



# Convention on Biological Diversity

Distr.  
GENERAL

UNEP/CBD/IAS/WS/2014/1/2  
16 September 2014

ENGLISH ONLY



## Capacity-building workshop for small island developing States to achieve Aichi Biodiversity Target 9 on invasive alien species

Organized by the Secretariat of the Convention on Biological Diversity

### WORKSHOP REPORT



The Workshop Participants (Photo: SCBD)

Montreal, Canada  
14-15 June 2014

## CONTENTS

ABBREVIATIONS .....	4
EXECUTIVE SUMMARY .....	7
1. INTRODUCTION .....	11
2. DAY 1 .....	12
2.1. Official opening of the workshop.....	12
2.1.1. Opening remarks by the representative of the Secretariat of the CBD: Mr. David Cooper .....	12
2.1.2. Aichi Biodiversity Target 9 on invasive alien species and expected outputs of this workshop: Ms. Junko Shimura (SCBD) .....	12
2.2. Best practices.....	13
2.2.1. Helping SIDS to Soar: Results of Survey of Invasive Species-Related Activities in SIDS: Mr. John Mauremootoo (SCBD Consultant) .....	13
2.2.2. International Plant Protection Convention: what is it? how can it help with invasive species and biodiversity? Ms. Sonya Hammons (IPPC Secretariat) .....	15
2.2.3. The Global Invasive Alien Species Information Partnership (GIASI Partnership) and its Global Register of Introduced and Invasive Species (GRIIS): Ms. Shyama Pagad (IUCN-SSC-ISSG).....	17
2.2.4. Global Island Partnership (GLISPA): Ms. Kate Brown (GLIPSA).....	20
2.2.5. Island Conservation - Mission and actions of Island Conservation): Mr. Olivier Langrand (Island Conservation) .....	20
2.2.6. IAS Activities and Opportunities in the Pacific: Mr. Phil Andreozzi National Invasive Species Council (US NISC) .....	21
2.2.7. A Pacific Regional Perspective From The Secretariat of the Pacific Regional Environment Programme (SPREP): Mr. David Moverley (SPREP).....	22
2.2.8. Summary of Discussion Points from the Best Practices Session.....	24
2.3. Presentations by donors, implementing agencies and experts to guide project proposal writing.....	24
2.3.1. Global Environment Facility support to the implementation of national and regional invasive alien species strategies: Mr. David Duthie (SCBD).....	24
2.3.2. Navigation on LifeWeb to meet the needs and to promote National strategies and action plans: Mr. Charles Besançon (SCBD) .....	26
2.3.3.....Standards and Trade Development Facility (STDF): Ms. Sonya Hammons (IPPC) .....	29
2.3.4. The World Bank: Ms. Valerie Hickey (The World Bank).....	31
2.3.5. Panel Discussion: Panel facilitator: Mr. Oliver Hillel .....	31
2.4. Identification and development of national or regional projects on invasive alien species (Setting working groups for Day 2) .....	33
3. DAY 2.....	33
Presentations .....	34
4. SUMMARY OF WORKSHOP FINDINGS.....	35
5. NEXT STEPS .....	35
Annex I WORKSHOP PROGRAMME .....	36
Annex II LIST OF PARTICIPANTS AND RESOURCE PERSONS .....	39
Annex III QUESTIONNAIRE SENT OUT TO WORKSHOP PARTICIPANTS IN MARCH 2014.....	48

Annex IV QUESTIONNAIRE SENT OUT TO WORKSHOP PARTICIPANTS IN MAY 2014.....	49
Annex V COUNTRY DOSSIERS ON IAS PRIORITIES AND CURRENT AND FUTURE IAS-RELATED PROJECTS .....	53
<b>Antigua and Barbuda</b> .....	53
<b>Bahamas</b> .....	56
<b>Cape Verde</b> .....	58
<b>Comoros</b> .....	61
<b>Cook Islands</b> .....	64
<b>Cuba</b> .....	67
<b>Dominica</b> .....	71
<b>Dominican Republic</b> .....	73
<b>Ecuador</b> .....	75
<b>Fiji</b> .....	80
<b>Grenada</b> .....	83
<b>Guinea-Bissau</b> .....	86
<b>Haiti</b> .....	87
<b>Jamaica</b> .....	89
<b>Kiribati</b> .....	93
<b>Madagascar</b> .....	95
<b>Maldives</b> .....	96
<b>Marshall Islands</b> .....	98
<b>Palau</b> .....	100
<b>Saint Kitts and Nevis</b> .....	102
<b>Saint Lucia</b> .....	104
<b>São Tomé and Príncipe</b> .....	108
<b>Seychelles</b> .....	110
<b>Singapore</b> .....	115
<b>Solomon Islands</b> .....	117
<b>Sri Lanka</b> .....	119
<b>Timor-Leste</b> .....	122
<b>Tonga</b> .....	124
<b>Trinidad and Tobago</b> .....	127
<b>Turks and Caicos Islands</b> .....	128
<b>Tuvalu</b> .....	130
<b>Vanuatu</b> .....	132
Annex VI PROJECT DEVELOPMENT TEMPLATE .....	135
Annex VII WORKSHOP EVALUATION .....	138
Annex VIII USEFUL REFERENCES AND WEBSITES.....	141

## ABBREVIATIONS

<b>APFISN</b>	Asia-Pacific Forest Invasive Species Network
<b>APHIS</b>	Animal and Plant Health Inspection Service (USA)
<b>AU</b>	African Union
<b>BTS</b>	brown tree snake
<b>BWM</b>	IMO Guidelines for Ballast Water Management Convention
<b>CARDI</b>	Caribbean Agricultural Research and Development Institute
<b>CARICOM/CEHI</b>	Caribbean Community Secretariat, Caribbean Environmental Health Institute
<b>CARINET</b>	Biosystematics Network of the Caribbean
<b>CBD</b>	Convention on Biological Diversity
<b>CEPF</b>	Critical Ecosystem Partnership Fund
<b>CISWG</b>	Caribbean Invasive Species Working Group
<b>COP</b>	Conference of the Parties
<b>CROP</b>	The Council of Regional Organisations in the Pacific
<b>DAC</b>	The OECD Development Assistance Committee
<b>DIISE</b>	Database of Island Invasive Species Eradications
<b>DoD</b>	Department of Defence (USA)
<b>DOI</b>	Department of the Interior (USA)
<b>DWCT</b>	Durrell Wildlife Conservation Trust
<b>EIF</b>	Enhanced Integrated Framework for trade-related assistance for Least Developed Countries
<b>EOI</b>	Expression of Interest
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FSP</b>	GEF Full-Sized Project
<b>FWS</b>	Fish and Wildlife Service (USA)
<b>GBI</b>	Global Benefits Index
<b>GBIF</b>	Global Biodiversity Information Facility
<b>GEF</b>	Global Environment Facility
<b>GEF-PAS</b>	Prevention, Control and Management of Invasive Alien Species in the Pacific Islands
<b>GFATM</b>	Global Fund to Fight AIDS, Tuberculosis and Malaria
<b>GIASI Partnership</b>	Global Invasive Alien Species Information Partnership
<b>GIIN</b>	Global Impact Investing Network
<b>GRIIS</b>	Global Register of Introduced and Invasive Species
<b>IAS</b>	invasive alien species
<b>IAV</b>	invasive alien vertebrates
<b>IICA</b>	Inter-American Institute for Cooperation on Agriculture
<b>IMO</b>	International Maritime Organization
<b>IPPC</b>	International Plant Protection Convention
<b>ISPMs</b>	International Standards for Phytosanitary Measures
<b>ISSG</b>	Invasive Species Specialist Group (of the IUCN Species Survival Commission)
<b>ITC</b>	The International Trade Centre
<b>IUCN</b>	World Conservation Union (International Union for Conservation of Nature)
<b>LDC</b>	least developed country
<b>LMIC</b>	lower middle income country

<b>MBP</b>	Micronesia Biosecurity Plan
<b>MSP</b>	GEF Medium-Sized Project
<b>NBSAP</b>	national biodiversity strategy and action plan
<b>NGO</b>	non-governmental organization
<b>NHM</b>	Natural History Museum, UK
<b>NISC</b>	National Invasive Species Council (USA)
<b>NISSAP</b>	national invasive species strategy and action plan
<b>NPFE</b>	National Portfolio Formulation Exercise
<b>NPPO</b>	national plant protection organization
<b>OCTA</b>	Overseas Countries and Territories Association
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OFFP</b>	National GEF Operational Focal Point
<b>OIE</b>	World Organisation for Animal Health
<b>OIRSA</b>	Organismo Internacional Regional de Sanidad Agropecuaria
<b>PBS</b>	Pacific Biocontrol Strategy
<b>PCA</b>	GEF Program Coordination Agency
<b>PCE</b>	phytosanitary capacity evaluation
<b>PICT</b>	Pacific Island Countries and Territories
<b>PIF</b>	GEF Project Identification Form
<b>PIFS</b>	Pacific Islands Forum Secretariat
<b>PoWPA</b>	programme of work on protected areas
<b>PPG</b>	GEF Project Preparation Grant
<b>PPP</b>	public private partnership
<b>RBP</b>	Regional Biosecurity Plan for Micronesia and Hawaii
<b>RISC</b>	Micronesia Regional Invasive Species Council
<b>RPPO</b>	regional plant protection organization
<b>RSPB</b>	Royal Society for the Protection of Birds
<b>SCBD</b>	Secretariat of the Convention on Biological Diversity
<b>SIDS</b>	small island developing States
<b>SOAR</b>	strengths, opportunities, aspirations and results
<b>SPC</b>	Secretariat of the Pacific Community
<b>SPREP</b>	Secretariat of the Pacific Regional Environment Programme
<b>SPS</b>	sanitary and phytosanitary
<b>SRIMPAC</b>	Shipping Related Invasive Marine Pests Pacific
<b>STAR</b>	GEF System for Transparent Allocation of Resources
<b>STDF</b>	Standard Trade Development Facility (of the IPPC)
<b>SWOT</b>	strengths, weaknesses, opportunities, and threats
<b>TIB</b>	Global Threatened Island Biodiversity
<b>UMIC</b>	upper middle income country
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNEP</b>	United Nations Environment Programme
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>UoG</b>	University of Guam
<b>USDA</b>	U.S. Department of Agriculture

<b>USGS</b>	United States Geological Survey
<b>USP</b>	University of the South Pacific
<b>UWI</b>	University of the West Indies
<b>WB</b>	The World Bank
<b>WHO</b>	World Health Organization
<b>WTO</b>	The World Trade Organization

## EXECUTIVE SUMMARY

There is currently a strong focus on biodiversity in small island developing States (SIDS) and invasive alien species (IAS), which constitute the number one extinction threat on islands. At its tenth meeting, the Conference of the Parties (COP) adopted the Strategic Plan for Biodiversity 2011-2020 with 20 headline targets (Aichi Biodiversity Targets) to be achieved by 2020, which includes a target addressing IAS (Target 9). Target 9 aims that “by 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated and measures are in place to manage pathways to prevent their introduction and establishment”. CBD decision XI/15 (islands) consolidated the in-depth review of the programme of work on island biodiversity adopted at the eighth meeting of the Conference of the Parties. Additionally, the United Nations designated 2014 as International Year of Small Island Developing States (SIDS), and the CBD chose island biodiversity as its 2014 theme for International Day for Biodiversity. Finally, the 3rd International SIDS Conference (complementing the 1994 Barbados Programme of Action and the 2005 Mauritius Strategy for Implementation) will be hosted in Samoa this year. Mindful of this, the Global Environment Facility (GEF) in its GEF-6 has many critical core programmes for SIDS.

In the context above, the Executive Secretary organized a capacity-building workshop for small island developing States to achieve Aichi Biodiversity Target 9 on invasive alien species, held in Montreal, Canada, on 14 and 15 June 2014, with generous support from the Governments of Japan and Germany. This report outlines the objectives of the workshop, activities undertaken, results achieved and next steps.

The focus of the workshop was to assist SIDS to identify regional and national projects targeting IAS prevention, eradication and control and guide them to formulate suitable project proposals aimed at various significant funding sources such as GEF-6 STAR and its Program 4.

Prior to the workshop, the SCBD disseminated two questionnaires in order to establish the status of IAS-related activities in SIDS prior to this workshop. Questions were posed on topics such as priority invasive species and pathways, activities undertaken to date to prevent and manage IAS, existing synergies between those responsible for environmental management and phytosanitary authorities, the degree to which IAS issues are highlighted in national biodiversity strategies and action plans (NBSAPs), and the existence of IAS management plans. In addition there was a section on IAS-related projects undertaken to date and planned future projects including those that the country representatives planned to produce as an output of this workshop. Questionnaire responses were supplemented by Internet searches to create dossiers for each SIDS that can be used in exchanges and in the preparation of proposals to investors in IAS management.

The workshop was attended by 42 participants representing 23 SIDS or developing countries with islands, and 21 resource persons – presenters, resource persons and support staff – from the National Invasive Species Council (NISC) of the United States of America (1), the United Nations Development Programme – UNDP (1), International Plant Protection Convention (IPPC) Secretariat (1), the World Bank (1), International Union for Conservation of Nature - IUCN (1), Secretariat of the Pacific Regional Environment Programme – SPREP (1), Conservation International (1), Island Conservation (3), Global Island Partnership (1), EcoLomics International (1) and nine resource persons and support staff from the CBD Secretariat (SCBD) (see Annex B for a full list of participants and resource persons).

Day 1 primarily focused on setting the scene, presentations and discussions on good practice that can assist effective IAS prevention and management in SIDS, and presentations by donors, implementing agencies and experts to guide project proposal writing. Ms. Junko Shimura of the CBD Secretariat emphasized the strategic value of Aichi Biodiversity Target 9 which provides very important justification for the implementation of decisions of the Conference of the Parties on IAS. She also emphasized the

value of a pathways approach to IAS prevention and management, the fact that there are essentially two entry points for IAS in islands – seaports and airports and the wealth of guidance material available which can help SIDS to build on good practices.

The next session was comprised of presentations on activities, organizations and initiatives that exemplify good practices that can assist effective IAS prevention and management in SIDS. John Mauremootoo (SCBD Consultant) summarized the good practice “bright spots” gleaned from the questionnaires and literature surveys. These bright spots included the emphasis on invasives placed in many SIDS’ NBSAPS, the production of invasives species strategies and action plans, good collaboration between the environment and agriculture sectors, and successful management approaches such as mammal eradications, biological control of plants, ecosystem restoration, and integrated pest management approaches.

Ms. Sonya Hammons of the International Plant Protection Convention (IPPC) Secretariat outlined the strategic importance of the IPPC as a key part of the IAS prevention and management system at a global, regional and national level and ways in which it can be used to maximize synergies between different sectors working for very compatible goals.

Ms. Shyama Pagad of the IUCN-SSC-ISSG (Invasive Species Specialist Group) introduced the Global Invasive Species Information Partnership (GIASI Partnership) and its Global Register of Introduced and Invasive Species (GRIIS) as initiatives that can benefit SIDS in their efforts to manage IAS. The GIASI Partnership is a consortium of invasive species information providers that have come together to assist parties to the Convention on Biological Diversity and others implement Article 8 (h) and Aichi Target 9. GRIIS is presented in the form of a country-wise annotated and verified inventories of introduced and invasive species.

Ms. Kate Brown of the Global Island Partnership (GLISPA) introduced the working group formed to help different island regions collaborate particularly on the issue of mobilizing political will for invasive species and coordination effort. This group worked as a partnership in making sure that the programme of work on island biodiversity in-depth review in 2012 had wide input and supported islands to include the issue of invasive species as one of the priorities.

In his presentation, Mr. Olivier Langrand of Island Conservation highlighted the disproportionate proportion of threatened species and species extinctions from islands compared to continental areas, the impact of introduced alien vertebrates on island biodiversity and the work undertaken by Island Conservation and partners to protect thousands of endangered species on islands primarily through alien vertebrate eradications.

Mr. Phil Andreozzi of the US National Invasive Species Council (US NISC) outlined the broad IAS impacts on islands, the unique opportunities for success on islands, and specific examples of IAS impact from the Pacific. He presented the Regional Biosecurity Plan for Micronesia and Hawaii as a potential model of effective regional collaboration and proactive biosecurity and an applicable tool for invasive species efforts on islands around the world.

Mr. Dave Moverley of the Secretariat of the Pacific Regional Environmental Programme (SPREP) introduced the Pacific region, SPREP and its mandate and strategic plan, mechanisms for IAS management including funding IAS work in the region, prospects for IAS work under GEF-6 and a summary of lesson learned from forming proposals for ongoing IAS work.

The discussion points from this session centred on common challenges and opportunities for SIDS with regard to achieving Aichi Target 9. Most of the challenges concerned capacity and resource constraints; while the opportunities related to natural advantages such as insularity and limited numbers of entry



points, and common ground, regional groupings and resource constraints as opportunities for collaboration.

The following session was comprised of presentations by donors, implementing agencies and experts to guide project proposal writing.

Mr. David Duthie of the SCBD, in presenting the Global Environment Facility's support to the implementation of national and regional IAS strategies, emphasized the opportunities to obtain funding under GEF-6's Biodiversity Focal Area, Program 4 - Prevention, Control and Management of Invasive Alien Species. The GEF-6 strategy is very focused, so it is vital that proposals meet the stated criteria. IAS must be a priority in the NBSAP if a project is to be developed under Program 4. NBSAP revisions are happening now in many countries so there is an opportunity to ensure that IAS are prioritized.

Mr. Charles Besançon of SCBD outlined the nature of the LifeWeb initiative, LifeWeb eligibility, what LifeWeb offers to CBD Parties, the LifeWeb Expression of Interest process, LifeWeb's past success, recent LifeWeb matches, and ingredients for successful LifeWeb matches. LifeWeb is not a fund but a matching mechanism which creates partnerships between donors and developing countries, offers strategic advice, and profiles funding needs in the clearing-house and at donor round tables. LifeWeb projects can be seen as part of a donor/funding mix. The LifeWeb project development process is relatively fast (compared with those of other funds). LifeWeb therefore can be a very useful vehicle for initiating actions relatively rapidly.

Ms. Sonya Hammons of the IPPC Secretariat introduced the Standards and Trade Development Facility (STDF), its relevance to IAS prevention and management, its financing mechanism, and eligibility for support. STDF is a global partnership that supports developing countries in building their capacity to implement international sanitary and phytosanitary (SPS) standards, guidelines and recommendations as a means to improve their human, animal and plant health status and ability to gain or maintain access to markets. STDF-funded projects can be a valuable source of strategic and financial support for IAS-related work, although it is important to use "buzzwords" that appeal to the IPPC that may not always feature in the biodiversity sector.

Ms. Valerie Hickey of the World Bank outlined the comparative advantage of the Bank in readiness including harmonizing policy and building credible institutions; it is increasingly talking about how they can help connect readiness with implementation and results-based finance. She emphasized the fact that the World Bank has the potential to invest in IAS readiness to usher in a biosecurity approach – "producing a safe trade level playing field", so that the private sector can no longer compete for the lowest common denominator in biosecurity to cut costs. Ms. Hickey stated that it is essential that IAS gets on the mainstream agenda for this major shift to happen. SIDS have the potential help in this process by pushing for increased international attention on IAS as they have so successfully done for oceans.

The bulk of Day 2 was devoted to the development of outline project proposals by country and regional groupings with support from international experts. Participants worked on their projects using the generic project proposal template provided, initially in national groupings. After the national project concepts were developed, those who wanted to pursue regional projects formed regional project development groups. Resource persons were available throughout to assist the participants.

During the workshop the following 15 concept notes were prepared:

1. Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, Territory of Guam, Commonwealth of the Northern Mariana Islands: Enhancing the Prevention, Control and Management of Invasive Alien Species in vulnerable ecosystems of Micronesia

2. Pacific Region: Pacific Regional Project for Smart Capacity Development and Mainstreaming IAS Financing
3. Sao Tome and Principe: Development of an invasive species policy and strategy.
4. Seychelles: Management adaptations to increase ecosystem resilience of Seychelles UNESCO World Heritage Sites
5. Ecuador: Prevention, Control and Management of Invasive Alien Species (IAS) in Ecuador with a focus on National Protected Areas.
6. Maldives: Enhancing Resilience against Invasive Alien Species in Maldives
7. Vanuatu: Vanuatu's Inter Island Biosecurity Project and implementation of the National Invasive Species Strategy and Action Plan.
8. Saint Lucia: Reducing impacts of invasive species.
9. Jamaica: Eradication of Invasive Plant Species in the Black River Lower Morass (Ramsar Site) and Habitat Restoration.
10. Grenada: Eradication of selected Alien Invasive Species from the state of Grenada.
11. Antigua and Barbuda: Strengthening National Frameworks for and Management of Invasive Alien Species (IAS), along with Prevention of Entry of IAS for Antigua and Barbuda and Revitalizing Redonda.
12. Saint Kitts and Nevis: Development of an invasive species policy and strategy.
13. The Bahamas: Decreasing the Impact of Invasive Alien Species in the Bahamas
14. Palau, Federated States of Micronesia, Republic of the Marshall Islands, Guam, Commonwealth of the Northern Mariana Islands: Integrating Invasive Species Prevention and Management into Protected Areas Management in Micronesia
15. Singapore: Identification of IAS for Singapore

Following the workshop the Secretariat of the CBD will prepare an information document to submit to the twelfth meeting of the Conference of the Parties. The document will include an operationalization of a new international islands initiative to facilitate collaboration among the participants from SIDS and beyond, GEF implementing agencies/partners, international experts on invasive alien species and additional donors to the GEF, subject to funding.

## 1. INTRODUCTION

At its tenth meeting, the Conference of the Parties (COP) adopted the Strategic Plan for Biodiversity 2011-2020 with 20 headline targets (Aichi Biodiversity Targets) to be achieved by 2020, which includes a target addressing invasive alien species (Target 9). The aim of Aichi Target 9 is that “by 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated and measures are in place to manage pathways to prevent their introduction and establishment”. CBD decision XI/15 (islands) consolidated the in-depth review of the programme of work on island biodiversity adopted at the eighth meeting of the Conference of the Parties. Additionally, the United Nations designated 2014 as International Year of Small Island Developing States (SIDS), and the CBD chose island biodiversity as its 2014 theme for International Day for Biodiversity. Finally, the third international SIDS conference (complementing the 1994 Barbados Programme of Action and the 2005 Mauritius Strategy for Implementation) will be hosted in Samoa this year. Mindful of this, the Global Environment Facility (GEF) in its GEF-6 has many critical core programmes for SIDS.

In the context above, the Executive Secretary organized a capacity-building workshop for small island developing States to achieve Aichi Biodiversity Target 9 on invasive alien species, held in Montreal, Canada, on 14 and 15 June 2014, with generous support from the Governments of Japan and Germany. This report outlines the objectives of the workshop, activities undertaken, results achieved and next steps.

The focus of the workshop was to assist SIDS to identify regional and national projects targeting prevention, eradication and control of invasive alien species and guide them to formulate suitable project proposals aimed at various significant funding sources such as GEF-6 STAR and its Program 4.

The workshop provided a review of multilateral, bilateral and philanthropic donors, and their strategies that address invasive alien species in SIDS and developing countries with islands. It reviewed best practice in the development of regional, thematic and national project proposals and prospection of donors and partners. This workshop allowed for an exchange of sources of information on invasive alien species among Parties, experts and potential donors to develop project proposals based on the regional and national strategies and action plans for invasive alien species as part of the obligations of SIDS with the CBD (see annex I below for the full workshop programme).

The workshop was attended by 42 participants representing 27 SIDS or developing countries with islands, and 21 resource persons - presenters, resource persons and support staff – from the U.S. National Invasive Species Council – NISC (1), the United Nations Development Programme – UNDP (1), International Plant Protection Convention (IPPC) Secretariat (1), the World Bank (1), International Union for Conservation of Nature - IUCN (1), Secretariat of the Pacific Regional Environment Programme – SPREP (1), Conservation International (1), Island Conservation (3), Global Island Partnership (1), EcoLomics International (1) and nine resource persons and support staff from the CBD Secretariat (SCBD) (see annex II for a full list of participants and resource persons).

Day 1 focused primarily on setting the scene, presentations and discussions on good practices that can assist effective IAS prevention and management in SIDS, and presentations by donors, implementing agencies and experts to guide project proposal writing.

## 2. DAY 1

### 2.1. *Official opening of the workshop*

Facilitator: Ms. Junko Shimura, SCBD

#### **2.1.1. OPENING REMARKS BY THE REPRESENTATIVE OF THE SECRETARIAT OF THE CBD: MR. DAVID COOPER**

Mr. Cooper opened the workshop and made the following points:

- Last month, the 2014 International Day for Biodiversity was celebrated, with a focus on small island developing States (SIDS). This year will also see the third United Nations conference on small island developing States taking place in Apia, Samoa, from 1 to 4 September. This year is a great opportunity for SIDS to promote the value of island biodiversity and call for support to facilitate sustainable development of SIDS.
- Under the Convention on Biological Diversity, the twelfth meeting of the Conference of the Parties will take place in Pyeongchang, Korea, from 6 to 17 October 2014, envisaging that the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity will be entering into force. Invasive alien species will be considered by the Conference of the Parties for its future work, together with new guidance on the risks associated with introduction of alien species as pets, aquarium and terrarium species, and as live bait and live food. The ecosystems on islands are particularly vulnerable to invasive alien species. This workshop is timely to further promote the national and regional strategies for biodiversity, and to take action on invasive alien species in SIDS.
- Aichi Biodiversity Target 9 was developed specifically to address invasive alien species. To achieve this target, globally, SIDS can take a leadership role through utilising best practices on eradication and control of invasive vertebrates and ensuring that preventive measures are in place. Achieving Target 9 is critical for SIDS to prevent loss of biodiversity and move forward toward sustainable development in partnership with UN agencies, and intergovernmental and non-governmental organizations. The CBD Secretariat wishes all participants to develop collaborative partnerships and to produce tangible outputs of the workshop, which may include draft project proposals to be considered by the Global Environment Facility (the financial mechanism under the CBD), the LifeWeb Initiative, and other potential donors.

#### **2.1.2. AICHI BIODIVERSITY TARGET 9 ON INVASIVE ALIEN SPECIES AND EXPECTED OUTPUTS OF THIS WORKSHOP: MS. JUNKO SHIMURA (SCBD)**

The presentation set the scene for the workshop, emphasizing the importance of Aichi Biodiversity Target 9 and CBD Article 8(h), and pathways management, and outlining the expected outputs of this workshop (see <http://www.cbd.int/doc/?meeting=IASWS-2014-01>).

Ms. Shimura began by introducing Aichi Biodiversity Target 9 on invasive alien species: *Priority invasive alien species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment*, and CBD Article 8(h): *Each Contracting Party shall, as far as possible and as appropriate, prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species* (emphasis added in both cases).

CBD Article 8(h) provides legal recognition for prevention and control or eradication of invasive alien species, defined as “alien species which threaten ecosystems, habitats or species.” Aichi Biodiversity Target 9 further provides a very important justification for implementation of decisions of the Conference

of the Parties on invasive alien species (IAS) and encourages Parties to take actions, Ms. Shimura emphasized the importance of pathways of IAS entry into SIDS and the fact that there are essentially two entry points – seaports and airports.

A lot is known about pathway management and Ms. Shimura introduced the following resources which contain pathways management guidance that can be adapted for use in SIDS:

- CBD Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species (general)
- CBD Guidance on the pet and aquarium trade, live food, etc. to be adopted at the twelfth meeting of the Conference of the Parties
- International Standards for Phytosanitary Measures (ISPMs)
- OIE Animal Health Codes and Manuals
- FAO Code of Conduct for Responsible Fisheries
- IMO Guidelines for Ballast Water Management (BWM) Convention

Ms. Shimura outlined the following expected outputs of the workshop:

1. Draft project proposals that are ready to submit
2. Collaborative partnership plan(s)
3. Road map for implementation

Finally, she stressed that the Secretariat is willing to continue support for Parties to achieve Aichi Biodiversity Target 9 on invasive alien species and encouraged participants to maximize this opportunity to enable actions at each national level with strong regional collaborations.

## **2.2. Best practices**

Mr. Charles Besançon of SCBD facilitated the session, which was comprised of presentations on activities, organizations and initiatives that exemplify good practices that can assist effective IAS prevention and management in SIDS.

### **2.2.1. HELPING SIDS TO SOAR: RESULTS OF SURVEY OF INVASIVE SPECIES-RELATED ACTIVITIES IN SIDS: MR. JOHN MAUREMOOTO (SCBD CONSULTANT)**

In order to establish the status of IAS-related activities in SIDS prior to this workshop the SCBD disseminated two questionnaires that posed questions on topics such as priority invasive species and pathways, activities undertaken to date to prevent and manage IAS, existing synergies between those responsible for environmental management and phytosanitary authorities, the degree to which IAS issues are highlighted in NBSAPs, and the existence of IAS management plans. In addition there was a section on IAS-related projects undertaken to date and planned future projects including those that the country representatives planned to produce as an output of this workshop. The blank questionnaires are included as annexes III and IV. Questionnaire responses were supplemented by Internet searches to create dossiers for each SIDS that can be used in exchanges and in the preparation of proposals to investors in the management of invasive alien species. The dossiers are included as annex V.

It was not possible to present a comprehensive summary of the survey results in the time available so instead the summary took the form of a “SOAR analysis” (strengths, opportunities, aspirations and results). SOAR analysis is derived from the better-known “SWOT analysis” (strengths, weaknesses, opportunities, and threats) but emphasizes what is working rather than using the “language of deficits”. It is based on the constructionist principle, that words create worlds; i.e. the filters through which we interpret the world create our reality (the map is not the territory). These filters shape our language, communications and day to day interactions; so focusing on possibilities rather than limitations helps us to generate a better future.

In the case of invasive species prevention and management this perspective helps us to focus on getting more of what we want, such as species saved, ecosystems restored, cultural values protected, food security, and water security. The results summarized highlight good practices as examples to follow but it not meant to imply that all of these practices are operating in all SIDS not that all these practices are functioning optimally in every case.



Figure 1. Contrast between SWOT and SOAR.

### Strengths

- Invasives highlighted in NBSAPS
- The production of invasives species strategies and action plans
- Examples of good collaboration between environment and agriculture
- Baseline information for many countries
- Existing in-country capacity
- Examples of regional collaboration
- New legislation relating to IAS
- Successful management approaches, e.g. mammal eradications, biological control of plants, ecosystem restoration, integrated pest management approaches
- A questionnaire response rate of over 90%!

### Opportunities

- The insularity of (small) islands
- Improvements in techniques and understanding
- Opportunities for networking – similar species, similar pathways, South-South collaboration
- Traditional and non-traditional funding opportunities
- Co-funding opportunities
- Improved communications
- Increased numbers of good practice examples
- This workshop!

## Aspirations

The following highlights desired outcomes from this workshop as articulated by some of the participants:

- Develop early warning mechanisms, rapid response measures and management plans (Antigua and Barbuda)
- Consolidate partnerships (Cape Verde)
- Identify sources of finance to promote capacity-building (Comoros Islands)
- Ways and means to scale up and facilitate access to additional financing (Cuba)
- To be able to develop project proposals according to the criteria of the donors (Grenada)
- To access information on successful projects on Invasive alien species (Maldives)
- To obtain greater insight into achieving Aichi Target 9 (Saint Lucia)
- Prioritize invasive species for management (Tonga)
- To learn how to write proposals (Tuvalu)

## Results

The following highlights project ideas proposed by some SIDS:

- Prevention, control and management of invasive alien species (IAS) in Ecuador with a focus on National Protected Areas
- Eradication of selected invasive alien species from the state of Grenada
- Formulation of an inter-institutional strategy against invasive alien species (Haiti)
- Reducing the impacts of invasive species (Saint Lucia)
- Development of web-based participatory decision support system for monitoring and managing IAS in the identified pilot sites (Sri Lanka)

## In summary

Although invasive species management is a challenge there have been many successes or bright spots. We can get to know, show and grow these bright spots to get more of the outcomes we desire in terms of ultimate ends to which IAS prevention and management is a means.

