORKSHOP BACKGROUND, GOALS AND EXPECTED OUTPUTS

“Why are we here?”

13. After adopting the agenda and organization of work, CBD Secretariat provided an overview of the background, goals, and expected outputs of the workshop. Expected outputs involved the development of tangible outlines of programmes/projects on invasive alien species management to be implemented at the national or regional level. Such outlines would contribute to the achievement of Aichi Biodiversity Target 9 at the global level.

14. Subsequently, participants were invited to introduce themselves to the group and engage in an exercise to discuss cross-sectoral communication and collaboration. They focused their discussion on ways to address the issue of invasive alien species such as the potential spread of red imported fire ants in the region. They also exchanged their views on the roles and common goals of both biodiversity conservation and agricultural sectors with regards to preventing and controlling or eradicating invasive alien species.

15. During this exercise, participants representing the ministries responsible for biodiversity conservation and national plant protection organization exchanged information on:

(a) The national obligations to implement international agreements such as the CBD, the International Plant Protection Convention (IPPC) and other related international standards;

(b) The roles of their ministry/agency on the management of invasive alien species and pests at pre-border (pre-import), border and post-border management in their countries..

16. In addition, the Secretariat of the CBD emphasized that transport of alien species with high risk of biological invasion within the national jurisdiction (e.g. transport between islands within a country) should also be considered by the two sectors to achieve Aichi Biodiversity Target 9.

17. Participants were then invited to share the ideas exchanged. Among those ideas, participants noted the importance of both biodiversity conservation and agricultural sectors to be on the same page regarding:

- (a) Listing and prioritizing invasive alien species;
- (b) Implementing measures of control/eradication;
- (c) Considering national regulation and legislation on invasive alien species.

18. In addition, participants suggested the creation of national committees or task forces at the policy level to deal with this communication challenge between the different sectors.

19. Furthermore, participants identified complementary roles in prevention and control of invasive alien species between conservation sector and national plant protection organization.

20. Considering the diversity of terms employed by the different organizations, ministries and agencies participating in the workshop to refer to invasive alien species and associated topics, the participants expressed their need for clarification. To fulfill this need, CBD and CARICOM Secretariats took the lead in clarifying the definition of invasive alien species under the Convention on Biological Diversity and IPPC. Accordingly, the definition of invasive alien species and associated terms were reiterated as follows:

(a) "Alien species" refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution. It includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce (CBD COP Decision VI/23);

(b) "Invasive alien species" means an alien species whose introduction and/or spread threaten biological diversity (CBD COP Decision VI/23);

(c) "Pest" is any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products (IPPC Glossary of Phytosanitary Terms);

(d) "Quarantine pest" means a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled (IPPC Glossary of Phytosanitary Terms);

(e) Pests that are not quarantine pests may be subject to phytosanitary measures because their presence in plants for planting results in economically unacceptable impacts. They are defined in IPPC as "regulated non-quarantine pests" (ISPM 16).

21. In sum, invasive alien species include those alien species which threaten ecosystems, habitats or native species, as well as species that impact agriculture, forestry, livestock, and aquaculture—in accordance with paragraphs 2-5 of CBD COP decision IX/4A—and the potential negative impacts on biodiversity (and its ecosystem services) posed by the introduction of alien species as pets, aquarium and terrarium species, and as live bait and live food (CBD COP decision XII/16).

ITEM 4. AICHI BIODIVERSITY TARGETS 9 AND PROJECTS ON INVASIVE ALIEN SPECIES MANAGEMENT IN THE CARIBBEAN REGION

"What has been done?"

22. Under this agenda item, a representative of CABI presented the successes, challenges and lessons learned from the project "Mitigating the threats of Invasive Alien Species in the Insular Caribbean (MTIASIC)" during the period 2009-2014. His presentation included an overview of the MTIASIC project, which included 5 components ranging from the development of national and regional invasive alien species strategies to capacity building to prevent introduction, control and manage invasive alien

species. Among the successes of the project, CABI highlighted the update and development of 5 national and 1 regional strategies to mitigate the threats of invasive alien species in the Caribbean, and trainings on impact and risk assessment. Challenges included the need for dedicated staff and a formal coordination mechanism, political will to get attention in the region, the myth that information is not available to take action, and the weakness of legislations to enforce prevention. Lessons learned included the need for the multilateral environmental agreements to expand their roles to target the heads of cabinets and finance ministers, and the need to act on the devastating impacts of invasive alien species in the Caribbean and to go beyond awareness and capacity building.

23. CABI also gave an overview of the “Strategy and Action Plan for Invasive Alien Species in the Caribbean Region 2011-2016”, developed as part of the MTIASIC project by representatives from national and regional working groups in the region. He shared the participatory process used to develop the strategy and the structure of the final product. The final strategy focused on 5 elements: prevention of new introductions, detection and eradication of new invasive alien species, management of invasive alien species and restoration of ecosystems.

24. In addition, Mr. Carlos Rijo, National Coordinator of Invasive Species at the Ministry of Environment and Natural Resources of Dominican Republic, presented the work conducted under the MTIASIC project to remove invasive alien species from one of the country’s offshore islands in order to conserve the population of two species of native iguana populations.

25. To supplement the review of the progress made toward the achievement of Aichi Biodiversity Target 9 and projects on invasive alien species, Ms. Marianela Araya, GEF Task Manager of UN Environment, was invited to present the project “Preventing COSTS of Invasive Alien Species in Barbados and the Organisation of Eastern Caribbean States (OECS)” via Skype conference call. The GEF Task Manager offered an overview of the project, which aims to prevent, early detect, control and manage frameworks for invasive alien species with a focus on risk management and the highest risk of invasion pathways. Countries participating in the project include Antigua and Barbuda, Barbados, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Grenada, Dominica, and Saint Lucia. Ms. Araya also informed that the project concept was approved by the GEF in 2016 and is planned to be implemented in the period 2018-2021.

26. Subsequently, CARICOM Secretariat summarized the progress towards the achievement of Aichi Biodiversity Target 9 in the Caribbean. To do so, the organization presented the overall results of the country dossiers on invasive alien species developed collaboratively by CARICOM and CBD Secretariats prior to the workshop¹. Among the results, CARICOM Secretariat informed that a total of 17 countries were considered for the production of the dossiers. Out of the 17 countries, CARICOM Secretariat highlighted that 59% have a national target on invasive alien species and this target is included in the National Biodiversity Strategy and Action Plan. In addition, 10 countries have a national policy or legislation on invasive alien species, 88% identified priority invasive alien species, and 78% identified their pathways.

27. Additional projects on invasive alien species developed by participating countries, provinces or territories were presented in the format of a poster session. Posters were displayed in a separate room and were visited by participants during lunch times. Poster presenters included Antigua and Barbuda, Bahamas, Barbados, Bermuda, Dominica, Guyana, Jamaica, Saint Kitts and Nevis, and Saint Lucia. Photos of posters are included in Annex VII.

28. Following the review of country dossiers, participants were invited to engage in a SWOT analysis exercise in small discussion groups. After concluding their group SWOT analysis, participants were

¹ Earlier this year, CBD and CARICOM Secretariats have signed an agreement to collaborate in the produce country dossiers on invasive alien species. The dossiers aim at evaluating the current occurrences and impacts of invasive alien species, pests, and pathogenic agents on biodiversity and ecosystem services of small islands developing States in the Caribbean. They also describe the impacts of such species and organisms on agriculture, forestry and fisheries, and assess national laws, policies, and regulations that address the risks posed by invasive alien species and unwanted organisms.

invited share the key points discussed with the plenary. The key points resulting from this exercise are outlined in Annex III.

29. To conclude the discussions under this agenda item, CBD Secretariat revisited the main ideas shared among the participants. These included:

- (a) Invasive alien species listed at the national level;
- (b) Need for capacity in taxonomy with a focus on species identification and information sharing;
- (c) Need to improve facilities such as laboratory, disposal and incineration facilities (National Plant Protection Organization);
- (d) Need to collect information on social and economic impact of invasive alien species;
- (e) Emergency action plan (rapid response plan) should be established;
- (f) Need for options of invasive alien species management (biological control, Integrated Pest Management);
- (g) Need for coordination at the policy level towards legal enforcement of invasive alien species management.

ITEM 5. EVALUATION OF NATIONAL POLICIES, LEGISLATION, AND CAPACITIES REQUIRED WITHIN THE CARIBBEAN TO ACHIEVE AICHI BIODIVERSITY TARGET 9

“What are the gaps we have?”

30. Under this agenda item, a representative of the Great Britain Non-native Species Secretariat presented the results of the project “Tackling Invasive Non-native Species in the UK Overseas Territories”. According to this representative, the project aims at improving the biosecurity of the United Kingdom Overseas Territories against invasive non-native species to improve their environment resilience and food security. The Great Britain Non-native Species Secretariat added that the project carried out a gap analysis of 22 components grouped in three areas: prevention, early warning and rapid response, and management, prioritization and frameworks. To conclude her presentation, Ms. Key shared some of the gaps the project identified. These included limited resources on pathways and species of highest risk, legal policy framework, training, and use of regional coordination bodies and networks.

31. Subsequently, the participants from the United Kingdom Overseas Territories Mark Outerbridge, from Bermuda, and Eric Salamanca, from Turks and Caicos, shared their experiences as members of the project presented by the Great Britain Non-native Species Secretariat.

32. Afterwards, participants were invited to share their views on national and regional gaps in achieving Aichi Biodiversity Target 9. To guide the discussions during this activity, CBD Secretariat, suggested participants to focus on the following topics:

- (a) National policies on invasive alien species, agriculture, trade;
- (b) National legislation;
- (c) Other relevant policies on pathways management;
- (d) National capacity to take actions;
- (e) SPS measures on import and export of animals, plants and their products;
- (f) Potential impacts on human well-being; and
- (g) Protecting the value of biodiversity and ecosystem services.

33. As a result of the activity, participants identified national and regional gaps to be fulfilled. A compilation of these gaps can be found in Annex IV.

34. Considering the gaps identified, CARICOM Secretariat shared the gaps in country dossiers and described the areas requiring definitional clarity. She revisited the definitions and terminology of invasive alien species and pathways under the Convention on Biological Diversity and the International Plant Protection Convention.

35. Participants were then invited to share the definitions of these terms used in their respective ministry/agency and in the country dossiers. While some countries and UK Overseas Territories have their own definition of invasive alien species and pathways (e.g. Saint Lucia, Bahamas, and Bermuda), others use the CBD definition (e.g. Guyana) and the IPPC definition (e.g. Barbados).

36. To further the debate on pathways, smaller groups were established and assigned a pathway to discuss. Discussions focused on the following questions:

- (a) What is the prevalence of the pathway in your country (with examples, if possible)?
- (b) What measures are in place in your country to manage the pathways (with examples)?
- (c) How adequate are these measures (with explanation)?
 - Not adequate
 - Somewhat adequate
 - Adequate to an acceptable degree
 - Adequate to a high degree

37. Participants presented the outcomes of the pathways debate. These outcomes are compiled in Annex V.

38. To conclude this agenda item, participants further reviewed and supplemented the information contained in country dossiers, paying special attention to the definitions of terms employed in the text of the dossiers. The review started at the workshop and was agreed to continue after it, as part of the follow up action plan of the workshop.

ITEM 6. IDENTIFICATION OF REGIONAL PRIORITIES FOR INVASIVE ALIEN SPECIES MANAGEMENT AND HARMONIZATION OF MEASURES TO ADDRESS THE RISKS POSED BY THESE SPECIES AND TO ACHIEVE AICHI BIODIVERSITY TARGET 9

“What are the regional issues?”

39. Under this agenda item, participants were invited to revisit the workshop goals and expected outputs. CBD Secretariat stressed the importance of the participation of both biodiversity conservation sector and national plant protection organization to address the risks posed by invasive alien species and identify regional priorities.

40. Participants were also invited to review the roles of both sectors in dealing with invasive alien species at the national level. To conduct this review, participants formed small groups composed of representatives from both the biodiversity conservation sector and a national plant protection organization from two or three neighbouring countries.

41. Representatives from the national plant protection organizations provided an overview of the International Standards on Phytosanitary Measures (ISPMs) to their biodiversity conservation colleagues. They further explored the measures related to quarantine pests, regulated non-quarantine pests and their reporting mechanisms.

42. In turn, representatives from the biodiversity conservation sector exposed their role in addressing the risks and consequences posed by invasive alien species, particularly the known impacts of these species on ecosystems, habitats and native species. They also stressed the needs for controlling the populations of these invasive alien species already established and that continue to threaten biodiversity.

43. Subsequently, participants were invited to identify existing gaps and measures to be potentially filled and harmonized at the regional level, taking into account the guidance set by the Convention on Biological Diversity² and International Standards on Phytosanitary Measures. One recurring gap identified by participants was the lack of communication at the political and regional levels. To reduce this gap, participants suggested coordination of communication through CARICOM Secretariat. CARICOM Secretariat listed possible opportunities to promote the regional environmental agenda to ministers. Additional gaps identified by participants include:

(a) National and regional training on risk assessment of alien species becoming invasive in the Caribbean. Training could be based on the ones conducted by United States Department of Agriculture – Food and Agriculture Organization;

(b) Engagement of national and regional emergency management organizations on reducing the risk of introduction of IAS during disaster/emergency relief;

(c) Border regulation on live animals import/transit taking into account guidance and guidelines established by CBD³ and OIE – World Organisation for Animal Health⁴;

(d) Training on application of Horizon Scanning in the region;

(e) Engagement and awareness of customs office and border control agencies on the management of biological invasions risks associated with consignments.

44. To conclude the discussions under this agenda item, participants considered a call to action to prevent the invasion of alien species via emergency relief responses after the disastrous passage of hurricanes Irma and Maria in the Caribbean region, referring to paragraph 42 of decision VIII/27 of the Conference of the Parties to the CBD in 2006. Participants supported the release of a joint statement between the UN Environment Caribbean Sub regional Office, CBD and CARICOM Secretariats to be annexed to the workshop report. The joint statement was officially released on 3 November and is available on the Invasive Alien Species website at <https://www.cbd.int/invasive/doc/cbd-unec-joint-statement-en.pdf>. A copy of the joint statement is also included in Annex VIII.

ITEM 7. DEVELOPMENT OF PROGRAMME/PROJECT PROPOSALS AIMED AT IMPLEMENTING MEASURES THAT ADDRESS THE RISKS POSED BY INVASIVE ALIEN SPECIES AND AT ACHIEVING AICHI BIODIVERSITY TARGET 9

“How do we solve the issues?”

45. Under this agenda item, CBD Secretariat offered an overview of multilateral environmental agreements, funding opportunities, and additional potential opportunities for eligible Parties to the Convention. Following the overview, CBD Secretariat detailed the logical framework approach used by implementing agencies, such as UN Environment. CBD Secretariat demonstrated an example of logical framework on achieving Aichi Biodiversity Target 9 to help participants get familiar with the task.

² <https://www.cbd.int/decision/cop/?id=7197>, <https://www.cbd.int/decision/cop/default.shtml?id=13379>, <https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-13-en.pdf>

³ Annex to decision XII/16, guidance on devising and implementing measures to address the risks associated with the introduction of alien species as pets, aquarium and terrarium species, and as live bait and live food, available at <https://www.cbd.int/decision/cop/default.shtml?id=13379>

⁴ OIE Guidelines for assessing risks of non-native animals becoming invasive, <http://www.oie.int/doc/ged/D13931.PDF>

46. CBD Secretariat also stressed the importance of writing clear and compelling goals, outcomes, and activity outputs and targeting those to third parties such as GEF operational focal points, those implementing and executing agencies, and biodiversity stakeholders. Specifically, CBD Secretariat emphasized that project/logical framework proposals should ensure that:

(a) For projects targeting GEF, goals are aligned with GEF priorities and have a clear contribution to conservation of globally significant biodiversity (e.g. unique endemic species, globally recognized sites such as Ramsar sites of World Heritage Sites);

(b) Aichi Target 9 is incorporated as a priority in National Biodiversity Strategy and Action Plans given that this a requirement to receive funding from the GEF;

(c) For projects targeting the Standards and Trade Development Facility (STDF), a recent PCE was completed. There are opportunities for funding support to build SPS capacity through the STDF grant facility, and linkages can be made between SPS capacity and pest/IAS management.

47. CBD Secretariat added that this approach of project formulation better contributes to meeting priorities set by Parties, donors, and implementing and executing agencies.

48. To conduct this activity, participants were then invited to form small groups and choose to work at either the national level or the sub regional/regional. Groups were instructed to identify strategies and actions to address invasive alien species by taking into account the following elements of the logical framework approach:

(a) Identification of goal, outcome, purpose, outputs and activities;

(b) Identification of objective indicators to evaluate the progress on each of the above;

(c) Identification of information sources to evaluate using each indicator;

(d) Identification of important assumptions and risks (situation analysis).

49. Resource persons, staff members of UN Environment and the Secretariats of the CBD and CARICOM Secretariats assisted the groups in identifying the elements to develop the logical framework. One-on-one consultations took place during this activity.

ITEM 8. PRESENTATION OF PROPOSALS DEVELOPED

50. Under this agenda item, each group presented its draft logical frameworks in plenary.

51. While seven groups chose to develop their log frames at the national level, one group chose to create their logical framework at the sub regional level. A summary of the logical frameworks presented is illustrated in Table 1 and the complete results of this activity are included in Annex VI.

Table 1. Logical frameworks presented by participants by title/goal.

LOGFRAME TITLE/GOAL	COUNTRY/GROUP
Regional Coordinating Framework to Effectively manage IAS by 2022	Antigua and Barbuda, Dominica, and Saint Kitts and Nevis
To protect the endemic iguanas on San Salvador, Andros, The Exumas and Eleuthera in The Bahamas by controlling the population of the invasive alien species Green Iguana (<i>Iguana iguana</i>)	Bahamas
To contribute to Barbados' prioritization and control of IAS and Achievement of Aichi Biodiversity Target 9 by 2021	Barbados
To protect threatened native and endemic species in three islands	Dominican Republic
Supporting actions to enable the uptake of Aichi target 9 in	Guyana

Guyana	
Aichi Biodiversity Target 9 is achieved in Jamaica by 2021	Jamaica
Strengthening Saint Lucia's capacity for protection of its unique biodiversity from IAS by 2022	Saint Lucia
Supporting actions to enable the uptake of Aichi target 9 in Suriname	Suriname

**ITEM 9. DEVELOPMENT OF AN ACTION PLAN FOR THE PERIOD 2018-2022
BASED ON REGIONAL PRIORITIES AND PROGRAMME/PROJECT
PROPOSALS DEVELOPED**

“What actions do we take?”

52. Under this agenda item, CARICOM Secretariat introduced the CARICOM Biodiversity Strategy 2018-2022. The strategy aims at establishing a strategic direction for the region on agreed priority targets. Among these priority targets is invasive alien species.

53. Subsequently, participants discussed the actions to be taken within the next 12 months to further develop their logical frameworks and prepare project proposals to submit to funding agencies. Participants were invited to submit all outputs produced during the workshop to CBD Secretariat, including their plans to use these outputs at the national and regional levels.

54. Among the actions discussed, participants highlighted the following:

(a) Connect with their national GEF operational focal point and to present the outputs of the workshop and outline next steps;

(b) Create a mailing list to keep in contact;

(c) Organize a cross-sectoral meeting on invasive alien species to share outputs of the workshop and initiate national level discussion on programme/project formulation targeting GEF-7. Participants suggested engaging the forestry sector in this process;

(d) Review the national legislation relevant to invasive alien species, and if necessary revise the legislation to cover animal imports (mammals, reptiles, amphibians, fishes, insects among others under kingdom Animalia) based on the risk of biological invasions.

(e) Communicate the outputs of the workshop to a broader community than that composed of biodiversity stakeholders. This include the industry sector and the general public;

(f) Review country dossiers and submit a revised version to CARICOM and Secretariats.

55. CBD Secretariat further explained that the logical framework could be a work in progress and suggested participants to adjust it according to feedback received during and after the workshop. CBD Secretariat also highlighted the importance of involving a wider range of sectors that can strengthen the formulation of programme/project proposals at the national level.

56. To conclude the discussions under this agenda item, CBD Secretariat informed participants that workshop outputs will be included in the workshop report, and country dossiers will be incorporated into a CBD technical series invasive alien species in small island developing States to be published at the occasion of the fourteenth meeting of the Conference of the Parties to the CBD.

ITEM 10. REVIEW OF WORKSHOP OUTPUTS AND NEXT STEPS

“What did we achieve at the workshop?”

57. Participants were invited to complete an online survey to evaluate the workshop. Results of the survey are included in Annex II.

58. In addition, participants were encouraged to keep CARICOM and CBD Secretariats informed on the progress of the planned actions over the next twelve months. As a next step, CARICOM Secretariat offered to organize a post-workshop web meeting to follow up the workshop.

59. CBD Secretariat also emphasized the importance of the leadership role of participants in advancing workshop outputs when returning to their home institutions. This included sharing scientific information, notably information included in country dossiers, and further strengthening the collaboration between the biodiversity conservation and agricultural sectors to mainstream the invasive alien species agenda.

60. Furthermore, CBD Secretariat presented the Global Taxonomy Initiative and its training courses to be held in 2018, as supplementary ideas and means to improve capacity in taxonomic identification of invasive alien species.

61. To conclude this agenda item, participants were informed that a post-workshop web meeting to be organized by CARICOM Secretariat would take place in October 2017.

ITEM 11. OTHER MATTERS

62. Under this agenda items, CBD and CARICOM Secretariats announced the best three poster presentations: Barbados, Bermuda and Saint Lucia. Representatives of these countries were awarded CBD shirts, pins and caps.

ITEM 12. CLOSURE OF THE WORKSHOP

63. To close the workshop, CBD, CARICOM, and the Great Britain Non-native Species Secretariats congratulated participants for their achievements despite the challenges resulting from the impacts of hurricanes Irma and Maria in the region.

64. On behalf of all participants, Mr. Augustine Dominique from Saint Lucia expressed appreciation to the Government of Jamaica for hosting the workshop. He also expressed participants' gratitude to the CBD Secretariat and UN Environment for organizing the workshop, as well as to the resource persons representing the CARICOM Secretariat, CABI, and the Great Britain Non-native Species Secretariat.

65. The workshop closed at 2:30 p.m. on Friday, 22 September 2017.

Annex I

LIST OF PARTICIPANTS

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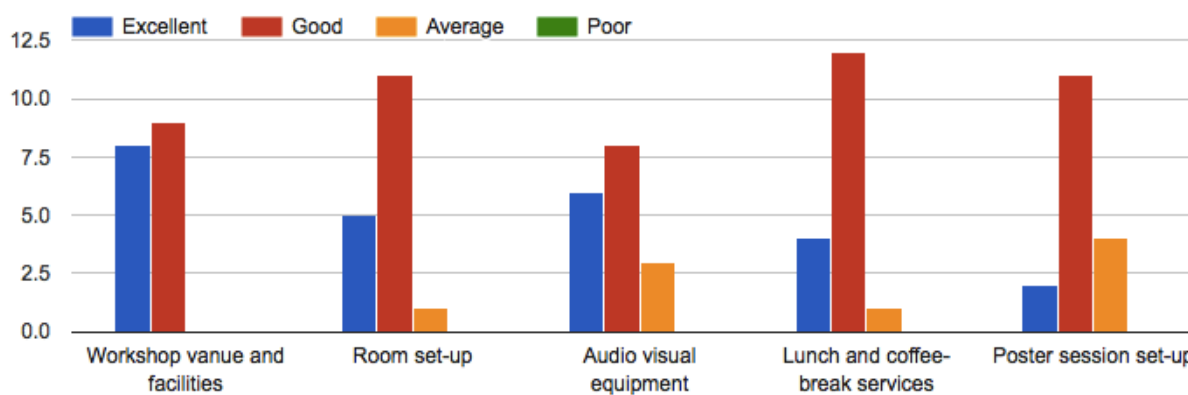
*Annex II***WORKSHOP EVALUATION**

Participants were invited to complete an online survey to evaluate the workshop. The evaluation survey was composed of 12 questions and a total of 17 participants out of the 38 included in Annex I responded them. The results of each question are illustrated below.