### 2.2.2. INTERNATIONAL PLANT PROTECTION CONVENTION: WHAT IS IT? HOW CAN IT HELP WITH INVASIVE SPECIES AND BIODIVERSITY? *Ms. SONYA HAMMONS (IPPC SECRETARIAT)*

In this presentation Ms. Hammons emphasized the strategic importance of the International Plant Protection Convention (IPPC) as a key part of the IAS prevention and management system at a global, regional and national level and ways in which it can be used to prevent invasive species from being moved to and established in new areas.

#### The IPPC

The International Plant Protection Convention (IPPC) is an international agreement on plant health to which 181 signatories currently adhere. It aims to protect **cultivated and wild plants** by preventing the introduction and spread of pests. Under the IPPC, a “pest” is any organism that causes damage to plants, and this can include many invasive species. The IPPC process for analysing the risk of pests is internationally recognized and provides a globally agreed framework for identifying which organisms to regulate. There was discussion on whether invasive species that impact non-agricultural plants could be regulated through the IPPC framework. It was clarified that this is the case. This is because under the IPPC, regulation is based on “quarantine pests”, which are pests that do economic damage, and the economic consequences can be due to environmental damage.

The Secretariat of the IPPC is provided by the Food and Agriculture Organization of the United Nations. Each IPPC contracting party establishes a national plant protection organization (NPPO), which regulates pests based on risk. The contracting party has an official contact point through which all official communications are channelled (for example confirmation of the import regulatory requirements in place to prevent the introduction of pests).

### **The importance of prevention**

The IPPC focuses on prevention and control of organisms that damage plants but the major focus is prevention. This is done by countries completing risk analysis of pathways and commodities to identify which organisms could pose significant risk to plant resources and to regulate based on this risk. The NPPO has inspectors in place at ports and airports – the major entry points for IAS. There is also national surveillance to look for pests. Currently, most national plant protection systems are primarily looking for species that affect agriculture but the IPPC scope covers all pests so this can include species of biodiversity concern as well. By taking advantage of the systems that are already in place to analyse risk for and regulate pests of plants, CBD Parties can strengthen national efforts to protect biodiversity through ensuring a coordinated system. In addition, the plant protection systems have a long history of risk analysis and regulation with technical expertise that can offer valuable contributions to efforts to prevent and manage invasive species.

### **IPPC Tools**

IPPC tools are based on risk analysis which is comprised of:

- Risk assessment – which looks at the chances of a species establishing and spreading and the consequences should this happen.
- Risk management - what can be done to manage the negative effects of the species.
- Action – what regulatory and concrete actions are undertaken, e.g. regulating a product, inspection, containment and cooperation.

A key part of IPPC is the International Standards for Phytosanitary Measures (ISPMs) which are risk-based, globally harmonized, science-based guidelines that are recognized by the WTO-SPS agreement.<sup>1</sup> The recognition of these standards by the WTO-SPS agreement means that regulations on trade that are consistent with the IPPC standards are considered to be in line with the WTO agreement. This is important in order to ensure that restrictions on trade meant to prevent invasive species are not more restrictive than necessary, which is important for avoiding costly international trade disputes. Listed below are a few of the many ISPMs that are of relevance to the prevention and management of invasive species:

- Surveillance
- Pest risk analysis
- Pest reporting
- Lists of regulated pests
- Plants for planting
- Biological control agents
- Relationships between CBD/IPPC terminology
- Guidance on environmental considerations in risk analysis

### **Collaboration between IPPC and CBD**

The IPPC and the Convention on Biological Diversity (CBD) have recognized their common interest, and the CBD, through decisions of the Conference of the Parties, has encouraged CBD Parties to use IPPC tools for assessing and managing risks of invasive species.

### **Collaboration at the national level**

National-level collaboration between those charged to protect biodiversity and those responsible for plant health is essential in order for countries to fulfil implementation of both the CBD and IPPC. In order to do this, the first step is for national focal points of the CBD and national contact points of the IPPC to make contact with one another, to understand how each convention works, and to consider options for coherent

---

<sup>1</sup> The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) is an agreement on how governments can apply food safety and animal and plant health measures (sanitary and phytosanitary or SPS measures).



national-level implementation. Those from the environmental sector can provide input on what should be considered a pest, and what priorities should be taken into account when doing risk analysis. Through science-based risk analysis, the IPPC's standards (recognized by the WTO-SPS) and the CBD's precautionary principle can be compatible.

#### Resources

- National IPPC contact points can be found at [www.ippc.int/countries](http://www.ippc.int/countries);
- The Phytosanitary Resources page ([www.phytosanitary.info](http://www.phytosanitary.info)) includes risk analysis training materials, diagnostic guides, and pest information fact sheets.

#### 2.2.3. THE GLOBAL INVASIVE ALIEN SPECIES INFORMATION PARTNERSHIP (GIASI PARTNERSHIP) AND ITS GLOBAL REGISTER OF INTRODUCED AND INVASIVE SPECIES (GRIIS): MS. SHYAMA PAGAD (IUCN-SSC-ISSG)

The inclusion of a specific biodiversity target on IAS highlights the critical importance of this issue. Aichi Biodiversity Target 9 provides the ISSG with the umbrella and the mandate to work with their stakeholders in SIDS on this key threat to biodiversity, food security and livelihoods. Aichi Biodiversity Target 9 clearly identifies key actions that nations have to undertake to mitigate the impacts of this threat:

1. Identify and prioritize invasive species for management action; and
2. Identify and prioritize pathways of introduction of alien and potentially invasive species in order to manage these pathways more effectively.

Lack of availability and access to authoritative, current and accurate information has been identified as a barrier to effective management action. So the information providers have an important role in supporting decision makers to make informed decisions as well as making available and providing access to accurate, current and useful information to invasive species practitioners.

The presentation focused on the ongoing activities of the Global Invasive Alien Species Information Partnership (GIASI Partnership) as well as future plans. Ms. Pagad presented two tools under development by the partnership: the Global Register of Introduced and Invasive Species (GRIIS) and the Invasive Alien Species Pathway Management Resource (IASPMR).

The GIASI Partnership is a consortium of **invasive species information providers** that have come together to assist Parties to the Convention on Biological Diversity and others implement **Article 8 (h)** and **Aichi Target 9**.

**Article 8(h)** of the CBD states that “*Each contracting Party shall, as far as possible and as appropriate, prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species.*”

**Aichi Biodiversity Target 9** states that “*By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.*”

The partnership was launched during the eleventh meeting of the Conference of the Parties to the CBD in Hyderabad India, where partners signed a memorandum of cooperation with the CBD committing their support to the mission of the GIASI Partnership.

Current GIASI Partnership Partners include:

- All Parties to the Convention of Biological Diversity (CBD)
- CABI

- FishBase Information and Research Group
- Global Biodiversity Information Facility (GBIF)
- International Union for Conservation of Nature (IUCN) and the Invasive Species Specialist Group of the IUCN Species Survival Commission
- Muséum National d'Histoire Naturelle (Paris, France)
- Natural History Museum, UK (NHM)
- The Horus Institute for Environmental Conservation and Development (Brazil)
- The Asia-Pacific Forest Invasive Species Network (APFISN)

The GIASI Partnership mission statement is as follows “*Through global-scale cooperation, maximize the capacity of CBD Parties and their partners to access, exchange, analyse, and effectively apply the information and informatics tools needed to prevent, control and eradicate invasive alien species in a timely and reliable manner.*”

**GIASI Partnership Partners** are institutions and organizations prepared to contribute structured information on invasive alien species for use by the community. These partners will share relevant information from the databases (or spreadsheets) that they maintain. The information shared through the GIASI Partnership mechanisms will typically be a subset of the most common data elements from each resource. The information will be presented in a portal/ discovery tool – GIASI Partnership Information Gateway

#### **GIASI Partnership Information Gateway architecture**

- GIASI Partnership partners make key data available for open reuse
- GIASI Partnership partners export core fields of data for public use including links back to original sources
- The GIASI Partnership data repository provides consistent access to standardized GIASI Partnership data
- The GIASI Partnership Information Gateway provides navigable linked data for users to explore and access

The initial focus of the GIASI Partnership is on data to address the following fundamental questions:

- Which species are considered invasive aliens?
- What names are in use for each invasive alien species?
- Which invasive alien species have been recorded in each country (and what is the supporting evidence)?
- What pathways support the transmission of each invasive alien species to new regions?

The architecture adopted will be suitable for ready expansion to address additional questions, including:

- Which invasive alien species have been recorded in each state/province/other administrative unit (and what is the supporting evidence)?
- What key traits does each invasive alien species exhibit?
- How can each invasive alien species be recognized or identified?
- What strategies have proven successful to manage each invasive alien species?

#### **Global Register of Introduced and Invasive Species (GRIIS)**

GRIIS was developed as a concept and prototype by the ISSG in 2006 as part of a project for the Defenders of Wildlife on the regulation of the import of live animals into the United States of America. This concept was revisited by the partnership and enhanced to address Target 9.

The Global Register is presented in the form of country-wise annotated and verified inventories of introduced and invasive species. This register will form the backbone of the Gateway architecture.

The steps in the development of these inventories are as follows. A literature review, including a review of databases, is conducted to compile species lists held in an Access database. Taxonomy is standardized so accepted names and synonyms etc. are noted. The biological status of the species as stated in the original source is recorded. The literature review also includes the documentation of any evidence of impact. All sources are documented and the key one is listed for each species.

Expert country editors are identified. The role of the country editor is to verify the presence of the species, and to submit any evidence of impact. Editors are listed on the editor's page. Sometimes the ISSG has received offers of assistance from several editors for one country.

All the original data as well as revised data is maintained in the backend database. What is visible to users is the species name, including species authority, higher taxonomy - Kingdom, the ecosystem in which the species occurs, and two check boxes for verification of the record and evidence of impact

The GRIIS now contains 65 country inventories. Editors have been identified for over 30 countries and requests have been sent out. Confirmation of participation has been received for 18 countries and the verification process is underway

### **The Invasive Alien Species Pathway Management Resource (IASPMR)**

Invasion pathways are the actual or theoretical routes along which introduced species move during their early stages of invasion. Species that become invasive (whether they are animals, plants or microorganisms) usually come from another ecosystem or country (where they are native or indigenous) before entering a new ecosystem (or country) where they are not native. It is that passage from their former "home" to the new locality where they have the advantage of being "foreign" that invasion biologists term the **pathway of invasion**. This can be made more precise by adding the means by which such species move along that pathway – and this is called the invasion "**vector**".

One of the most important types of information in the practical approach to prevention and management of biological invasions is the identity of the **pathways** of introduction and, if possible, details of the **vectors**.

It is envisaged that the Invasive Alien Species Pathway Management Resource will assist countries to implement international sanitary and phytosanitary standards, guidelines and recommendations, for example by enabling pathway risk assessments in order to protect their human, animal and plant health while maintaining and improving access to markets.

The framework of pathway types used in this resource was developed by a group of expert members of the Invasive Species Specialist Group- ISSG.

It includes 5 first-level classifications:

1. Release in nature;
2. Escape from confinement;
3. Transport - as a contaminant;
4. Transport - as a stowaway;
5. Corridor - interconnected waterways/basins/sea.

Each of these first-level classifications includes subcategories, which at present number over 45.

Selection of any one of the subcategories will lead the user to the specific webpage - which includes a narrative describing the pathway and four key components of information including:

- Species names;
- Pathway type including two levels;

- Legal information;
- An extensive bibliography.

#### **2.2.4. GLOBAL ISLAND PARTNERSHIP (GLISPA): Ms. KATE BROWN (GLIPSA)**

IAS remains one of the priorities of Global Island Partnership and to this end we have formed a working group to help different island regions collaborate particularly on the issue of mobilizing political will for invasive species and coordination effort. This working group is chaired by Mr. Olivier Langrand from Island Conservation and Mr. Phil Andreozzi from the US National Invasive Species Council. We worked as a partnership in making sure that the programme of work on island biodiversity in-depth review in 2012 had wide input and supported islands to include the issue of invasive species as one of the priorities. We want to ensure that now there is a potential increase in opportunities for funding for IAS work, so that the pipeline of projects is there to access it so that momentum continues to build.

GLISPA will also in its international activities provide where possible opportunities for islands (countries with islands and island countries) to work together and share bright spots and lessons on invasive species action so that we can continue to address this important threat.

#### **2.2.5. ISLAND CONSERVATION - MISSION AND ACTIONS OF ISLAND CONSERVATION): MR. OLIVIER LANGRAND (ISLAND CONSERVATION)**

In his presentation Mr. Langrand emphasized the disproportionate proportion of threatened species and species extinctions from islands compared to continental areas, the impact of introduced alien vertebrates on island biodiversity and the work undertaken by Island Conservation and partners to protect thousands of endangered species on islands primarily through alien vertebrate eradications.

##### **The vulnerability of island biota to introduced vertebrates**

Although islands represent 5% of the earth's surface they are home to 40% of the world's threatened species and 80% of species extinctions since 1500 have been from islands.

Many of these extinctions have been caused by the impacts of invasive alien vertebrates (IAV) which degrade the natural habitats through predation and competition with native species resulting in disruption to ecosystem function and processes, with economic, social and cultural impacts.

##### **The work of Island Conservation**

Island Conservation, whose mission is *to prevent species extinctions by removing invasive species from islands*, was formed in 1994. It has worked with partners in 52 islands to protect 977 populations of 389 native species. Its campaign strategy is to inspire science, funding and policy to catalyse regional partners to implement innovative field projects that focus on primarily on vertebrate eradications to protect threatened native species on islands.

Island Conservation shares knowledge and guides island conservation through its Database of Island Invasive Species Eradications (DIISE) <http://diise.islandconservation.org> and global Threatened Island Biodiversity (TIB) database <http://tib.islandconservation.org>.

Information on all invasive vertebrate eradications on islands, such as location, methods, status, outcome, practitioner, source, and data quality is contained in DIISE which contains information from published and grey literature, and expert consultation. DIISE is a collaborative partnership comprising Island Conservation, the IUCN SSC Invasive Species Specialist Group, the Coastal Conservation Action Lab at the University of California, Santa Cruz, Maanaki Whenua-Landcare Research, and the University of Auckland, New Zealand. Key results include records of over 1,770 eradication efforts of which more than 1,300 have been successful, from 1,050 islands belonging to 68 countries and territories.

The TIB database is the world's best compilation of Threatened species (as classified by the International Union for the Conservation of Nature or IUCN), invasive animals, and islands. The database can be viewed here: <http://tib.islandconservation.org/>. It contains information on globally threatened species on islands at risk from invasive vertebrates. Launched in October 2012 it is now in its second update. It contains information from 1,326 islands on 1,117 Critically Endangered and Endangered species. It is a valuable tool for identifying priority islands.

In the immediate future, Island Conservation through the “Small Islands, Big Difference” launched in October 2012 is looking to scale up its efforts to help save 1000s of species in 500 islands by 2020. This will help to achieve Aichi Target 9 and Target 12 – species conserved with potentially dozens of Critically Endangered, hundreds of Endangered and thousands of Vulnerable and non-assessed species protected.

#### **2.2.6. IAS ACTIVITIES AND OPPORTUNITIES IN THE PACIFIC: MR. PHIL ANDREOZZI NATIONAL INVASIVE SPECIES COUNCIL (US NISC)**

In his presentation Mr. Andreozzi outlined the broad IAS impacts on islands, the unique opportunities for success on islands, specific examples of IAS impact from the Pacific, the Regional Biosecurity Plan for Micronesia and Hawaii, and opportunities at upcoming international fora.

##### **The broad IAS impacts on islands**

Obviously IAS affect biodiversity on islands but impact goes beyond this. IAS also affect food security, ecosystem resilience (which has implications for climate change adaptation), fresh water availability, human health (disease vectors for example), cultural resources, protected areas, trade options, and livelihoods and tourism. All these are critical aspects of sustainable, green development.

##### **Unique opportunities for success on islands**

Efforts to prevent, eradicate and control IAS are more likely to be successful on islands, because:

- Limited size means eradication efforts more likely to be feasible
- Limited ports of entry and no land borders means biosecurity efforts can be strategically concentrated = greater chance of success.

The take home message is that biosecurity, eradication and control efforts on islands are more likely to be successful and have multiple, beneficial effects on other critical island issues. Therefore, funding such efforts is an effective and efficient use of resources.

##### **Examples of IAS impact from the Pacific**

One of the best known examples of IAS impact from the Pacific is the brown tree snake (BTS). BTS arrived on Guam after WWII and has reached densities of up to 10,000 BTS/square mile. It has caused unprecedented ecological damage including multiple bird extinctions, impacts on other native wildlife such as bats and lizards, impacts on pets and poultry, snake bites injuries to people, ecosystem changes (e.g. by eliminating native pollinators, insectivores and seed dispersers, BTS has also caused "cascading" effects on Guam ecosystems, reducing pollination by lizards and birds and reducing native plant regeneration and coverage as a consequence), and power outages. Management measures (including interdiction efforts to keep BTS from spreading to other islands) for BTS in Guam cost more than \$5m per year.

But BTS is just one threat to Micronesia. Other examples include the rhinoceros beetle, which causes significant damage to coconut plantations and impacts tourism (aesthetics); a number of vertebrates such as the cane toad, wild pigs and the red-eared slider; and numerous invasive plant species.

### **The Regional Biosecurity Plan for Micronesia and Hawaii (RBP)**

Developed with over USD 3.7 million of direct funding from U.S. Department of Defence (DoD) (in two chunks over 5 years) and many hundreds of thousands of dollars of in-kind support from the governments and non-governmental groups and organizations of the region, the RBP represents an unprecedented collaborative effort to develop a strategic plan to enhance prevention and to minimize invasive species threats and impacts. It is a comprehensive plan that covers the entire region, all ecosystems and all taxa.

Phase 1 includes risk analyses of species, pathways, vectors, and ports of origin, port and needs assessments - inspection needs, training, facilities, technologies, recommendations and best management practices, identification of implementation obstacles, and the establishment of coordination mechanisms. It has proved to be a unique effort in terms of size and scope, interdepartmental collaboration and proactivity.

Phase 2 includes competitive grants awarded to the University of Guam (UoG), the Secretariat of the Pacific Community (SPC), Landcare New Zealand, and others. Phase 2 components are independent scientific review of draft scientific reports to strengthen and augment the underlying science with input from regional experts making the document truly Micronesian in scope, the development of the RBP strategic implementation plan through an extensive participatory consultative process.

The plan was endorsed by the Micronesian Chief Executives in May, 2014. The next stage is implementation of what could be a potential model of effective regional collaboration and proactive biosecurity and an applicable tool for invasive species efforts on islands around the world.

### **Opportunities at upcoming international fora**

There are several upcoming opportunities for highlighting IAS issues in SIDS. These include:

- Pacific Islands Forum (July 28 – 31, 2014, Palau)
- SIDS Meeting (September 1 – 4, 2014, Samoa)
  - GLISPA High Level Side Event

### **2.2.7. A PACIFIC REGIONAL PERSPECTIVE FROM THE SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP): MR. DAVID MOVERLEY (SPREP)**

In his presentation Mr. Moverley introduced the Pacific region, SPREP and its mandate and strategic plan, mechanisms for IAS management including funding IAS work in the region, prospects for IAS work under GEF-6 and a summary of lesson learned from forming proposals for ongoing IAS work.

**The Pacific Region** has a population of about 10 million, includes 21 countries and territories, a land area of about 553,000 km<sup>2</sup> made up of about 30,000 islands.

### **SPREP and its mandate**

The Secretariat of the Pacific Regional Environment Programme (SPREP) is a regional intergovernmental agency accountable to 26 member countries (21 Pacific Island countries and territories and 5 “metropolitan” members (Australia, France, New Zealand, UK, and USA). It is the lead agency in the Pacific for biodiversity management, climate change, and waste management and pollution.

SPREP’s mandate is to promote cooperation in the Pacific islands region and to provide assistance in order to protect and improve the environment and to ensure sustainable development for present and future generations. Under this mandate SPREP provides technical, institutional and financial support to regional invasive species programmes in coordination with other regional bodies.

SPREP is an agency of the Council of Regional Organisations in the Pacific (CROP). Other CROP agencies involved in IAS are the Secretariat of the Pacific Community (SPC), and the University of the South Pacific (USP).

### Mechanisms for funding IAS work in the region

Current funding for SPREP IAS-related work is provided by member contributions or is project-based. Past projects have been through the Critical Ecosystem Partnership Fund (CEPF), current projects are through the Fonds Pacific, and the GEF-4 Regional Invasive Species Management Project: Prevention, Control and Management of Invasive Alien Species in the Pacific Islands, being implemented in 10 countries.

### Prospects for IAS work under GEF-6

In 2012 and 2013 the Pacific Islands Forum Leaders requested SPREP and SPC to step up action on invasive species. Members directed SPREP to develop a GEF-6 Regional Invasive Species proposal, and gave their support to building Pacific Island Countries and Territories' capacity to manage invasive species (SPREP Meeting 2013).

In response SPREP has conceived of a project to help address the impacts of invasive species at both the national and regional levels which is summarized in the figure below.

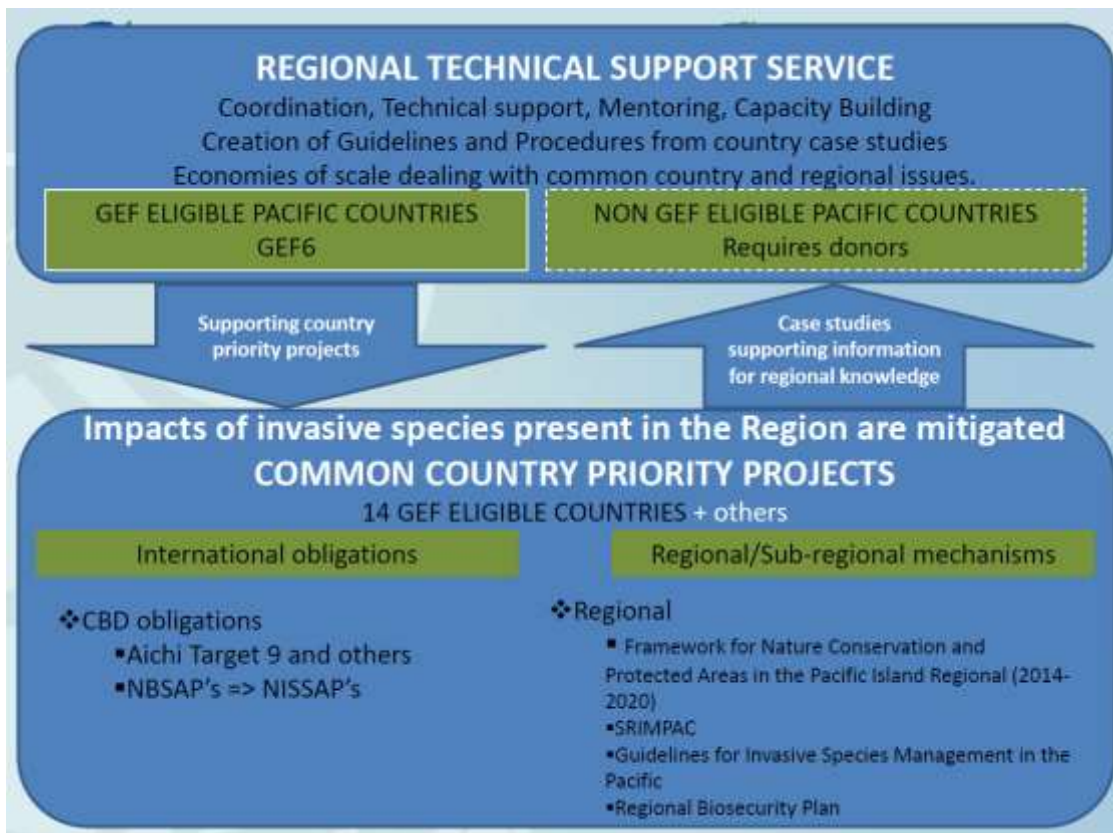


Figure 2. Schematic representation of the proposed GEF-6-funded regional IAS project

Regional technical support will be provided by SPREP, SPC, other CROP agencies and partners. They will support country priority projects and generate regionally significant guidelines, capacity-building and best practice procedures for invasive species management. This regional support will help to provide economies of scale and reduce overlap and duplication.

Common country priority projects would include the following:

- Risks are reduced for key pathways
- Extinction of priority species prevented (identified in NBSAP)
- Protected areas are managed for invasive species (NBSAP)



- Habitat restoration is used to build resilience against invasive species
- Natural enemies reduce the impact of regional high priority weeds through wider use of existing agents (PBS - Pacific Biocontrol Strategy - 2010).
- Specific country invasive species or issues are systematically identified, methods developed and implemented.

#### **A summary of lesson learned from ongoing IAS work**

The following are among the lessons identified in preparing proposals:

- Proposals should include technical support and applicants need to be honest about capabilities, limitations and resources required if the deliverable objectives are to be realized.
- Collaboration with open and honest partners is essential.
- Proposals should be driven by mandated decisions (local, regional, international), and up-to-date information.

### **2.2.8. SUMMARY OF DISCUSSION POINTS FROM THE BEST PRACTICES SESSION**

#### **Common challenges of SIDS to achieve Target 9 include:**

- Limited expertise to identify invasive alien species;
- Limited capacity to conduct risk analysis;
- Limited human resources and technical expertise to eradicate invasive alien species;
- Limited border control capacity to prevent entry of potentially invasive alien species;
- Unsustainable financial resources to manage invasive alien species;
- Dependence on experts based in remote countries.

#### **SIDS also have distinct advantages that can help them achieve Target 9 – these which may include:**

- Pathways to manage can be focused on international trade/border controls;
- Limited number of entry points of alien species (sea and air ports);
- Strong international collaboration with participated experts have already been established in many SIDS and if funding becomes available capacity will be further enhanced;
- Potentially regional centres of expertise exist and opportunities of collaboration will be welcomed by SIDS.

#### ***2.3. Presentations by donors, implementing agencies and experts to guide project proposal writing***

Facilitator: Mr. Oliver Hillel, SCBD

#### **2.3.1. GLOBAL ENVIRONMENT FACILITY SUPPORT TO THE IMPLEMENTATION OF NATIONAL AND REGIONAL INVASIVE ALIEN SPECIES STRATEGIES: MR. DAVID DUTHIE (SCBD)**

In this presentation Mr. Duthie emphasized the opportunities to obtain funding under GEF-6's Biodiversity Focal Area, Program 4 - Prevention, Control and Management of Invasive Alien Species. He provided valuable context by summarizing GEF-6's Biodiversity Strategy and Funding, SIDS STAR (System for Transparent Allocation of Resources) allocations, and the project cycle in GEF-6.

#### **Summary of the GEF-6 Biodiversity Strategy and Funding**

(i) GEF-6 Biodiversity Programming Target is US\$ 1,296 million (an increase over GEF-5 making the Biodiversity focal area the largest in the GEF);

(ii) The STAR Country Biodiversity Allocation is \$1,051 million – minimum aggregate allocation for SIDS in STAR is \$4 million (\$2 million CC-climate change, \$1.5 million BD-biodiversity, \$0.5 million LD-land degradation); national allocations should be posted by 30 June 2014;

(iii) The STAR Focal Area Set-Aside is \$245 million, comprising:



- \$13 million for Convention Obligations – i.e. the Sixth National Report;
- \$82 million for Global and Regional Programmes;
- \$45 million for Integrated Approach Programmes (\$35 million for Taking Deforestation out of the Commodities Supply Chain; and \$10 million for Fostering Sustainability and Resilience of Production Systems in Africa);
- \$37 million for Other Global and Regional Programmes; and
- \$150 million for Sustainable Forest Management.

The GEF-6 Biodiversity Focal Area Strategy comprises 4 major objectives:

1. Improve sustainability of protected area systems;
2. Reduce threats to globally significant biodiversity;
3. Sustainably use biodiversity; and
4. Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and production sectors.

These four objectives are divided into 10 programmes. The amount invested in each programme will be determined by how countries prioritize each in the use of their national STAR allocations.

**Objective 1.** Improve sustainability of protected area systems;

- Program 1: Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure;
- Program 2: Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate

**Objective 2.** Reduce threats to globally significant biodiversity;

- Program 3: Preventing the Extinction of Known Threatened Species;
- **Program 4: Prevention, Control and Management of Invasive Alien Species;**
- Program 5: Implementing the Cartagena Protocol on Biosafety (CPB).

**Objective 3.** Sustainably use biodiversity;

- Program 6: Ridge to Reef+: Maintaining Integrity and Function of Coral Ecosystems;
- Program 7: Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources;
- Program 8: Implement the Nagoya Protocol on ABS.

**Objective 4.** Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and production sectors

- Program 9: Managing the Human-Biodiversity Interface;
- Program 10: Integration of Biodiversity and Ecosystem Services into Development & Finance Planning.

**Program 4: Prevention, Control and Management of Invasive Alien Species**

This is the primary opportunity for IAS projects in GEF-6:

- “GEF will support the implementation of comprehensive prevention, early detection, control and management frameworks that emphasize a risk management approach by focusing on the highest risk invasion pathways.” (GEF Biodiversity Strategy para 51)
- “Targeted eradication will be supported in specific circumstances where proven, low-cost, and effective eradication would result in the extermination of the IAS and the survival of globally significant species and/or ecosystems.” (GEF Biodiversity Strategy para 51)

**STAR allocations for SIDS**

Under the STAR, most SIDS are in the LDCs and SIDS group, with the base allocation in GEF-6 of \$2 million for biodiversity, increased from \$1.5 million. Cape Verde, Cuba, Fiji, Jamaica, and Seychelles

have an individual allocation based on the Global Benefits Index (GBI<sub>bio</sub>). Each Program has a provisional funding envelope, but in reality the amount allocated to each is determined by country demand; projects are approved on a first come, first served basis until resources are fully utilized.

### **The project cycle in GEF-6**

The STAR minimum aggregate allocation remains at \$4 million (\$2 million CC, \$1.5 million BD, \$0.5 million LD). The MSP ceiling is now \$2 million. Countries are expected to present project concepts to the full value of their focal area allocations (or full value of the total country envelope for “flexible” countries) by December, 31, 2017.

Project cycle changes in GEF-6 include the following:

- The co-finance ratio for the entire GEF portfolio is set at 6:1 and will vary from project to project and between focal areas (but can include both in-kind and cash);
- The STAR country allocations to be published in the coming months;
- The PPG is now included in the PIF template. PIF and 1-step MSP templates are available at: [www.thegef.org/gef/guidelines\\_templates](http://www.thegef.org/gef/guidelines_templates).

Steps from a project idea to the GEF endorsement/approval request comprises the following:

- Project idea – Countries – National Portfolio Formulation Exercise (NPFE) (optional).
- Project concept – Agencies – PIF & PPG (templates);
- GEF Sec PIF & PPG review, work program inclusion and Council approval;
- Project preparation – National agencies, partners and GEF agencies;
- Project document – Agencies – FSP or MSP (EA) (templates);
- GEF Sec review, revision, resubmission, CEO endorsement/ approval and Council information.

The PIF can be submitted on a rolling basis. It takes 18 months for preparation for a FSP and 12 months for the preparation of an MSP.

The review criteria for a FSP/MSP are as follows:

- Country eligibility and ownership;
- Global environmental benefits;
- GEF focal area strategy (a “tick box”);
- The implementing agency’s (UNEP, UNDP, World Bank, etc.) comparative advantage;
- Resource availability;
- Project consistency with the strategies indicated above;
- Project design;
- Project financing and co-financing;
- Monitoring and evaluation;
- Agency’s responses to comments and reviews.