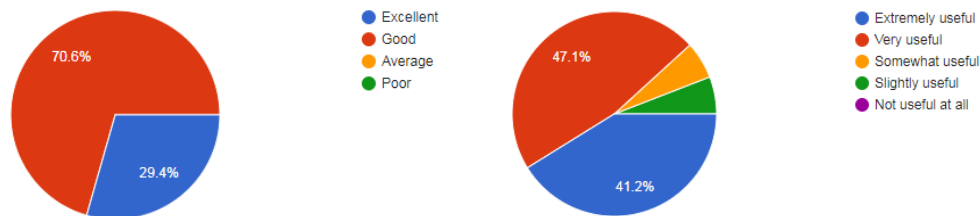
1. Workshop Logistics

The overwhelming majority of survey respondents found that the workshop logistics was excellent or good. Comments to improve workshop logistics included:

- Have a separate lunch room to allow for a more efficient workshop;
- Increase the variety of the lunch menu;
- Adjust the room temperature; the air conditioning made the room too cold;
- Offer a trip to see some of the biodiversity of the host country;

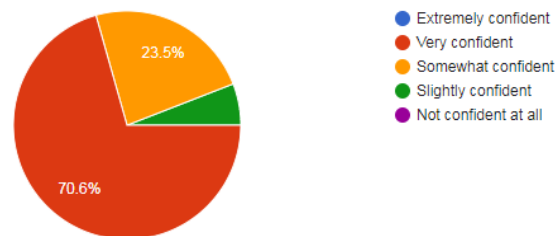
**2. Quality and Usefulness of Workshop Activities**

The vast majority of survey respondents rated the overall quality of the workshop activities as excellent or good and the usefulness of these activities for their work back home as extremely or very useful.



3. Confidence in Formulating Logframe/Project Proposals

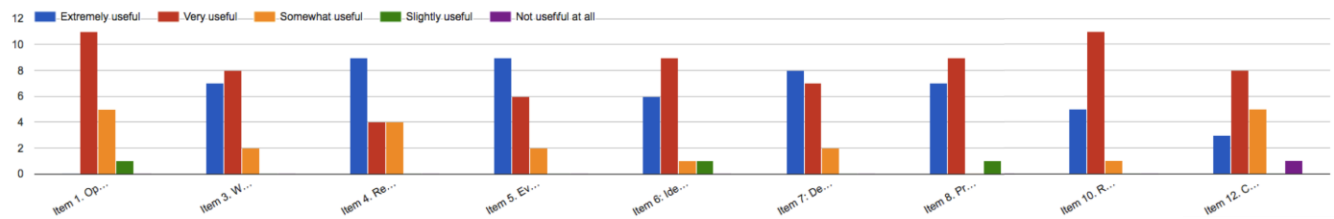
The greatest proportion of survey respondents feel confident to formulate log frame or project proposals aimed at implementing measures that address the risks posed by invasive alien species and at achieving Aichi Biodiversity Target 9, while a smaller proportion feel somewhat and slightly confident in performing that task.



4. Usefulness of Workshop Sessions

Overall, the majority of survey respondents rated the sessions related to agenda items 3 (workshop background, goals and outputs), 4 (progress of Aichi Target 9), 5 (evaluation of national policies), 6 (identification of regional priorities), 7 (development of logframe proposals), 8 (presentation of log frame proposals), 9 (development of action plan), and 10 (review of workshop outputs) extremely or very useful. Items 1 (opening) and 12 (closure) were majoritarily rated as very useful or somewhat useful. Comments regarding the usefulness of the workshop sessions included:

- Participation of the attendees and the sharing of their knowledge enhanced the workshop;
- Sessions on the preparation of individual log frames were useful. By seeing other countries submissions, these sessions gave participants a chance to improve on their own log frames;
- The open ceremony was too long;
- It would have been more useful if participants were more specific in what to do when they get back home;
- I appreciate very much a chance to consult face-to-face Dr. Junko Shimura, Dr. Therese Yarde and Dr. Jillian Key on their various pieces of advice on how we (UKOTs) will go about evaluating availability of relevant provisions to achieve Target 9 of Aichi Convention.
- The sessions served to foster additional and very useful discussions between plant health and environment officials to bring all closer to being and operating on the same page;
- Information on funding options was useful;
- More time could have been allotted to some sessions.



5. Learning Challenges During the Workshop Sessions

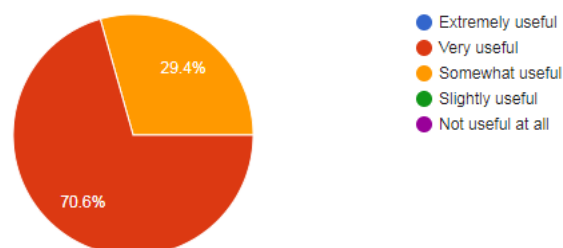
The majority of survey respondents found that the development of log frames/project proposals was the most difficult thing to learn during the workshop. Their comments included:

- The log frame complexity was more similar to a work plan IMO;
- Information on the development of log frames should have been made available prior to the workshop;
- The preparation of the log frame document for project proposals proved to be the most difficult, particularly at the beginning of the activity. This is because it is not an activity conducted very frequently by this participant;
- The log frames development required input of other colleagues.

6. Poster Session

The overwhelming majority of survey respondents evaluated the usefulness of the poster session as extremely or very useful. Comments to improve this session included:

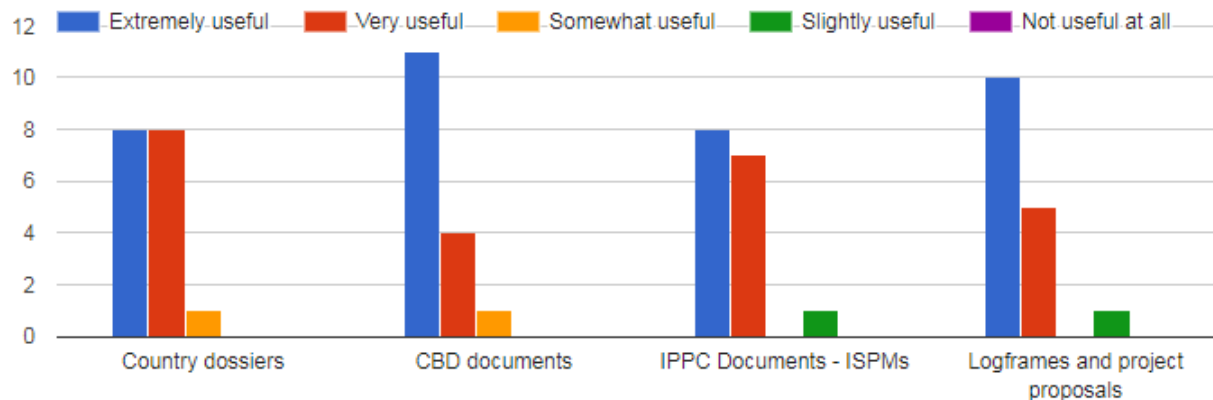
- Provide more information on the guidelines:
 - Include details in terms of objectives and design specifics;
 - Add a suggested format and focus for the poster so that countries are able to showcase the information most pertinent to the process;
 - Announce poster guidelines in advance, including in the notification of the workshop.
- Provide a technical/scientific abstract of the poster for a better understanding of the overall message of the project being described in the poster.
- Allot time for each presenter as part of the agenda. This would facilitate more exchange of information and experiences;
- Have the posters displayed all week in the same room;
- Offer more space to walking around the poster;
- Expand the poster to cover beyond the list of prioritized Invasive Alien Species;
- Show the successes achieved by countries.



7. Usefulness of USB Key Resources

The vast majority of survey respondents evaluated the usefulness of the resources included in the USB key to support your learning during the workshop as extremely and very useful. Comments regarding these resources included:

- The distribution of digital hands out was appreciated as it is good for the environment;
- CBD should continue distributing USB keys in future meetings, workshops, and trainings.



8. Additional Comments

Survey respondents offered additional comments on how we can improve future workshops. These included:

- Consider the hurricane season in the Caribbean region for future events ensuring they take place outside this season (November-May);
- Offer a field trip:
 - Being able to visit important biodiversity areas of the host country would have been a welcome addition;
 - For future workshops I would like to suggest having a field trip to sites where IAS management is being undertaken;
 - Field trips in country to see IAS management in action.
- Workshop agenda/sessions:
 - Allocate more time allotted to critical sessions;
 - Invite local GEF focal points and representatives from the customs agency/department to participate;
 - Instructions were sometimes confusing.
- Country dossiers:
 - Country dossiers must be sent to the country before being compiled, so each participant may have sent their comments before compiling them, and update some information that is not currently updated and rectify some other data that must be verified.
- Preparation and follow up:
 - The pre-workshop meeting and the proposed post-workshop meeting will be very useful.

*Annex III***RESULTS OF THE SWOT ANALYSIS EXERCISE****Group Analysis**

Group 1: Saint Lucia, Jamaica, and Barbados	
STRENGTHS	• Good interagency collaboration ◦ Inclusive of NGOs and academia • Highly trained, experienced and competent staff ◦ Identification capacity for IAS (Jamaica) ◦ Pest risk analysis • Participation in international processes • Good structures for addressing IAS ◦ Ministry of Agriculture and its department ◦ Working on Biodiversity ◦ Interception capacity (Jamaica) ◦ Quarantine ◦ Public education ◦ Surveillance and early alerts • Success in project identification and implementation (St. Lucia)
WEAKNESSES	• Limited capacity as numbers of staff are limited ◦ Lack of trained staff in some areas • Financial capacity • Structures are in place but need strengthening ◦ Inadequate legislation • Constant change at the policy level • Limited appreciation of importance of IAS issues
OPPORTUNITIES	• Involvement of regional and international partners in preparation of briefing policy document • Access to international agencies and guidelines • Access to scientific information • New diagnostic facilities • Capacity building - training opportunities • Funding opportunities

	• Influencing national policy • Regional Cooperation ◦ Use of regional structures such as UWI, CABI • Integration and harmonization of policy and legislation • Public engagement as surveillance • Use of existing guidelines in the IPPC
THREATS	• Increased liberalization ◦ New methods of trading internet pet trade • Unintentional introductions through hitch hikers on legitimate trade • Increase in Tourism, trade and tourism • Illegal trade and illegal entries • Signature of agreement that may have negative implications in terms of strict adherence to IAS Strategies, capacity to implement • Policy shifts diminishing the importance of IAS at the international, regional and national level • Climate movement of IAS and impact of infrastructure ◦ Increase in frequency and intensity of hurricanes

Group 2: Saint Kitts and Nevis, Dominica, Antigua and Barbuda	
STRENGTHS	• Existence of technical presence at the borders • Sensitization and public awareness exists at various levels • National focus on biodiversity conservation exists • Fairly good communication exists at the technical level • A multi-sectoral Technical Advisory Committee established in the Department of Environment meets once monthly to discuss ongoing and planned projects & to ensure synergies & sustainability of work programs • Existence of a good relationship with partner agencies (e.g. NGOs, community groups, regional/international agencies, etc.) with knowledge & technical capacity on IAS issues • Existence of IAS relevant legislation and regulatory presence at ports of entry • Access to/participation in high level dialogue at the regional & international levels • Some level of knowledge & capacity exists (e.g., Gene banks established to combat LY strains & establishment of farmer field schools to combat Diamondback moth) [St. Kitts/Nevis] • Under law, areas have been designated as protected areas and forest reserves [Antigua and Barbuda, Comm. of Dominica] • Border control agencies have developed lists of prohibited & permitted commodities, based on Pest Risk Analysis
WEAKNESSES	• High turnover rate of technically capable staff, particularly within government agencies • Lack of quantification systems to determine impact of IAS • Lack of trained human resources • Weak institutional framework (e.g., labs, etc.) • Lack of national IAS strategy & coordination group • Lack of IAS-specific legislation • Lack of coordination at the policy level • Funding for IAS management does not appear to be a priority
OPPORTUNITIES	• Existence of agencies with an IAS focus with whom greater collaboration is possible • Collaboration & opportunities with international organizations with knowledge and experience in IAS issues • Ability to attract funding due to presence of key biodiversity areas • A national biodiversity strategy can be linked to other sectors (tourism, education, finance, etc.)

	• IAS has been identified by the GEF as a priority area for funding • Existence of various international standards, guidelines that can be adopted at the national level (OIE, IPPC, etc.)
THREATS	• Lack of adequate policy buy-in by stakeholders • Lack of political will, particularly as it relates to providing resources OR support of proposed policies which are seen as prohibitive to economic growth] • IAS management is costly and national funding for sustainability of such efforts is limited • Governments' priorities re: IAS changes • Increase in trade, services & infrastructure development increases vulnerability to entry of IAS

Group 3: Bahamas, Dominican Republic, and Jamaica	
STRENGTHS	• Support from other govt agencies, NGO, civil societies and other stakeholders • Legislation • NIAS Strategy • Working groups and committee • Identification capacity (Taxonomy) • NBSAP
WEAKNESSES	• Public awareness • Capacity (human resources) • Budget • Reactive instead of proactive • Local buy-in • Policy support • Geography of the island(s)
OPPORTUNITIES	• SDGs and Aichi Targets include IAS (Global Agenda) • International funding for projects • Regional collaboration • Funding for regional projects • Graduate students working on IAS
THREATS	•

Group 4: Jamaica, Guyana, Suriname, UK, and Bermuda	
STRENGTHS	• EPA/Conservation (together) • Personal networks • Public/Private partnership (implementation) • Technical capacity
WEAKNESSES	• No IAS legislation • NPPO and EPA working in isolation • Lack of specialized technical experts • Lack of funding • Inadequate border control
OPPORTUNITIES	• NGO/Governmental collaboration • Research opportunity (for funding – lionfish) • Mechanism for collaboration (communication) • Border agents collaborate (Customs, NPPO)
THREATS	• Political intervention • Changes in government policies

	• Natural disaster • Travel tourism/trade
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Country Analysis

Bahamas	
STRENGTHS	• NISS • Public awareness via various means • NBSAP • Biodiversity Committee which discusses a number of BD committee including IAS • Technical expertise • Good collaboration between gov agencies, civil society groups/NGOs & other stakeholders • Collaboration with other gov agencies (Customs) in frontline defense of borders/ports • Varied pool of expertise that can contribute to initiatives, issues, etc. • Have generated a list of experts locally & externally, a broad knowledge base, e.g., experts on local flora & fauna hydrologist wildlife ecologists
WEAKNESSES	• Size of country/geography • Continuity after project completion • Capacity in technical personnel • Budget & funding • Actions are reactive instead of proactive • Lack of specific IAS legislation and/or stalled legislation ◦ Has not been gazette or still in draft form • Lack of political will • Little public interest • No technical presence at the border • Staff attrition • Limited of M&E • Lack of technical expertise within the Dept. of Agriculture for surveillance of ports of entry • Lack of technical capacity across the scope of The Bahamas
OPPORTUNITIES	• IAS is on the global agenda through SDGs & Aichi Targets ◦ int'l funding • Regional collaboration • UB is developing capacity in its environment & natural resources colleges • Support through grad research • Through research permits and collaborations with int'l organizations we have access to seed banks • Various international standards that can be adopted
THREATS	• Pet trade • Increased (international) trade • Unmanned ports of entry • Natural disasters = decreased resilience • Economic value of IAS that can be a threat • Increased tourism/globalization • Climate change • Sea level rise • When funding requests are made, the archipelagic nature of our islands are not taken into account • Our GDP is skewed, which frequently leads to insufficiently funded projects

Jamaica	
STRENGTHS	• Identification capacity • Knowledge in marine and terrestrial IAS • Inspection/Interception at ports of entry • Pest Risk Analysis Unit • Institutional support (across the public sector) • IAS Working Group including NGOs and academia • Public education programmes • Early alert leading to control • Priority potential IAS list
WEAKNESSES	• Lack of human resources • Inadequate funding • Lack of legislation • Lack of understanding from the general public
OPPORTUNITIES	• Access to information from other organizations • Shared information within the region • Access to international and regional organization (funding and technical assistance)
THREATS	• Illegal imports • Increase in tourism, trade and shipping • Natural disasters as pathways

*Annex IV***RESULTS OF THE GAPS IDENTIFICATION EXERCISE****Group 1: Saint Lucia, Jamaica, Barbados, and Bermuda**

- Some countries have IAS included in their NBSAPs
- Instead of bringing new species to the country, use what is already there
- Legislation for zoos and aquariums - lionfish
- Many administrative procedures are in place, but may not be covered by current legislation
- Capacity to enforce IAS legislation
- ISPM 41 movement of vehicles

Group 2: Saint Kitts and Nevis, Dominica, Antigua and Barbuda

- Gaps as it relates to: SPS measures on import and export of animals, plants and their products
- There is a need to increase the efficiency of passing legislations relevant to IAS issues, particular as it relates to stressing to policy makers the importance of passing these acts (Antigua e.g.)
- There is a need for internal checks, particularly between Antigua and Barbuda, to regulate the exchange of items between the two islands. Particularly as it relates to difference of issues found in Antigua and Barbuda. Need for internal quarantines, and adherence to internal quarantines (GAS e.g.).
- Yachting sector is a high-risk pathway, which is dependent of reports from custom offices to the various agencies.
 - Trash disposal during customs checks and ship generated waste (Marpol convention is not applied to yachting with the same emphasis as cruise ships, etc.)
 - Pets allowed to roam
 - Importation of “foreign food” which is allowed to transit from port to yacht.
- Lack of training of border control agents (customs staff). There are often informalities at the borders.
- Insufficient human resource, which requires the cross training of agencies to ensure awareness.
- OECS is looking at getting member states to set up a body which deals with SPS regulations
 - Antigua Barbuda is setting up a council which will address cross-cutting issues.
 - We have model Plant and Animal health acts, and model Food Safety act, but these needs to be adopted by the country
 - Dominica: SPS committee is merging into the Agriculture, Health and Food Safety committee and will have joint programs.
- There is an absence of updated pest list, which reduces the ability to conduct an adequate gap analysis.
- There is a need for horizon scanning as it relates to IAS (e.g. Monkeys from St. Kitts to Antigua, need to develop IAS strategy). The Plant health has a regional priority pest list (top 10) and countries are asked to develop their own list of quarantined pest. Although the framework exists, it needs strengthening and improvement of its efficiency.
- Import of food from exotic places (e.g. Sweet Tamarind from Thailand that was initially brought it without import permits). There is often a lack of enforcement due to lack of resources. Non-processed dried (not roasted) feed for animals.
- Passenger baggage is a major gap. Standard for facilities at ports of entry (New Airport issues in Antigua)
- There is a need to develop protocol to handle emergency situations where aid is incoming into a country (e.g. Current Hurricane emergencies)

Group 3: Bahamas, Dominican Republic, and Jamaica

- Effective communication, education and public awareness

- Promoting IAS establishment and spread
- Increase coordination between agencies.
- AS working group publish a newsletter
- Public awareness campaigns to deal with IAS before they are established
 - IAS affect local livelihoods and cultures
- Early alert system for potential IAS
 - CIASNET role - to know what is moving and potentially invading other islands
 - PestNet
- Early detection and rapid response

Group 4: Jamaica, Guyana, Suriname, Turks and Caicos, and Bermuda

- Infrastructure
 - Quarantine facilities (ISPM 34)
 - Fumigation facility (ISPM 38)
 - Incinerator close to the ports of entry
 - Diagnostic lab
- Human resources
 - Tech experts
 - Entomologists
 - Soil
 - Marine
 - Health
- Working group coordination

*Annex V***RESULTS OF THE PATHWAYS DISCUSSION**

Group 1: Jamaica, Barbados and Saint Lucia		
Release in nature refers to the intentional introduction of live alien organisms for the purpose of human use in the natural environment. Examples include for biological control, erosion control (and dune stabilization), for fishing or hunting in the wild; landscape “improvement” and introduction of threatened organisms for conservation purposes.		
PREVALENCE OF PATHWAYS IN JAMAICA, BARBADOS AND SAINT LUCIA		
COUNTRY	IAS	PURPOSE
JAMAICA	Sterile Fly (<i>Cochliomyia hominivorax</i>)	Released for screwworm control
	2 African parasites released to control (<i>Cephalonomia stephanoderis</i> and <i>Prorops nasuta</i>)	Released to control Coffee Berry Borer
	Wasp	Pink hibiscus mealy-bug (lady bird bug, anygyrus)
BARBADOS	Wasp (<i>Anygyrus</i>)	Pink hibiscus mealy-bug (lady bird bug, anygyrus)
	Mongoose (<i>Herpestes javanicus</i>)	Control of snakes and rats on plantations
	Sages (<i>Artemisia</i> Spp)	released as ornamentals
	Leuceana (<i>Leuceana leucocephala</i>)	for fuel wood to drive bio-fuel production
SAINT LUCIA	Wandering Jew (<i>Tradescantia Zebrine</i>) and Basket Plant (<i>Callisia Fragrans</i>)	Introduced as ornamentals especially along the Gros Piton Nature Trail in the Piton Management Area (PMA) World Heritage Site in Soufriere
	Heliconia (<i>Heliconia wagneriana</i>)	for horticultural interests
	Leucaena	for animal feed and alternative wood for charcoal production
	Asian Mongoose (<i>Herpestes javanicus</i>)	brought in during the sugar cane era for control of snakes
	Cane Toad (<i>Bufo Marinus</i>)	Introduced intentionally

Group 2: Dominica, Antigua and Barbuda, Saint Kitts and Nevis
• Pathway discussion exercise: ESCAPE from confinement • Additional pathway could be SEEDS for feeding • Agriculture (medium prevalence, few examples (e.g. neem which was brought for insecticide purposes, grass brought for agriculture feed) • Aquaculture (low, non-suitable habitat for escapes) • Botanical Gardens/Zoo/Aquaria (low, iguana e.g.) • Pets/Aquarium/Terrarium species (low (monkey brought in as pets and displaced by hurricanes – St. Kitts), Snake releases/escapes (Antigua) e.g. unconfirmed reports) • Farmed Animals (high: goats and other livestock) • Forestry (low/non-existent) • Fur Farms (non-existent) • Horticulture (low – neem brought for shade purposes) • Measures: Risk Assessments, issuance of import permits which details reason and location, surveillance and

monitoring

- Measures are somewhat adequate, but subject to resource constraints. Additionally, there is a lack of public awareness which illustrates the dangers to biodiversity when organisms escape.

Group 3: Dominican Republic, The Bahamas and Jamaica

Each table is assigned a pathway (Transport as a Stowaway) and asked to identify answers to the following questions:

1. What is the prevalence of the pathway in our country (with examples, if possible)?
 - Prevalence – High
 - Dominican Republic (DR) – Giant African Snail comes from machinery (especially Brazil), building materials & tourists' bags; Green Mussels in ballast water
 - The Bahamas – rats/mice on storage containers
 - Jamaica – wood-boring beetles on pallets
2. What measures are in place in your country to prevent the pathways (with examples)?
 - Jamaica – 1) inspection of pallets regardless of the commodity via ISPM 15; 2) inspection of luggage
 - Dominican Republic – 1) ISPM 15 and if a pallet is determined as infested/compromised then the pallet was destroyed by incineration; 2) heavy duty machinery is requested to be sanitized prior to leaving the exporting country and once there the equipment is then cleaned again
 - The Bahamas – 1) Customs checks luggage of persons entering the country via airplanes; 2) Customs officers are trained to perform agency functions (by training)
3. How adequate are those measures (with explanation)?
 - All measures excluding the DR's ISPM 15 measures were defined as somewhat adequate.
 - DR's ISPM 15 measure was defined as highly adequate.

Annex VI

RESULTS OF THE LOGFRAME DEVELOPED BY PARTICIPANTS

Antigua and Barbuda, Dominica, and Saint Kitts and Nevis				
	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	Regional Coordinating Framework (RCF) to Effectively Manage IAS by 2022	RCF implemented & operational in the OECS by 2022		
OUTCOME	Regional IAS framework strengthened to protect biodiversity in OECS countries for sustainable livelihoods, particularly in light of OECS Free Circulation of Goods (FCG) regime	Reduced risk posed by IAS within OECS MS in realization of Aichi Biodiversity Target 9 Improved IAS capacity in OECS MS IAS issues handled with a proactive, as opposed to reactive, focus		FCG regime up and running by 2022
IMMEDIATE OBJECTIVE (PURPOSE) A	To develop a regional IAS framework to address FCG within the OECS	IAS Regional Framework developed		
OUTPUT A	OECS Free Circulation of Goods IAS framework implemented	IAS regional framework is incorporated into the FCG regime by 2020	Regional standard on minimal IAS requirements for border control facilities List of IAS diagnostic experts & laboratories	IAS Regional Framework approved by OECS
ACTIVITY A-1	Development of a rapid alert system & response plan for IAS	Rapid alert system & response plan created and implemented	Raid alert system platform IAS response plans for priority IAS Regional reports generated through use of the rapid alert system	Financial resources are mobilized to support the rapid alert system & response plan
A-2	Development of tool to prioritize IAS for management	IAS prioritization tool accessible to MS MS using IAS tool to develop/update IAS priority lists	IAS prioritization tool (Updated) priority IAS lists based on the tool & stored in regional database	MS accept and willing to use the IAS prioritization tool