### **2.3.2. NAVIGATION ON LIFEWEB TO MEET THE NEEDS AND TO PROMOTE NATIONAL STRATEGIES AND ACTION PLANS: MR. CHARLES BESANÇON (SCBD)**

In this presentation Mr. Besançon outlined the nature of the LifeWeb initiative, LifeWeb eligibility, what LifeWeb offers to CBD Parties, the LifeWeb Expression of Interest process, LifeWeb past success, recent LifeWeb matches, and ingredients for successful LifeWeb matches.

#### **The nature of the LifeWeb initiative**

The LifeWeb initiative was launched in May 2008 during the ninth meeting of the Conference of the Parties to the Convention on Biological Diversity, in Bonn, Germany. LifeWeb is not a fund but a matching mechanism which creates partnerships between donors and developing countries, offers strategic advice, and profiles funding needs on the clearing-house and at donor round tables.

**LifeWeb eligibility**

Developing countries and countries with economies in transition are eligible. Proposals are eligible for consideration if they are endorsed by CBD and/or PoWPA (programme of work on protected areas) focal points and submitted by the Government.

LifeWeb topics must be in alignment with the CBD 2011-2020 Strategic Plan for Biodiversity and NBSAPs as well as area-based Aichi Biodiversity Targets (targets 5, 6, 9, 10, 11, 12, 13, 14, 15) – protected areas, restoration, invasive alien species, etc.

**What LifeWeb offers to CBD Parties**

LifeWeb offers:

- Technical assistance for developing projects linked to NBSAPs, PoWPA Action Plans and other national planning strategies.
- Promotion and profiling of LifeWeb Expressions of Interest online and to donors.
- Financial and logistical support for “round tables” – Meetings where political support is sought and galvanized, stakeholders can air their views and necessary domestic expenditure can be secured.
- Financial and logistical support for donor round tables – focused meeting with donors, where matches are sought and partnerships developed.

**The LifeWeb Expression of Interest process**

The project development process is triggered by the submission of a LifeWeb Expression of Interest (EoI). This should be tied to the national planning processes, should reflect other proposals or plans, and can “upscale” site-specific proposals.

The EoI expires one year after the date published.

**LifeWeb past success**

LifeWeb has had considerable success in facilitating funding as shown schematically in the figure below.

## LifeWeb Past Success

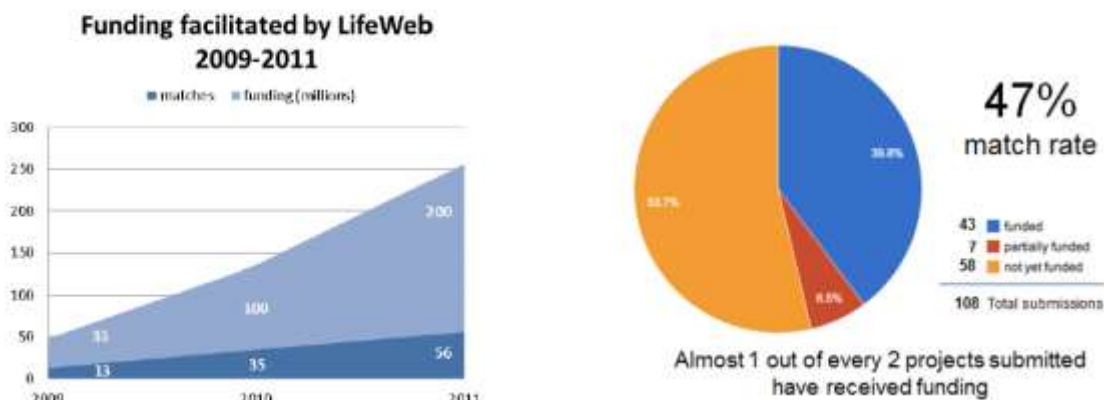


Figure 3. LifeWeb success in facilitating project funding

### **Recent LifeWeb matches**

The following recent LifeWeb matches are listed below:

With Austrian funding:

- DR Congo: Rehabilitation of the Yangambi Biosphere Reserve (USD 500K)
- Laos: Strengthening and enlarging of the PA system in Eastern Bolikhamxay (USD 500K)
- Bangladesh: Protection of threatened river dolphins in Sundarbans mangrove forest (USD 500K)
- Ethiopia: Protection of wild coffee varieties and protection and restoration of their natural habitat (500K)

With European Union funding (USD 7 million) and German funding (USD 2.9 million):

- Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela: Ecosystem-based Vision of Biodiversity Conservation for the Amazon Biome.

### **Ingredients for successful LifeWeb matches**

1. Project idea clearly reflects national priorities
2. Builds on existing initiatives or momentum
3. Co-financing already exists
4. EoI is well written and convincing
5. Topic of EoI is timely (climate change adaptation, IAS)

### **2.3.3. STANDARDS AND TRADE DEVELOPMENT FACILITY (STDF): MS. SONYA HAMMONS (IPPC)**

In this presentation Ms. Hammons presented information prepared by the STDF. The information discussed what the STDF does, how it works, its relevance to IAS prevention and management, its financing mechanism, and eligibility for support.

#### **What does STDF do?**

The Standards and Trade Development Facility (STDF) is a global partnership that supports developing countries in building their capacity to implement international sanitary and phytosanitary (SPS) standards, guidelines and recommendations as a means to improve their human, animal and plant health status and ability to gain or maintain access to markets.

In achieving its aims, the STDF acts both as a coordinating and a financing mechanism.

STDF's vision is *Improved SPS capacity supports sustainable economic growth, poverty reduction, food security and environmental protection*. To support this vision the STDF works to increase sanitary and phytosanitary (SPS) awareness, mobilize resources, strengthen collaboration, identify and disseminate good practices; and provide support and funding for development and implementation of projects that promote compliance with international SPS requirements.

#### **How is STDF governed?**

STDF has a Policy Committee, a working group that meets biannually in Geneva and comprises Partners (FAO including Codex/IPPC, OIE, WHO, WB, WTO), donors (12), developing country SPS experts (6), Observer organizations (AU, CABI, IICA, ITC, OECD, OIRSA, UNCTAD, UNIDO, etc.), and a Secretariat. STDF has a Medium Term Strategy (2012-16) and annual work plans (annual budget: US\$ 5 million target).

#### **What is STDF's value added?**

STDF provides a knowledge platform for SPS collaboration and identification/dissemination of good practices through which it is possible to share information/experiences with a wider audience, learn from what others are doing, and obtain feedback on ongoing/planned initiatives.

STDF also provides access to the expertise and skills of STDF partners, donors, observers and beneficiaries, and linkage to the SPS Committee, Aid for Trade, the Enhanced Integrated Framework (EIF) for trade-related assistance for Least Developed Countries (LDCs), as well as other (SPS-related) programmes

STDF serves as a focal point for SPS advocacy/information exchange through Working Group meetings, briefing notes, e-newsletter, etc. The STDF website provides a virtual library and a film on trading safely.

STDF produces thematic work on cross-cutting topics. Examples of thematic work include:

- Trade facilitation in the context of SPS Agreement
- International trade and invasive alien species
- Use of economic analysis to inform SPS decision-making and prioritize SPS investments
- Public private partnerships (PPPs) to build SPS capacity
- National/regional SPS coordination mechanisms

### **Advice/support on SPS project development**

- STDF provides project preparation grants (PPGs) up to a maximum of US\$50,000 for:
  - Application of capacity evaluation / prioritization tools
  - Feasibility studies
  - Project formulation
  - Synergies with other initiatives
  - Mobilization of donor funds
- It also provides pilot training/guidelines on project design and formulation (with EIF).
- Since 2004, STDF has financed 62 PPGs.

### **Projects to improve SPS situation and enhance market access**

- STDF focuses on projects that:
  - Identify, develop and/or disseminate good practices
  - Are linked to STDF thematic topics (e.g. IAS)
  - Include regional approaches
  - Are innovative, collaborative, and interdisciplinary
- The STDF contribution is US\$1 million or less for a duration of up to 3 years.
- Since 2004, STDF has financed 68 projects.

### **How can beneficiaries request support?**

- To request support potential beneficiaries have to undertake the following steps:
  - Review eligibility criteria on the STDF website
  - Read Guidance Note for Applicants
  - Download application form
  - Consult relevant stakeholders in country / region
  - Contact STDF Secretariat with questions or for advice
  - Submit application by e-mail
- Requests are considered two times per year. The next deadline is 18 July 2014, followed by December (exact date to be confirmed).

### **Who can apply?**

- Public sector entities (including regional or international bodies) with responsibility for SPS measures or policy (for example, the national plant protection organization);
- Private sector entities, either in their own right or in cooperation with the public sector. Examples of private sector entities are legally registered farmers' organizations, trade and industry associations, and private enterprises;
- Non-profit non-governmental organizations (NGOs) with expertise in the SPS area and with an organization in the relevant beneficiary country or countries, in cooperation with the public and/or private sector; and
- STDF partners

It was emphasized that in order to explore this option, CBD focal points should collaborate with national IPPC contact points to discuss plans that would be supported by the national plant protection organization.

#### **2.3.4. THE WORLD BANK: MS. VALERIE HICKEY (THE WORLD BANK)**

This presentation was actually given on Day 2 but the summary is given here as the talk formed part of the donor presentation session.

Ms. Hickey emphasized the fact that overseas aid is actually increasing, although official development assistance is decreasing. The greatest increase is coming through two main sources: 1) “vertical funds” which implement a standard set of programmes in their areas of operation across multiple countries, e.g. the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM); and 2) social impact investing – “...investments made into companies, organizations, and funds with the intention to generate a measurable, beneficial social and environmental impact alongside a financial return.” according to the definition of the Global Impact Investing Network (GIIN). Both have great, and so far largely untapped, potential as funding sources for IAS prevention and management. IAS prevention and management benefits from standardized approaches and global and regional coordination so could be attractive to vertical funds; and management actions can yield huge environmental, social, and financial benefits so could be a focus of social impact investing.

However, to date most countries have not pushed for IAS as a priority issue on the international environmental and sustainable development agenda. Therefore, unfortunately, the World Bank has not channelled major funding to this issue.

The World Bank has a comparative advantage in readiness including harmonizing policy, and building credible institutions, and the Bank is increasingly talking about how they can connect readiness with implementation and results-based finance. The World Bank is doing this in forestry and is now writing a forestry action plan to “connect these dots.”

There is potential for the World Bank to invest in IAS readiness. This could provide the basis for a 10- to 15-year investment. This could include, for example, economic evaluation of IAS impacts under different management scenarios and the production of a roadmap to ensure that the right donors are in place at the right time – mapping the donor landscape for invasives.

Agriculture and health can be very strategic entry points for IAS-related actions. These traditional sectors could help to usher in a biosecurity approach – “producing a safe trade level playing field”, so that the private sector can no longer compete for the lowest common denominator in biosecurity to cut costs. This type of work could be ideal for a funder such as the Gates Foundation, with the World Bank doing the readiness work. It would be essential to develop this as a regional programme so that countries do not compete to cut costs by adopting lower biosecurity standards.

Using sectors such as agriculture and health as entry points will help ensure that funding has co-benefits, with biosecurity funding also helping to conserve biodiversity. Currently, and ironically, it is often the case that the biodiversity conservation sector, which has much smaller budgets than most traditional sectors, ends up subsidizing these sectors, such as agriculture and health. Biodiversity should not be carrying the water for these better funded sectors.

In summary, it is essential that IAS get on the mainstream agenda for this major shift to happen. SIDS have the potential help in this process by pushing for increased international attention on IAS as they have so successfully done for oceans.

#### **2.3.5. PANEL DISCUSSION: PANEL FACILITATOR: MR. OLIVER HILLEL**

Panel: Mr. David Duthie, Ms. Valerie Hickey, Mr. Johan Robinson, Ms. Kate Brown, Mr. Miguel Morales, Mr. Olivier Langrand, Ms. Sonya Hammons, Mr. Phil Andreozzi, Mr. John Mauremootoo.

Some of the major discussion threads are summarized below.

### **GEF eligibility and opportunities for funding IAS-related projects**

The GEF-6 strategy is very focused, which can be good and bad. It is very important that proposals meet the stated criteria.

IAS must be a priority in the NBSAP if a project is to be developed under Program 4. NBSAP revisions are happening now in many countries so there is an opportunity to ensure that IAS are prioritized.

**The importance of Program 4:** In theory IAS-related work can be covered under other programmes such as Program 5 - Implementing the Cartagena Protocol on Biosafety (CPB) but participants were advised against this and were instead advised to stay “laser focused” on Program 4, which, to coin a football analogy is “an open goal.”

**An emphasis on prevention:** There is not so much in the strategy about eradication and control, but resources can be put into an integrated project that encompasses all levels of the invasive species management hierarchy.

**Global and regional programmes:** There are \$82 million allocated for global and regional programmes, so it is certainly possible to develop IAS projects at the regional or global level.

### **LifeWeb-related discussions**

LifeWeb projects as part of a donor mix: the LifeWeb project development process is relatively fast (compared with other funds). LifeWeb therefore can be a very useful vehicle for initiating actions relatively rapidly.

LifeWeb is happy to help develop second phases or continuations of projects, unlike some other funds.

NGOs may receive money through LifeWeb but expressions of interest must be submitted and endorsed by CBD focal points, thus ensuring that the work done is in close collaboration with governments.

### **STDF and IPPC-related discussions**

**The scope of the IPPC:** The IPPC addresses all pests that affect any plant (cultivated or wild). Therefore in many cases an invasive species can be considered a “quarantine pest” and regulated at the national level to prevent its introduction or contain its spread.

**Phytosanitary measures go beyond border control:** Phytosanitary measures include a range of processes – not just border control inspections but also countrywide systems like surveillance. There is a lot of expertise in place that can be built upon instead of starting a new system from the beginning.

**Buzzwords:** It is important to think about the key words that will appeal to STDF, for example, safe trade, biosecurity, and risk-based policies. They will not always be the same “buzzwords” that are used in traditional biodiversity projects.

Using the Phytosanitary Capacity Evaluation (PCE) tool can be a useful means to get the interest of several different donors. This is a country-led evaluation process that provides the basis for developing a national action plan to protect plant resources.

**Inter-island biosecurity:** The strengthening of biosecurity among subnational units such as islands in a multi-island state would be something that could be funded by an STDF project.

**Regional plant protection organizations (RPPOs):** RPPOs are a great resource and can be the regional implementing organization for a STDF project.



## General discussion points

**Putting together a portfolio of donor funded interventions:** Funding is needed in the short, medium and long term. It is very useful to target funding beyond GEF which provides large funds but projects take a long time to develop. Implementers need to look at a range of funding sources to ensure. Foundations such as the Packard Foundation can rapidly turn over project proposals, enabling work to be implemented in the short term. Other donors such as bilaterals and the private sector can be targeted as part of this “portfolio”.

**Sharing project lessons and using platforms and people:** The results of projects need to be tracked better. Working with global and regional organizations and networks can help in this regard.

**Regional and global partners:** Support to national implementation from regional and global partners needs to be built in from the beginning so that the necessary resources are allocated to them in order to fully benefit from the expertise they can provide.

## Examples and suggestions for funding for synergies and co-benefits

- Hawaii’s Green Growth Initiative has championed the issue of IAS to maximize ecosystem resilience and wants to engage worldwide. Neil Abercrombie, the Governor of Hawaii, has lobbied for IAS to be considered as a factor that affects climate change adaptation.
- Working with UNESCO could be a way to engage the education sector in IAS-related issues and may help get more money for reporting.
- Safe and fair trade is a great anchor for IAS-related work.
- The new website of BEST - voluntary scheme for Biodiversity and Ecosystem Services in Territories of European overseas, a project funded by DG Environment that aims to support the conservation of biodiversity and sustainable use of ecosystem services in the EU Outermost Regions (ORs) and Overseas Countries and Territories (OCTs) provides a vehicle for EU Overseas Territories to coordinate with their neighbours in SIDS

### *2.4. Identification and development of national or regional projects on invasive alien species (Setting working groups for Day 2)*

Facilitator: Mr. John Mauremootoo

In this session those participants who were already well advanced were invited to briefly present their projects to provide examples of the kind of approaches being pursued as an “appetizer” for the following day which would be devoted to writing project concept notes.

## 3. DAY 2

The bulk of the day was devoted to the development of outline project proposals by country and regional groupings with support from international experts. Ms. Valerie Hickey also gave her presentation, summarized in the previous section, on the World Bank on Day 2.

Participants worked on their projects using the generic project proposal template provided (annex VI) initially in national groupings. Once national projects were developed those who wanted to pursue regional projects formed regional project development groups.

Resource persons were available throughout to assist the participants.

### *Presentations*

The following countries and regions presented their projects:

- **Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, Territory of Guam, Commonwealth of the Northern Mariana Islands:** Enhancing the Prevention, Control and Management of Invasive Alien Species in vulnerable ecosystems of Micronesia
- **Pacific Region:** Pacific Regional Project for Smart Capacity Development and Mainstreaming IAS Financing
- **Sao Tome and Principe:** Development of an invasive species policy and strategy
- **Seychelles:** Management adaptations to increase ecosystem resilience of Seychelles UNESCO World Heritage Sites
- **Ecuador:** Prevention, Control and Management of Invasive Alien Species (IAS) in Ecuador with a focus on National Protected Areas.
- **Maldives:** Enhancing Resilience against Invasive Alien Species in Maldives
- **Vanuatu:** Vanuatu's Inter Island Biosecurity Project and implementation of the National Invasive Species Strategy and Action Plan
- **Saint Lucia:** Reducing impacts of invasive species
- **Jamaica:** Eradication of Invasive Plant Species in the Black River Lower Morass (Ramsar Site) and Habitat Restoration. This proposal was further elaborated after the workshop by the Government and the new title of the project is “Managing IAS impacting endemics and livelihoods and strengthening Jamaica’s capacity for Biosecurity”
- **Grenada:** Eradication of selected Alien Invasive Species from the State of Grenada
- **Dominican Republic:** The proposal was further elaborated by the Government; the new title is “Assessment, Coordination and Workshop Implementation on IAS for the General Awareness in the Dominican Republic to Prevent Invasive Alien Species Introduction”.
- **Antigua and Barbuda:** Strengthening National Frameworks for and Management of Invasive Alien Species (IAS), along with Prevention of Entry of IAS for Antigua and Barbuda and Revitalizing Redonda.
- **Saint Kitts and Nevis:** Development of an invasive species policy and strategy.

The following countries/country groupings did not present their projects at the workshop but did develop concept notes:

- **The Bahamas:** Decreasing the Impact of Invasive Alien Species in the Bahamas
- **Palau, FSM, RMI, Guam, CNMI:** Integrating Invasive Species Prevention and Management into Protected Areas Management in Micronesia
- **Singapore:** Identification of IAS for Singapore

**The following country submitted its project concept note to the Secretariat after the workshop:**

- **Comoros:** Promotion d’un programme de gestion intégrée de lutte contre les espèces exotiques envahissantes en Union des Comores

In the closing discussions several factors were emphasized, including the following:

- It is important to identify and to make contact with the NPPO contact point early in the project development process for any projects that are likely to have synergies with the NPPO;
- GEF is not the only funding sources and it would be useful to look at a mix of funds, some of which could be mobilized much more rapidly than GEF;
- It is critical to manage a target species as a means to an end and to clearly articulate that end - the overall ecosystem level objective(s);
- Projects must have realistic goals. It is easy to get over-ambitious. For example, if the objective is “eradication”, it must be achievable and should not be used as a euphemism for control.

#### **4. SUMMARY OF WORKSHOP FINDINGS**

The workshop stressed the following findings:

- (a) Further coordination of relevant sectors (such as trade, border controls, transport) at the national level has to be facilitated;
- (b) Sharing of experience on management of common pathways of invasive alien species may lead to collaboration and harmonization of measures among neighboring SIDS;
- (c) Coordination of available expertise within the country or region and remote countries is needed to maximize the use of funds and opportunities for capacity-building and to avoid duplication of efforts in development of tools and project proposals;
- (d) Best practices, case studies and experiences of failures of and challenges to invasive alien species management are equally important to share at the regional and global levels for SIDS where available expertise is limited;
- (e) Capacity-building needs in management of invasive alien species and species identification is high in all SIDS. Additional workshops, trainings and mentoring for on-the-ground officials will help ensure that technology is transferred and the results of this transfer are sustained;
- (f) To sustain the projects developed over the long term, scientific expertise must be established within the regions.

#### **5. NEXT STEPS**

The Secretariat of the CBD will prepare an information document to submit to the twelfth meeting of the Conference of the Parties. The document will include an operationalization of a new international islands initiative to facilitate collaboration among the participants from SIDS and beyond, GEF implementing agencies/partners, international experts on invasive alien species and additional donors to the GEF, subject to funding.

*Annex I*

**WORKSHOP PROGRAMME**

<b>DAY 1: 14 June 2014</b>	<b>Item</b>	<b>Presenter</b>
<i>Plenary</i>		
10.30 a.m. – 10.35 a.m.	<b>Official opening of the workshop</b>  Opening remarks by the representative of the Secretariat of the CBD (SCBD)	Facilitator: Ms. Junko Shimura, SCBD  Mr. David Cooper, SCBD
10.35 a.m. – 11.30 a.m.	<b><i>Aichi Biodiversity Target 9 on invasive alien species and expected outputs of this workshop (15 min.)</i></b>  Tour de table: participants' self-introduction with their expected outputs of this workshop, briefly (1 min.)	Ms. Junko Shimura  Participants
<i>Coffee/tea self-service during the session (no session break)</i>		
11.30 a.m. – 1 p.m.	<b><i>Best practices</i></b>	Facilitator: Mr. Charles Besançon, SCBD
	<b>National strategies and actions on invasive alien species in small island developing States (15 min.)</b>	Mr. John Mauremootoo, SCBD consultant
	<b>Capacity-building for risk analysis, border controls, eradication and opportunities under Standard Trade Development Facility to develop phytosanitary capacity (15 min.)</b>	Ms. Sonya Hammons, IPPC Secretariat
	<b>The Global Invasive Species Information Partnership and its Global Register of Introduced and Invasive Species (GRIIS) (15 min.)</b>	Ms. Shyama Pagad, IUCN-SSC-ISSG
	<b>Global Island Partnership (GLISPA) (10 min.)</b>	Ms. Kate Brown, GLISPA
	<b>Island Conservation - Mission and actions of Island Conservation (10 min.)</b>	Mr. Olivier Langrand, Island Conservation
	<b>IAS Activities and opportunities in the Pacific:</b>	Mr. Phillip Andreozzi,

	<b>Mr. Phillip Andreozzi, National Invasive Species Council (US NISC) (10 min.)</b>	US NISC
	<b>Secretariat of the Pacific Regional Environment Programme (SPREP) (10 min.)</b>	Mr. David Moverley, SPREP
1 p.m. – 2 p.m.	<b>Lunch</b> Video presentations by expert supporting networks	
2 p.m. – 3.45 p.m.	<b><i>Presentations by donors, implementing agencies and experts to guide project proposal writing</i></b>	Facilitator: Mr. Oliver Hillel, SCBD
	<b>Global Environment Facility to support implementation of national and regional invasive alien species strategies (60 min.)</b>	Mr David Duthie, SCBD
	<b>Navigation on Life Web to meet the needs and to promote National strategies and action plans (15 min.)</b>	Mr. Charles Besançon, SCBD
	<b>The World Bank (15 min.)</b>	Ms. Valerie Hickey, World Bank
	<b>Standards and Trade Development Facility (STDF) (15 min.)</b>	Ms. Sonya Hammons, IPPC
3.45 p.m. – 4.45 p.m.	<b>Panel: SCBD (GEF), World Bank, UNDP, GLISPA, CI-GEF, Island Conservation, IPPC, NISC</b>	Panel facilitator: Mr. Oliver Hillel  Panel: Mr. David Duthie, Ms. Valerie Hickey, Mr. Johan Robinson, Ms. Kate Brown, Mr. Miguel Morales, Mr. Olivier Langrand, Ms. Sonya Hammons, Mr. Phil Andreozzi, Mr. John Mauremootoo
4.45 p.m. – 5.45 p.m.	<b>Identification and development of national or regional projects on invasive alien species (Setting working groups for day 2)</b>	Facilitator: Mr. John Mauremootoo  Participants
5.45 p.m. – 6 p.m.	<b>Summary of work on day 1</b>	Facilitator: Mr. Oliver Hillel, SCBD; Mr. Charles Besançon, SCBD

<p><b>DAY 2</b> <b>15 June 2014</b></p>	<p><i>Group work (Coffee /tea self-service during the session)</i></p>	
<p>10 a.m. – 12.30 a.m.</p>	<p>Identification and development of national or regional projects on invasive alien species (<i>continued</i>)</p>	<p>Facilitators : Mr. John Mauremootoo, Mr. Charles Besançon, Mr. Oliver Hillel, Ms. Junko Shimura, SCBD</p> <p>Participants</p>
<p>12.30 a.m. – 2 p.m.</p>	<p><b><i>Working lunch</i></b> Ad hoc presentations by resource persons will be welcomed</p>	<p>Participants</p>
<p><b><i>Plenary</i></b></p>		
<p>2 p.m. – 4.30 p.m.</p>	<p>Presentation of outputs of this workshop (project proposals)</p>	
<p>4.30 p.m.– 5.45 p.m.</p>	<p>Other matters, if any</p>	<p>Participants</p>

*Annex II*

**LIST OF PARTICIPANTS AND RESOURCE PERSONS**

CBD Parties	Participants
Antigua and Barbuda	<p>Ms. Helena Brown            Technical Coordinator            Environment Division            Ministry of Agriculture, Lands, Housing and Environment            Saint John's, Antigua and Barbuda            Email: <a href="mailto:jeffreybrown.helena@gmail.com">jeffreybrown.helena@gmail.com</a></p>
Bahamas	<p>Ms. Candace Lockhart            The Bahamas Environment Science and Technology Commission (BEST)            P.O. Box N480            Nassau, Bahamas            Email: <a href="mailto:candace.lockhart12@gmail.com">candace.lockhart12@gmail.com</a></p>
Cape Verde	<p>Ms. Sónia Indira Monteiro de Pina Araújo            Marine Turtle Conservation Coordinator            General Directorate of Environment            Ministry of Environment            Achada Santo António            Praia Santiago            Cape Verde            Email: <a href="mailto:soniaraujocv@gmail.com">soniaraujocv@gmail.com</a></p>
Comoros	<p>Mr. Ibrahim Yahaya            Expert national pour les plantes envahissantes            Ministère du Développement Rural, de la Pêche et de l'Environnement            B.P. 289            Moroni, Comoros            Email : <a href="mailto:yahayaim@yahoo.fr">yahayaim@yahoo.fr</a></p> <p>Ms. Nadjat Said Abdallah            Chargée de l'aménagement des zones côtières et bassins versants            Direction Générale de l'Environnement et des Forêts            Ministère de la Production, de l'Environnement, de l'Énergie, de l'Industrie et de l'Artisanat            B.P. 5414            Moroni, Comoros            Email : <a href="mailto:najalim@gmail.com">najalim@gmail.com</a>; <a href="mailto:najat_66@hotmail.fr">najat_66@hotmail.fr</a></p>
Cook Islands	<p>Mr. Joseph Brider            Deputy Director            National Environment Service            P.O. Box 371            Avarua, Rarotonga            Cook Islands            Tel: + (682) 21 256            Email: <a href="mailto:joseph.brider@cookislands.gov.ck">joseph.brider@cookislands.gov.ck</a></p> <p>Ms. Elizabeth Moari Munro</p>

	<p>Biodiversity Senior Environment Officer National Environment Officer International Environment Division Rarotonga, Cook Islands Email : <a href="mailto:elizabeth.munro@cookislands.gov.ck">elizabeth.munro@cookislands.gov.ck</a></p>
Cuba	<p>Mr. Héctor Conde Almeida Deputy Director International Relations Department Ministry of Science, Technology and Environment Capitolio Nacional Habana Vieja, La Habana Cuba Email: <a href="mailto:conde@citma.cu">conde@citma.cu</a></p> <p>Dr. Dalia Maria Salabarría Fernández IAS Project Director National Center for Protected Areas Ministry of Science, Technology and Environment La Habana, Cuba Email: <a href="mailto:dalia@snap.cu">dalia@snap.cu</a></p>
Dominica	<p>Ms. Kongit Haile-Gabriel MEAs Projects Manager Environmental Coordinating Unit Ministry of Environment, Natural Resources, Physical Planning and Fisheries Roseau, Dominica Email: <a href="mailto:ecu@dominica.gov.dm">ecu@dominica.gov.dm</a>; <a href="mailto:kongith@hotmail.com">kongith@hotmail.com</a></p> <p>Mr. Menelik Carlos Pascal Member of the Small Islands Development States Youth Group National Youth Council Environmental Coordinating Unit Roseau, Dominica Email: <a href="mailto:carlospascal@live.com">carlospascal@live.com</a>; <a href="mailto:ecu@dominica.gov.dm">ecu@dominica.gov.dm</a></p>
Dominican Republic	<p>Mrs. Yocasta Sixtina Valenzuela Arias Director International Agreements Ministry of Environment and Natural Resources Santo Domingo, Dominican Republic Email: <a href="mailto:Yocasta.valenzuela@ambiente.gob.do">Yocasta.valenzuela@ambiente.gob.do</a></p>
Ecuador	<p>Mr. Esteban Cadena Duarte Second Secretary Direction of Environment and Climate Change Ministry of Foreign Affairs and Human Mobility Ecuador Email: <a href="mailto:ecadenad@yahoo.com.ar">ecadenad@yahoo.com.ar</a></p> <p>Ms. Karen Ivonne Noboa Melo National Biodiversity Direction Ministry of Environment Quito, Ecuador Email: <a href="mailto:Karen.noboa@ambiente.gob.ec">Karen.noboa@ambiente.gob.ec</a></p>



	<p><a href="mailto:knoboa@ambiente.gob.ec">knoboa@ambiente.gob.ec</a></p> <p>Ms. Roxana Bravo Consular assistant Consulate of Ecuador in Montreal 2055 Peel St., suite 601 Montreal, Quebec, Canada Tel.: 514-874-4071; 514-603-1950 Email: <a href="mailto:info@consecuador-quebec.org">info@consecuador-quebec.org</a>; <a href="mailto:bravoroxana@hotmail.com">bravoroxana@hotmail.com</a></p>
Fiji	<p>Ms. Eleni Marama Rova Tokaduadua Acting Director Department of Environment Suva, Fiji Email: <a href="mailto:eleni.tokaduadua@govnet.gov.fj">eleni.tokaduadua@govnet.gov.fj</a>; <a href="mailto:etokaduadua@gmail.com">etokaduadua@gmail.com</a></p>
Grenada	<p>Mr. Paul Graham Pest Management Officer Ministry of Agriculture, Lands, Forestry, Fisheries and Environment Botanical Gardens St. George's, Grenada Email: <a href="mailto:paulgraham1957@gmail.com">paulgraham1957@gmail.com</a></p> <p>Ms. Simone Lewis Senior Environment Officer Ministry of Agriculture, Lands, Forestry, Fisheries and Environment Botanical Gardens Saint George's, Grenada Email: <a href="mailto:simonelewis2011@gmail.com">simonelewis2011@gmail.com</a>; <a href="mailto:agriculture@gov.gd">agriculture@gov.gd</a></p>
Haiti	<p>Mr. Daniel Brisard General Director Ministère de 'Environnement Port-au-Prince, Haiti Email : <a href="mailto:daniel_brisard@yahoo.com">daniel_brisard@yahoo.com</a></p> <p>Mr. Paul Judex Edouarzin Focal Point for CBD Ministère de 'Environnement Port-au-Prince, Haiti Email : <a href="mailto:pauljudex.edouarzin@gmail.com">pauljudex.edouarzin@gmail.com</a></p>
Jamaica	<p>Ms. Dionne Newell Senior Research Officer- Entomology Natural History Museum of Jamaica The Institute of Jamaica Kingston, Jamaica Email: <a href="mailto:dnewell@nhmj-oij.org.jm">dnewell@nhmj-oij.org.jm</a></p>
Maldives	<p>Ms. Aishath Huma Environment Analyst Ministry of Environment and Energy</p>

	<p>Malé, Maldives Email: <a href="mailto:Aishath.huma@environment.gob.mv">Aishath.huma@environment.gob.mv</a></p> <p>Ms. Ilham Atho Mohamed Environment Analyst Ministry of Housing and Environment Malé, Maldives Email: <a href="mailto:ilham.mohamed@environment.gov.mv">ilham.mohamed@environment.gov.mv</a></p>
Marshall Islands	<p>Mr. Warwick Harris Deputy Director Office of Environmental Planning and Policy Coordination Majuro, Marshall Islands Email: <a href="mailto:Warwick47@gmail.com">Warwick47@gmail.com</a></p> <p>Ms. Rebecca Lorennij Deputy Secretary Ministry of Resources and Development Majuro, Marshall Islands Email: <a href="mailto:rebeccalorennij@gmail.com">rebeccalorennij@gmail.com</a></p>
Palau	<p>Dr. Joel Miles National Invasive Species Coordinator Bureau of Agriculture Koror 96940, Palau Email: <a href="mailto:joelmiles52@gmail.com">joelmiles52@gmail.com</a>;</p> <p>Ms. Gwendalyn Sisor Scientific Officer/Database Manager Protected Areas Network (PAN) Office Ministry of Natural Resources, Environment and Tourism Koror 96940 Palau Email: <a href="mailto:gsisor07@gmail.com">gsisor07@gmail.com</a>; <a href="mailto:gustavaitaro@palaumos.net">gustavaitaro@palaumos.net</a></p>
Saint Kitts and Nevis	<p>Mr. Randolph Antonio Edmead Director Department of Physical Planning and Environment Ministry of Sustainable Development Basseterre, Saint Kitts and Nevis Email: <a href="mailto:phyplskb@sisterisles.kn">phyplskb@sisterisles.kn</a>; <a href="mailto:raedmead@yahoo.com">raedmead@yahoo.com</a></p> <p>Mr. Ervin Parry Environment Specialist Department of Physical Planning and Environment Ministry of Sustainable Development Basseterre, Saint Kitts and Nevis Email: <a href="mailto:phyplskb@sisterisles.kn">phyplskb@sisterisles.kn</a>; <a href="mailto:elvinparry@hotmail.com">elvinparry@hotmail.com</a></p>
Saint Lucia	<p>Mr. Alwin Dornelly Assistant Chief Forest Officer Ministry of Sustainable Development, Energy, Science</p>

	<p>and Technology Castries, Saint Lucia Email: <a href="mailto:Dornelly_al@yahoo.com">Dornelly_al@yahoo.com</a></p> <p>Mr. Terrence Gilliard Biodiversity Coordinator/Sustainable Development and Environment Officer Ministry of Sustainable Development, Energy, Science and Technology Castries, Saint Lucia Email: <a href="mailto:Terrence.gilliard@gmail.com">Terrence.gilliard@gmail.com</a></p>
Sao Tome and Principe	<p>Mr. Jose de Deus Lima de Menezes Technician Direction of Agricultural Planning Ministerio de Agricultura, Pescas e Desenvolvimento Rural Sao Tome Sao Tome and Principe Email: <a href="mailto:zemenezeslima1@yahoo.com">zemenezeslima1@yahoo.com</a>; <a href="mailto:jodeumenezes15817@hotmail.com">jodeumenezes15817@hotmail.com</a></p> <p>Mr. Aurélio de Sousa Jesus Rita Director do Parque Natural Obô de S. Tomé Ministerio de Agricultura, Pescas e Desenvolvimento Rural Ministerio dos Negócios Estrangeiros e Cooperaçao Sao Tomé, Sao Tome and Principe Email: <a href="mailto:asoujerita@yahoo.com.br">asoujerita@yahoo.com.br</a>; <a href="mailto:asoujeri@hotmail.com">asoujeri@hotmail.com</a></p>
Seychelles	<p>Ms. Nancy Bunbury Science &amp; Projects Programme Coordinator Seychelles Islands Foundation Victoria, Mahe Seychelles Email: <a href="mailto:nancy@sif.sc">nancy@sif.sc</a></p> <p>Ms. Frauke Fleischer-Dogley Chief Executive Officer Seychelles Islands Foundation Victoria, Mahe Seychelles Email: <a href="mailto:ceo@sif.sc">ceo@sif.sc</a></p>
Singapore	<p>Mr. Jeremy Woon Ren Wei Biodiversity Manager International Relations National Biodiversity Centre Singapore Email: <a href="mailto:Jeremy_oon@nparks.gov.sg">Jeremy_oon@nparks.gov.sg</a></p> <p>Ms. Wendy Yap Hwee Min Deputy Director (International Relations) National Biodiversity Centre Singapore</p>

	Email: <a href="mailto:wendy_yap@nparks.gov.sg">wendy_yap@nparks.gov.sg</a>
Tonga	<p>Mr. Asipeli Palaki Head of Research and Assessment Section Ministry of Lands, Environment, Climate Change and Natural Resources Nuku'alofa, Tonga Email: <a href="mailto:apalaki@environment.gov.to">apalaki@environment.gov.to</a>; <a href="mailto:apalaki@gmail.com">apalaki@gmail.com</a></p> <p>Mr. Viliami Hakaumotu Coordinator Invasive Alien Species Project Ministry of Lands, Environment, Climate Change and Natural Resources Nuku'alofa, Tonga Email: <a href="mailto:viliamihakau@gmail.com">viliamihakau@gmail.com</a></p> <p>Ms. Atelaite Lupe Matoto Head of Environment Department Ministry of Lands, Environment, Climate Change and Natural Resources Nuku'alofa, Tonga Email: <a href="mailto:lupe.matoto@gmail.com">lupe.matoto@gmail.com</a></p>
Vanuatu	<p>Ms. Lilly Fatdal National Invasive Species Coordinator Department of Environment and Conservation Port Vila, Vanuatu Email: <a href="mailto:lfatdal@vanuatu.gov.vu">lfatdal@vanuatu.gov.vu</a></p>
<b>CBD Non-Parties</b>	<b>Participants</b>
United States of America	<p>Mr. Phillip Andreozzi Program Specialist U.S. National Invasive Species Council Washington, D.C. United States of America Email: <a href="mailto:Phillip_andreozzi@ios.doi.gov">Phillip_andreozzi@ios.doi.gov</a></p>
<b>United Nations and Specialized Agencies</b>	<b>Participants</b>
International Plant Protection Convention Secretariat	<p>Ms. Sonya Hammons Capacity Development Program Officer International Plant Protection Convention Secretariat IPPC Secretariat Rome, Italy Email: <a href="mailto:sonya.hammons@fao.org">sonya.hammons@fao.org</a></p>
The World Bank	<p>Ms. Valerie Hickey Senior Biodiversity Specialist The World Bank Washington, D.C. United States of America Email: <a href="mailto:vhickey@worldbank.org">vhickey@worldbank.org</a></p>
United Nations Development Programme, Regional Centre in Bangkok	<p>Mr. Johan Robinson Regional Technical Advisor, Biodiversity and</p>

	<p>Ecosystems Asia-Pacific Regional Centre United Nations Development Programme, Regional Centre in Bangkok Bangkok, Thailand Email: <a href="mailto:johan.robinson@undp.org">johan.robinson@undp.org</a></p>
<b>Intergovernmental Organizations</b>	<b>Participants</b>
International Union for Conservation of Nature (IUCN)	<p>Ms. Shyama Narayan Pagad Program Manager IUCN/SSC Invasive Species Specialist Group International Union for Conservation of Nature- IUCN University of Auckland, Centre for Biodiversity and Biosecurity Auckland, New Zealand Email: <a href="mailto:s.pagad@auckland.ac.nz">s.pagad@auckland.ac.nz</a></p>
Secretariat of the Pacific Regional Environment Programme (SPREP)	<p>Mr. David Moverley Invasive Species Adviser Secretariat of the Pacific Regional Environment Programme Apia, Samoa Email: <a href="mailto:davidm@sprep.org">davidm@sprep.org</a></p>
<b>Non-Governmental Organizations</b>	<b>Participants</b>
Conservation International	<p>Mr. Miguel Morales Technical and Safeguards Director CI-GEF Project Agency Arlington, Virginia United States of America Email: <a href="mailto:mamorales@conservation.org">mamorales@conservation.org</a></p>
Global Island Partnership	<p>Ms. Kate Brown Global Partnership Coordinator Global Island Partnership Washington, D.C. United States of America Email: <a href="mailto:kate.brown@glispa.org">kate.brown@glispa.org</a></p>
Island Conservation	<p>Mr. Brad Keitt Director of Conservation Island Conservation Santa Cruz, California United States of America Email: <a href="mailto:brad.keitt@islandconservation.org">brad.keitt@islandconservation.org</a></p> <p>Mr. Olivier Langrand Director of Global Affairs Island Conservation Arlington, Virginia United States of America Email: <a href="mailto:olivier.langrand@islandconservation.org">olivier.langrand@islandconservation.org</a></p> <p>Ms. Kristy Swinnerton Program Manager Island Conservation Boqueron, California</p>

	<p>Unites States of America Email: <a href="mailto:kristy.swinnerton@islandconservation.org">kristy.swinnerton@islandconservation.org</a></p>
Pacific Invasives Initiative (PII)	<p>Ms. Souad Boudjelas Programme Manager Pacific Invasives Initiative (PII) Auckland, New Zealand Email: <a href="mailto:s.boudjelas@auckland.ac.nz">s.boudjelas@auckland.ac.nz</a></p>
EcoLomics International	<p>Ms. Noriko Yajima Research Director EcoLomics International Geneva, Switzerland Email: <a href="mailto:nikkiyaji@hotmail.com">nikkiyaji@hotmail.com</a></p>
<b>Secretariat of the Convention on Biological Diversity</b>	<b>Participants</b>
SCBD	<p>Mr. Charles Besançon Programme Officer, LifeWeb Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:Charles.besancon@cbd.int">Charles.besancon@cbd.int</a></p>
SCBD	<p>Ms. Christine Estrada Programme Assistant Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:Christine.estrada@cbd.int">Christine.estrada@cbd.int</a></p>
SCBD	<p>Ms. Ginette Gagnon Programme Assistant Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:ginette.gagnon@cbd.int">ginette.gagnon@cbd.int</a></p>
SCBD	<p>Mr. Olivier Hillel Programme Officer, Island Biodiversity and Sustainable Use and Tourism Social, Economic and Legal Affairs Division Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:olivier.hillel@cbd.int">olivier.hillel@cbd.int</a></p>
SCBD	<p>Mr. David Duthie Senior Programme Officer Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:david.duthie@cbd.int">david.duthie@cbd.int</a></p>
SCBD	<p>Mr. John Mauremootoo Consultant Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:john@inspirationalpathways.com">john@inspirationalpathways.com</a></p>

SCBD	Ms. Junko Shimura Programme Officer, Invasive Alien Species/GTI Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:junko.shimura@cbd.int">junko.shimura@cbd.int</a>
SCBD	Mr. Seishu Okuda Junior Programme Officer Japan Biodiversity Fund Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:seishu.okuda@cbd.int">seishu.okuda@cbd.int</a>
SCBD	Anne-Marie Asselin Intern Science Assessment and Monitoring Secretariat of the Convention on Biological Diversity Montreal, Canada Email: <a href="mailto:anne-marie.asselin.intern@cbd.int">anne-marie.asselin.intern@cbd.int</a>

*Annex III*

**QUESTIONNAIRE SENT OUT TO WORKSHOP PARTICIPANTS IN MARCH 2014**

**Questionnaire**

**Capacity-building workshop for Small Island Developing States to achieve Aichi Biodiversity Target 9 on Invasive Alien Species**

**14 -15 June 2014 - Montreal, Canada**

Please complete this questionnaire and submit by fax to +1 (514) 288-6588 or e-mail to [secretariat@cbd.int](mailto:secretariat@cbd.int) no later than **30 April 2014**.

- 1.) Are your country's priority species and pathways identified in the updated national biodiversity strategies and actions plans (NBSAP)?
  - a. If yes, does the updated NBSAP include pathway management plans?
  - b. If no, please indicate the reason.
- 2.) Have you contacted National Plant Protection Organizations (NPPOs) or academic institutions of your country to conduct Pest Risk Analysis or invasive species risk analysis to minimize the risk?
  - a. If yes, please indicate the experts name and contact address.
  - b. If no, please indicate the reason why risk is not considered in the updating process of the NBSAP.
- 3.) Have you contacted National Plant Protection Organizations (NPPOs) to apply phytosanitary measures on imports to your country?
  - a. If yes, does the updated NBSAP contain the measures to be in place?
  - b. If no, please indicate why an NPPO was not involved.
- 4.) Have you developed a national plan for eradication of invasive alien species?
  - a. If yes, please indicate the species name to be eradicated by when and explain the rationale for such project.
  - b. If no, please indicate why eradication will not take place.
- 5.) Does your country have existing funded projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species?
  - a. If yes, please indicate who the donors of these projects are.
- 6.) Is your country currently developing proposals to achieve Aichi Biodiversity Target 9 on Invasive Alien Species?
  - a. If yes, please explain.



*Annex IV*

**QUESTIONNAIRE SENT OUT TO WORKSHOP PARTICIPANTS IN MAY 2014**

**CBD Capacity-building workshop for Small Island Developing States to achieve Aichi Biodiversity Target 9 on Invasive Alien Species**

**Pre-Workshop Questionnaire to be Completed by Workshop Participants**

Name and title of respondent	
Institution	
E-mail	
Date of submission	

1. What is the relative priority afforded to implementation of CBD Article 8(h) <sup>2</sup> and the associated decisions by your country?					
a) High		b) Medium		c) Low	
Give reasons for your response (add space as necessary)					

2. To what extent are the resources available adequate for meeting your country's obligations?							
a) Good		b) Adequate		c) Limiting		d) Severely limiting	
Please list any gaps or barriers to resource mobilization? (add space as necessary)							

3. Has your country developed national policies for addressing issues related to alien invasive species?							
a) No							
b) Yes – as part of a national biodiversity strategy							
c) Yes – as a separate strategy							
d) Has your country already taken actions based on its strategy?				Y		N	
If yes, indicate actions that have been taken in your country (add rows as necessary)							

<sup>2</sup> Article 8(h) of the CBD states that, “Each contracting Party shall, as far as possible and as appropriate, prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species”.

4. Has your country participated in the “Helping Islands Adapt” workshop held in Auckland, New Zealand from 11-16 April 2010?			
Yes		No	
If yes, indicate actions that have been taken in your country. See list of actions on <a href="http://www.cbd.int/invasive/doc/proceedings-workshop-helping-island-en.pdf">http://www.cbd.int/invasive/doc/proceedings-workshop-helping-island-en.pdf</a> (add rows as necessary)			

5. Has your country been involved in the development and implementation of projects at national, regional or global levels to address the issue of alien species?	
5.1. Little or no action	
5.2. Discussion on potential projects under way	
5.3. Completed projects	
5.4. Active development of new projects (please list below)	
5.5. Current funded projects / projects being implemented (please list below)	

5.3.1. Please list completed projects at national, regional or global levels to address the issue of alien species? Add boxes for additional projects as required

Project Title				
Objective(s)				
Donor(s) and duration of the project				
National or Regional Project	Yes		No	
	If yes list other countries involved in the box below			
Other countries involved				
Global Project	Yes		No	
What follow-up action took place to sustain the momentum of the project?				
Any other relevant information				

5.4.1. Please list projects developed (but not yet funded) at national, regional or global levels to address the issue of alien species? Add boxes for additional projects as required

Project Title					
Objective(s)					
Targeted Donor(s)					
National or Regional Project	Y es	<input type="checkbox"/>	N o	<input type="checkbox"/>	If yes list other countries involved in the box below
Other countries involved					
Global Project	Yes <input type="checkbox"/>		No <input type="checkbox"/>		
Any other relevant information					

5.5.1. Please list current projects funded / being implemented at national, regional or global levels to address the issue of alien species? Add boxes for additional projects as required

Project Title					
Objective(s)					
Donor(s) and duration of the project					
National or Regional Project	Y es	<input type="checkbox"/>	N o	<input type="checkbox"/>	If yes list other countries involved in the box below
Other countries involved					
Global Project	Yes <input type="checkbox"/>		No <input type="checkbox"/>		
Any other relevant information					

6. Can you please give details of the project you intend to develop at the Montreal workshop?

Project Title					
Objective(s)					
Targeted Donor(s)					
National or Regional Project	Y es	<input type="checkbox"/>	N o	<input type="checkbox"/>	If yes list other countries involved in the box below
Other countries involved					
Any other relevant information					

7. What specific information or assistance are you seeking from the Montreal workshop? (add rows as necessary)

8. What do you want to achieve by participating in the Montreal workshop? (add rows as necessary)

Thank you for your participation

*Annex V*

**COUNTRY DOSSIERS ON IAS PRIORITIES AND CURRENT AND FUTURE  
IAS-RELATED PROJECTS**

*Antigua and Barbuda*

**QUESTIONNAIRES**

**Name of respondent:** Ms. Helena Brown **Institution:** Environment Division

**Email:** Jefferybrown.helena@gmail.com

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** The Regulatory Agencies of Antigua and Barbuda have always done their best to set up sufficient port of entry controls to reduce the incidence of the entry of invasive alien species. However, invasives do enter due to a variety of factors e.g. smuggling.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** There appears to be a disconnect between the users and providers of the resources, especially as regards the human and financial resources required to do the necessary work at the national level. The approach to management of issues pertaining to alien invasive species is general reactive rather than proactive.

**3a. National policies related to IAS:** Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** The passage of the 2012 Plant Protection Act to replace the 1941 Act. This Act takes into consideration the tenets of the International Plant Protection Convention. Draft Regulations to the Act have been developed and are awaiting consultation and subsequent passage into law.

**5. Project development and implementation:** Discussion on potential projects under way; Completed projects

**6a. Intended project title:** Strengthening National Frameworks for and Management of Invasive Alien Species for Antigua and Barbuda

**6b. Objective(s):**

- Development of policies and regulations for the management of invasive alien species
- Development of financing mechanisms for management
- Management of invasive alien species – including Identification and Implementation of control methods.

**6c. Targeted donor(s):**

- GEF
- The Greater Caribbean Safeguarding Initiative (USDA-APHIS)

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- General Framework in managing Invasives - developing early warning mechanisms, rapid response measures and management plans
- Guidance in capacity-building in managing invasives
- Guidance in development of policies, regulations for the management of invasive alien species
- Guidance in the development of financing mechanisms for the management of invasive alien species

#### **8. Objectives for participating in the Montreal workshop:**

- Assistance in the management of invasives – developing early warning mechanisms, rapid response measures and management plans
- Assistance in developing a project entitled “Strengthening National Frameworks for and Management of Invasive Alien Species for Antigua and Barbuda.”

#### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Mongoose (*Herpestes auro-punctatus*), and other mammal predators (rats - *Rattus* sp. Especially on offshore islands), cats (*Felis catus*)- prevent introduction as well as re-invasions to islands where these invasive species are absent (for example mongoose to Barbuda and Redonda); Giant African snail (*Achatina fulica*) and the introduced Cuban frogs (*Osteopilus septentrionalis*) are of concern (Cuban tree frogs could compete with native herpetofauna for food resources). Lemongrass (*Citronella* sp.) is an aggressive species under management- fire hazard.

Priority species are not identified in the NBSAP but work is being done and they may be included in a future revision.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Pet trade/ Nursery trade, ballast water.

Priority pathways are not identified in the NBSAP but work is being done and they may be included in a future revision.

**Priority capacity (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Awareness-raising activities at various levels: policy, planning and implementation, as well as research. Current policy and legislation needs to be upgraded to bring it in line with international requirements.

**Work with the NPPO and others to conduct risk analysis:** The Plant Protection Unit routinely conducts risk analysis on a case by case basis, in terms of requests for importation, as the legislation requires that regulated articles (e.g. planting material, soil, etc.) require an import permit. Additionally, under the umbrella of the Caribbean Plant Health Directors Forum there is a move to manage (risk analysis and eradication/control) common pests on a regional level. The phytosanitary measures that have to be in place are already legislated for.

#### **Contact details of PRA experts:**

Dr. Janil Gore-Francis  
National Plant Protection Officer  
IPPC Focal Point  
Plant Protection Unit  
Department of Agriculture  
Ministry of Agriculture  
Friars Hill Rd.  
St. John's, Antigua.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**IAS eradication and related plans:** The Legislation is already in place, but the supporting mechanisms such as financial and human resources to carry out the work are not always in place.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Antigua and Barbuda has no project per se, but the Caribbean Plant Health Directors Forum is supported by agencies such as USDA (under the Greater Caribbean Safeguarding Initiative), CARICOM Secretariat, IICA, FAO and CARDI. The

main function of this Forum is to discuss regional plant health issues and achieve synergies by addressing pests of common interest at a regional level.

The process of project development is ongoing, it makes up the work programme of the Plant Protection Unit. For future projects it may be possible to apply for funding under GEF-6 in 2015.

**Source information:** Fourth National Report <http://www.cbd.int/doc/world/ag/ag-nr-04-en.pdf>

## **PROJECTS**

**Project title:** Offshore Islands: rat eradications and rare species translocations

**Objective(s):** Conservation Targets, species recovery of Antigua racer (CR) and several other endemic reptiles and migratory seabirds

**Major Achievement(s):** Antigua racer, formerly on a single offshore islet, has now been now translocated to 3 additional sites with a 20 times increase in global population since 1995; biosecurity maintained at 4 sites; rat eradications from a number of additional sites

**Contact(s):** Matthew Morton, Durrell Wildlife Conservation Trust, mmorton@fastmail.fm

**Further relevant information: :** In Antigua incursions are inevitable after eradications (though only 2 over 15 years, both same offshore islet in Antigua), so surveillance and rapid response is at least as important as eradications (more so if measured by resources expended)

**Project title:** Demonstrating the Development and Implementation of a Sustainable Island Resource Management Mechanism in a Small Island Developing State (Rehabilitation of Body Ponds Watershed)

**Duration:** 2008-2014

**Objective(s):** Management of lemon grass (*Cymbopogon citratus*)

**Major Achievement(s):** There is continued general management of watersheds to prevent spread of invasive Lemon Grass.

**Follow up:** The activities under this project became a part of the Forestry Unit's (Ministry of Agriculture) work programme.

## *Bahamas*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Ms. Stacy Lubin-Gray **Institution:** Bahamas Environment Science and Technology (BEST) Commission **Email:** slubingray@gmail.com

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** The Bahamas is a hotspot for faunal and floral biodiversity. There are many endemic species. IAS has been one of the main threats to this biodiversity which the country depends on for many reasons.

**2a. Available resources:** Adequate

**2c. Gaps or barriers to resource mobilization:** The major gap is financial capacity. The Country has overcome this to a certain extent by trying to include the eradication and control of invasives into other national projects and participating in regional projects, e.g. The Bahamas has participated in the regional project Mitigating The Threats of Invasive Alien Species in the Insular Caribbean (MTIASIC) which enabled the country to do some much needed research into the invasive lionfish (*Pterois volitans*).

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy; Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** The Bahamas has a National Invasive Species Strategy which talks about codes of conduct, measures for prevention, as well as eradication and control of IAS

- There have been increased efforts to raise awareness on invasives.
- There has been increased coordination among entities both Government and Non-Government to deal with invasives.
- There is discussion on legislation for invasives (this will be project based)
- There has been some increased political will regarding invasives (due to a recent ‘cane toad scare’)

**5. Project development and implementation:** Completed projects; Current funded projects / projects being implemented

**6a. Intended project title:** Project not yet identified.

### **7. Information sought from the workshop:**

- Experience Sharing.
- Technical expertise.

### **8. Objectives for participating in the Montreal workshop:**

- See where the gaps are, and how The Bahamas can better manage the issue of IAS.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priorities listed in the National Invasive Species Strategy (2003)- Species recommended for eradication are:

*Casuarina glauca* Suckering Australian Pine

*Melaleuca quinquenervia* Melaleuca, (paper bark)

*Mucuna pruriens* Monkey Tamarind

*Scaevola taccada* Asian Scaevola, White Inkberry, (Hawaiian Seagrape)

*Schinus terebinthifolius* Brazilian Pepper, Bahamian Holly

*Molothrus bonariensis* Shiny Cowbird

*Procyon lotor* Raccoon (for all islands except New Providence and Grand Bahama)

Species recommended for control are:

*Albizia lebbbeck* Woman’s Tongue

*Antigonon leptopus* Coral Vine



*Bauhinia variegata* Poor Man's Orchid  
*Casuarina equisetifolia* Casuarina, Australian Pine, (beefwood)  
*Delonix* spp. Poinciana  
*Eichhornia crassipes* Water Hyacinth  
*Haematoxylum campechianum* Logwood  
*Ipomoea purpurea* Morning Glory  
*Leucaena leucocephala* Jumbey  
*Pimenta racemosa* Bay Rum B3  
*Prunus amygdalus* Almond  
*Ricinus communis* Castor Bean  
*Spathodea campanulata* African Tulip Tree, Flame of the Forest  
*Schefflera actinophylla* Schefflera, Queensland Umbrella Tree  
*Trachelospermum jasminoides* Star Jasmine  
*Sphagneticola trilobata* Wedelia, (carpet daisy)  
*Columba livia* Rock Dove  
*Passer domesticus* House Sparrow  
*Streptopelia decaocto* Eurasian Collared Dove  
Marine invasive species (species not specified)

**Priority pathways (with reference to NBSAPs, IUCN databases, Regional strategies, etc.):** Pathways related to trade and tourism, ballast water. CABI under the MTIASIC project working with National Executing Agencies have generated some information in this regard for the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago.

**Eligible for STDF Project Preparation Grant:** Not eligible

**Source information:** National Invasive Species Strategy for the Bahamas (2003)  
<<http://www.friendsoftheenvironment.org/wp-content/uploads/2012/08/Bahamas-National-Strategy-for-Invasive-Species.pdf>>

## **PROJECTS**

**Project Identifier:** GEF\_ID 3729

**Project title:** Building a Sustainable National Marine Protected Area Network

**Duration:** 2009-2014

### **Objective(s):**

To expand protected area coverage of globally significant marine biodiversity and increase the management effectiveness of the national marine protected area network across the Bahamian archipelago.

**IAS Objective:** At 2 Pilot Sites (a) statistically significant lionfish decrease (using experimental approach); (b) statistically significant improvement in overall health of coral reef (coral cover, fish diversity); socio economic indicators, governance indicators.

**Donor(s):** UNEP/GEF

**Executing Agency:** Bahamas Environment, Science and Technology (BEST) Commission

**Grant amount (in \$US):** \$2,200,000

**Co-financing amount (in \$US):** \$7,761,600

## *Cape Verde*

### **QUESTIONNAIRES**

**Name of respondent:** Sonia Araújo & Liza Lima    **Institution:** Direcção Geral do Ambiente – Cabo Verde  
**Email:** soniaraujocv@gmail.com; lizaalveslima@yahoo.com.br

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** The subject of invasive species is one of the seven national priorities (Priority 3. Reduction of pressures and threats on the marine and terrestrial biodiversity) in the Biodiversity Strategy and National Action Plan for Cape Verde.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:**

- Poor mobilization of financial resources for activities;
- Lack of human and material resources.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy; Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** As one of the activities of the National Strategy and Action Plan, the development and implementation of a programme to control invasive species is identified. There is a strategy for managing invasive plants in protected areas.

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Project not yet identified. The Cape Verde representatives have not yet identified any project, but with the country's participation in this workshop they intend to identify possible projects and partnerships.

**7. Information sought from the workshop:**

- Identification of partners
- Support for development and implementation of a project
- Identification of potential donors

**8. Objectives for participating in the Montreal workshop:**

- Consolidate partnerships
- Identify potential funders
- Share experiences with other island countries on the subject of invasive species

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Introduced mammals (goats (*Capra hircus*), rats (*Rattus* sp.) and green monkeys (*Chlorocebus sabaues*)); freshwater ecosystems (that are characterised by the absence of freshwater fish) - invaded by the introduced guppy (*Poecilia reticulata*). Invasive plant species in protected areas have been prioritized for management as follows: “widespread high impact species in protected areas”- *Lantana camara* and *Furcraea foetida*; “localised high impact species in protected areas”- *Leucaena leucocephala*; locally abundant and likely to constitute threats to biodiversity and other ecosystem objectives - *Acacia mearnsii*, *Jacaranda mimosifolia*, *Cuscuta* species or dodder, *Bryophyllum pinnatum*, *Desmanthus virgatus*.

Priority species are not identified in the NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways are not identified in the NBSAP.

Despite the efforts and numerous conservation initiatives developed over the years, the threats and pressures on biodiversity remain and, in many cases, have increased. One is the existence of invasive species and this issue appears as the 3rd national priority which is the reduction of pressures and threats on the marine and terrestrial biodiversity.

The reduction of pressures and threats happens through behaviour change, the adoption of good practices and the recognition of the importance of biodiversity. The scope of this national priority is therefore dependent on the success of the national priority 1 being the "involvement of the whole society in biodiversity conservation (population, public and private organizations, NGOs and Associations)". The Strategy and National Action Plan is expected to design and implement a control programme for invasive species.

**Work with the NPPO and others to conduct risk analysis:** Because there are some measures that aim at minimizing the risk of entry of exotic species in the country, some control has been done by the Department of Agriculture in the country. Thus, the risk of introduction of invasive species in the country has not been considered to be high.

**IAS eradication and related plans:** There is a strategy for managing invasive plants in protected areas, including the following species:

- *Lantana camara*,
- *Furcraea foetida*,
- *Leucaena leucocephala*,
- *Acacia mearnsii*,
- *Jacaranda mimosifolia*

**Eligible for STDF Project Preparation Grant:** LMIC (at least 20% co-financing)

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** No current projects. No future projects yet developed but taking into consideration that when compiling the programme for control of invasive species, Cape Verde will identify priority invasive species, pathways of introduction and control mechanisms, thus part of the Aichi Target 9 will be fulfilled by the country.

**Source information:** Cornelis J. Hazevoet & Marco Masseti (2011) On the history of the green monkey *Chlorocebus sabaues* (L., 1766) in the Cape Verde Islands, with notes on other introduced mammals. *Zoologia Caboverdiana* 2 (1): 12-24 ISSN 2074-5737

<<http://www.scvz.org/zoolcv/vol2no1/Hazevoet&Masetti%20introduced%20mammals%20Cape%20Verde.pdf>>.

First Record of Freshwater Fish on the Cape Verdean Archipelago

Kay Lucek & Mélissa Lemoine (2012) First Record of Freshwater Fish on the Cape Verdean Archipelago. *African Zoology* 47(2):341-344. 2012 <http://www.bioone.org/doi/abs/10.3377/004.047.0214>

Mauremootoo, J.R. (2012). Invasive Plant Management Strategy for Terrestrial Protected Areas in: Fogo, Santo Antão and São Vicente. Report produced as part of the UNDP/GEF Project: Consolidation of Cape Verde's Protected Areas System. Praia, Cape Verde.

## **PROJECTS**

**Project title:** Consolidation of Cape Verde's Protected Areas System

**Duration:** 2009-2014

**Objective(s):** To consolidate and strengthen Cape Verde's protected areas (PAs) system through the establishment of new terrestrial and marine PA units and the promotion of participatory approaches to conservation. The 8 targeted PA/MPA units will demonstrate various strategies for conservation and management, including vegetation

rehabilitation, control of invasive plants, and design and testing of revenue generation and allocation systems for tourism (visitor fees; product sales; concessions, etc.)

**Major Achievement(s):** An Invasive Plant Management Strategy for Protected Areas in Fogo, Santo Antão and São Vicente produced and some management actions based on this plan undertaken.