A-3	Development and implementation of a communication and public awareness strategy	Strategy incorporated into the FCG campaign	Communication & public awareness strategy document	FCG Regime communication strategy is effective OECS Commission accepts responsibility to incorporate the IAS communication & public awareness strategy into the FCG regime
A-4	Development of a regional IAS coordination mechanism	OECS chairs the coordination mechanism	Documented responses of OECS on IAS issues	Proposed OECS Invasive Species Steering Committee (ISSC) established by 2020
A-5	Technical Capacity Development of key staff in IAS relevant areas (incl. PRA, pathway analysis, diagnostics, etc.)	Regional Training programmes held for Training of Trainers (ToT)	Workshop reports List of trainers & appropriate diagnostic facilities Training manual(s)	MS have personnel who qualify to be a ToT
A-6	Development/sourcing of an appropriate regional IAS database	OECS IAS database is sourced or developed	Database updated with relevant IAS information from MS	MS transparent on IAS issues Existence of an appropriate platform
IMMEDIATE OBJECTIVE (PURPOSE) B	To develop/update IAS frameworks and coordination mechanisms within OECS Member States	IAS legislation and coordination mechanisms exist within MS	IAS committee established within MS	
OUTPUT B	IAS frameworks developed/updated within OECS Member States	IAS legislative/policy documents implemented by MS	MS have relevant IAS legislative/policy document	
ACTIVITY B-1	Development and use of a diagnostic and survey/surveillance protocol for IAS within Member States	DSS protocol adopted nationally	Diagnostic protocols for priority IAS Survey/surveillance protocols for priority IAS Reports of surveys conducted Surveillance reports Diagnostic Reports of IAS in MS	National IAS framework exists to support diagnosis and survey/surveillance for IAS within MS
B-2	Implementation of a communication & public awareness/response strategy	Media campaign launched Stakeholder training IAS identification/awareness workshops	Improvement in the scores of baseline IAS awareness survey Increased number of IAS sightings/reports received from the public	Public/stakeholders are receptive and willing to participate in IAS management
B-3	Adoption/implementation by OECS Member States of existing SPS model legislation	SPS compliant legislation in place	Appropriate facilities at ports of entry Inspection reports	MS unable to (fully) enforce legislation [risk]

			Interception reports	
B-4	Updating and/or drafting of IAS specific legislation/policy in keeping with NBSAPs	Adequate IAS legislation/policy drafted, formally approved & implemented by MS	IAS policy or legislative document Infrastructure, equipment & human resource available for IAS	Ability of MS to draft/update legislation within project timelines Financial and Technical Capacity exist within MS to implement IAS documents over timeline

Bahamas				
	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	To protect the endemic iguanas on San Salvador, Andros, The Exumas and Eleuthera in The Bahamas by controlling the population of the invasive alien species Green Iguana (<i>Iguana iguana</i>).	1. Eradication of target species 2. Increased population of the native iguana species in the targeted areas	1. Conducting site-specific assessments for the absence of the green iguana	1. Baseline surveys are present 2. Risk – Evidence not reported a. Online reported sightings/events
OUTCOME	To enact the Biosecurity Act. To remove the Green Iguana (<i>Iguana iguana</i>) populations.	1. Biosecurity Act is enacted 2. Decreased population of targeted species	1. Gazetting of Biosecurity Act 2. Impact monitoring of native iguana species (inclusive of keystone species quantity)	1. Parliamentary approval of legislation within the timeframe of the project 2. There are no pressing issues in Parliament 3. RISK: Delays in bringing the Bill to Parliament a. Meetings between technical officers and Cabinet 4. Prolonged discussion in Parliament
IMMEDIATE OBJECTIVE (PURPOSE) A	To revise the Biosecurity Act	1. Biosecurity Act is revised by the Committee	1. Approved by the Office of the Attorney General (OAG)	1. The Committee can efficiently review the Draft 2. RISK: There is limited scientific evidence

OUTPUT -A	The approval of the revised Biosecurity Act	Committee approved revised final draft	Approval by OAG	
ACTIVITY A-1	Establish working committee for the drafting of the Biosecurity Act	Working group established with identified stakeholders	Committee minutes	
A-2	Review the draft Bahamas Biosecurity Act Strategy	Edits to the draft	Committee minutes with comments and critiques on the draft	
A-3	Conduct a desktop study of existing legislation	A document listing conflicting & supporting laws/regulations	Table stating laws/policies/legislation which conflict and support the draft	
A-4	Develop a revised draft of the Bahamas Biosecurity Act	A completed revised draft	An e-mail to the Committee with the draft attached requesting feedbacks	
A-5	A final draft of the Bahamas Biosecurity Act	Completed final draft	Draft circulated for feedback	
A-6	Submission of the revised final draft Bahamas Biosecurity Act to OAG	OAG acknowledges receipt of the document	Approval by OAG	1. There are no edits necessary 2. RISK: OAG has feedback on the document and sends it back for further revision a. OAG officer was consulted by the Committee during the revision process
IMMEDIATE OBJECTIVE (PURPOSE)	To protect endemic iguana populations	Identifying IAS on the islands	Removal and/or control of IAS at each site	
OUTPUT-B	To eradicate the Green Iguana (<i>Iguana iguana</i>) populations	Removal of Green Iguana populations	Site-specific population surveys	
ACTIVITY B-1	Establish task-force to survey selected sites on each island		Establishment of Green Iguana Taskforce	
B-2	Locate native iguana populations	Presence of native species	Geographical coordinates of pop'n	
B-3	Locate and survey Green Iguana populations on the selected islands	Presence or absence of Green Iguanas at targeted sites on the islands	Completed surveys on each island	
B-4	Identify other IAS threats to native iguana pop'n	Surveillance of native iguana pop'n for presence of other IAS	Report stating IAS	
B-5A	Identify biosecure breeding sites for the	Criteria for biosecure sites	GPS coordinates for locations	

	native iguana species		identified	
B-5B	Impact assessment of IAS on native iguana pop'n	Desktop study and literature review Economic valuation of IAS control measures	Development of control measures for identified IAS	
B-6	Execution of IAS control measures	Implementation of spaying & neutering, culling and removal programmes	Number of IAS spayed, neutered, culled or removed	
OUTPUT -C	To enact the Biosecurity Act	The Bill is passed in Parliament	Gazetting of the Bill to an Act	
ACTIVITY C-1	Submission of the Bahamas Biosecurity Bill	The Bill is on Parliament's agenda for action	The Bill is passed in Parliament Gazetting of the Biosecurity Act	

Barbados				
	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	To contribute to Barbados' prioritization and control of IAS and achievement of Aichi Biodiversity Target 9 by 2021 towards the protection of Barbados' endemic species and agricultural biodiversity.	Management Options Identified IAS Policy prepared Post Entry Quarantine Facility	Report on Barbados IAS and Risk Analysis Report on IAS control Interception reports Policy submitted and approved by Cabinet Post Entry Quarantine Facility established	Buy-in and commitment and relevant agencies and departmental heads Dedicated Project Manager and Assistant Timely disbursement of funds Timely approvals by relevant agencies including Town Planning
OUTCOME 1	Barbados' Priority List of IAS and Identification of Pathways utilized in decision making and utilized to inform the development of Barbados' IAS Policy to be implemented by relevant agencies through the Ministries of Agriculture and Environment	IAS List and Policy incorporated into Government planning	Included in National Policy documents including the development strategy	Timely Agency contributions Availability of key personnel
IMMEDIATE OBJECTIVE (PURPOSE) A	Preparation of IAS list and prioritization	Consultant's TOR prepared List prepared Pathways identified Risk Analysis undertaken	Document prepared and shared Implemented by Ministries of Environment, Agriculture and	Timely availability of resources

		Development of prioritization methodology/tool for IAS	Trade Availability and use of tool/methodology	
OUTPUT -A	Literature review and background documents prepared. Critical analysis and Risk Analysis undertaken by consultant	Consultant prepare and submit document	Report prepared	Speedy document preparation at all ministries is done Risk: priority of IAS varies at different ministries Working Group on Biodiversity will strengthen mainstreaming of Biodiversity and IAS efforts
ACTIVITY A-1	Meeting of the Working Group on Biodiversity	Scheduled meetings over the duration of the project	Minutes of Meetings	Timely meeting of Biodiversity Working Group Availability of members
A-2	Stakeholder Meeting with Consultant including NGOs and Private Sector	Scheduled meetings over the duration of the project	Workshop report Guidelines for IAS Risk Analysis	Availability of appropriate persons
A-3	Compilation and prioritization of list (using prioritization tool)	Priority list and guidance utilized by agencies Submission of drafts	Draft and final Lists prepared	
IMMEDIATE OBJECTIVE (PURPOSE)	To develop an effective policy to address all issue related to IAS in Barbados for the approval of Cabinet to inform the development of new or amendment of existing legislation	Policy prepared	Policy approved by Cabinet	Timely availability of resources
OUTPUT-B	Draft IAS Policy is prepared by Consultants	TOR prepared for consultants		
ACTIVITY B-1 B-2	Preparation of the draft policy by consultant Meeting of the Working Group on Biodiversity Stakeholder meetings including NGOs and Private Sector Document submitted to Cabinet for approval	Consultant prepare and submit policy Scheduled meetings over the duration of the project	Policy prepared Minutes of Meetings Workshop report Cabinet approval Instruction to Chief Parliamentary Counsel to Prepare Draft Legislation	Availability of information
OUTCOME 2	To strengthen the ability of agencies to implement the IAS policy and support the implementation of the legislation when developed towards improved management	All agencies trained Customs, Port Health, Ministry of Environment, Agriculture Consultants TOR prepared	Interception reports	Willingness of all agencies to participate Availability of personnel

	of pathways			
IMMEDIATE OBJECTIVE (PURPOSE) A	Capacity building implemented for agencies involved in the administration of the IAS Policy	Training manual prepared Trainers trained 100 % of identified staff trained		
OUTPUT -A	Consultants Identify gaps and training, equipment and infrastructural needs and prepare training plan	Capacity assessment document prepared Building Plan Developed Progress reports prepared by consultants		Funds availability Availability of experts
ACTIVITY A-1	Questionnaire administration and meetings by consultants to identify gaps	Questionnaire	Progress reports Survey reports	Availability of key personnel
A-2	Capacity needs assessment report prepared	Assessment report prepared with 6 weeks of completion of surveys and interviews	Assessment report	Availability of key personnel
A-3	Training and capacity programme implemented – equipment purchase, facilities improved or developed	100 of identified personnel trained Training manuals provided to agencies Trainers identified and trained	Training reports Increased interceptions	Timely approval of relevant documents Identified area for building
A-4	Capacity strengthening programme implemented – equipment purchased and installed	Laboratory Facilities improved		
A-5	Capacity strengthening programme implemented – facilities improved and developed	Laboratory facilities improved Post Quarantine Facility established	Building completed Equipment installed and staff trained	Timely approval of relevant documents Identified area for building

Dominican Republic

	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	Aichi Biodiversity Target 9 is achieved locally at small islands protected area (Alto Velo, Cabritos and Catalina) by 2022	1. Increased population of protected species (endemic lizards, iguanas). 2. Invasive Alien Species	1. Management Plan is implemented 2. Records of endemic species observed.	1. Successful coordination between the relevant government Departments, the Tourism sector and