**Donor(s):** UNDP/GEF

**Executing Agency:** Government of Cape Verde

**Grant amount (in \$US):** \$3,287,000

**Co-financing amount (in \$US):** \$14,245,000

**Contact(s):** Mr Leão Carvalho, Project Coordinator (leaocarvalho21@yahoo.com.br)

## *Comoros*

### **QUESTIONNAIRES**

#### **Respondents:**

Mr. Yahaya Ibrahim  
Comores (CNDRS)

**Institution:** Centre National de Documentation et de Recherche Scientifique des  
**Email:** [yahayaim@yahoo.fr](mailto:yahayaim@yahoo.fr).

Ms. Nadjat Said Abdallah  
l'Environnement et des Forêts, Ministère de l'Environnement, Comores

**Institution:** Direction Générale de  
**Email:** najalim@gmail.com

#### **1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** Despite the willingness of the Comorian State to sustainably conserve its biodiversity, the fight against IAS has not yet featured in any national strategy, nor in any major projects and programmes for the conservation of biodiversity.

#### **2a. Available resources:** Severely limiting

#### **2c. Gaps or barriers to resource mobilization:**

- Constraints on the national budget do not yet allow the funding of integrated actions to conserve biodiversity including IAS.
- The issue of IAS does not seem to be a major environmental concern in the Comoros Islands.
- The low level of concern of governmental and non-governmental organizations to act on IAS issues explains the non-mobilization of resources to date.
- Low levels of national expertise.

#### **3a. National policies related to IAS:** No

#### **3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** No

#### **5. Project development and implementation:** Discussion on potential projects under way

**6a. Intended project title:** Implementation of an integrated programme of IAS prevention and management in the Union of Comoros has been suggested. The suggested idea does not yet represent an official government initiative.

#### **6b. Objective(s):**

- Promote a programme of information generation and awareness raising in the fight against IAS
- Build human and technical capacity in governmental and non-governmental organizations for the sustainable and effective management of IAS

#### **6c. Targeted donor(s):**

- IOC/EU
- GEF
- AFD
- CEPF
- Other potential donors to be identified

#### **6d. National or regional project:** Regional

#### **6e. Other countries involved:**

- Madagascar
- Mauritius
- Seychelles
- La Réunion (France)

### **7. Information sought from the workshop:**

- Identify sources of finance to promote capacity-building (human and technical) of governmental and non-governmental organizations in the Comoros Islands to put in place actions to prevent and manage IAS
- Promote a project to fight against IAS in SIDS
- Share experience and information with the country, and experts in IAS with the goal of equipping us with the tools needed to formulate a funded project for the management of IAS that can help us to achieve Target 9 of the Aichi Protocol
- Learn from experts and donors the best way of mobilizing the funds necessary for the goal of fighting against IAS

### **8. Objectives for participating in the Montreal workshop:**

- Learn from the IAS-related experiences of other island states
- Develop a formal or informal network of resource persons and institutions in SIDS who are working to manage IAS
- To be able to formulate a project to submit for funding

## **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Invasive plants- examples- *Lantana camara* (CBD Thematic report); The Anjouan Scops owl (*Otus capnodes*) is classified as 'Critically Endangered (CR)' in the IUCN Red List of Threatened Species. The species was rediscovered in 1992 on Ndzuwani (Anjouan), Comoros. The remaining small population (estimated to be below 100 pairs) survives in the remaining fragments of native forest. Habitat clearance for agriculture, timber and coal; and habitat degradation due to human activities and the spread of invasive species are the major causes for the decline of this species (BirdLife International 2012).

Introduced black rats *Rattus rattus* may predate nests; the spread of invasive plants such as *Rubus rosifolius* and *Lantana camara* degrade the species habitat and the common Indian myna *Acridotheres tristis* may compete with the owl for nest holes. The impact level of invasive plant species and the common Indian myna are described as 'low impact' on the survival of the species; the impact of the black rat remains unknown (BirdLife International, 2013).

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways not identified in the NBSAP.

The Comoros NBSAP, developed in 2000, has not considered the problem of invasive alien species. In Topic 2 of this strategy, entitled "Improvement of the implementation of conservation actions and sustainable management of biological diversity", it was stated in paragraph 5 that "The balance of natural forests and agroecosystems is threatened by the introduction of invasive alien species such as *Lantana camara* and guava."

No measures or strategy are proposed to fight against IAS.

IAS have been tentatively discussed in the fourth National Biodiversity Report (2009) based on the first study of IAS by FAO in 2004 entitled 'Studies of invasive woody plants of the Comoros (Union of the Comoros and Mayotte)'.

The National Centre for Documentation and Scientific Research Comoros (CNDRS) works on the inventory of the flora of the Comoros and the study and identification of agricultural weeds (<http://portal.wikwio.org/>). In this context, CNDRS works very closely with colleagues at the Herbarium of the Comoros, in the University of the Comoros to produce plant species lists. Currently, the risk of introducing invasive or exotic species (e.g. through risk analysis) is hardly taken into account in any strategy or action plan developed by Union of the Comoros.

The process of reviewing the NBSAP, currently under development at the Ministry of Environment of the Union of Comoros will integrate IAS-related issues in conformity with Aichi Biodiversity Target 9.

**Work with the NPPO and others to conduct risk analysis:** Not currently undertaken systematically. Comoros has no phytosanitary measures still in force for the imports of plants. There is no denying the existence of a deficiency in the regulatory control of the imports of plants and a lack of technical expertise and human resources to carry out such checks.

**IAS eradication and related plans:** Since little is known at both the level of policy makers and environmental manager's levels, the problem of IAS is not yet in any development strategy (national strategy for the conservation of biodiversity, agricultural strategy, etc.) and is not yet addressed in a legal framework. No currently implemented environmental protection project or programme is considering this issue to any extent.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** To date no funding has been specifically designed to achieve Aichi Biodiversity Target 9. However, in the document Project Identification Form (PIF) relating to the project 'Development of a national network of terrestrial and marine protected representative of the unique natural heritage of the Comoros and co-managed with local village communities areas' funded by the Global Environment Fund and the Government of the Comoros, IAS are considered among the 'Threats to Biodiversity and Ecosystems Services'. We should therefore expect that funding could be accessed to study the problem of IAS and a strategy to fight against IAS should be developed for future protected areas of the Comoros Islands.

At the regional level of the islands of south-west Indian Ocean, under the aegis of the Indian Ocean Commission a project called Island Biosafetynet just been launched. The purpose of the IOC/IUCN Project is to establish a regional network against IAS. Initially, Comoros will benefit from a small amount of funding to conduct a study on the issue of IAS in a pilot site for a period of 18 months. The success of this project will allow the country to access other sources of regional and international funding to scale up this model project in the islands of the Comoros archipelago.

As previously stated, the Comoros is in the process of revising its National Biodiversity Strategy which will include IAS issues. Some environmental projects under development or soon be implemented will include IAS research or management. This is the case for the future network of protected areas in Comoros or the Indian Ocean Commission EU-funded Biodiversity Project which will start this year.

As a consultant for the development of the Ecosystem Profile of the Madagascar and Indian Ocean Islands Hotspot for the next programme of the Critical Ecosystem Partnership Fund, a multi-donor mechanism consisting of the Global Environment Facility, the World Bank, the French Development Agency, the European Union, the Government of Japan, and the MacArthur Foundation, Yahaya Ibrahim of CNDRS has been able to highlight the need to take IAS issues into account so that the Comoros islands, as one of the islands in the Southwest Indian Ocean, will benefit from funds to fight IAS. This may help in future funding efforts.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** Convention on Biological Diversity. Thematic report to CBD on alien and invasive species in Comoros <<http://giasipartnership.myspecies.info/content/comoros-thematic-report-cbd-alien-and-invasive-species>>

IBIS database- <http://ibis.fos.auckland.ac.nz/page/species-information.aspx?speciesid=13253>

Vos, P. (2004). Forest Health & Biosecurity Working Papers FBS/4-2E. Forestry Department, FAO, Rome, Italy (unpublished).

## *Cook Islands*

### **QUESTIONNAIRES**

#### **Name of respondents:**

Elizabeth Munro (elizabeth.munro@cookislands.gov.ck); Joseph Brider (joseph.brider@cookislands.gov.ck)

**Institution:** National Environment Service

**1a. Priority given to CBD 8(h):** Medium

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** The current modality is for government to provide personnel support and administrative support to assist the IAS programmes and to utilise donor support, primarily GEF, to implement IAS operations on the ground.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** The Cook Islands NBSAP was developed in 2002 and some of the IAS-related actions were implemented under the NBSAP add-on project. These actions are captured in the Cook Islands 4th National Report to CBD and summarized below.

#### **5. Project development and implementation:**

Completed projects; Active development of new projects

Current funded projects / projects being implemented

#### **6a. Intended project title:**

Project title not yet specified but some ideas are listed below

**6b. Objective(s):** Some ideas...

1. Survey invasive species in natural ecosystems and the agro-ecosystems on all islands in the Cook Islands group as baseline data and display this on a GIS platform
2. Programme on the control of transboundary and inter-islands movement of terrestrial and marine flora and fauna with a view to developing legislation and strengthening the capacity of ports and focal points to implement.
3. Biocontrol assessment and EIA
4. Valuation of IAS threats to biodiversity

**6f. Other relevant information:** If any of the other Pacific regional countries have similar objectives then this can be developed into a regional project

#### **7. Information sought from the workshop:**

- Identify experts or technical assistance that can assist on IAS
- Environment impact assessment for bio-control agents
- Boarder control capacity-building particularly internal quarantine control measures on IAS
- GIS mapping of IAS

#### **8. Objectives for participating in the Montreal workshop:**

- The types of assistance available and the eligibility criteria for accessing these to address IAS issues
- Identify experts to assist with implementation of IAS-related activities in country
- Applications in IAS monitoring

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** There is a priority list in the NBSAP- this is dated.



A Global Environment Facility (GEF) funded project is currently being implemented in the Cook Islands titled the “Prevention, Control and Management of Invasive Alien Species in the Pacific Islands”. This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of Invasive Alien Species (IAS).

Key deliverables for the Cook Islands include

Revise and enhance risk analysis and EDRR systems with the Ministry of Agriculture to include invasives that impact biodiversity.

Ship rat (*Rattus rattus*) early detection surveillance (trapping and monitoring for sign)

Determine and implement best management practices for *Cuscuta* sp. and Beach Burr (*Cenchrus echinatus*) on Rarotonga and Pukapuka respectively

Determine and implement best management practices for sand flies on Aitutaki and Mitiaro

Eradicate red passion fruit (*Passiflora rubra*) using best management practices.

Rearing and redistribution of agents for priority invasive species including *Mimosa invisa*

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats, etc. Priority pathways are not identified in the NBSAP. The Cook Islands hasn't updated its NBSAP and is still preparing its project document. However, the Cook Islands have recently completed a desktop review listing of priority species and pathways.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Work with the NPPO and others to conduct risk analysis:** The Cook Islands Ministry of Agriculture handles all phytosanitary measures on imports to the Cook Islands which applies international standards.

**IAS eradication and related plans:** The Cook Islands haven't developed a national plan for eradication of IAS, however surveys have been done to identify invasive species for control and eradication of key species, especially those that have been recently introduced to the country have been carried out.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The Cook Islands is currently implementing a Regional project on the Prevention, Control and management of IAS in the Pacific Islands, funded by GEF.

The Cook Islands have progressed in identifying species pathways, and identified species for control and eradication and are looking at developing an IAS strategy to guide the management and coordination of IAS in country as a funded project.

**Source information:** Cook Islands NBSAP <<http://www.cbd.int/doc/world/ck/ck-nbsap-01-en.pdf>>.

The GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has benefits for social and economic reasons too.

<<http://www.sprep.org/ias/project-overview>>

## **PROJECTS**

**Project title:** Biodiversity Enabling Activity 'Add-on' component for Cook Islands

**Duration:** 2003-2006

**Objective(s):** To enable the Cook Islands to assess capacity-building needs and defining the country specific priorities in the areas of in-situ and ex-situ conservation, methods to assess threats to biodiversity and traditional

knowledge, practices and innovations. The project also aimed to create ways of sharing biodiversity information through the development of a Biodiversity website.

**Major Achievement(s):** The incorporation of IAS into the GEF-4 funding round so that Cook Islands IAS is addressed and implemented.

**Donor(s):** UNDP/GEF

**Project title:** The Ministry of Foreign Affairs and Trade (MFAT), acting through the New Zealand Secretary of Foreign Affairs and Trade, has engaged Landcare Research to undertake a scoping study to develop a weed biocontrol programme for the Cook Islands under the State Sector Development Partnerships Fund.

**Duration:** 5 years

**Objective(s):** To identify a clear pathway for developing biocontrol of economically important weeds in the Cook Islands that will, in future, allow agriculture and tourism to be more sustainable in the Cook Islands as follows:

- Identify and prioritize weeds.
- Complete an effort and cost analysis.
- Complete a risk analysis and train Cook Islands (CI) Ministry of Agriculture (MoA) staff in risk assessment techniques.
- Identify key personnel and systems, foster relationships and develop importation protocols.
- Produce a final report which will include the recommended 5-year plan.

**Donor(s):** Landcare New Zealand

## *Cuba*

### **QUESTIONNAIRES**

**Project Identifier:** GEF\_ID 3955

**Project title:** Enhancing prevention control and management of Invasive Alien Species at vulnerable ecosystems in Cuba

**Duration:** 2011-2016

**Objective(s):** To safeguard globally – significant biodiversity in vulnerable ecosystems by building capacity at the systemic level to prevent, detect, manage the spread of IAS in Cuba.

**Major Achievement(s):**

- Review and update of Legal and Policy Frameworks.
- Elaboration and implementation of IAS National Strategy.
- Strengthening of IAS Regulatory System and Intersectoral Coordination Mechanisms.
- Update IAS National Inventory.
- Elaboration of Methodological Documents on Risk analysis, EIA, Economical Assessments, Methodology to elaborate Species List (black, grey and white).
- Enhance scientific know-how on IAS.
- Elaboration and Implementation of IAS Management Plans.
- Design and Implementation of a National Monitoring System.
- Economic Assessment on the IAS Impact and costs from control and management actions.
- Design and Establishment of a National Management Information System.
- Development of an Early Warning System and Rapid Response.
- Design and Establishment National Strategy on Communication and Environmental Education.
- Monitoring and Control on Effectiveness and Impact from Management Plans on working sites.
- Strengthening of Surveillance and Protection Mechanisms.
- Assessment of Climate Changes effects on IAS in selected working sites.

**Donor(s):** UNDP/GEF

**Executing Agency:**

Ministry of Science, Technology and Environment (CITMA), Center of Information, Management and Environmental Education

**Grant amount (in \$US):** \$5,018,180

**Co-financing amount (in \$US):** \$10,000,000

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Invasive plant species (examples *Melaleuca quinquenervia* as (Cav.) Black and *Eucalyptus* spp., *Acacia* spp., *Albizia* spp., *Dichrostachys cinerea* (L.) Wight & Arn.); *Mimosa pigra* L., *Syzygium jambos* (L.) Alston and *Terminalia catappa* L., *Casuarina* spp.) [González-Torres et al 2012]. Freshwater ecosystem (*Clarias gariepinus* (African Catfish)); tramp ants;

introduced mammals, Herpetofauna (*Chytrid* fungus). Marine introduced invasive examples - lionfish, *Tubastraea coccinea* (orange-cup coral).

Under the UNDP/GEF Project: Enhancing the Prevention, Control and Management of Invasive Alien Species in Vulnerable Ecosystems in Cuba the following invasive species were cited:

Plant species:

- Melaleuca leucadendron* (Melaleuca - Cayepu)
- Dichrostachys cinerea* (Marabú)
- Casuarina equisetifolia* (Casuarina)
- Leucaena leucocephala* (Ipil ipil)
- Bromelia pinguin* (Piña de ratón)
- Spathodea campanulata* (Tulipán africano)
- Albizia procera* (Algarrobo de la India)
- Syzygium jambos* (Pomarrosa)
- Mimosa pigra* (Weyler)
- Acacia farnesiana* (Aroma)
- Sida acuta* (Malva de caballo)
- Eichhornia crassipes* (Jacinto de agua, Malangueta)
- Myriophyllum pinnatum* (Miriofilum)

#### **Animal species**

- Clarias* sp. (Pez gato)
- Perna viridis* (Mejillón verde)
- Pterois volitans* (Pez león)
- Bubalus bubalis* (Búfalo de agua)
- Mus musculus* (Ratón doméstico)
- Rattus rattus* (Ratas negra)
- Rattus norvegicus* (Rata parda)
- Herpestes auropunctatus* (Mangosta)
- Felis catus* (Gato jíbaro)
- Canis familiaris* (Perro jíbaro)
- Sus scrofa* (Cerdo jíbaro)
- Molothrus bonariensis* (Pájaro vaquero)
- Wasmannia auropunctata* (Santanilla)
- Pheidole megacephala* (Hormiga león)
- Cyrtophora citricola* (Araña parda mediterránea)

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Pet trade/ Nursery trade

**Priority pathways identified in NBSAP?** Yes. Pathway management plans are included in the existing NBSAP and in the Strategic working lines and identified priorities for the updated NBSAP. This is an ongoing process, and is not yet finished).

**Work with the NPPO and others to conduct risk analysis:** The quarantine service is one of the key institutions participating in the IAS Project from the design process onwards. Cuba has established an effective National System for systematic control and implementation of phytosanitary measures on all products imported to the country.

#### **Contact details of PRA experts:**

Ing. Julio Piedrahita Portas

Head, Department on External Quarantine.  
National Center for Phytosanitary Protection.  
Ayuntamiento N. 231 e/ Lombillo y San Pedro, Plaza.  
La Habana, Cuba.

**IAS eradication and related plans:** Main national strategies considered are: prevention, contention, control and management. Eradication of well-established species is known to be very difficult and expensive. However, Cuba has several case studies at selected sites where eradication strategies are being considered for some plant species.

Cuba is implementing a UNDP/GEF project that includes 28 species, 13 plant species and 15 animal species. Main strategies considered are: prevention, contention, control and management. Eradication of well-established species is known to be very difficult and expensive. However, we have several case studies at selected sites where eradication strategies are being considered for some plant species, such as *Casuarina equisetifolia*, *Dichrostachys cinerea*, *Leucaena leucocephala*, *Syzygium jambos*, *Bromelia pinguin* and some animals, as *Rattus rattus*, *Rattus norvegicus*, *Felis silvestris catus* y *Canis lupus familiaris*, *Herpestes auropunctatus*, and *Perna viridis*.

Cuba is developing projects to address Aichi Target 9. Within the National Strategic Plan for Protected Areas, which covers 20% of the national territory, a programme is included for IAS control, monitoring and management.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Luis Roberto González-Torres, Rosa Rankin y Alejandro Palmarola. 2012. Plantas invasoras en Cuba. Bissea 6 (1)  
<<http://www.cabi.org/isc/uploads/file/Invasive%20Species%20Compendium/Invasive%20Plants%20Cuba%202012.pdf>>

National Biodiversity Strategy, National reports and other literature.

## **PROJECTS**

**Project Identifier:** GEF\_ID 3955

**Project title:** Enhancing prevention control and management of Invasive Alien Species at vulnerable ecosystems in Cuba

**Duration:** 2011-2016

**Objective(s):** To safeguard globally – significant biodiversity in vulnerable ecosystems by building capacity at the systemic level to prevent, detect, manage the spread of IAS in Cuba.

### **Major Achievement(s):**

- Review and update of Legal and Policy Frameworks.
- Elaboration and implementation of IAS National Strategy.
- Strengthening of IAS Regulatory System and Intersectoral Coordination Mechanisms.
- Update IAS National Inventory.
- Elaboration of Methodological Documents on Risk analysis, EIA, Economical Assessments, Methodology to elaborate Species List (black, grey and white).
- Enhance scientific know-how on IAS.
- Elaboration and Implementation of IAS Management Plans.
- Design and Implementation of a National Monitoring System.
- Economic Assessment on the IAS Impact and costs from control and management actions.

- Design and Establishment of a National Management Information System.
- Development of an Early Warning System and Rapid Response.
- Design and Establishment National Strategy on Communication and Environmental Education.
- Monitoring and Control on Effectiveness and Impact from Management Plans on working sites.
- Strengthening of Surveillance and Protection Mechanisms.
- Assessment of Climate Changes effects on IAS in selected working sites.

**Donor(s):** UNDP/GEF

**Executing Agency:**

Ministry of Science, Technology and Environment (CITMA), Center of Information, Management and Environmental Education

**Grant amount (in \$US):** \$5,018,180

**Co-financing amount (in \$US):** \$10,000,000

## *Dominica*

### **QUESTIONNAIRES**

**Name of respondent:** Mr. Kongit Haile-Gabriel      **Institution:** Environmental Coordinating Unit, Ministry of Environment, Natural Resources, Physical Planning & Fisheries      **Email:** kongith@gmail.com

**1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** Lack of financial and human resources.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** Inadequate validation data, limited human capacity to develop project proposals, poor resource assessment of the extent of invasiveness of species and their impacts, limited knowledge of the source of available resources.

**3a. National policies related to IAS:** No

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** None

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Project not yet identified.

**7. Information sought from the workshop:**

- Financial and technical assistance to develop programs/projects that would lead to the control/eradication of those listed as priorities.

**8. Objectives for participating in the Montreal workshop:**

- Sharing the experiences and good practices of other SIDS in combating, managing or eradicating invasive alien species.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Marine Invasive species like the lion fish (*Pterois volitans*), sea grass (*Halophila stipulacea*). Fungal attack on mountain chicken (Chytrid fungus), red palm mite (*Raoiella indica*); Puerto Rican crested anole (*Anolis cristatellus cristatellus*); Lemongrass (*Cymbopogon nardus*, *C. winterianus*); African tulip tree (*Spathodea campanulata*); *Heliconia wagneriana*; *Acacia* spp.; Eurasian collared dove (*Streptopelia decaocto*). The following additions were given by Kongit Haile-Gabriel: sea grass (species name not given) and black Sigatoka.

Priority invasive species have not been identified in the NBSAP. In order to update Dominica's National Biodiversity Strategy and Action Plan, a National Consultation was held. At the time of the National Consultation, priority species and pathways were not identified.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Trade related pathways.

Priority invasive species pathways have not been identified in the NBSAP (see above).

**Work with the NPPO and others to conduct risk analysis:** This is no system at the moment. Pest Risk analyses are usually done on a needs-basis in lieu of a policy framework for the management of pest and other invasive species. In order to ensure a standard approach, we will need to ensure a policy and institutional framework. Phytosanitary measures for certain imports exist but are not encompassed in the updated NBSAP.

**Priority pathways identified in NBSAP?** No. However, invasive species were taken into account in the National Invasive Species Strategy, which was elaborated in 2011 and was adopted by the Ministry of Environment and Natural Resources in 2013.

**IAS eradication and related plans:** A National Policy and Plan does not exist for the eradication of invasive alien species. The management of invasive alien species is usually conducted on an ad-hoc basis e.g. Black Sigatoka, Sea grass, Giant African Snail, Lion Fish (*Pterois volitans*), etc.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** No projects are being implemented but Dominica intends to develop proposals to achieve Aichi Biodiversity Target 9 on Invasive Alien Species, pending financial and technical assistance.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** National Biodiversity Strategy and Action Plan (NBSAP) version 2 2014  
<<https://www.cbd.int/doc/world/dm/dm-nbsap-v2-en.pdf>> Overlook of Dominica's Biodiversity and Invasive Species situation <[http://especies-envahissantes-outramer.fr/pdf/atelier\\_antilles\\_2009/Dominica.pdf](http://especies-envahissantes-outramer.fr/pdf/atelier_antilles_2009/Dominica.pdf)>

## **PROJECTS**

**Project title:** Reef Environmental Education Foundation (REEF)

**Objective(s):** To determine the extent of the spread of lion fish (*Pterois volitans*), distribution, abundance and methods of control

**Major Achievement(s):** "Lion Fish - Public Awareness on lion fish was done with various fisheries cooperatives and the general public around the island"

**Follow up:** Public awareness, fish cooking competition, Lion Fish Public Awareness Program

**Contact(s):** Mr. Kongit Haile-Gabriel

### **Further relevant information:**

Lion Fish - Additional assistance needed to develop/conduct an assessment of the population and improved methods of exploitation.

**Project title:** Sea Grass - A survey was conducted on the spread and impact of sea grass.

**Duration:** 2007-2013

**Contact(s):** Mr. Kongit Haile-Gabriel

**Further relevant information:** Sea Grass - Need to be able to fully assess its impacts and develop controls for limiting its spread and impact.



## Dominican Republic

### QUESTIONNAIRES

**Name of respondent:** Yocasta Valenzuela **Position:** International Environmental Agreements  
**Institution:** Ministry of Environment **Email:** Yocasta.valenzuela@ambiente.gob.do

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Dominican Republic was part of the regional project Mitigating the Threats of Invasive Alien Species in the Insular Caribbean, also Dominica is working at the national level in a programme for capacity-building to deal with the issues of invasive species.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** The main barriers to address invasive species is the fact that the positive characteristics of some species, e.g. those that are felt to be a charismatic presence in the countryside such as donkeys which are used as a working animal, shade trees such as neem (*Azadirachta indica*) that are grown in gardens and ornamental plants grown in the towns.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy; Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** The Dominican Republic has adopted a National Invasive Species Strategy and action plan to deal invasive species.

**5. Project development and implementation:** Completed projects

**6a. Intended project title:** Project not yet identified.

### **7. Information sought from the workshop:**

- To obtain more information about how to get more funding to address invasive species at both national and regional levels
- To obtain enough skills to plan and the development of strategies to deal with the most problematic invasive species, mainly in the most vulnerable insular ecosystems

### **8. Objectives for participating in the Montreal workshop:**

- To improve knowledge on the behaviour of invasive species and how to control and eradicate them.
- To share experience and to know about the experiences of other insular country.
- To know the impacts of climate change on the establishment and spread of invasive species and vice versa.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** *Leucaena leucocephala*, *Calliandra calothyrsus*, walking catfish (*Clarias batrachus*), lionfish (*Pterois volitans*), American bullfrog *Lithobates (Rana) catesbeianus*, village weaver (*Ploceus cucullatus*), tricoloured munia (*Lonchura Malacca*), marine invasive species (species not specified).

CABI under the ISC and the MTIASIC project have assisted the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago update their national IAS lists. Through its Plantwise Knowledge bank it can generate a list of crop pest and diseases based on published information and can provide assistance to countries in doing pest risk analysis. CABI is also part of the Caribbean Plant Health Directors Forum which in effect is the regional NPPO for the Caribbean.

All the issues on invasive species were taken into account in the National Invasive Species Strategy, which was elaborated in 2011 and was adopted by the Ministry of Environment and Natural Resources in 2013.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Trade related pathways, ballast water. CABI under the MTIASIC project working with National Executing Agencies have generated some information in this regard for the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago.

**Priority capacity (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Awareness-raising activities at various levels: policy, planning and implementation, as well as research. Current policy and legislation needs to be upgraded to bring it in line with international requirements.

**Work with the NPPO and others to conduct risk analysis:** The Institute for the Agriculture and Forestry Researches (IDIAF, Spanish Acronymic) and the Phytosanitary Department of the Ministry of Agriculture are participating in the National Invasive Species Strategy formulation process. Also the Customs Department is involved on the Strategy implementation.

**Committed actors (e.g. Government, NGOS, etc.):** Government, international NGOs

**IAS eradication and related plans:** The Dominican Republic was part of the funded GEF Regional Project “Mitigating the Threats of Invasive Alien Species”. In the Dominican Republic this project undertook activities of eradication invasives mammal in the National Park Enriquillo Lake and Isla Cabritos. The invasive species considered were *Equus asinus* and *Felis catus*. These species were included in the project to be eradicated due to the important and relevant role the Cabritos have for the conservation of endangered native and endemic species of iguanas and the American Crocodile.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently the Dominican Republic, specifically the Ministry of Environment and Natural Resources, have implemented a programme of invasive species control and eradication by building capacity at the local level and also doing some eradication activities. Among the donors are UNEP/GEF, CABI and Island Conservation. An Invasive Species Eradication programme is under the budget of the Ministry and local eradication activities are promoted and implemented by the Ministry. The Green Customs initiatives implemented on between the Customs Directorate and the Environment Ministry have also the effect of prevent the invasive species entrance in both Port and Airports.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Thematic report on Invasive alien species 2000 <<http://www.cbd.int/doc/world/do/do-nr-ais-es.pdf>> NBSAP 2011 <<http://www.cbd.int/doc/world/do/do-nbsap-01-es.pdf>>

## *Ecuador*

### **QUESTIONNAIRES**

**Name of respondent:** Karen Ivonne Noboa Melo    **Position:** Assistant  
**Institution:** Wildlife, National Directorate of Biodiversity    **Email:** karen.noboa@ambiente.gob.ec

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:**

The Government of Ecuador is replicating the experiences of Galapagos Islands by giving financial resources and technical support for invasive alien species projects and programmes, in order to prevent, eradicate, and control the introduction of invasive alien species around the country.

**2a. Available resources:** Adequate

**2c. Gaps or barriers to resource mobilization:** In 2015 the Biodiversity Finance Initiative (BIOFIN) project will define the financing gap to meet Ecuador's conservation priorities.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:**

- The National Plan of Action on Invasive Alien Species was developed in 2013.
- Meetings with public and private institutions related with the control, prevention and management of invasive alien species.

**5. Project development and implementation:** Discussion on potential projects under way

**6a. Intended project title:** Prevention, Control and Management of Invasive Alien Species (IAS) in Ecuador with a focus on National Protected Areas.

**6b. Objective(s):**

Control, eradicate and management of invasive alien species (IAS) to reduce threats, and impacts on biodiversity in the following National Protected Areas: Ecological Reserve Manglares-Churute, Pacoche Wildlife Refuge, Machalilla National Park and Podocarpus National Park.

**6c. Targeted donor(s):** Government of Ecuador

**6d. National or regional project:** National

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species and pathways have been identified in the NBSAP.

The number of introduced species in Galapagos continues to increase, with many of them impacting the native ecosystems.

A total of 36 vertebrate species have been introduced to Galapagos, with 30 of them becoming established, including 1 freshwater fish, 2 amphibians (frogs), 4 reptiles (all geckos), 10 birds, and 13 mammals. Most of the more invasive and devastating species are mammals, primarily goats, rats, cats, pigs, and dogs. The birds include domestic chickens and ducks, the semi-domestic Rock Pigeon, and wild species such as Smooth-billed Ani and Cattle Egrets.

Some 750 introduced plant species have been registered in Galapagos, with nearly 90% of them brought deliberately by humans for agricultural and ornamental purposes. The recent jump in the total number of introduced plants is

more a result of increased interest in the problem coupled with more thorough surveys than of any exponential increase in the introduction rate. The majority of introduced plants are not overly invasive. The most invasive species are primarily found only on the inhabited islands and Santiago.

Approximately 543 alien insect species, more than 1/4 of the total insect fauna, have been registered in Galapagos. Most arrive in Galapagos on lumber, fruits and vegetables, and other organic material. The most serious threats to the Galapagos biota include two fire ant species (impact native invertebrates, reptiles, and birds), two wasp species (prey on native invertebrates and compete for food with finches), a scale insect (threatens many native plants), and an ectoparasitic fly (feeds on and harms nestlings of many bird species). Some of these also cause havoc for the human population.

While not yet a problem, the threat from the potential arrival and establishment of aggressive marine species, such as the north Pacific sea star (*Asterias amurensis*) and the barnacle *Chthamalus proteus*, among others, is cause for concern.

#### Efforts to combat invasive species

Since the establishment of the Galapagos National Park and the Charles Darwin Foundation (CDF) in 1959, efforts to control and eradicate invasive introduced species have been ongoing. Initial efforts were primarily aimed at goat populations on the smaller islands and control of plants in the highlands of Santa Cruz. However, by the 1980s, the increase in tourism and the resident population made stopping any new introductions of equal importance.

The 1990s saw a major shift in invasive species work. The CDF played a lead role in establishing the Galapagos Inspection and Quarantine System (SICGAL), responsible for inspection of cargo from ships and planes, as well as the bags and luggage of tourists. Advances in eradication techniques worldwide provided the foundation for new and more expanded programmes. Community education programmes were implemented on the inhabited islands to increase both awareness of the threat from introduced species and participation by residents in the battle against invasives.

Biological control—the use of natural enemies to reduce the damage caused by pest populations—was first used in Galapagos beginning in 2002, to control the cottony cushion scale, which was threatening more than 60 native and endemic plant species. After six years of intensive research to determine probability of success and any potential impacts, the Australian ladybug (*Rodolia cardinalis*) was released. This was the first intentional introduction of an insect to Galapagos and it has proven effective at reducing the scale population to manageable levels.

The most dramatic success related to invasive species was achieved in March 2006, when Project Isabela—an unprecedented island restoration programme in terms of size and scope—was completed, with the successful eradication of feral goats and donkeys from northern Isabela; goats, donkeys, and pigs from Santiago, and goats from Pinta.

Additional successes include the eradication of fire ants from Marchena, rock pigeons from Galapagos (were only established on Isabela, Santa Cruz, and San Cristóbal), cats from Baltra, and one species of blackberry from much of Santa Cruz, among others.

#### Current Initiatives

While the more aggressive invasive species continue to have major impacts on the ecosystems of Galapagos, as the level of human activity continues to increase, so does the threat of new introductions of potentially dangerous species. Current initiatives of the CDF, the GNPS, and other organizations in Galapagos to combat the problems of invasive species include:

##### *Prevention and Awareness*

Strengthen the inspection capabilities of the Galapagos Inspection and Quarantine System through improved training

and equipment

Expand Community Monitoring Projects (CMPs) to achieve greater participation of the local population in identifying and responding to new invasive species

Strengthen education programmes in schools and Environmental Education Centers

Introduced Vertebrates

Priorities identified by the Galapagos Conservancy

Complete goat eradications on the few remaining goat-inhabited islands based on the methodologies developed in Project Isabela: ultimate goal is a goat-free archipelago

Continue monitoring Judas goats on Santiago, Isabela, and other islands to detect any re-introductions

Complete eradication of feral goats, burros, pigs, and cattle already initiated on Floreana

Complete eradication of the freshwater fish Tilapia from El Junco Lake on San Cristóbal

Execute rodent eradications based on the results of an international workshop held in Galapagos in March 2007 – beginning with Seymour Norte, Rábida, and Pinzón

Continue humane sterilization programmes for cats and dogs on inhabited islands

#### *Introduced Invertebrates*

Complete inventory of introduced invertebrates present in urban and agricultural areas and their prioritization for management action

Complete feasibility studies for biological control options for introduced ants, wasps, and the mosquito that potentially carries West Nile Virus

Develop short- and long-term methodologies for control of parasitic flies and protection of their endangered host birds

Continue eradication attempts of fire ants on priority small islands and in smaller infestations on larger islands

Introduced Plants

#### *Introduced plants*

Complete analysis of inventory of introduced plants in urban and agricultural zones on San Cristóbal (last island to be surveyed)

Initiate plant eradication projects based on the Weed Risk Assessment system

Eliminate select small populations of invasive plants

Develop a comprehensive management plan for the highly invasive Quinine tree with its large-scale eradication as the ultimate goal

Conduct feasibility studies of biological control options for the Lantana shrub, Mysore Raspberry, Quinine tree, and Guava shrub

#### *Threat from Marine Invasives*

Conduct diver surveys of hull epifauna and epiflora and of marine species associated with the Guayaquil port (most important port in terms of maritime transport to Galapagos)

Conduct a risk analysis of transport pathways from national and international ports

Develop risk assessment tools based on itineraries.

In 2013 The Ministry of Environment developed the Action Plan for the prevention, control, management and / or eradication of Invasive Alien Species in Ecuador. The document includes the activities and tasks of strategic lines that should be implemented for the next 10 years, based on the priorities proposed by the public institutions that manage this issue.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement and related pathways are a serious issue; as well as Oceanic traffic. The updated National Biodiversity Strategy doesn't contain any information on the phytosanitary measures on imports.

**Work with the NPPO and others to conduct risk analysis:** Work is conducted in collaboration with the NPPO.

**Contact details of PRA experts:**

1. Edgar Chicaiza e- mail edgar.chicaiza@agrocalidad.gob.ec
  2. Esteban Nogales e – mail esteban.nogales@agrocalidad.gob.ec
  3. Karla Méndez e- mail karla\_sabrina85@yahoo.com
  4. Cristina Sandoval e – mail cristina.sandoval@agrocalidad.gob.ec
- Address: Av. Eloy Alfaro y Av. Amazonas, Edificio MAGAP, Piso 9

**IAS eradication and related plans:** The National Plan Action of Invasive Alien Species was developed in 2013. In 2015 the implementation phase will begin and this will include the Plan for eradication of invasive alien species.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The Ecuadorian National Environmental Fund's "Galápagos Invasive Species" (FEIG) adopted projects in April 2013 for the study, control, and monitoring of invasive alien animals and a new package of projects submitted by the Galapagos National Park (GNP), Charles Darwin Foundation (CDF) and Agency for Regulation and Control of Biosecurity and Quarantine for Galapagos (ABG). FEIG is chaired by Ecuador's Environment Ministry, and integrated by Conservation International (CI), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP), and other donors. Ecuador is developing proposals to achieve Aichi Biodiversity Target 9 on Invasive Alien Species.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Fifth National Report to the CBD 2014 <<http://www.cbd.int/doc/world/ec/ec-nr-05-es.pdf>>  
Galapagos Conservancy <<http://www.galapagos.org/conservation/invasive-species/>>

## **PROJECTS**

**Project title:** Control of Invasive Species in the Galapagos Archipelago.

**Duration:** 2002-2008

**Objective(s):**

Conservation of native and endemic species of the Galapagos Islands and preservation of natural evolutionary processes.

Project aimed to develop an “integrated and permanent system for the total control of invasive species” on Galapagos, as a major step towards the common goal of conserving native and endemic biodiversity and natural evolutionary processes on the archipelago Outcome 1 Inspection, quarantine, monitoring and rapid response system

- Outcome 2 Science-based planning and adaptive management of IS control
- Outcome 3 Eradication and control pilots addressing priority IS threats
- Outcome 4 Sustainable financing of IS control on Galapagos
- Outcome 5 Public awareness and participation in IS control programmes
- Outcome 6 Integrated Galapagos regional and sectoral planning and regulation.

**Major Achievement(s):**

Overall impacts

1. The institution of a process of inspection of baggage and cargo sent to the islands, and the disinfection of ships and aircraft, which is the first barrier to preventing the entry of invasive species into Galapagos. While not yet effective, this constitutes important progress.

2. A number of bold eradication pilot projects were successfully completed – some of which were unprecedented in their scope and scale. As a result Ecuador is now seen as a world leader in invasive species management and island restoration. All involved can take considerable credit for these achievements.
3. While many outcomes will need to be interpreted over longer timeframes, important ecological outcomes have already been reported following several eradication operations. Native vegetation is recovering following the removal of goats from northern Isabela Island, and land iguanas are increasing following the removal of cats from Baltra<sup>43</sup>. Ecological responses are mainly positive. However, some negative consequences, such as the expansion of weeds following the removal of herbivorous ungulates, have been reported. Such responses can be anticipated. Actions should be put in place to manage these adverse consequences.
4. Project staff (especially in GNP and CDF) developed new skills and knowledge as a result of their involvement in the Project. This pool of skilled, experienced and motivated practitioners and managers constitutes one of the most important impacts of the Project. These people will underpin further actions.
5. The capacities, experience and attitudes generated amongst project staff during the Project have led to important outcomes being sustained in the archipelago, and further projects being initiated. GNP staff have contributed their skills and perspectives elsewhere in Ecuador, and internationally.
6. Awareness amongst local communities of invasive species was raised, including the management of domestic animals in urban areas. Challenges in raising further awareness within Galapagos communities and generating further support for invasive species management activities will need to be more comprehensively and collaboratively addressed if conservation outcomes are to be sustained.
7. The GNP team has become interested in developing ecological restoration initiative, and some of these types of activities are already in progress, like the introduction of 39 hybrid turtles on Pinta Island<sup>44</sup> (in a joint effort with the CDF and with GC support).
8. As a result of the work of the CIMEI, control of IS has been instituted in urban areas, along with good pet management practices, like vaccination and sterilization.
9. The establishment of the FEIG represents an important mechanism to sustain some project outcomes and to stimulate further activities involving further collaborators.

**Follow up:**

The Ecuadorian National Environmental Fund's "Galápagos Invasive Species" (FEIG) adopted in April 2013 projects for the study, control, and monitoring of invasive alien animals and a new package of projects submitted by the Galapagos National Park (GNP), Charles Darwin Foundation (CDF) and Agency for Regulation and Control of Biosecurity and Quarantine for Galapagos (ABG). FEIG is chaired by Ecuador's Environment Ministry, and integrated by Conservation International (CI), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP), and other donors.

**Donor(s):** UNDP/GEF

**Executing Agency:** Government of Ecuador Ministry of Environment

**Partners:** Co-executing agencies: National Institute of Galapagos (INGALA), Galapagos National Park Service, Galapagos Inspection & Quarantine Service, Charles Darwin Foundation, Municipalities on Sna Cristobal & Santa Cruz

**Grant amount (in \$US):** \$18,300,00

**Co-financing amount (in \$US):** \$24,800,000

**Links to supporting documents, URLs, etc.:** : <http://www.hear.org/galapagos/invasives/features/tcp.htm>

[http://www.thegef.org/gef/sites/thegef.org/files/gef\\_prj\\_docs/GEFProjectDocuments/M&E/TER/FY2011/UNDP/763/1349\\_BD\\_Ecuador\\_TE.pdf](http://www.thegef.org/gef/sites/thegef.org/files/gef_prj_docs/GEFProjectDocuments/M&E/TER/FY2011/UNDP/763/1349_BD_Ecuador_TE.pdf)

*Fiji*

**QUESTIONNAIRES**

**Name of respondent:** Eleni Rova Tokaduadua      **Institution:** Department of Environment Fiji  
**Email:** etokaduadua@gmail.com; eleni.tokaduadua@govnet.gov.fj

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** The Biosecurity Promulgation 2008 provides the legislative basis for the Biosecurity Authority of Fiji to implement measures to prevent the introduction of exotic pests and diseases harmful to plants, animals and human beings including the environment. The Biosecurity Promulgation 2008 is a complete legislation which encompasses the managing of biosecurity risks through the implementation of sanitary and phytosanitary measures justified by scientific research.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** Fiji comprises of groups of islands therefore monitoring entry points into Fiji by Biosecurity Fiji is challenging. Fiji lacks the resources to manage and monitor the entry of illegal vessels which may bring invasive species. The following gaps have been identified: 1) Staff/project officers; 2) No vessels to monitor islands; 3) Surveillance capabilities; 4) Limited number of specialists - entomologists, plant pathologist, veterinarians

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:**

- Containment and control of the Asian Subterranean Termite *Coptotermes gestroi*
- Containment of the invasive Green Iguana *Iguana iguana* on Qamea, Matagi and Laucala Island.
- Monitoring of the movement of domestic vessels departing the island of Taveuni.
- Biosecurity Emergency Regulation in place prohibiting the movement of all stages of the green iguana
- Containment of the taro beetle *Papuana uninodis*.
- Prevention of the Rotuma fruit fly *Bactrocera kirki* from entering Fiji

**5. Project development and implementation:**

Discussion on potential projects under way

Completed projects

Active development of new projects

Current funded projects / projects being implemented

**6a. Intended project title:** Containment and eradication of the Green Iguana from Fiji; eradication of terrestrial invasives such as African Tulip etc.

**6b. Objective(s):** Complete eradication of the Green Iguana

**6c. Targeted donor(s):** GEF

**6d. National or regional project:** Regional

**6e. Other countries involved:**

- Vanuatu
- Solomon Islands
- New Caledonia
- Papua New Guinea

**7. Information sought from the workshop:**



1. Funding assistance – opportunities for support to regional or national project, guidance to donors funding
2. Expertise (technical assistance) - identify with other countries' needs in the region, identify pool of expertise in the region, eradication methods for green iguana
3. Capacity-building – training, information sharing, country success models, biosecurity and customs training modules.
4. Collaborative approaches with other countries - information sharing, technical advice, understanding how other MEAs support work on IAS.

### **8. Objectives for participating in the Montreal workshop:**

Fiji has missed out on IAS project funding for the last 3 years or so. This time, Fiji will endeavour to develop projects to strengthen its policies and programme implementation for IAS prevention and management. The workshop is an opportunity to gauge the success of regional projects compared to national projects and to learn lessons that others have learned over the past 3 years. The workshop also provides an opportunity to identify synergies in priority areas for other countries and learn more of their processes and systems and establish relations with countries on IAS.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Introduced birds like the Indian myna (*Acridotheres tristis*); introduced mammals predators (*Rattus* spp.); Green iguana (*Iguana iguana*), pigs (*Sus scrofa*), goats (*Capra hircus*), Cane toad (*Rhinella marina*); Wedelia (*Sphagneticola trilobata*), *Lantana camara*, etc.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats, etc.

Priority pathways have not been identified in the NBSAP. However, Fiji is currently revising NBSAP and has plans to include a pathways management plan in this revision. The process shall be completed by the end of 2014. Fiji has a species conservation working committee that will take this into consideration.

**Work with the NPPO and others to conduct risk analysis:** Most of the risk analysis and research has been consulted by the regional University and Biosecurity of Fiji that is assisted by Conservation International and Nature Fiji Mareqiti Viti, a local NGO. There have been several discussions and finding but sometimes is delayed or slow because of unavailability of funds to carry out such work. It is hoped that with NBSAP resource mobilization plan this will be accomplished. The Resource Mobilization Plan is currently considered alongside the NBSAP review process.

The Forestry Department, Biosecurity Authority of Fiji and South Pacific Commission (SPC) are responsible for pest risk assessment, are consulted about biodiversity issue and are part of NBSAP consultation.

### **Priority actions:**

Fiji's In Depth Review on Invasive Alien Species includes the following recommendations:

- Adapt and run course on invasive plant management developed by the New Zealand Department of Conservation with a focus on control techniques for field crews.
- Biocontrol: Support workshop on biocontrol (e.g., for African tulip tree - *Spathodea campanulata*).
- Technical exchanges: support technical and learning exchanges (e.g., Federated States of Micronesia and Kiribati on techniques for field crews; Fiji and American Samoa for weed control in protected areas; Samoa and Federated States of Micronesia on bio-control of ivy gourd (*Coccinia grandis*) release program; New Caledonia and French Polynesia on Miconia control; and Hawaii with other Pacific islands on existing areas of skills and expertise).

**IAS eradication and related plans:** There is an eradication plan for some species. Fiji is continuously trying to include as many species as possible and to educate the masses and strengthen its boarder control. However, much work is restricted to lack of funding.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently Fiji has no specific projects funded for this purpose. Fiji is looking for funds and hopes to find some sources. The country has not as yet done much to address this target, but it is very eager to access some funding on this item. Fiji has its National Taskforce on Invasives which identifies priorities on this area and holds discussions on IAS issues. However no specific project proposal has yet been developed. Fiji has seen the importance of working with partners who have an interest in IAS and agricultural pests for an effective and coordinated response to national (bio)security.

**Eligible for STDF Project Preparation Grant:** LMIC (at least 20% co-financing)

**Source information:** Fiji Submission for the In Depth Review on Invasive Alien Species by the Convention on Biological Diversity <<https://www.cbd.int/doc/submissions/ias/ias-fj-2007-en.pdf>>

## **PROJECTS**

**Project title:** Containment of the Green Iguana *Iguana iguana*

**Duration:** 1 year

**Objective(s):** To prevent the spread of this invasive species to other parts of Fiji

**Follow up:** Submission of funding proposals; engagement of expertise (herpetologist)

**Donor(s):** Fiji Government

**Project title:** Containment of the Asian Subterranean Termite

**Duration:** 2 years

**Objective(s):** To prevent the spread of this invasive species to other parts of Fiji

**Follow up:** Submission of funding proposals; engagement of expertise (Termite experts), mobilization of project staff to treat houses and trees

**Donor(s):** Fiji Government

**Project title:** Monitoring and surveillance

**Duration:** 1 year

**Objective(s):** To monitor the introduction of pests and diseases at pre-border, border and post border levels.

**Follow up:** Submission of proposal for funding. This is an ongoing project for BAF.

**Donor(s):** Fiji Government

## *Grenada*

### **QUESTIONNAIRES**

**Name of respondent:** Ms. Simone Lewis: Senior Environment Officer (simonelewis2011@gmail.com); Mr. Paul Graham: Pest Management Officer (paulgraham1957@gmail.com)

**Institution:** Ministry of Agriculture, Lands, Forestry, Fisheries and Environment ([agriculture@gov.gd](mailto:agriculture@gov.gd))

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Invasive alien species can have adverse economic impact on the country's economy.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:**

- Inadequate information on the resources available
- The stringent criteria outlined for accessing available funding

**3a. National policies related to IAS:** No

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** No

**3e. Details of Actions:** To be included in the revised NBSAP

**5. Project development and implementation:**

Discussion on potential projects under way  
Completed projects  
Active development of new projects  
Current funded projects / projects being implemented

**6a. Intended project title:**

Eradication of selected invasive alien species from the state of Grenada

**6b. Objective(s):**

To eradicate three invasive alien species viz.: the Coconut Palm Weevil (*Rhynchophorus palmarum*) and the Orange Winged Parrot (*Amazona amazonica tobagensis*) from the mainland and the alien toad from the sister isle of Carriacou.

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- Assistance in developing project proposals
- Assistance in accessing the available financial resources
- Assistance in identifying projects in Grenada as it relates to invasive alien species

**8. Objectives for participating in the Montreal workshop:**

- To be able to develop project proposals according to the criteria of the donors participating in the workshop thus resulting in an increase in the rate of projects eligible for funding
- To be able to increase our ability to access funding to implement projects related to IAS

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Introduction of exotic species such as mongoose (*Herpestes auro-punctatus*); pink mealy bug (*Maconellicoccus hirsutus*), lionfish (*Pterois volitans*). Priority species have not been identified in the NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No information found. Priority pathways have not been identified in the NBSAP. The priority species and pathways of introduction

have been identified for invasive alien species that are pests of plant or animal quarantine significance. This has been done independently of the National Biosafety Strategy and Action Plan.

**Work with the NPPO and others to conduct risk analysis:** The National Plant Protection Organization of Grenada (Pest Management Unit of the Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment) conducts pest risk assessments of new plant products prior to the issue of import permits to authorize their entry into the State of Grenada. The PRA however is limited to the assessment of risks associated with the introduction of pests of quarantine significance on the plants in question and does not include invasive alien species that may be present in or on the plants.

**Contact details of PRA experts:** The members of the PRA Team of the NPPO are as follows:

- Paul Graham – Pest Management Officer
- Thaddeus Peters – Agricultural Officer
- Peter Joseph – Plant Quarantine Officer
- Bertrand Munro – Plant Quarantine Officer

**Potential to integrate biodiversity issues into the work of the NPPO:** The phytosanitary measures to be applied on plant imports are detailed by the National Plant Protection Organization on import permits. The information contained in the plant import schedule can therefore be incorporated easily in the NBSAP of Grenada.

**IAS eradication and related plans:** There is a generic Emergency Action Plan for the introduction of invasive alien species that are pests of quarantine significance to plants and animals. This EAP was introduced and developed by the Inter American Institute for Cooperation on Agriculture (IICA) in 1997.

The NPPO of Grenada has in addition developed Eradication plans for the following:

- Pink Hibiscus Mealybug (*Maconellicoccus hirsutus*)
- Mango Seed Weevil (*Sternochetus mangiferae*)
- West Indian Fruitfly (*Anastrepha obliqua*)
- Black sigatoka (*Mycosphaerella fijiensis*)

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Grenada at present does not have any existing or potential Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** NBSAP 2000; Fourth National Report <<http://www.cbd.int/countries/?country=fj>>

The GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has benefits for social and economic reasons too.  
<<http://www.sprep.org/ias/project-overview>>

## **PROJECTS**

**Project title:** Management of the Pink Hibiscus Mealybug

**Objective(s):** To reduce the infestation of the Pink Hibiscus Mealybug to below its economic threshold

**Follow up:** Island wide monitoring of the pest population for 5 years after project completion

**Donors/Partners:**

Caribbean Development Bank  
United States Department of Agriculture  
CABI (UK)  
FAO  
Government of Grenada

**Contact(s):**

Ms. Simone Lewis  
Mr. Paul Graham

**Project title:** West Indian Fruit Fly

**Duration:** 10 years

**Objective(s):**

- To suppress the adult population of the West Indian Fruit Fly
- To minimize damage to host fruits and consequently increase domestic sales and exports
- To regain entry into the US Fresh fruit market for selected commodities

**Donor(s):** Government of Grenada

**Contact(s):**

Ms. Simone Lewis  
Mr. Paul Graham

## *Guinea-Bissau*

### **QUESTIONNAIRES**

**Name of respondent:** Matilde da Conceição Gomes Lopes **Position:** Ecologiste **Institution:** Secretariat of state for the Environment and Tourism  
**Email:** conceicao.gomeslopes@yahoo.com.br;  
conceicao.gomeslopes@gmail.com

**1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** Because the means to implementation of CBD Article 8(h) and associated decisions are coming from European Union and UEMOA

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** At present the resources available adequate for meeting in Guinea-Bissau are limited because the country are still in the foreign attachment.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** There is the RCNPVLCIC (plant protection project for national capacity-building to combat the growing enemy). This project has been financed by European Union.

**5. Project development and implementation:** Active development of new projects

**6a. Intended project title:** Fruit fly project

**6b. Objective(s):** To combat fruit flies

**6c. Targeted donor(s):** UEMOA and European Union

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- All the information necessary to combat alien invasive species.

**8. Objectives for participating in the Montreal workshop:**

- To acquire experiences to combat alien invasive species.

### **PROJECTS**

**Project title:** UEMOA Project

**Duration:** 4 years

**Objective(s):** To purchase of the phytosanitary product and to following the fruit flies combat in rural area.

## *Haiti*

### **QUESTIONNAIRES**

**Name of respondent:** Mr. Paul Judex Edouarzin: CBD Focal Point (Pauljudex.edouarzin@gmail.com)  
Mr. Daniel Brisard: Membre du Cabinet du Ministre de l'Environnement (daniel\_brisard@yahoo.com)

**Institution:** Ministère de l'Environnement

**1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** Resources are not allocated to this specific CBD article. The country's efforts to comply with the CBD are global in nature.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** The main barrier regards the budgetary limitations that prevent Haiti from implementing all the mechanisms enabling the country to meet its international obligations. There is the Ministry of Agriculture and some controls at customs, but resources are insufficient to effectively fight against invasive alien species.

**3a. National policies related to IAS:** No

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** No

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Formulation of an inter-institutional strategy against invasive alien species

**6b. Objective(s):** Establish mechanisms and policies to control and monitor invasive alien species

**6c. Targeted donor(s):** GEF

**6d. National or regional project:** National

**6f. Other relevant information:**

The project is not yet developed. This is a project idea that all government entities involved in the issue must approve before its preparation.

**7. Information sought from the workshop:**

Technical information on this issue is important. At the same time the participants would like to know the actors who have experience and expertise in strategy definition and implementation of projects relating to invasive species. Finally, they would like to be informed about all possible sources of funding available for activities related to the prevention and the fight against invasive alien species.

**8. Objectives for participating in the Montreal workshop:**

Have as much information as possible on the extent of the problem in the region and identify partnerships to be developed for Haiti to produce a strategy for the prevention and fight against invasive alien species.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species have not been identified in the NBSAP.

**Priority pathways** Priority pathways have not been identified in the NBSAP.

**Priority capacity (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Awareness-raising activities at various levels: policy, planning and implementation, as well as research. Current policy and legislation needs to be upgraded to bring it in line with international requirements.

**Committed actors (e.g. Government, NGOS, etc.):** Government, international NGOs (not specified)

**Work with the NPPO and others to conduct risk analysis:** The NPPO was involved the compilation of this dossier but some academic institutions have conducted pest risk analysis and invasive species risk in the area of agriculture in order to minimize the risk to this sector. The country has developed its phytosanitary policy but independently of (non-productive) biodiversity considerations.

**IAS eradication and related plans:** None have been developed. The lack of financial resources from the public budget to support such efforts is the main reason. In addition, like this issue has not been identified as a high priority in public policy strategy documents. [without such a prioritization] It is difficult to mobilize resources from other traditional sources of funding.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** None.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** NBSAP 2011 <<http://www.cbd.int/doc/world/ht/ht-nbsap-01-en.pdf>>



## *Jamaica*

### **QUESTIONNAIRES**

**Name of respondent:** Mrs. Dionne Newell **Institution:** Natural History Museum – Institute of Jamaica  
**Email:** dnewell@nhmj-ioj.org.jm

**1a. Priority given to CBD 8(h):** High

#### **1a. Reason for response:**

1. The NRCA Act of 1991 has as one of its permitted categories, the introduction of species of flora and fauna and genetic material. Looking to also amend the regulations as they relate to permitted categories, to include zoos and pet stores.
2. The development of a national invasive species database.
3. The re-establishment of a national invasive alien species working group (IASWG) in fulfilment of article 8(h) is one activity where the group operates as an oversight body on all matters relating to IAS.
4. The government's commitment to providing matching funds towards the recent successfully concluded 5 year regional project on 'Mitigating the threats of IAS in the Insular Caribbean'.
5. Recently concluded development of a National Invasive Species Strategy and Action Plan (NISSAP) as well as a Pet Trade Pathway Toolkit as a result of the recognition of the impact of pet introductions and their impact on native species.
6. Ministry of Agriculture and Fisheries standard procedure for importations involve a risk assessment of any plant or animal that can potentially impact the agricultural industry.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** Possess adequate Human Resource Capacity to establish strong linkages however, gaps and barriers include financial constraints, overlapping responsibilities among various entities based on legislation which lead to minimal coordination; knowledge gap on invasives in protected areas at a national level

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

#### **3e. Details of Actions:**

- Research projects and assessments of invasive alien species have been and continue to be carried out
- Draft adaptive Management Plan developed for the Lionfish (*Pterois volitans*) in Jamaica
- Risk Assessment Unit developed in the Ministry of Agriculture
- Risk analyses conducted by local Scientific Authority prior to approval of species introductions

#### **5. Project development and implementation:**

Completed projects  
Current funded projects / projects being implemented

**6a. Intended project title:** Project not yet identified.

#### **7. Information sought from the workshop:**

- List of potential donors specific to the Caribbean Region
- Available opportunities for networking with other Caribbean countries
- Sourcing information on existing resource persons and projects in the region

#### **8. Objectives for participating in the Montreal workshop:**

- Funding for invasive species project at a national and or regional level
- Networking
- Best practice for project design

## **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP.

Goats (*Capra hircus*); mongoose (*Herpestes auropunctatus*) are among the invasive species identified in Jamaica;

The invasive species list for Jamaica includes 40 plants and 46 animals. There are pilot projects planned for the Portland Bight Protected Area, and the Black River Lower Morass (Ramsar site) as part of a regional invasive species project which commenced in 2009. The project in the Portland Bight area aims to monitor and selectively eradicate vertebrate predators that may attack the critically endangered Jamaican Iguana (*Cyclura collei*), as well as protect the habitats of nesting sea birds and turtles that use the nearby cays. The second pilot project will be the rehabilitation of the Black River Lower Morass by the control of two invasive plants species (*Alpinia allughas*, and *Melaleuca quinquenervia*) and two fresh-water invasive animal species Australian Red Claw Crayfish, and the freshwater Suckermouth Catfish (*Cherax quadricarinatus*, and *Pterygoplichthys pardalis*, respectively) which have had negative effects on native species, as well as affecting the hydrology and structure of the wetlands.

Two marine invasive species are the Lion fish (*Pterois volitans*) and the Green mussel (*Perna viridis*). The Lion fish is currently the focus of a pilot control programme in Jamaica because of the potentially devastating effect it may have on the marine ecosystem.

CABI under the ISC and the MTIASIC project have assisted the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago update their national IAS lists. Through its Plantwise Knowledge bank it can generate a list of crop pest and diseases based on published information and can provide assistance to countries in doing pest risk analysis. CABI is also part of the Caribbean Plant Health Directors Forum which in effect is the regional NPPO for the Caribbean.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways are not identified in the NBSAP. However, the NBSAP is currently being updated. Priority pathways will be identified in the NISSAP. CABI under the MTIASIC project working with National Executing Agencies have generated some information in this regard for the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago.

**Work with the NPPO and others to conduct risk analysis:** The Plant Quarantine Produce Inspection Branch of the Ministry of Agriculture and Fisheries is the NPPO for Jamaica and has been contacted to conduct Pest Risk Analysis or invasive species risk analysis. The NBSAP, which is currently being updated, will include phytosanitary measures on imports.

### **Contact details of NPPO experts:**

Mrs. Juliet Goldsmith

Pest Risk Analysis Unit

Ministry of Agriculture and Fisheries

Hope Gardens

Kingston 6.

**IAS eradication and related plans:** There is an eradication plan for some species in the NISSAP. Species name: *Melaleuca* (Paperbark Tree) and *Alpinia* (Invasive Wild Ginger) in the Black River Lower Morass (RAMSAR Site) to be eradicated by 2016 and controlled spread respectively. These species cause deleterious effects on native species especially endemic and rare plant species and their habitats as well as the hydrology of the wetland. Can cause millions of US dollars in damage.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The regional project on Mitigating the Threats of Invasive Alien species in the Insular Caribbean, which includes the following pilot projects will help to achieve Aichi Target 9;

1. Lionfish control
2. Removal of predator species of the Jamaican Iguana
3. Removal of invasive plant species in the lower Black River Morass

The project is being funded by UNEP/GEF and the Government of Jamaica. CABI is the regional executing agency. Further projects being developed to achieve Aichi Target 9 are:

- Proposals developed for the Management of Lionfish in the Marine Environment;
- Control of Jamaican Iguana predators;
- Implementation of the NISSAP;
- Maintenance of the National Database on IAS.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Fourth National Report <<https://www.cbd.int/doc/world/jm/jm-nr-04-en.pdf>>

## **PROJECTS**

**Project title:** IABIN Invasives Information Network (I3N) Database Development (2001)

**Duration:** 2001-2002

**Objective(s):** Setting up initial inventories and databases on: 1) Invasive species 2) Individuals and organizations actively involved in invasive species research and management 3) Invasive species projects (in research and/or management) and 4) available datasets.

**Follow up:** Further development and expansion of existing database through funding from GEF under IABIN in 2006. Additional funding received for open source and database is currently managed by the JA-CHM which continues to partner with stakeholders.

**Donor(s):** U.S. Geological Survey (USGS) with support from the Environmental Diplomacy Fund of the U.S. State Department

**Contact(s):** Mrs. Dionne Newell

**Project title:** IABIN Content Building Grant (2006)

**Duration:** 2006

**Objective(s):** Expansion of existing I3N database, development of educational resource materials i.e. two posters on invasive alien species (flora and fauna) in Jamaica, and two new educational brochures.

**Follow up:** Currently managed by the JA-CHM which continues to partner with stakeholders.

**Donor(s):** Through IABIN

**Contact(s):** Mrs. Dionne Newell

**Further relevant information:** Open source version of the database issued to participating countries thereby increasing the functionality of the database. Also able to support risk assessment processes.