		(IAS), removed from these protected area	3. Records of Invasive Alien Species records from the Ministry of Environment and local NGOs	NGOs. 2. Local people and private sector actively involved in monitoring and surveillance of pathways.
OUTCOME	Native and endemic threatened species protected in Alto Velo, Cabritos and Catalina islands and a biosecurity plan in place.	1. Biosecurity plan in place 2. Endemic and native species population increased 3. Recruitment of endemic and native species already occur	1. NISS, NBSAP and Biodiversity Law. 2. Species records from the Ministry of Environment and local NGOs	Declaration of Protected areas decree mandates to protect these species.
IMMEDIATE OBJECTIVE (PURPOSE) A	To eradicate Invasive Alien mammals (cats, rats and raccoons) in protected area, Alto Velo, Cabritos and Catalina islands in the Dominican Republic (in order to Achieve Aichi Target 9 on biodiversity conservation by 2022)	1. Invasive Alien Species population removed from these islands. 2. Consistent Monitoring and surveillance of pathways to prevent reinvasion/ introduction of invasive alien species to these islands	Existing monitoring and management plans.	<u>Assumption:</u> All stakeholders agree with the eradication of invasive alien species <u>Risk:</u> Non target species affected
OUTPUT -A	Invasive mammals captured and removed from these protected area (Alto Velo, Cabritos and Catalina islands)	1. Techniques and methodologies in place for animals capture 2. Creation/maintenance of national inventory of captured invasive species.	Reports of field activities and survey	Fund available timely. <u>Risk:</u> Non expertise available to devise strategy
ACTIVITY A-0				
ACTIVITY A-1	Procuring equipment and materials for IAS capture and management	1. All environmental Staff trained in equipment use 2. Inventory and equipment.	Reports of training.	<u>Assumptions:</u> The trainer and trainee agree to assume responsibility. <u>Risk:</u> no experts available for training people.
A-2	Personnel /Local Training: technicians and field support personnel, for capture and surveillance. Intra-country biosecurity measures explained	1. Environmental staff trained. 2. Field support personnel trained for invasive mammals capture and	Reports of training	Intra-country national biosecurity measures are accepted by relevant ministries (Env, Agr, Tourism, Defense)

	to the trainees	management.		
A-3	Regular trapping, capturing and removing invasive alien mammals.	Amount of captured animals	Reports of fields activities	Well trained personnel and able to works in the field
A-3	Biosecurity post established for individuals to enter the protected areas, prior to leaving the main island	Biosecurity post installed at ports to the protected areas on main island	Records of interception at the main island	Intra-country biosecurity measures are accepted by relevant ministries (Env, Agr, Tourism, Defense)
A-4	Monitoring of invasive alien mammals	Video camera to monitor the eradication sites are set and regular monitoring is conducted	Video tape; video analysis records	Staff can analyze the video regularly
A-5	Setting intra-national border post on protected areas to prevent entries /reentries of invasive alien mammals	Intra-national border post (video camera and phone system, X ray scanner) is built at ports (sea, air) to access to the protected island	Records of interception in the post of surveillance	Border post can be monitored by main island. Inspection takes place at a ports to access the protected islands so that interception can take place prior to travel to the protected areas
A-6	Survey and monitoring of population of Invasive Alien mammals and protected species, to ensure all invasive target species individuals has been removed	Number of individuals of each species removed	Inventory of removed and protected species	No climatic events occur during project implementation
IMMEDIATE OBJECTIVE (PURPOSE)	Strengthen capacity to identify and intercept prioritizes species	Train personnel for surveillance.	National Invasive Species Strategy	Authorities agree to put in place biosecurity plan Fund are timely provided
OUTPUT-B	Biosecurity plan elaborated and in place for preventing reinvasion by review and establish revised biosecurity and biodiversity act	Biosecurity plan is reviewed and revised by 2020	Biosecurity and Biodiversity act review dossier	Revision and approval by legislation office of the cabinet is given in a timely manner
	Intra-country biosecurity measures developed and established	Biosecurity plan is accepted by relevant ministries (Env. Agr, tourism, Defense)	Biosecurity plan dossier	Plans are drafted by relevant ministries officials (IAS Steering Committee work in a timely manner)
ACTIVITY B-1	Consultants, National Invasive Species and Biosecurity Commission prepare a draft of plan.	Biosecurity plan draft	Minutes of the Committee and the Commission.	Consultants and engage commission and Committee agree on draft prepare.
B-2	Communication Education and Public Awareness	A public Awareness and education plan in place	National Invasive Species Strategy	Mass media and social web can be used for communicate and

				advise of risk pose by the invasive alien species.
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Guyana				
	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	Supporting actions to enable the uptake of Aichi target 9 in Guyana.	1. The national IAS list is reviewed and updated. 2. Most traders partners are identified. 3. The relevant agencies are trained in recognizing and managing IAS. 4. IAS species regulated at ports of entry	1. IAS List 2. Capacity of BCA enhanced 3. IAS Policy is developed 4. BCA regulates IAS	1. IAS committee is proactive 2. Local governments take actions promptly 3. Risk: National priority may vary on IAS
OUTCOME	Adequate Protection of Guyana's BD and contribution to Conservation efforts by management of IAS. IAS pathways are identified and IAS priority species are regulated at points of entry. Conservation/Agriculture agencies mandates updated to include IAS management and coordination. National Capacity is enhanced Public is sensitized on IAS matters	IAS Policy IAS regs and guidelines	Monitoring and Compliance is strengthened	Cost of implementation/co-financing should be shared among the relevant ministries/agencies or NGOs
IMMEDIATE OBJECTIVE (PURPOSE) A	To develop appropriate programs and procedures to minimize the impacts of established invasive species and minimize the number of unintended IAS introduction to Guyana			
OUTPUT -A	Risk Assessment Tool Vector & Pathway Assessment Report of Pathways Information-Sharing Mechanism between			

	Border-control offices established.			
ACTIVITY A-1	Recruitment of Consultants to review existing data and conduct studies to develop a risk assessment process to screen species imported to avoid introduction of more IAS.	Consultants hired Progress reports submitted	Risk assessment tool is developed	
A-2	Assessment for Vectors and Pathways for commercial routes (ballast water, ornamental plants, pet trade, etc.) conducted by Consultant.	Consultants hired Progress reports submitted	Assessment Report	
A-3	Review of existing communication protocols to identify gaps and present to relevant stakeholders through consultations to improve effectiveness.	Completion of Review	Improved Communication Mechanism	
IMMEDIATE OBJECTIVE (PURPOSE)	To minimize the number of IAS that tend to have harmful consequences once they have introduced in Guyana			
OUTPUT-B	Priority Species and Pathways identified for immediate monitoring & containment control.	Studies conducted	Priority Report	
ACTIVITY B-1	Conduct review to identify Priority Pathways and species for immediate monitoring, containment and control.	Review completion	Final Report	
B-2	Preparation of Contingency Plan to avoid potential introduction of IAS	Literature review, surveys conducted	Contingency Plan is developed	
B-3	Conduct training of personnel on CP	No. of personnel trained	Enhanced capacity	
IMMEDIATE OBJECTIVE	Eradication priorities in place, eradications are undertaken as necessary and results are disseminated			
IMMEDIATE OBJECTIVE	Eradication priorities in place, eradications are undertaken as necessary and results are disseminated			
OUTPUT C	Eradication and Control Measure implemented for IAS in Protected Areas, Coastline and other priority areas for conservation of BD and ecosystem services.	Areas identified	Measures in place at selected areas	

ACTIVITY C-1	Development of Eradication and Controls systems	No. of measures developed	Measures developed	
C-2	Identification of Priority areas for IAS management (eradication & control)	No. Areas identified	Areas identified	
C-3	Training in measures developed	No. of training sessions	Enhanced capacity	
IMMEDIATE OBJECTIVE	A coordinated policy and management framework that minimises the risk of IAS to the economy, environment, and society to Guyana			
OUTPUT D	Policy on IAS to control IAS identified as high-risk for BD in Guyana Conditions for use of IAS of economic importance. Capacity building for Taxonomists			
ACTIVITY D-1	Development of IAS Policy guided by IAS SAP	National Consultations	Policy developed	
D-2	Training of Taxonomists on non-native species to improve local references	No. of personnel trained	Enhanced capacity in identification of non-native IAS	Personnel is retained
IMMEDIATE OBJECTIVE	To enhance the knowledge and understanding of the Guyana community to increase levels of compliance and support for preventing the introduction of IAS that have not yet reached Guyana, and managing those already present.			
OUTPUT-E	Official IAS List Regulations and guidelines on IAS Roster of Experts Capacity of BCA enhanced			
ACTIVITY E-1	Establish Official IAS List and categories for restricted use or prohibition.	Stakeholder engagements	List developed	Stakeholders contribute
E-2	Develop regulations and guidelines as it relates to internal IAS of commercial interests and value.	Stakeholder consultations	Regulations and guidelines prepared	PSC support
E-3	Develop a training plan to build capacity on EDRR (early detection and rapid response), inspection methods.	No. of training sessions of BCAs	EDRR capacity is enhanced	Capacity is retained

E-4	Establish and maintain list of technical experts	Request for experts	Roster of Experts prepared	Expertise available
IMMEDIATE OBJECTIVE	To have clear understanding of the economic, environmental and social impacts and ready access to IAS information			
OUTPUT F	National Database established			
ACTIVITY F-1	Build a network of data providers and collaborators to feed the national database	No. of IAS data sources/collaborators identified	Database is established	Collaborators support on board
F-2	Make available national database to public seeking IAS information	Public node is incorporated	Info readily available	
F-3	Maintenance of database with updates from data sources	No. updates	Database is up-to-date	Sustained funds
IMMEDIATE OBJECTIVE	To sensitise public, decision-makers, other stakeholders of IAS in Guyana; the impacts, best practices, and prevention.			
OUTPUT G	National IAS Awareness campaigns			
ACTIVITY G-1	Develop and carry out National Awareness campaigns on IAS (Brochures, Posters, Jingles, blasts, etc)	No. of campaigns developed	National Awareness campaigns are performed	
IMMEDIATE OBJECTIVE	To provide a strong scientific basis for decision-making			
OUTPUT H	Tailored Control Methods Risk Assessment of Non-native species			
ACTIVITY H-1	Define control methods for IAS in the country	No. of measures developed	Tailored control methods developed	
H-2	Perform risk assessment of existing non-native species present in Guyana to verify which have the potential to become invasive in the future	No. of species identified	Assessment Report	

Jamaica

Strengthening Systems for Early Detection and Management of Invasive Alien Species in Jamaica

	PROJECT DESCRIPTION	MEASURABLE INDICATORS	SOURCES OF VERIFICATION	ASSUMPTIONS AND
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		(TARGETS)		RISKS
GOAL	Aichi Biodiversity Target 9 is achieved in Jamaica by 2021	Potential and existing invasive alien species intercepted at ports of entry	Records of interception at ports of entry and competent authorities	Regulatory agencies proactively share information and implementation costs.
OUTCOME	Implementation of early detection/rapid response system for identification of non-native organisms at ports of entry and reporting system to competent authorities	Early detection/rapid response system for identification of non-native organisms at ports of entry and reporting system to competent authorities initiated within the life of the project.	Reports and records from competent authorities Minutes of Invasive Alien Species Working Group	Invasive Alien Species Working Group will monitor implementation of system and report to Biodiversity Committee. Agencies do not effectively implement system. Staff attrition
IMMEDIATE OBJECTIVE (PURPOSE) A	To develop early detection/rapid response system for identification of non-native organisms and reporting system to competent authorities	Early detection/rapid response system for identification of non-native organisms at ports of entry and reporting system to competent authorities documented.	Reports and records from competent authorities Minutes of Invasive Alien Species Working Group	Invasive Alien Species Working Group will monitor implementation of system and report to Biodiversity Committee. Agencies do not effectively implement system. Staff attrition
OUTPUT -A	Updated and expanded Jamaica Invasive Species Database (JISD)	New and updated records totaling 25 entries	Comments from validators on updated records	Records will be validated. Updated database with invalidated records.
ACTIVITY A-1	Review invasive alien species lists	Updated invasive alien species lists	Date of revised list	There are available records.
A-2	Workshops on data entry and management	9 persons representing different entities on the IAS Working Group trained	Workshop report and evaluation	Full participation in workshops.
A-3	Content validation	At least 10% of records no longer showing "some data under review"	Message "some data under review" no longer shown for at least 10% of records	
OUTPUT - B	IAS Resource Kit developed for border control agents	IAS Resource Toolkit live and training sessions conducted for 100 persons	Webinars promoting the Resource Toolkit	Resource kit not completed.
ACTIVITY B-1	Prepare content for IAS Resource Kit	IASWG reviews content for resourcekit	Meeting minutes Content material	IASWG meets. Unable to identify technically

				competent personnel to develop toolkit.
B-2	Production of interactive IAS Resource Kit to include mobile app, identification cards, taxonomical components, etc.	Demonstration kit with accompanying guidelines completed by "x time"	Demonstration kit with accompanying guidelines	Technically competent personnel engaged early in project life cycle
B-3	Train the trainer workshops on utilizing the resource kit conducted	20 trainers trained	Training report Training manual	Staff attrition and rotation
B-4	Workshops where trainers train personnel in competent authorities	100 persons trained	Training report Evaluations forms	Staff attrition and rotation
OUTPUT - C	Content Managed Database developed for multiple users for interceptions	Database completed by "x time" Training sessions conducted for 100 persons	URL for content managed database	Agencies have appropriate human and technical expertise. Agencies do not want an additional database.
ACTIVITY C-1	Existing databases for interceptions located in competent authorities reviewed	Analysis of findings	Report on analysis of database	Lack of sharing of information on existing databases.
C-2	Content Managed Database designed	Demonstration Database completed 6 months prior to project completion	URL for demonstration content managed database	
C-3	Training exercise on use of database	20 trainers trained	Training report Training manual	Staff attrition and rotation
OUTPUT - D	Comprehensive protocol for early detection/rapid response developed and implemented	Completed and tested protocol	Reports from simulation exercises	Human and financial capacity available for implementation.
ACTIVITY D-1	Review existing procedures and protocols	Analysis of findings	Report	Information not made available.
D-2	Capacity assessment of competent authorities for carrying out forecasting, surveillance, containment, eradication etc.	All competent authorities assessed	Report	Limited participation of competent authorities.
D-3	Develop protocol and carry out simulation exercises	Draft protocol completed by x time	Protocol accepted by competent authorities	Protocol signed off on by competent authorities in project timeframe.
OUTCOME	Drafting instructions for legislation for ballast water discharge, treatment and management	Drafting instructions prepared by "x time"	Consultation reports	Buy in by all relevant Ministries and Departments.
IMMEDIATE OBJECTIVE (PURPOSE)	Prepare drafting instructions for legislation for ballast water discharge, treatment and management to enable preparation of draft	Drafting instructions prepared by "x time"	Drafting instructions submitted to relevant Ministry Consultation reports	