**Project title:** Extension of the control of Lionfish in Jamaica

**Duration:** Ongoing

**Objective(s):** Control of the spread of lionfish

**Donor(s):**

University of the West Indies  
Bank of Nova Scotia  
Rainforest Seafoods

**Contact(s):** Mrs. Dionne Newell

**Further relevant information:** The lionfish control project is currently undertaken as a postgraduate research project under the supervision of the University of the West Indies.

**Project title:** The removal of predators of the Jamaican Iguana, *Cyclura collei*

**Duration:** Ongoing

**Objective(s):** Capture and removal of the Indian mongoose, cats and other predators of the Jamaican iguana in the Hellshire Hills

**Donor(s):** Natural Resources Conservation Authority (NRCA)

**Contact(s):** Mrs. Dionne Newell

**Further relevant information:** Continuation of the terrestrial component of the MTIASIC project to be sustained for another one year period with plans to seek additional funds. The headstart programme for the iguana continues at the Hope Zoo.

## *Kiribati*

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** A Global Environment Facility (GEF) funded project is currently being implemented in Kiribati titled the “Prevention, Control and Management of Invasive Alien Species in the Pacific Islands”. This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of Invasive Alien Species (IAS).

Key priorities identified include

Revise National and Line & Phoenix Islands invasive species strategies and action plans.

Write a management plan and implement it for two myna species in Betio, Tabiteuea North and Onotoa.

Priority invasive species are eradicated (completely removed) from islands where feasible (7 projects in 5 countries identified in Appendix 6 of the Project Document). Conduct feasibility studies for pest eradications on uninhabited islands, draw up plan of action and begin priority eradications. [introduced mammal predators]

Some examples of invasive alien species currently existing in Kiribati include Pacific or Polynesian rat (*Rattus exulans*); Ship rat – *Rattus rattus*; House mouse – *Mus musculus*; Asian rat – *Rattus tanezumi* (present on McKean Island of the Phoenix Islands Group; Feral cats (*Felis catus*) – present on Kiritimati Island; Feral rabbits (*Oryctolagus cuniculus*) – present on Rawaki Island of the Phoenix Group; wedelia – (*Wedelia trilobata*), and myna birds (*Acridotheres tristis*). Wedelia, is a creeping mat forming perennial herb with fast growing rounded stems up to 40 cm long or longer and grows upward (ascend) when flowering (Thaman, 2002). This species also exists in Kiribati and has been sighted on Tabonuea & Antekana in Butaritari (2001) and in several places around the capital island of South Tarawa. The source of introduction was unknown and although it is highly invasive and pose serious threats to the environment if not eradicated immediately, many people in Kiribati, particularly those in Butaritari and South Tarawa are not aware of its existence. Myna bird commonly known as the Common or Indian myna has been found to be one of the invasive species in all continents. They are within the top 100 world’s most serious invasive species as determined by the Invasive Species Group of the World Conservation Union (IUCN). There have been attempts to eradicate these species where an eradication programme has been established to address the issue. Effective eradication on the other hand is being undertaken mostly within the Line and Phoenix groups and has been successful.

Introduction of new and additional invasive alien species (including agricultural pests and diseases). The direct negative impacts on native species and terrestrial and aquatic habitats by alien invasive species such as Pacific or Polynesian rat – *Rattus exulans*; Ship rat – *Rattus rattus*; House mouse – *Mus musculus*; Asian rat – *Rattus tanezumi* (present on McKean Island of the Phoenix Group); Feral cats (*Felis catus*) – present on Kiritimati Island; Feral rabbits (*Oryctolagus cuniculus*) – present on Rawaki Island of the Phoenix Group); introduced frogs in Kuria and Abemama Islands (Gilbert Group) and Agricultural pests and diseases – ‘te bwabwai’ (giant swamp taro) beetle – Papuana spp.; coconut scale insect on Tab.North, Tab.South & Nonouti (Gilbert Group); mango fruit-fly – *Ceratitidis cosyra*.

### **Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):**

Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats etc.

Training and capacity-building on risk assessments and pathway analysis.

Improve quarantine inspection and decommissioning facilities on S Tarawa, Kiritimati and Canton

Improve pest control on Kiribati-registered inter-island transport.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** Fourth National Report <<http://www.cbd.int/countries/?country=ki>>  
The GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has benefits for social and economic reasons too.  
<<http://www.sprep.org/ias/project-overview>>

## *Madagascar*

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** The most recent introduction of the Asian common toad (*Duttaphrynus melanostictus*), the repeated introduction of Indian myna (*Acridotheres tristis*) individuals in Madagascar (from 1875 to 1985) and its rapid proliferation is considered as a threat to Malagasy birds, mainly habitats birds (Goodman and Hawkins, 2008). Similarly, the high abundance of the introduced species *Rattus rattus* is a significant threat to the survival of small mammals. In some forest units, when *Rattus rattus* has colonized the natural habitat, the populations of some small indigenous mammals as rodents decline.

The introduction of exotic fish species results in changes in the habitat for herbivorous species such as tilapia (*Tilapia macrochir*, *T. melanopleura*), and direct predation by largemouth bass (*Micropterus salmoides*) and snakehead (*Ophiocephalus striatus*) and in competition between *Tilapia* spp. and indigenous species. Carnivorous species have further aggravated the ecological imbalance among fish populations. Carnivorous fish have well developed in the country's water bodies by eating aquatic insects, batrachians, and local fish. *Heterotis niloticus* (vangolaopaka) seems to colonize the habitat of *Megalops cyprinoides* (besisika) and *Arius madagascariensis* (gogo, vaona). For two years now, the presence of an invasive crayfish species, *Procambarus alleni*, is considered as dangerous because it kills all associated fauna (especially endemic species) and its multiplication is very fast by parthenogenesis. Similarly, the introduction of some exotic plankton-eating, herbivorous, or carnivorous fish species has been detrimental to some lake bird species by the transformation of its natural habitat, which benefits to some opportunistic bird species. It is the case of *Tachybaptus pelzelinii* (Malagasy grebe) on *Tachybaptus rufficollis* (little grebe).

Finally, the introduction of exotic plants such as *Eichhornia crassipes* (water hyacinth) results in eutrophication of aquatic environments and transformation of freshwater habitats. In most cases, it becomes not adapted to the original fauna such as the case of *Thalassornis leuconotus* (white-backed duck).

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No information found.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** NBSAPS and National Reports <> <<https://www.cbd.int/doc/world/mg/mg-nr-04-en.pdf>>  
Invasive toad <<http://www.nature.com/news/toxic-toads-threaten-ecological-disaster-for-madagascar-1.15309>>

## *Maldives*

### **QUESTIONNAIRES**

**Name of respondent:** Ms. Aishath Huma **Institution:** Ministry of Environment and Energy, Maldives  
**Email:** aishath.huma@environment.gov.mv

**1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** No study done so far on the threats of alien species and no known case of threats from alien species

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** Annual government budget allocation for biodiversity is less than 1% of the total budget which is hardly sufficient to carry out any activity and alien species is a least priority.

**3a. National policies related to IAS:** No

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Identifying threats of invasive alien species in Maldives

**6b. Objective(s):** To identify and make a database of invasive alien species in Maldives

**6d. National or regional project:** National

**6f. Other relevant information:** So far there is no data on invasive alien species in Maldives

### **7. Information sought from the workshop:**

- Information on successful projects on Invasive alien species
- Information on financial opportunities and how to approach them
- Information on how to address cases of invasive alien species in island states
- Information on trade control of invasive alien species

### **8. Objectives for participating in the Montreal workshop:**

- By end of the workshop I would like to be able to develop a project on invasive alien species and identify different financial mechanisms for funding.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Obnoxious weed species of *Cuscuta* and *Ageratum* are invading the Maldives, which poses a concern for the standing forest vegetation. Pest attack on timber species affects the regeneration of certain species which warrants proper pest management Reference: Forestry Assessment and Programme Planning Maldives, November 2005, Dr. Ravishankar Thupalli, OSRO/GLO/502/FIN, Food and Agriculture Organization of the United Nations. Priority species are not identified in the NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No information found. Priority pathways are not identified in the NBSAP because of unavailability of baseline information. Maldives is currently revising its NBSAP and it is planned to identify the priority species and pathways.

**Work with the NPPO and others to conduct risk analysis:** Pest risk analysis is conducted by the Plant Protection Unit of the Ministry of Fisheries and Agriculture. Pest risk analysis is conducted for cash crops only.



There is the potential for work on risk analysis relating to (non-productive sector) biodiversity as phytosanitary measures are already in place. The NBSAP targets strengthening the Quarantine facility to improve the implementation and enforcement of 'Plant Protection Act' ratified in 2012.

**Contact details of PRA experts:**

Ms. Aminath Aroosha  
Director  
Ministry of Fisheries and Agriculture  
Email: aminath.aroosha@fishagri.gov.mv

**IAS eradication and related plans:** None have been developed but national plans will be developed after identification of priority species and pathways.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The 'Forest Invasive Species Project' funded by FAO which focuses on the Hispid Beetle.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Fourth National Report <<https://www.cbd.int/doc/world/mv/mv-nr-04-en.pdf>>; all other reports

**PROJECTS**

**Project title:** Forest Invasive Species

**Objective(s):** To understand the extent of the threats of Hispid Beetle

## *Marshall Islands*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Warwick Harris **Institution:** Office of Environmental Planning & Policy Coordination  
**Email:** warwick47@gmail.com

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** The ultimate challenge for the Marshall Islands is the lack of capacity to identify marine and terrestrial species that are invasive and endemic. This challenge is further exacerbated by the absence of a strategic action plan - coupled with limited financial and technical resources.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** Absence of a national coordination and formal structure to address IAS.

**3a. National policies related to IAS:** No. With collaboration of the Secretariat of the Pacific Community (SPC), a biosecurity bill has been drafted and is currently awaiting to be tabled at Parliament, for 7 years now

**5. Project development and implementation:** Active development of new projects

**6a. Intended project title:** Enhancing capacity of local communities

**6b. Objective(s):**

- Building awareness of local communities in identifying and effective eradication and management of marine invasive alien species.

**6c. Targeted donor(s):**

- GEF

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- Technical assistance needed to undertake an extensive biological diversity assessment to identify what marine invasive alien species are in the Marshall Islands.

**8. Objectives for participating in the Montreal workshop:**

- To identify suitable donors to assist addressing IAS in the Marshall Islands
- To formulate project proposals that will enhance capacity of national authorities and local communities address IAS in the Marshall Island

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No Invasive species priorities mentioned in the NBSAP.

A Global Environment Facility (GEF) funded project is currently being implemented in the Marshall Islands titled the "Prevention, Control and Management of Invasive Alien Species in the Pacific Islands". This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of Invasive Alien Species (IAS). The GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has benefits for social and economic reasons too.

Key priorities identified: Eradication of *Chromolaena odorata*, *Miconia calvescens* and *Merremia peltata* from Majuro, Bikini and Kili islands.

**Priority species and pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats, etc. The Marshall Islands has not concluded in the NBSAP revision process. There is much to do and they are yet to identify priority species and pathways. NBSAP revision is not completed. Awaiting further funds from UNEP.

**Work with the NPPO and others to conduct risk analysis:** Some PRA work has been done through the Secretariat of the Pacific Community (SPC) in early 2000.

**IAS eradication and related plans:** The Marshall Islands does have a draft invasive species strategy, but this has been in dormant for 5 years. They are in the process of revising a strategic action plan with the assistance of the University of Guam (UOG) and Secretariat of the Pacific Regional Environment Programme (SPREP).

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The Marshall Islands will be working with the Secretariat of the Pacific Regional Environment Programme (SPREP) through national allocation under GEF-6. The Marshall Islands has been approached by SPREP and its anticipated that a Pacific regional wide project will be developed.

The Marshall Islands is also part of the Micronesia Biosecurity Plan (MBP) which is developed through the UOG and Department of Defense (US). There will be provisions from DoD and UOG to assist the Marshall Islands in addressing IAS issues.

**Eligible for STDF Project Preparation Grant:** LMIC (at least 20% co-financing)

**Source information:** NBSAPs and National report <<https://www.cbd.int/reports/search/?country=ht>> GEF PAS IAS project <<http://www.sprep.org/ias/project-overview>>

## *Palau*

### **QUESTIONNAIRES**

**Name of respondent:** Gwendalyn K. Sisor **Position:** Scientific Officer/Database Manager  
**Institution:** Protected Areas Network, Ministry of Natural Resources, Environment & Tourism  
**Email:** gsisior07@gmail.com

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Legislation, regulations and strategic plans have been made to ensure the prevention and eradication of invasive alien species

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** Unfortunately, funding is the greatest limiting factor as it requires major funding to do extensive eradications as well as ensure manpower to prevent introductions.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** Ongoing work for eradicating invasive alien species identified in the strategic plan as well as building capacity for people conducting work on IAS.

**5. Project development and implementation:** Discussion on potential projects under way

**6a. Intended project title:** Project not yet identified.

**7. Information sought from the workshop:** Available funding and technological and technical assistance that would assist in the eradication and prevention of invasive alien species. For the existing invasive alien species, the need for funding and methods to eradicate invasive alien species effectively and efficiently is needed.

**8. Objectives for participating in the Montreal workshop:** To determine what would be the best course of action that can be taken to achieve Aichi Target 9 and what the next step should be to continue to fight IAS effectively.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP.

A Global Environment Facility (GEF) funded project is currently being implemented in Palau titled the “Prevention, Control and Management of Invasive Alien Species in the Pacific Islands”. This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of Invasive Alien Species (IAS).

Key priorities include "Collect test and release known agents for *Miconia calvescens*;  
Review NISC Strategy"

Immediate threats to partulids include limestone quarrying, rats, and potential spread or reintroduction of invasive species. There are five identified priority introduced species, including an invasive fish, Tilapia sp. The Pacific Rat, *Rattus exulans*, probably came to Palau millennia ago with the original Palauan settlers and it has become naturalized over the centuries. Three additional species of *Rattus* are of recent (20th century) introduction as is the House Mouse, *Mus musculus*. These recently introduced rodents appear to be commensal, or synanthropic, in distribution as does the recently introduced Asian Musk Shrew, *Suncus murinus*.

#### Threats to Biodiversity from Feral Mammals

Feral domesticated mammals (livestock and pets) represent a serious threat to Palau's native flora and fauna. These feral mammals include pigs, cats and monkeys. Feral pigs are responsible for habitat destruction and feral cats are opportunistic predators of native birds and reptiles. Feral monkeys on Angaur Island disrupt natural habitats, prey on native wildlife and destroy crops. There are ongoing efforts in Palau to control all three.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways are not identified in the NBSAP. The NBSAP is broad; it does not have this level of detail.

Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats, etc.

**Work with the NPPO and others to conduct risk analysis:** For proposed imports of plants, Palau relies on the Hawaii Weed Risk Assessment: if a plant is high risk, and not already present in the country, importation is not allowed. Palau has not yet had the need for this type of system for other organisms. If the need arises, they will request assistance. Palau does not have in-country capacity to conduct pest risk analysis.

**IAS eradication and related plans:** Palau's National Strategic Action Plan addresses all aspects of invasive species prevention and management, including eradication. Palau does not have a specific eradication plan.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Palau is among the countries participating in the GEF-funded project is currently entitled the "Prevention, Control and Management of Invasive Alien Species in the Pacific Islands". This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of invasive alien species.

Palau is developing a project for funding from the GEF-6. They are also developing proposals for smaller projects using various sources of funding.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Fifth National Report <<https://www.cbd.int/doc/world/pw/pw-nr-05-en.pdf>> CBD Country profile <<http://www.cbd.int/countries/?country=nu>> GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has benefits for social and economic reasons too.

<http://www.sprep.org/ias/project-overview>

## *Saint Kitts and Nevis*

### **QUESTIONNAIRES**

#### **Respondents:**

Mr Eavin L. Parry      **Position:** Environmental Scientist      **Institution:** Department of Physical planning and Environment, Ministry of Sustainable Development, Government of St. Kitts and Nevis

**Email:** elvinparry@hotmail.com

Mr. Randolph Edmead      **Email:** phyplskb@sisterisles.kn

#### **1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** In St. Kitts and Nevis, several invasive alien species over the years have negatively affected important productive sectors including the Agricultural and Fisheries Industries. Although, this issue is not pronounced and not high on the government's agenda, the country has nonetheless responded by undertaking a range of initiatives with the aim of controlling the destructive impacts results from these species. Due to the limited cases encountered, IAS was not identified as one of the National Targets identified in the revised NBSAP as a national priority.

#### **2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** Needed resources necessary to effectively address the range of issues caused by invasive alien species is often deployed to other Government Ministries. For example, insufficient human resources are assigned to the Quarantine Unit, as a result, only limited border monitoring takes places.

#### **3a. National policies related to IAS:** No

#### **5. Project development and implementation:**

Discussion on potential projects under way  
Completed projects

#### **6a. Intended project title:** Project not yet identified.

#### **7. Information sought from the workshop:**

The respondent is hoping to gain insight in terms of how to go about developing a national invasive species strategy. He is also interested in learning from the experience of other countries on how they are coping with these issues.

#### **8. Objectives for participating in the Montreal workshop:**

It the respondent's hope the workshop would be an opportunity to expand his knowledge in this field, aid in the development of a draft national project on invasive species and identify potential funding sources.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Pink hibiscus mealybug, Cane toad, Mongoose, Cuban tree frog, *Cercopithecus aethiops*, *Gambusia*, *Tilapia*, marine invasives. Priority species are not identified in the NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Pet and aquarium trade and other trade related pathways, ballast water. Priority pathways are not identified in the NBSAP. The revised National Biodiversity Strategy and Action Plan for St. Kitts and Nevis does not identify the country's priority invasive alien species or the respective pathways as Aichi Biodiversity Target 9 has not been prioritized as a national target in the NBSAP for the moment.

**Priority capacity (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Awareness-raising activities at various levels: policy, planning and implementation, as well as research. Current policy and legislation needs to be upgraded to bring it in line with international requirements.

**Committed actors (e.g. Government, NGOS, etc.):** Government, international NGOs.

**Work with the NPPO and others to conduct risk analysis:** When compiling this dossier, the Plant Quarantine Unit of the Department of Agriculture, which functions similarly to a National Plant Protection Organization (NPPO), was contacted regarding the status of plant IAS and the various strategies current used to manage the introduction and spread of such species. However, no comprehensive Pest Risk Analysis was undertaken or included in the revised NBSAP as this issue was not deemed a priority area.

**IAS eradication and related plans:** In St. Kitts and Nevis, a reactive approach to control invasive alien species has been used on a case by case basis. In light of this situation, no comprehensive national policy, strategy or plan has been developed to holistically address the issue. It must be reiterated however that actions towards eradication take place on a case by case basis, led by various government ministries, such as the Ministry of Agriculture.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Saint Kitts and Nevis currently do not have any funded projects to achieve Aichi Biodiversity Target 9 on Invasive Species.

Saint Kitts and Nevis is in the preliminary stages of brainstorming possible proposals to control IAS. However, a proposal with clear and concrete actions is yet to be developed.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing).

**Source information:** CBD reports <<http://www.cbd.int/reports/search/>> A Biodiversity Profile of St. Kitts and Nevis <<http://www.bio-diversity-nevis.org/Documents/Biodiversity%20Profile%20of%20SKN.pdf>>

## **PROJECTS**

**Project title:** Eradication of the Pink Hibiscus Mealy Bug

**Duration:** 2 years

**Objective(s):** To eliminate the spread of the pink mealy bug in St. Kitts and Nevis

**Follow up:** Measures were introduced to control the importation of ornamental plants.

**Donor(s):** Government of St. Kitts and Nevis

**Project title:** National Initiative addressing the coconut palm bud rot disease.

**Objective(s):** To address the rapid loss of coconut palm trees by introducing a disease tolerant species which would replace the current affected type

**Donor(s):** Government of St. Kitts and Nevis

**Project title:** The Control and Management of Lionfish (*Pterois volitans*) in St. Kitts and Nevis

**Objective(s):** To Develop a lionfish management plan for St. Kitts and Nevis

**Donors/Partners:** FFI, Local sources, GEF, CEPF

*Saint Lucia*

**QUESTIONNAIRES**

**Name of respondent:** Mr. Alwin Dornelly **Institution:** Department of Forestry, Ministry of Sustainable Development, Energy, Science and Technology **Email:** dornelly\_al@yahoo.com; alwin.dornelly@govt.lc

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** There is the potential for IAS to impact negatively on the farming community; there is the potential for hybridization and loss of genes of native species; there is a threat to the existence of key endemic species

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** A current decline in the local economic situation; inadequate legislation

**3a. National policies related to IAS:** Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** Development of a National Strategy; the development of draft legislation; the determination of the extent of invasion by vertebrate invasive species through questionnaire interviews; collaboration with other agencies in responding to IAS entering the seaports; collaboration with overseas experts to identify unknown IAS species

**5. Project development and implementation:**

Completed projects

Current funded projects / projects being implemented

**6a. Intended project title:** Reducing the impacts of invasive species

**6b. Objective(s):**

(a) To evaluate various techniques for detecting and containing alien green iguanas in the western part of Saint Lucia

(b) Assess the extent of invasion by monkeys and orange-winged parrots in the northern parts of Saint Lucia, and evaluate techniques to control them.

(c) Conduct an island wide survey on invasive alien species, with a greater focus on monkeys and orange-winged parrots

(d) Build capacity for effective port surveillance

**6c. Targeted donor(s):** UNEP/GEF

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- To obtain the necessary tools to fully develop the project so that it will be endorsed by the GEF for funding.

**8. Objectives for participating in the Montreal workshop:**

- Share experiences of participating countries
- Increase potential for funding to address IAS
- Develop links with potential funding agencies
- To obtain greater insight into achieving Aichi Target 9



## **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP. However 161 invasive species are listed in The Saint Lucia National Invasive Species Strategy (NISS).

CABI under the ISC and the MTIASIC project have assisted the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago update their national IAS lists. Through its Plantwise Knowledge bank it can generate a list of crop pest and diseases based on published information and can provide assistance to countries in doing pest risk analysis. CABI is also part of the Caribbean Plant Health Directors Forum which in effect is the regional NPPO for the Caribbean.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Pet trade/ Nursery trade, ballast water. CABI under the MTIASIC project working with National Executing Agencies have generated some information in this regard for the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago.

Priority pathways are not identified in the NBSAP. The NBSAP does not go into detail into what activities are to be carried out as the framework outlined by it, simply asks that annual work plans be developed according to broad actions and measures to be undertaken. However Saint Lucia has developed a National Invasive Species Strategy (NISS) under the Invasives Species Project that was recently ended and these pathway management plans have been addressed in that document.

**Priority capacity (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Awareness-raising activities at various levels: policy, planning and implementation, as well as research. Current policy and legislation needs to be upgraded to bring it in line with international requirements.

### **Work with the NPPO and others to conduct risk analysis:**

- The relevant organizations are responsible for conducting these pest risk analyses as needed. Saint Lucia does possess a Plant Quarantine Section of the Ministry of Agriculture that undertakes these responsibilities.
- Rudolph Louisy currently leads in that direction at 468-5611
- The Biosecurity Plan and Protocols for Saint Lucia's Offshore Islands (Morton & Cole 2013) does this for the five biggest offshore islands (excluding Scorpion Island, though that can be straightforwardly included if desired).
- A number of outputs of the 2009 Biophysical Inventory also clearly identify IAS risks (especially the Tech Reports on Reptile and Amphibians, Birds and 'Critical Species'), though they don't include a formal Pest Risk Analysis. Ditto the species action plans for iguana, white-breasted thrasher and racer.

The Agriculture Ministry was one of the stakeholders consulted in revising the Second NBSAP and their concerns were taken on board. As previously indicated the NISS of the country takes the concerns of the Plant Quarantine division on board and will be detailed when the annual work plans are developed based on the Revised Second NBSAP. The Plant Quarantine section of the Ministry of Agriculture plays an active part in applying regulations on imports into the country as desks are established at the Head Office and Research Section of the Ministry which assists the public in that regard for a small fee.

**IAS eradication and related plans:** The NISS is in existence. It is recognized that eradication is usually a futile effort and prevention is more often advised. There is also a Biosecurity Plan and Protocols for Saint Lucia's Offshore Islands where eradication has been effectively implemented and is a part of ongoing incursion response readiness. Species action plans (for the white-breasted thrasher, iguana) also contain plans for introduced predator control (not eradication) in situations where prevention has failed.

- Saint Lucia has attempted to eradicate the Alien iguana with little success. Likewise it has attempted to eradicate the lionfish with similar results. There are too many factors militating against the success of eradication.

- Black rats (*Rattus rattus*), small Asian mongoose (*Herpestes javanicus*) and opossum (*Didelphis marsupialis*) have all been successfully eradicated from one or more of Saint Lucia's offshore islands. In addition, goats (*Capra aegagrus hircus*) and sheep (*Ovis aries*) have been successfully removed from one offshore island to allow vegetation recovery and soil stabilization.
- There was also an eradication effort of three plant species on Gros Piton. They are: *Callisia fragrans*, *Rhoeo spathacea* and *Tradescantia zebrina*.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** CEPF, USFWS; Saint Lucia participated in the Mitigating Invasive Alien Species Project that was funded by UNEP-GEF and has also participated in the offshore island biosecurity programme by the Critical Ecosystem Partnership Fund; a feasibility assessment of a "mainland island" (protected by a predator-proof fence) was also completed. A grant from the US Fish & Wildlife Service is also helping maintain offshore island biosecurity, in efforts to conserve the Endangered (to be re-assessed as Critically Endangered) Saint Lucia racer (*Liophis ornatus*).

- Saint Lucia has already developed a proposal on IAS such as to deal with the feral pig problem.
- Proposal to USFWS for follow-up grant (with FFI, Durrell, Saint Lucia National Trust, Saint Lucia Forestry Department) for offshore island biosecurity, arising from Saint Lucia racer Action Plan (see above)
- Under the PPCR DVRP project with funds provided by the World Bank, there is a proposal to address the issue of feral pigs within protected areas (The Government Forest Reserve)

**Committed actors (e.g. Government, NGOS, etc.):** Government, international NGOs

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** National report and NBSAPs <http://www.cbd.int/doc/world/lc/lc-nr-04-en.pdf>  
The Saint Lucia National Invasive Species Strategy <<http://www.ciasnet.org/wp-content/uploads/2013/05/NISS-SLU-final-reformat-v6.pdf>> List of 161 invasive species <http://www.ciasnet.org/wp-content/uploads/2010/08/IAS-present-in-SLU-May-2012-revision.pdf>

## **PROJECTS**

**Project title:** Reducing the impacts of invasive species in St. Lucia

**Objective(s):** To evaluate various techniques for detecting and containing alien green iguanas on the western part of St. Lucia

**Project title:** Integrated Slopes, Landslides and Riverbank Stabilization Project (PPCR-DVRP)

**Duration:** 4 years

**Objective(s):** Reduce the detrimental impacts of feral pigs within forested areas

**Project title:** Feasibility assessment for "mainland island" predator-proof fence

**Objective(s):**

Conservation Targets, species recovery of:

Saint Lucia racer (EN, proposed CR)

White-breasted thrasher (EN, may be uplisted to CR in 2015)

Saint Lucia black finch (EN)

Saint Lucia iguana (Iguana cf iguana; status not resolved; at a national level, CR)

Saint Lucia whiptail lizard (VU)

Saint Lucia wren (LC, but if the sp is split - as some argue it should be - this could change; nationally CR)

**Contact(s):**

Matthew Morton, Durrell Wildlife Conservation Trust, mmorton@fastmail.fm

**Project title:** Offshore islands: reviewed/strengthened biosecurity protocols

**Objective(s):** Conservation Targets for offshore islets, species recovery of:

Saint Lucia racer (EN, proposed CR) - currently global range a single offshore islet

Saint Lucia whiptail lizard (VU) - currently global range 4 offshore islets (thanks to translocations) and several other endemic reptiles and migratory seabirds

**Major Achievement(s):** Biosecurity maintained at 5 offshore island sites; increased capacity; exchange study trips to/from Antigua

**Follow up:** Priority is still rats but incorporate surveillance for other alien mammals, plants, lizards, ants.

Biosecurity maintained at 5 offshore island sites; increased capacity; exchange study trips to/from Antigua.

**Contact(s):** Matthew Morton, Durrell Wildlife Conservation Trust, mmorton@fastmail.fm

**Further relevant information:** In Saint Lucia, incursions are inevitable after eradications (though only 2 in 20 years, both on the same offshore islet, in Saint Lucia), so surveillance and rapid response is at least as important as eradications (more so if measured by resources expended)

**Project title:** Some work done at iguana nesting sites a few years ago.

**Objective(s):**

Conservation Targets, species recovery of:

Saint Lucia racer (EN, proposed CR)

White-breasted thrasher (EN, may be uplisted to CR in 2015)

Saint Lucia black finch (EN)

Saint Lucia iguana (Iguana cf iguana; status not resolved; at a national level, CR)

Saint Lucia whiptail lizard (VU)

Saint Lucia wren (LC, but if the sp is split - as some argue it should be - this could change; nationally CR)

**Contact(s):** Matthew Morton, Durrell Wildlife Conservation Trust, mmorton@fastmail.fm

## *São Tomé and Príncipe*

### **QUESTIONNAIRES**

**Name of respondent:** Mr. José de Deus Lima de Menezes    **Institution:** Ministry of Agriculture, Fishery and Rural Development    **Email:** jodeumenezes15817@hotmail.com; zemenezeslima1@yahoo.com

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Because up to now we do not have any programme or plan to know numbers and locations of invasive species and how they got in. We need to start a study to catalogue all possible existing invasive species, either plants or animal.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:**

- 1-financial support
- 2-Training (capacity-building)
- 3-equipment
- 4-Probably legislation
- 5-Needed to produce a strategy

**3a. National policies related to IAS:** No

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Project not yet identified.

**7. Information sought from the workshop:**

First the representatives are looking for support (financial and material) to start a project; Than they may need a regional, or subregional international technical support to set up and to start the elaboration of a strategy for the project.

**8. Objectives for participating in the Montreal workshop:**

To exchange information on invasive alien species among Parties, mainly island countries and countries with islands look like situation and problems regarding to the subject;  
To have an opportunity to know how to get the mobilization resource facility from external donors using the LifeWeb approach;  
To have an opportunity to identify projects targeting invasive alien species and guide them to formulate suitable project proposals to be funded from the GEF-6 STAR and its Program 4.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP.

Hutton (1994) identifies the following:

Commensal species

Ship or black rat, Norway or brown rat, House mouse (*Rattus rattus*, *R. norvegicus*, *Mus musculus*)

Naturalized species

Mona monkey (*Cercopithecus mona*), African civet (*Civettictis civetta*), weasel (*Mustela nivalis*)

Domestic/feral species

Pig, Goat, Horse, Donkey, Cattle, Sheep, Cat, Dog (*Sus domestic*, *Capra hircus*, *Equus caballus*, *E. asinus*, *Bos taurus*, *Ovis aries*, *Felis catus*, *Canis familiaris*)

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways are not identified in the NBSAP. Invasive alien species have only recently become a concern for the country. So far, the country had never been concerned about this issue because the influx of people from abroad into the country was very low. Recently, the country has defined a strategy that involves the development of tourism. In this context, this question is becoming part of the concerns of the country in terms of biodiversity conservation, insofar as the country has a relatively high rate of endemism. For this reason, it is expected that the issue be discussed during the next update of the Action and the National Biodiversity Strategy Plan.

**Work with the NPPO and others to conduct risk analysis:** This has not been undertaken. As mentioned above IAS is a very recent concern at the country level. But experts who are updating the strategy will take this concern into account so it will probably feature in the updated National Biodiversity Strategy and Action Plan.

It is expected that risk analyses will be conducted from this year, given the concern of the country in relation to a massive influx of tourists, especially through eco-tourism.