	legislation			
OUTPUT-E	Drafting instructions for legislation for ballast water discharge	Drafting instructions prepared by "x time"	Drafting instructions submitted to relevant Ministry Consultation reports	Buy in by all relevant Ministries and Departments.
ACTIVITY E-1	Stakeholder identification exercise	Stakeholder list prepared	Validation of stakeholder list by IASWG	
E-2	Stakeholder meetings	3 meetings conducted	Meeting reports Report on comments received	Stakeholders do not attend.
E-3	National stakeholder consultations	3 stakeholder consultations held	Consultation reports Report on comments received	Stakeholders do not attend.
OUTCOME	Priority Invasive Alien Species eradicated or controlled			
IMMEDIATE OBJECTIVE (PURPOSE)	Three populations of invasive alien species controlled (Lionfish, white tailed deer, one plant species)	Number of target species removed	Report	Equipment and personnel available
OUTPUT-F	Three population control programmes for lionfish, white tailed deer and one plant species	3 programmes completed	Programmes and consultation reports	
ACTIVITY F-1	Baseline study on population of white tailed deer and distribution of one plant species	Report on baseline studies	Report and consultation reports	
F-2	Develop methodology for control of white tailed deer	Methodology developed	Methodology available online	Availability of information Capacity to test methodology available (NGO and farming community etc.)
F-3	Identify plant species for re-introduction within removal sites for one plant species	Species list	Species list	
	Deep water assessment of lionfish	Methodology developed	Consultation on methodology	
OUTPUT-G	Eradication of IAS on Goat Island for re-introduction of Jamaican Iguana and other endangered species for establishment of a wildlife reserve	Goat island free of identified IAS Wildlife reserve established		Private sector funding and support for establishment of the reserve is still available.
ACTIVITY G-1	Verification of existing IAS list for IAS on Goat Island	Completed verified list	Report on desk study and field visits	
G-2	Trapping and removal of invasive alien species			
G-2	Establish Goat Island as a wildlife reserve for	x iguanas introduced to Goat	Tours being operated to	Private sector funding and

	Jamaican Iguana and other endangered species	Island Ranger station established	wildlife reserve	support for establishment of the reserve is still available.
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Saint Lucia

Saint Lucia Completed a National Invasive Species Strategies (NISS) in 2012 and while there has been some progress towards implementation of its recommendations, there is needed to advance implementation of the NISS to accelerate progress towards achievement of Aichi Biodiversity Target 9. The proposed project will facilitate this process by addressing the following gaps:

1. Insufficient trained staff for IAS diagnostics, pathway analysis, prioritization and management and control
2. Inadequate or incomplete legislative framework
3. Limited appreciation of importance of IAS issues at the national level
4. Absence of a national policy and coordinated framework for IAS management and control

	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	MEANS OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	Strengthening Saint Lucia's capacity for protection of its unique biodiversity from IAS by 2022			
OUTCOMES	• Improved control and management of IAS nationally • Improved effectiveness of IAS management and control • Strengthened IAS management and control protocols • Priority IAS eradicated or controlled • Increased public education and awareness on IAS			
IMMEDIATE OBJECTIVES	To develop and communicate a national policy on IAS management and control	• Policy approved by Cabinet of Ministers • IAS legislation enacted • IAS regulations drafted, enacted and enforced	• IAS management policy gazetted • Reports from IASWG Meetings • Cabinet conclusion • IAS Policy referenced in GOSL Medium Term Strategy/Annual Budget Policy Statement	• Absence of consensus on national IAS policy direction from national agencies • Relevant agencies willing to champion the process of developing the IAS policy • Consensus with NBSAP
	To strengthen national capacity for IAS diagnostics, pathway analysis, prioritization, management and control.	• 2 Staff Trained in Pathway Analysis, Taxonomy and Management Strategies	• Updated IAS pest lists • Certificates of achievement and training	• GOSL will approve Training requests • Training opportunities are

		• Increase in positive identification of IAS	workshop reports • Reports from monitoring and surveillance activities • Interception records	available • Financing for training programmes not available • Challenges with agency collaboration • Agencies willing to contribute to IAS management and control
	To develop and implement area specific IAS management interventions	• Increased success in prioritization of high risk pathways • 75% Reduction in incidence of IAS	• Interception records	
	Exclusion of IAS	• Facilities for post quarantine 100% complete • Non-compliant materials posing IAS risk are eliminated at ports of entry	• Plans for facility approved and facility constructed and staffed • Post Quarantine Facility established	
OUTPUTS				
OUTPUT-A	IAS policy framework strengthened			
ACTIVITIES	• Re-activate IASWG (IAS Working Group) established under the NISS • Consult with Stakeholders (SH) to develop and communicate national policy on IAS management and control • Write policy • Implementation of the NISS	• National policy on IAS developed and publicized • IAS pathways identified, prioritized and managed • 100% control/management of IAS	• IAS Legislation gazetted	
OUTPUT-B	Implementation of IAS Act and Regulations			
ACTIVITIES	• Develop ToR for Consultancy to draft IAS Regulations • Recruit Consultants • Consultations on IAS regulations	• IAS legislation enacted • IAS regulations drafted and enforced Increased apprehension of violators	• Consultancy reports • Draft IAS Regulations • Official notification in Gazette Records of apprehension from agencies • Official reports from agencies	• Timely review and endorsement by Attorney General's Chambers • Weak inter-agency collaboration • Limited or no resources for enforcement IAS regulations are enforced

OUTPUT-C	IAS Pathways are analyzed and prioritized and IAS management and control protocols strengthened			
ACTIVITIES	Identify specialist training opportunities in taxonomy etc.	- At least 2 persons receive high level training in taxonomy (Coleoptera and Lepidoptera) - Increase in positive identification of high risk pathways - Quick response to possible IAS introduction	- Certificates of completion - Records of interception	- Quick identification and eradication of IAS - Staff willing to participate in training programme
OUTPUT-D	Increased public engagement in IAS management and control through citizen science initiatives			
ACTIVITIES	- Controlling the spread of IAS plants <i>transcandantia zebrina</i> and <i>Callisia fragrans</i> from the Gros Piton Nature Trail (GPNT) within the PMA - Convening PMAAC to discuss project concept - Convening IASWG to discuss and approve interventions - Engaging Stakeholders within the PMA - Identification of control mechanisms (biological, physical etc.) - Citizen engagement and training activities - Implementation, monitoring and control	- All stakeholders engaged in process 75% eradication of IAS from the GPNT 75% increase in citizens trained and sensitized on IAS issues	- Meeting reports - Training reports - Surveillance and monitoring data	- Members of the public are reluctant to participate in IAS activities - Willingness to engage in citizen science activities focused on IAS management - Control measures identified and implemented will be successful
ACTIVITIES	- Exclusion of IAS - Procurement of Incinerator - Establishment of Post Entry Quarantine Facility	- Eradication and control of identified species - Successful procurement of incinerator - Post Quarantine facility operational	- Invoice and purchase documents - Capacity to dispose of non-compliant material intercepted at ports of entry	- Facility delayed by planning approval - Private sector support for facilities and equipment - Addressing risk of IAS introduction
ACTIVITIES	- Public education and awareness - Presentation to policy level on IAS issues - Engage educational institutions and media houses	- Buy-in and prioritization of IAS at the policy level - Increased public education and awareness 100% compliance in IAS	- Public pronouncements on IAS matters - Passenger baggage interceptions	- Other issues given priority - IAS projects prioritized in national recurrent budget - Public willingness to participate in IAS activities

	- Public presentations via electronic and print media - Development of interactive IAS kit for use by schools and general public	regulation		
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Suriname				
	PROJECT DESCRIPTION	MEASURABLE INDICATORS (TARGETS)	SOURCES OF VERIFICATION	ASSUMPTIONS AND RISKS
GOAL	Supporting actions to enable the uptake of Aichi target 9 in Suriname.	- The national IAS list is reviewed and updated. - The relevant agencies are trained in recognizing and managing IAS. - IAS policy is developed. - IAS species regulated at ports of entry.	- IAS List - Certification of the enhanced capacity of Environment/Conservation Agency - IAS Policy is developed - Environment/Conservation Agency regulates IAS	- IAS committee is proactive - Local governments take actions promptly - Risk: National priority may vary on IAS
OUTCOME	Adequate Protection of Suriname's Biodiversity and contribution to Conservation efforts by management of IAS. IAS pathways are identified and IAS priority species are regulated at points of entry. Conservation/Agriculture agencies mandates updated to include IAS management and coordination. National Capacity is enhanced Public is made aware and understands on IAS matters	IAS Policy IAS regulations and guidelines	Monitoring and Compliance is strengthened	Cost of implementation/co-financing can be done by other donors, as well in kind
IMMEDIATE OBJECTIVE (PURPOSE) A	To develop appropriate programs and procedures to minimise the impacts of established invasive species and minimise the number of unintended IAS introduction to Suriname			
OUTPUT -A	Risk Assessment Tool Vector & Pathway Assessment Report of Pathways			

	Information-Sharing Mechanism between Border-control offices established.			
ACTIVITY A-1	Recruitment of Consultants to review existing data and conduct studies to develop a risk assessment process to screen species imported to avoid introduction of more IAS.	Consultants hired Progress reports submitted	Risk assessment tool is developed	
A-2	Assessment for Vectors and Pathways for commercial routes (ballast water, ornamental plants, wildlife trade, etc.) conducted by Consultant.	Consultants hired Progress reports submitted	Assessment Report	
A-3	Review of existing communication protocols to identify gaps and present to relevant stakeholders through consultations to improve effectiveness.	Completion of Review	Improved Communication Mechanism	
IMMEDIATE OBJECTIVE (PURPOSE)	To minimise the number of IAS that tend to have harmful consequences once they have been introduced in Suriname			
OUTPUT-B	Priority Species and Pathways identified for immediate monitoring & containment control.	Studies conducted	Priority Report	
ACTIVITY B-1	Conduct review to identify Priority Pathways and species for immediate monitoring, containment and control.	Review completion of country dossier	Final Report	
B-2	Preparation of Contingency Plan to avoid potential introduction of IAS	Literature review, surveys conducted	Contingency Plan is developed	
B-3	Conduct training of personnel on Contingency Plan	Number of personnel trained	Enhanced capacity	
IMMEDIATE OBJECTIVE (PURPOSE)	Eradication priorities in place, eradications are undertaken as necessary and results are disseminated			
OUTPUT-C	Eradication and Control Measure implemented for IAS in Protected Areas, Coastline and other priority areas for conservation of BD and ecosystem services.	Areas identified	Measures in place at selected areas	
ACTIVITY C-1	Development of Eradication and Controls systems	No. of measures developed	Measures developed	

C-2	Identification of Priority areas for IAS management (eradication & control)	No. Areas identified	Areas identified	
C-3	Training in measures developed	No. of training sessions	Enhanced capacity	
IMMEDIATE OBJECTIVE	A coordinated policy and management framework that minimises the risk of IAS to the economy, environment, and society to Suriname			
OUTPUT D	Policy on IAS to control IAS identified as high-risk for Biodiversity in Suriname Conditions for use of IAS of economic importance. Capacity building for Taxonomists			
ACTIVITY D-1	Development of IAS Policy guided by IAS SAP	National Consultations	Policy developed	
D-2	Training of Taxonomists on non-native species to improve local references	No. of personnel trained	Enhanced capacity in identification of non-native IAS	Personnel is retained
IMMEDIATE OBJECTIVE	To enhance the knowledge and understanding of the Guyana community to increase levels of compliance and support for preventing the introduction of IAS that have not yet reached Guyana, and managing those already present.			
OUTPUT-E	Official IAS List Regulations and guidelines on IAS Roster of Experts Capacity of BCA enhanced			
ACTIVITY E-1	Establish Official IAS List and categories for restricted use or prohibition.	Stakeholder engagements	List developed	Stakeholders contribute
E-2	Develop regulations and guidelines as it relates to internal IAS of commercial interests and value.	Stakeholder consultations	Regulations and guidelines prepared	PSC support
E-3	Develop a training plan to build capacity on EDRR (early detection and rapid response), inspection methods.	No. of training sessions of BCAs	EDRR capacity is enhanced	Capacity is retained
E-4	Establish and maintain list of technical experts	Request for experts	Roster of Experts prepared	Expertise available

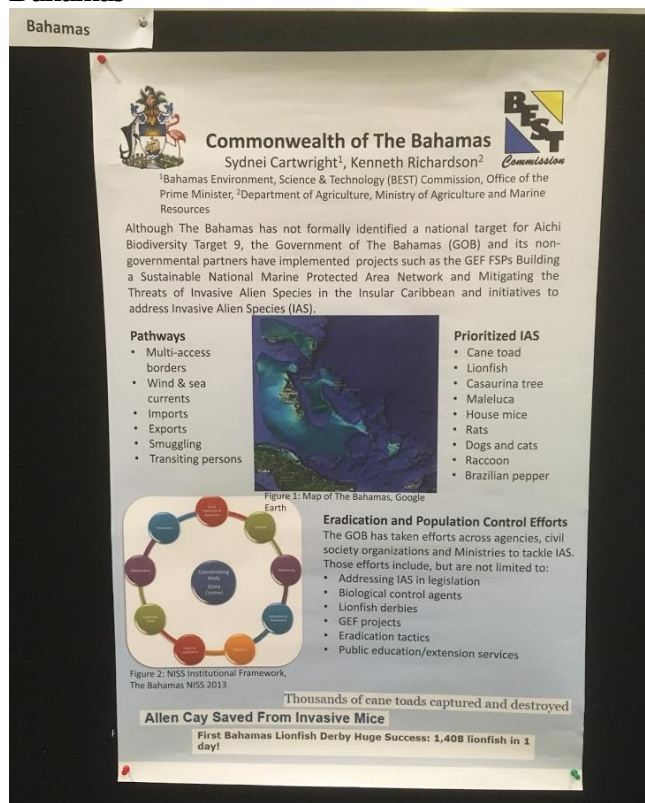
IMMEDIATE OBJECTIVE	To have clear understanding of the economic, environmental and social impacts and ready access to IAS information			
OUTPUT F	National IAS Database established			
ACTIVITY F-1	Build a network of data providers and collaborators to feed the national database	No. of IAS data sources/collaborators identified	Database is established	Collaborators support on board
F-2	Make available national database to public seeking IAS information	Public node is incorporated	Info readily available	
F-3	Maintenance of database with updates from data sources	No. updates	Database is up-to-date	Sustained funds
IMMEDIATE OBJECTIVE	To sensitise public, decision-makers, other stakeholders of IAS in Suriname; the impacts, best practices, and prevention.			
OUTPUT G	National IAS Awareness campaigns			
ACTIVITY G-1	Develop and carry out National Awareness campaigns on IAS (Brochures, Posters, Jingles, blasts, etc)	No. of campaigns developed	National Awareness campaigns are performed	
IMMEDIATE OBJECTIVE	To provide a strong scientific basis for decision-making			
OUTPUT H	Tailored Control Methods Risk Assessment of Non-native species			
ACTIVITY H-1	Define control methods for IAS in the country	No. of measures developed	Tailored control methods developed	
H-2	Perform risk assessment of existing non-native species present in Guyana to verify which have the potential to become invasive in the future	No. of species identified	Assessment Report	

POSTER SESSION

Antigua and Barbuda



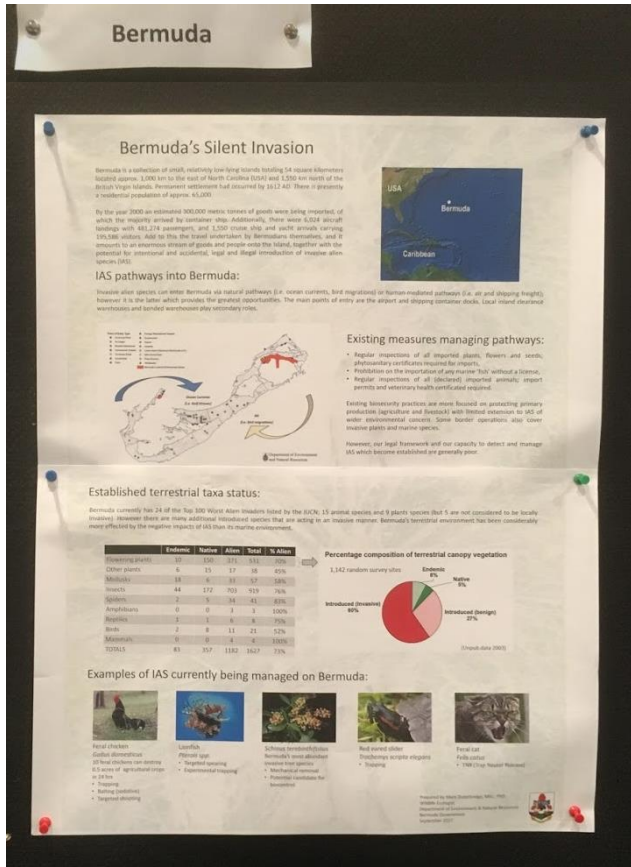
Bahamas



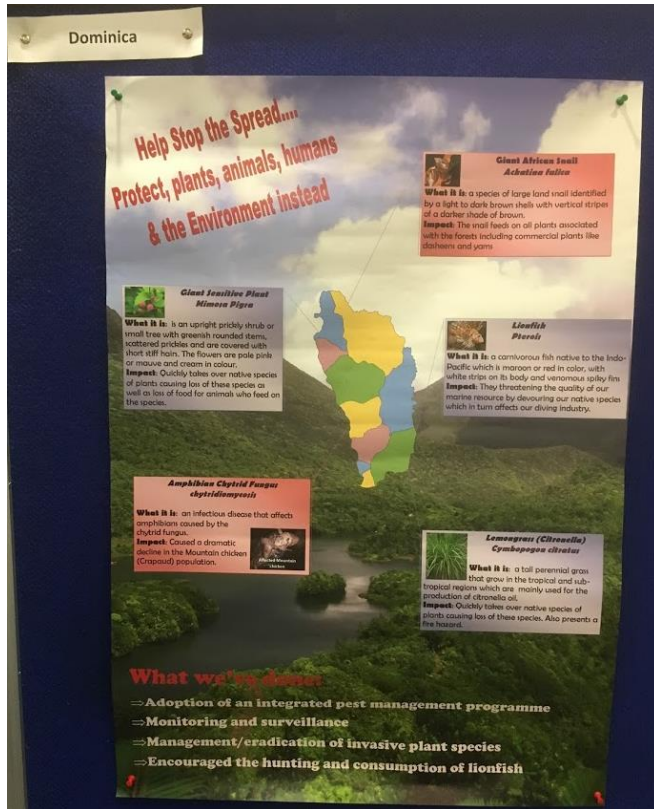
Barbados



Bermuda



Dominica



Dominican Republic



Guyana



Jamaica



Saint Kitts and Nevis

African Green Vervet Monkey

- Identified the Vervet Monkey as a priority IAS that requires swift management intervention.
- Arrived in SKN in the 1600s during the African slave trade (West Africa)
- Primary habitat until recent times has been the forested areas and its main diet prior to the closure of the Sugar Industry: wild fruits, flowers, seeds, seed pods and small animals
- Post-Sugar: Habitat range extended to include the agricultural belt of the island and urban areas. Diet changed to include a dependency on agricultural produce and a heightened appetite for domestic/processed foods



Impact of the Green Monkey

- High consumption of agricultural produce and otherwise damage to crops has caused significant economic loss to farmer; the population has posed a threat to food security
- Some farmers has been forced to abandon both their farms (higher elevations) and livelihoods as a result direct impacts
- Monkeys can be a nuisance when living in close proximity people/communities: entering homes; increase conflict and confrontation
- Ecological Impact: high consumption of and marked reduction in certain native plant species such as bromeliads and orchid. Consumes native lizards, frogs, invertebrates and bird species such as the St. Kitts Bullfinch
- Increase in black rat species



Measures to Manage Monkey Population

- Measures to reduce overall population or to protect individual farm lands
- Trapping (cages, baiting, foot traps)
- Ongoing research on sterilization of males
- National Dialog (Such as the recent Monkey Summit with all Stakeholders)
- Public awareness on the impact of monkeys
- Training of farmers and technical officers in trapping and handling of monkeys
- Government support includes providing electrical fences to some community farmers
- Use of dogs, scarecrows, loud speakers, use of unpleasant odors

Enabling Environment:

- partnership of stakeholders
- High on political agenda
- Several studies has been undertaken



Saint Kitts and Nevis

Lethal Yellowing In St.Kitts and Nevis

Host: *Leucaena leucocephala*
Vector: *Phytophthora Candelaria Phytophthora palm*

Effects of the disease



Pathways

Type of pathway: Movement of commodities

- Transportation of plant commodities used for horticulture in the hotel industry

Ways to prevent the pathway

- Post entry treatment of consignments, Importers are require to fumigate all plant consignments

Interventions

Propagation of resistant varieties



Accomplishments



Establishment of resistant gene bank

Saint Lucia



Annex VIII

**Joint Statement
of
The secretariat of the Convention on Biological Diversity
and
UN Environment Caribbean sub-regional office
on
The risk of invasive alien species associated with emergency relief, aid and response efforts
in
Small island developing states in the Caribbean**

Small island developing States are vulnerable to natural disasters and various pressures from anthropogenic changes. Currently, Caribbean island States are devastated by Hurricane Irma and Hurricane Maria, and suffering from the severe consequences.

We express our great appreciation to all involved in the emergency response with the prime concern of saving lives and livelihoods in the Caribbean.

At the occasion of capacity-building workshop for Caribbean small island developing States towards achieving Aichi Biodiversity Target 9 in Kingston, Jamaica, 18-22 September 2017, organized by the Secretariat of the Convention on Biological Diversity (CBD) with support of UN Environment Caribbean Sub-regional Office in Jamaica, the representatives of Caribbean small island developing States and United Kingdom Overseas Territories, while dealing with the devastating impacts of the hurricanes, also, expressed their concerns on the risk of biological invasions in disaster zones.

Attention was drawn to the Caribbean Comprehensive Disaster Management (CDM) Strategy 2014-2024⁵ aimed to establish *Safer, more resilient society through Comprehensive Disaster Management* among the member States of the Caribbean Disaster Emergency Management Agency. The Strategy provides regional guidance on coordinated and effective response to natural hazards, such as hurricanes, including appropriate planning, technical advice and the application of customs procedures, without delay of the relief effort.

The workshop participants noted that in 2006 the Conference of the Parties to the Convention on Biological Diversity (CBD) urged Governments and donors to take measures to prevent and minimise the introduction and spread of invasive alien species as part of their emergency relief, aid and any response efforts, and to take into account any relevant codes of practice or guidelines that may be developed at international level, or national legislation as appropriate, in their national aid operations or in the operations of non-governmental organisations within their country (paragraph 42 of decision VIII/27⁶).

To that end, and in accordance with the relevant international guidance⁷, we encourage the actors who plan and operate the disaster management and emergency response in the Caribbean:

⁵ Caribbean Comprehensive Disaster Management Strategy 2014-2024. <http://www.cdema.org/CDMStrategy2014-2024.pdf>

⁶ Decision XIII/27 on invasive alien species <https://www.cbd.int/doc/decisions/cop-08/cop-08-dec-27-en.pdf>

Article 8(h) of the Convention on Biological Diversity, <https://www.cbd.int/convention/articles/default.shtml?a=cbd-08> and the Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species, <https://www.cbd.int/decision/cop/?id=7197>

- To minimize the transfer of untreated soils, sands and construction materials from outside islands to the disaster zones;
- To minimize risk of biological invasions from the inputs for landscape recovery, agriculture and forestry to be released in the disaster zones;
- To minimize risk of contamination on vehicles, machinery and equipment in prior use for agriculture, forestry, horticulture, earth moving, surface mining, waste management and by the military outside the disaster zones;
- To support the island states to take early detection of, and rapid response to establishment of invasive alien species in the disaster zones.

Ensuring adequate consideration of environmental issues in humanitarian response actions is important to increase ecosystem resilience and reduce future risks. Moreover, with careful planning and coordination, this does not have to be expensive or time consuming.

Achieving Aichi Biodiversity Target 9 on invasive alien species, in particular with its element on “measures to be in place to manage pathways to prevent introduction and establishment of invasive alien species” is critically important to protect and improve the status of biodiversity in the Caribbean after the devastating impacts of disasters and the response to them.