**IAS eradication and related plans:** São Tomé and Príncipe had conceived a project to protect the country against invasive alien species about three years ago. They worked with European partners at the times who were interested in the project. However, the project has not funded by the EU - the prospective donors at the time.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** None yet implemented or planned.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** National report <<http://www.cbd.int/doc/world/st/st-nr-04-en.pdf>> NBSAP  
<<http://www.cbd.int/doc/world/kn/kn-nbsap-01-p1-en.pdf>> Introduced mammals in São Tomé and Príncipe: possible threats to biodiversity. John Dutton in Biodiversity & Conservation (1994)

## *Seychelles*

### **QUESTIONNAIRES**

**Name of respondents:** Dr Frauke Fleischer-Dogley; Dr Nancy Bunbury Foundation      **Institution:** Seychelles Islands  
**Email:** ceo@sif.sc & Mr Will Dogley, Seychelles Agricultural Agency (seypro@seychelles.net)

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Seychelles has mobilized financial resources to implement biosecurity measures at the national level which included a legal review and development of an Animal and Plant Biosecurity Act. In addition the institutional set up to control/eradicate IAS was reviewed and the necessary infrastructure provided to implement IAS control measures. Several biodiversity and IAS eradication programmes have been successfully completed at site and island level. A National Invasive Species committee was created to advance IAS management in Seychelles and a National Biosecurity Committee will be created under the Animal and Plant Biosecurity Act recently enacted.

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** GEF resources have been mobilized which have substantially contributed for Seychelles to meet its obligations. However, IAS being THE major threat to biodiversity in Seychelles means that more resources are required to engage in effective eradication/control/prevention of IAS. The main barrier to resource mobilization is access to funding mechanisms other than GEF.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:**

- Drafting of legislation
- Establishment of institutional framework
- Investment in infrastructure
- Building of local capacity
- Implementation of IAS control/eradications at site level

**5. Project development and implementation:**

Completed projects  
Current funded projects / projects being implemented

**6a. Intended project title:** IAS Management

**6b. Objective(s):** Strengthening of national framework to implement IAS management and resource mobilization for eradication programmes

**6d. National or regional project:** National

**7. Information sought from the workshop:**

We are seeking information on funding mechanisms available for submission of IAS projects of different size and importance and training to submit attractive project proposals.

**8. Objectives for participating in the Montreal workshop:**

Sharing of experience in mobilizing financial resources, building institutional capacity in project development

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are identified to some extent but not fully in the NBSAP. They will be further developed in the next update.

Introduced *Albizia* (*Paraserianthes falcataria*), Cinnamon (*Cinnamomum verum*) and Hard alstonia (*Alstonia macrophylla*); the most abundant birds – myna (*Acridotheres tristis*), zebra dove (*Geopelia striata*) and the Madagascar fody (*Foudia madagascariensis*) are invasive and most of the top predators, i.e. rats (*Rattus* spp.), cats (*Felis catus*), dogs (*Canis domesticus*) tenrecs (*Tenrec ecaudatus*) and barn owls (*Tyto alba*).

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement; pet and aquarium trade.

Priority pathways are identified to some extent but not fully in the NBSAP. They will be further developed in the next update.

**Work with the NPPO and others to conduct risk analysis:** Yes, in compliance with International Plant Protection Convention, the World Trade Organization's SPS Agreement for the Application of Sanitary and Phytosanitary Measures as well as national legislation (Biosecurity Act 2014 and Environmental laws and regulations).

**Contact details of PRA experts:**

•Will Dogley, Manager, Plant and Animal Health Services, Seychelles Agricultural Agency, P.O.Box 166 Victoria Mahe, Seychelles. Tel 248-2722606/4611479. E-mail: seypro@seychelles.net

•Randy Stravens, Principal Officer, National Plant Protection Office (NPPO), Seychelles Agricultural Agency, P.O.Box 166 Victoria Mahe, Seychelles. Tel 248-2724285/4611489. E-mail: rs25goal@hotmail.com

**IAS eradication and related plans:** There is an eradication plan but it does not cover all major species of significance. Species to be considered for eradication especially on smaller islands

- Clidemia hirta* (Koster's curse)
- Eichhornia crassipes* (Water hyacinth)
- Pistia stratiotes* (Water Lettuce)
- Aleurodicus dispersus* (Spiralling white fly)
- Anoplolepis gracilipes* (Crazy ant)
- Bactrocera cucurbitae* (Melon fruit fly)
- Ceratitis capitata* (Mediterranean fruit fly)
- Trachemys scripta elegans* (Red-eared slider terrapin)
- Psittacula krameri* (Ring-necked parakeet)
- Tyto Alba* (Barn Owl)
- Capra hircus* (Feral goat)
- Rattus norvegicus* (Norway or Brown rat)
- Rattus rattus* (Black rat)

Note: some of the species above are found only on a few islands of the Seychelles (e.g. Ring-necked parakeet, Red-eared slider terrapin); others (e.g. rats, goats) have been successfully eradicated on some islands).

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently relevant projects are being implemented such as the UNDP- GEF: Mainstreaming Prevention and Control Measures for Invasive Alien Species into Trade, Transport And Travel Across The Production Landscape ("UNDP Biosecurity Project") and the European Union: Mainstreaming of IAS management in Seychelles' UNESCO World Heritage Sites. But new funding will be required if Target 9 is to be achieved.

Seychelles NBSAP already integrates the country's obligations under the Convention on Biological Diversity (CBD) into its national development planning, aligning the results of the process to the global guidance contained in the CBD's Strategic Plan for 2011-2020 and Aichi targets. At the national level, the NBSAP is also aligned with Seychelles Sustainable Development Strategy 2012-2020 in an effort to mainstream biodiversity issues into the different sectors of Seychelles economy. The Government is currently preparing a Medium Term National

Development Strategy (MTNDS) (2013-2017), which aims to provide a strategic framework for sustainable development and will integrate components of the SIDS. Addressing specifically Aichi Biodiversity Target 9 on Invasive Alien Species, the Government recognizes alien species as a primary threat to Seychelles' biodiversity and the economic development. The government is therefore placing considerable emphasis on, and will be participating in, the development of the Global Invasive Species Programme as the country shares many IAS species with other small tropical island States. In recent years collaborative programmes have been undertaken to eradicate various species (including invasive plants, rodents, reptiles, birds) and there are ongoing control and mitigation programmes for several other animal and plant species. The main project objectives are to (i) increase the capacities to prevent and control the introduction and spread of Invasive Alien Species through Trade, Travel and Transport across the Production landscape, (ii) continue and strengthen eradication programmes for key IAS and (iii) enforcement of the national Animal and Plant Biosecurity Act, 2014 and various Environment-related laws and regulations.

**Eligible for STDF Project Preparation Grant:** UMIC (at least 60% co-financing)

**Source information:** Fourth National report <<http://www.cbd.int/doc/world/sc/sc-nr-04-en.pdf>>

## **PROJECTS**

**Project Identifier:** GEF\_ID 3254

**Project title:** Mainstreaming Prevention and Control Measures for Invasive Alien Species into Trade, Transport and Travel across the Production Landscape (or "Biosecurity Project")

**Duration:** 2008-2014

### **Objective(s):**

**Objective:** Increased capacities to prevent and control the introduction and spread of Invasive Alien Species through Trade, Travel and Transport across the Production landscape.

### **Outcomes:**

1. Enabling conditions for effective control of the introduction and spread of IAS in place.
2. Strengthened Institutional set-up to prevent and control the introduction of IAS.
3. Strengthened Institutional capacity to prevent and control the introduction and spread of IAS.

**Follow up:** New Biosecurity legislation, Biosecurity Committee to be appointed by Government, re-organization of plant and animal health sections to form the Plant and Animal Health Services Directorate that will enforce the Biosecurity Act in collaboration with all relevant stakeholders

**Donor(s):** UNDP/GEF

**Grant amount (in \$US):** \$2,000,000

**Co-financing amount (in \$US):** \$4,605,000

**Contact(s):** Suma, Sidney (Biosecurity Adviser, GOS-UNDP-GEF Biosecurity Project, Republic of Seychelles): [sidney.suma@pcusey.sc](mailto:sidney.suma@pcusey.sc)

**Links to supporting documents, URLs, etc.:** [http://www.thegef.org/gef/project\\_detail?projID=3254](http://www.thegef.org/gef/project_detail?projID=3254)

**Project Identifier:** GEF\_ID 5485

**Project title:** Seychelles' Protected Areas Finance Project

**Duration:** 2013-2018

### **Objective(s):**



**Objective:** Demonstrate effective models for protected area management by non-governmental organizations in the Seychelles, and enable their inclusion into a strengthened protected area system.

**Component 1:** Strengthened management framework for protected areas in Seychelles

**Component 2:** Expanded and strengthened management of protected areas in Seychelles

**Donor(s):** UNDP/GEF

**Executing Agency:** Ministry of Environment and Natural Resources (MENR)

**Partners:**

Ministry of Finance

Seychelles National Park Authority (SNPA)

Seychelles Fishing Authority (SFA)

Seychelles Islands Foundation (SIF)

Island Conservation Society (ICS)

Nature Seychelles (NS)

**Grant amount (in \$US):** \$2,776,900

**Co-financing amount (in \$US):** \$12,050,000

**Links to supporting documents, URLs, etc.:** [http://www.thegef.org/gef/project\\_detail?projID=5485](http://www.thegef.org/gef/project_detail?projID=5485)

**Project Identifier:** GEF\_ID 3925

**Project title:** Strengthening Seychelles' Protected Area System through NGO Management Modalities

**Duration:** 2011-2015

**Objective(s):**

**Objective:** Demonstrate effective models for protected area management by non-governmental organizations in the Seychelles, and enable their inclusion into a strengthened national protected areas system.

**Component 1:** Strengthened Management Framework for Protected Areas in Seychelles

**Component 2:** Expanded and Strengthened Protected Areas Management in Seychelles' Inner Islands

**Component 3:** Expanded and Strengthened Protected Areas Management in Seychelles' Outer Islands

**Donor(s):** UNDP/GEF

**Executing Agency:** Ministry of Home Affairs, Environment and Transport-Department of Environment (DOE)

**Partners:**

Nature Seychelles

Marine Conservation Society of Seychelles

Seychelles Islands Foundation

Green Islands Foundation

Island Conservation Society

**Grant amount**

**(in \$US):**

\$2,100,000

**Co-financing amount**

**(in \$US):**

\$3,527,000

**Links to supporting documents, URLs, etc.:** [http://www.thegef.org/gef/project\\_detail?projID=3925](http://www.thegef.org/gef/project_detail?projID=3925)

**Project title:** Mainstreaming of IAS management in Seychelles' UNESCO World Heritage Sites

**Duration:** 2011-2015

**Objective(s):** Eradication of 3 bird species, 1 plant species, control of IAS plant species, eradication feasibility study of 2 mammals, building of capacity, integration of IAS management in the Seychelles' UNESCO World Heritage Sites, raising public awareness, information sharing

**Further relevant information:** IAS management is to be integrated in the overall management of the sites, project is implemented by SIF and due to be completed in January 2015

## *Singapore*

### **QUESTIONNAIRES**

**Name of respondent:** Jeremy Woon      **Institution:** National Parks Board, Singapore

**Email:** Jeremy\_oon@nparks.gov.sg

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** Singapore has been monitoring a number of alien species of concern for establishment in sensitive habitats. As the moment, the species have yet to demonstrate significant incursions into these key habitats. Some IAS have established themselves in urban or artificial habitats of lesser importance, or on the outskirts of key habitats.

**2a. Available resources:** Adequate

**2c. Gaps or barriers to resource mobilization:** Singapore has adequate resources should this issue become a higher priority for management and conservation of our key sites.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Section completed

**3e. Details of Actions:** Singapore's National Biodiversity Strategy and Action Plan incorporates a strategy on Safeguarding the island's Biodiversity, under which issues related to IAS can be captured.

**5. Project development and implementation:** Discussion on potential projects under way

**6a. Intended project title:** Project not yet identified.

**6f. Other relevant information:** The participants are most interested to learn of research, case-studies and best practices in the Southeast Asian region, since there are some similarities in key invasive species that affect countries here. They would like to explore if other countries face similar situations to Singapore where the IAS have yet to penetrate key habitats, and what steps they are taking to prevent establishment. They would also be keen to explore what policies or guidelines are in place elsewhere that might be useful locally.

**7. Information sought from the workshop:** They hope to identify countries that have similar circumstances to Singapore and have a better understanding of the existing policies and guidelines that are in place in these countries with the eventual goal of developing our own policies or guidelines. They would also like to improve their current monitoring mechanisms to be better able to identify if a species is presenting a threat before the damage becomes significant.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP. Internally NParks monitor key IAS and their pathways and an invasive species list has been produced.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Ornamental fish trade, marine pathways- hull fouling and ballast water.

Priority pathways are not identified in the NBSAP.

Singapore's NBSAP was launched in September 2009. Currently they are working on the NBSAP vis-à-vis the Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets. The country's priority species and pathways are not reflected in September 2009's NBSAP.

**Work with the NPPO and others to conduct risk analysis:** The National Parks Board, Singapore have contacted their NPPO, the Agrifood and Veterinary Authority (AVA) to understand their risk assessment framework. Singapore has in place phytosanitary measures (for example, control of plants (plant importation), rules and control of plants (phytosanitary certification) Rules (exports) but not specifically for IAS

**Contact details of PRA experts:**

Ms Jenny Yap Mei Lai  
Director of Plant Health Laboratory Department  
AVA

**IAS eradication and related plans:** Singapore does not have a national plan on IAS. However, ad hoc removals of selected IAS such as *Cecropia pachystachya*, *Dioscorea sansibarensis* and *Clidemia hirta* are carried out in Singapore's nature reserves as part of their management of IAS.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently Singapore does not have any funded projects to achieve Aichi Biodiversity Target 9 but The National Parks Board is consulting with relevant agencies to develop national targets for IAS as part of their review of Singapore's NBSAP.

**Eligible for STDF Project Preparation Grant:** Not eligible

**Source information:** Fourth National report <<http://www.cbd.int/doc/world/sg/sg-nr-04-en.pdf>>  
List of invasive species <<http://www.nparks.gov.sg/cms/docs/redbook/List-of-alien-species-in-Singapore-2009May.pdf>>

## *Solomon Islands*

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Cane toad (*Bufo marinus*), feral pigs, cats, *Rattus* spp. and dogs. Invasive plants such as *Merremia peltata*, paper mulberry (*Broussonetia papyrifera*), mimosa weed (*Mimosa* sp.), and water hyacinth (*Eichhornia crassipes*), tilapia, and giant African snail.

Priority species are not identified in the NBSAP although the revised NBSAP did identify invasive alien species as priority 9 for further action. It is part of the action plans for detail studies to be conducted on potential IAS pathways and to monitor the pathways.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority pathways are not identified in the NBSAP. See above for more details.

**Work with the NPPO and others to conduct risk analysis:** The revised NBSAP and its action plans require funding support for their implementation. The Ministry of Agriculture and Livestock through its Quarantine sections has conducted some risk assessment on specific pests and continue to do this, but inadequate funding support always hinders the effectiveness of this activity.

The Quarantine section of the Ministry of Agriculture and Livestock has been and is heavily involved with the application of phytosanitary measures on all imports into the country. All plants, and plant product imported into SI must have two documents - 1. Import permit-This is issue after an application is done, risk assessments is undertaken and the level of risk pose by the plant of interest is minimal or manageable then fees are paid, then permits issued.

Every plant import has a condition attached to it whereby exporting countries must meet (e.g. treatment). 2. Importing or Exporting country must always issue a phytosanitary certificate. This is standard procedure.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** None identified. The revised NBSAP will be the vehicle to drive the proposals as new resources are sought to implement the action plan for invasive alien species in the country.

**IAS eradication and related plans:** Specific eradication plans targeting particular invasive species are in place, for example, for African giant snail and other crop pests. Effective implementation of the plans requires resources including money and technical expertise.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** Fourth National Report to the CBD 2014 <<http://www.cbd.int/doc/world/sb/sb-nr-04-en.pdf>>; Fifth National Report to the CBD 2014 <<http://www.cbd.int/doc/world/sb/sb-nr-05-en.pdf>>

### **PROJECTS**

**Project Identifier:** GEF\_ID 161

**Project title:** National Biodiversity Strategies, Action Plan, and the First National Report to the Convention on Biological Diversity

**Duration:** 1996-2005

**Objective(s):** To assist the country with the ability to formulate and manage sectoral and cross-sectoral programmes to meet the objectives of the Convention on Biological Diversity through a cost effective approach within the context of national sustainable development efforts, and to report to the Convention on progress achieved

in implementing agreed commitments. The activities stipulated in this project thus focus specifically on implementing Article 6 of the CBD and on the preparation of the first national report pursuant to Article 26 of the CBD, which were highlighted as programme priorities by the second meeting of the Conference of the Parties in its decisions II/7 and II/17.

**Major Achievement(s):** Responsible government authorities have improved their efforts in strengthening their capacities to address potential alien invasive species. These include quarantine and custom departments. The Agriculture

Quarantine Act has been the main piece of legislation governing quarantine issues. The Customs Act is also the other major Act. The EIA process under the Environment Act is an avenue that allows consideration of invasive species issues such as providing mitigation measures on control of potential invasive alien species.

Solomon Islands has participated in invasive species training and networking programmes under regional institutions and is supporting regional initiatives addressing invasive alien species. It is also party to the international regimes governing related issues such as in plant protection and continues its efforts to implement its international obligations.

**Donor(s):** UNEP/GEF

**Executing Agency:** Ministry of Forests, Environment, and Conservation (MFEC)

**Grant amount (in \$US):** \$123,000

**Links to supporting documents, URLs, etc.:**

[http://www.thegef.org/gef/project\\_detail?projID=164](http://www.thegef.org/gef/project_detail?projID=164)

<http://www.cbd.int/doc/world/sb/sb-nr-04-en.pdf>

**Further relevant information:** 368 invasive and potential invasive species for Solomon Islands. These include alien and native invasive species

*Sri Lanka*

**QUESTIONNAIRES**

**Name of respondent:** Mr Sujith S Ratnayake  
Environment and Renewable Energy, Sri Lanka

**Institution:** Biodiversity Secretariat, Ministry of  
**Email:** champikakariyawasam@yahoo.com

**1a. Priority given to CBD 8(h):** High

**1a. Reason for response:** Both the National Environmental Action Plan and the NBSAP have identified IAS is high priority issue

**2a. Available resources:** Limiting

**2c. Gaps or barriers to resource mobilization:** The issue of IAS is not fully mainstreamed to national planning sector. For example, it is less practiced in EIA processes. There has been inadequate capacity-building in the focus stakeholders such as customs, quarantine, urban development, and PA managers. Addressing knowledge and information gap is critical for effective resource mobilization.

**3a. National policies related to IAS:**

Yes – as part of a national biodiversity strategy

Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** No. The National IAS policy and strategy drafted recently it is in the process of getting public comments before it is finalised. In addition in the NBSAP includes a separate chapter on IAS and has identified prioritized actions to be implemented.

**5. Project development and implementation:** Current funded projects / projects being implemented

**6a. Intended project title:** Mapping and Monitoring IAS through a participatory decision support system.

**6b. Objective(s):** Development of web-based participatory decision support system for monitoring and managing IAS in the identified pilot sites.

**6c. Targeted donor(s):** GEF

**6d. National or regional project:** National

**6f. Other relevant information:** This project intends to develop as a sub-project under a large GEF project.

**7. Information sought from the workshop:**

At present Sri Lanka is in the process of updating its NBSAP according to the new strategic plan of the CBD. The coming NBSAP is developed mainly focusing on Aichi Targets adopted at the tenth meeting of the Conference of the Parties. Aichi Target 10 is one of the identified target in the NBSAP revision process. Therefore we hope to obtain information on development of strategic plans to control IAS according to Target 09. Also to get experiences how other countries are approaching Target 09 in relation to their NBSAP revision process.

1. Indicator development
2. Quarantine process
3. Capacity-building needs
4. Resource mobilization
5. Impact on Ecosystem services

**8. Objectives for participating in the Montreal workshop:**

- To understand processes for IAS mapping and monitoring, early detection and predictions
- How to obtain information from the field using a participatory approach, What are the specific tools and methods
- To gain skills and hands on experiences identification systems, tools and methods
- How to assess risks against endemic species and the effects on economic sectors such as agriculture

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** The NBSAP updating process is going on still not completed. In the NBSAP updating process there will be a separate chapter on IAS considering how to achieve Aichi Target 09. It includes strategic plan for IAS management

Sri Lanka has suffered major environmental and economic problems from previous invasions such as the ‘water hyacinth’ (*Eichhornia crassipes*) which commenced with one plant brought in 1904 from Hong Kong for ornamental purposes. The agricultural sector has already had several problems due to the introduction of alien invasive species that have reached pest proportions in Sri Lanka, such as the coconut leafminer *Promecotheca cumingii*. Other major problems were felt from non-intentional introduction of *Salvinia* (*Salvinia molesta*) in the 1940s. Although both were subjected successfully to biological control measures, the financial loss by for control measures and loss of productivity was considerable. Parthenium weed (*Parthenium hysterophorus*) was observed for the first time in Sri Lanka in 1999, introduced as contaminants in imported condiments and food stuff. Although it posed a threat to biodiversity, it too was controlled with timely and effective action by the Department of Agriculture using the control agent *Zygogramma bicolorata*. The latest threat to agriculture is the papaya mealy bug *Paracoccus marginatus* that is also spreading to other horticultural crops and even native flora. This is proposed to be controlled with a biological control agent from Puerto Rico.

The alien invasive Clown Knife Fish (*Chitala ornata*) was introduced to Sri Lanka as an ornamental aquarium fish, with breeding populations in streams and reservoirs in the Wet Zone that harbour most of the threatened endemic freshwater fish. The population reductions of many species of endemic fish have are suspected subsequent to the introduction and spread of *C. ornata* (Gunawardane, 2002). There are several other species of alien invasives, such as the plants *Annona glabra*, *Dillenia suffruticosa* and *Eichhornia crassipes* that have resulted in degradation of the remaining marshy habitats of the threatened blind eels (*Monopterus* spp.) in the western region of Sri Lanka. Likewise, Wijesinghe (2001) had recorded negative abundance relationships between endemic (i.e. *Srilankamys ohiensis*) and non-native (i.e., *Rattus rattus*) rat species in study sites within Sinharaja rainforest suggesting that these species are competing. Large herds of feral domestic buffalo (*Bubalus bubalis*) occur in many protected areas in Sri Lanka (Bambaradeniya, 2002), where it has hybridized with the threatened wild water buffalo (*Bubalus arnee*) resulting in the local extinction of genetically pure populations of the latter species in locations such as the Wilpattu National Park (Deraniyagala, 1964).

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Intentional introduction- ornamental fish/ aquarium trade; aquaculture. See above re. the NBSAP.

**Work with the NPPO and others to conduct risk analysis:** The Ministry of Environment directly contact with relevant stakeholders and academia on process of risk assessments. Risk assessment protocols are developed.

In addition to NBSAP updating, the National IAS Act has been drafted and submitted to the Attorney General's Office of Sri Lanka for their comments. So the NBSAP updating process is focusing on mainstreaming existing national legislation related to IAS such as the Plant Protection Act authorized by Department of Agriculture, the Customs Act Authorized by the Department of Customs and the new drafted act on IAS.

**IAS eradication and related plans:** The National IAS Policy and Strategy has been drafted and submitted for public comments. When the GEF project was developed during 2010 a number of plant and animal species were identified as most prioritized IAS species in Sri Lanka for future actions.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently Sri Lanka is implementing the GEF project titled Strengthening Capacity to Control the Introduction of Spread of Invasive Alien Species in Sri Lanka. The project was developed before the Aichi Target Adopted in Nagoya in 2010. So project it was not developed 100% focus on achieve the Target 09. However certain obligations in Target 09 are being covered by the project. Further projects have not been developed.



**Eligible for STDF Project Preparation Grant:** LMIC (at least 20% co-financing)

**Source information:** Fourth National Report <http://www.cbd.int/doc/world/lk/lk-nr-04-en.pdf>

## **PROJECTS**

**Project title:** Strengthening Capacity to control the introduction of spread of Invasive Alien Species in Sri Lanka

**Duration:** 2012-2017

**Objective(s):**

**Major Achievement(s):**

**Follow up:**

The project will support the development of an enabling policy and legal environment for effective IAS control. It will build capacities of the National Focal Point for IAS and other stakeholders, especially those involved in enforcement and of local communities, to encourage their support for IAS control activities. Information related to IAS will be assembled and managed through a national database that will be made widely accessible through the Internet.

## *Timor-Leste*

### **QUESTIONNAIRES**

**Name of respondent:** Americo Alves Brito **Institution:** Department of Plant Protection, Ministry Of Agriculture and Fisheries, Democratic Republic of Timor-Leste **Email:** bamerico@hotmail.com

**1a. Priority given to CBD 8(h):** Low

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** Timor-Leste is still lacking important information especially on how to minimize the spread of invasive alien species, lack of Internet facilities, and all related resources.

**3a. National policies related to IAS:** No

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** None

**5. Project development and implementation:** Little or no action

**6a. Intended project title:** Control of bellyache bush (*Jatropha gossypifolia*)

**6b. Objective(s):** To minimize the distribution to agricultural areas

**6c. Targeted donor(s):** ACIAR and other donors (not exactly sure)

**6d. National or regional project:** Regional

**6e. Other countries involved:** Indonesia and Australia

**7. Information sought from the workshop:** Because of Timor-Leste is a small state assistance on managing of invasive alien species is necessary, and assistance on development of capacity of human resources also one of the issues that needs to be considered.

**8. Objectives for participating in the Montreal workshop:** To network with members of organizations, especially those in countries which have achieved successful outcomes in the management of invasive alien species and to get experiences on the problems of controlling alien species.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Siam weed (*Chromolaena odorata*) and bellyache bush (*Jatropha gossypifolia*) invades disturbed and degraded ecosystems and constitute a fire hazard. Other weeds of concern include Lantana (*Lantana camara*) and mimosa (*Mimosa diplotricha*). Inland freshwater fisheries is dominated by carp (80%) and tilapias (20%) introduced in the 1980s and 90s- impacts on native freshwater species unknown. It was not clear whether priority species are identified in the updated NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Ornamental/ nursery trade, intentional introduction of alien plant species. Aquaculture/ mariculture as introductory pathway followed by escape into the wild. It was not clear whether priority pathways are identified in the updated NBSAP.

**Work with the NPPO to conduct risk analysis:** Risk analysis appears to be poorly developed in Timor-Leste with basic information lacking.

**IAS eradication and related plans:** Plans for the following species have been produced:

- Siam Weed (*Chromolaena odorata*)

- Coconut scale insect (*Aspidiotus destructor*)
- Papaya mealybug

However, it is not clear what the objectives of these plans are.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** It was stated that there are funded projects and the following were listed as donors: AusAID, ACIAR, USAID, and the East Timor government. However, the nature of the projects was not outlined. There are no proposals being currently developed to achieve the Aichi Biodiversity Target 9.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** (Terrestrial) National Biodiversity Strategy and Action Plan (2012)  
<<https://www.cbd.int/doc/world/tl/tl-nbsap-01-en.pdf>>; Freshwater-

## **PROJECTS**

**Project title:** Biological control of Siam weed (*Chromolaena odorata*) with the parasitoid *Cecidochares connexa*.

**Duration:** 3 years

**Follow up:** Partial observation of spreading the use of gall fly to control spread of *Chromolaena* in some release site, and continue to distributed the gall fly in some areas that has not been released

**Donor(s):** ACIAR

**Project title:** Biological control of Coconut scale insect (*Aspidiotus destructor*)

**Duration:**

3 years

**Follow up:** Release of some predators *Chilocorus politus* to control coconut scale insect in some areas, and continues observation coconut scale insect distribution of the control

**Donor(s):** USAID, CTZ

**Project title:** Control of Golden Apple Snail (*Pomacea canaliculata*)

**Objective(s):** To obtain correct control method and minimizing damage at agriculture crops

**Further relevant information:** Follow-up work will be an Intended regional project with Indonesia

**Project title:** Control of Cane Toad (*Bufo marinus*)

**Objective(s):** Reduce its population density by proper control measure

**Project title:** Biological Control of Mimosa (*Mimosa pigra*)

**Objective(s):** To obtain correct control method and minimizing damage at agriculture crops

**Further relevant information:** Mimosa is one of the weed species that have caused to agriculture land in some district of Timor-Leste, so control measure should be taken.

## *Tonga*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Ms. Atelaite Lupe Matoto      **Position:** Deputy CEO for Environment  
**Institution:** Ministry of Lands, Environment, Climate Change & Natural Resources, Tonga  
**Email:** lupe.matoto@gmail.com

**1a. Priority given to CBD 8(h):** Medium.

**1a. Reason for response:** Lack of knowledge and awareness of how IAS can impact on the livelihoods of the people, the environment and economy; lack of capacity – human and financial; coordination across sectors; border security and enforcement; enabling policy and legal frameworks; community engagement. These are some of the challenges that Tonga faces in trying to implement CBD Article 8(h) and many others. However, they are fortunate to be implementing the GEF PAS-IAS Project through UNEP/GEF and executed through SPREP which it is aimed at implementing the CBD Article 8(h), and hope it will strengthen the knowledge and awareness on IAS to support and increase the national prioritization for invasive species-related work.

**2a. Available resources:** Severely limiting.

**2c. Gaps or barriers to resource mobilization:** Fully dependent on external funding for meeting the country's obligations.

**3a. National policies related to IAS:** Yes – as part of a national biodiversity strategy.

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes.

#### **3e. Details of Actions:**

As part of implementing the GEF-PAS Invasive species project:

- Established a Project Management Unit
- Established a Technical Working Group to implement invasive species programmes, strengthening collaboration with key stakeholders
- Draft Biosecurity Bill to improve biosecurity systems
- Draft National Invasive Strategy and Action Plan
- Build public support through awareness programmes and materials
- Collect baseline information in a number of areas

**5. Project development and implementation:** Current funded projects / projects being implemented

**6a. Intended project title:** Resource mobilization to support the implementation of the National Invasive Species Strategy and Action Plan 2013 - 2020

#### **6b. Objective(s):**

- Generate support by raising awareness of the negative impacts of invasive species;
- Build capacity as Invasive species management is a relatively new programme area for Tonga and we need to develop the institutions, skills, infrastructure, technical support, information management systems, networks and exchanges required;
- Developing legislation, policy and protocols;
- Establish baselines and monitoring;
- Prioritize invasive species for management;
- Research on priorities;
- Establish biosecurity measures;
- Manage established invasive species
- Restore threatened species and ecosystems

#### **6c. Targeted donor(s):**

UNEP/GEF

**6d. National or regional project:** Regional

**6e. Other countries involved:**

Cook Islands  
Federated States of Micronesia  
Marshall Islands  
Kiribati  
Niue  
Palau  
Papua New Guinea  
RMI  
Samoa  
Tonga  
Vanuatu

**7. Information sought from the workshop:**

- Resource mobilization for IAS
- GEF-6; full size project proposals: how to move forward on a project proposal
- Capacity-building: knowledge and awareness; survey, monitoring and evaluation; appropriate tools
- Funding for enabling activities: baseline information

**8. Objectives for participating in the Montreal workshop:**

- Increased knowledge and awareness on IAS
- How to access funds to implement enabling activities
- Process for applying to GEF-6 with technical assistance in moving a project proposal forward.

**PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Introduced *Casuarina equisetifolia* (introduced most probably when the Polynesians arrived) and several other alien and invasive plants both shrubs and lianas introduced by the European settlers are dominating some ecosystems. *Clidemia hirta*, *Lantana camara*, *Psidium guajava* and Epipremnum vine (*Epipremnum aureum*) are examples. Introduced *Paspalum vaginatum* is the dominant grass cover in the inland margins of the swamp. Giant sensitive plant (*Mimosa diplotricha*) is new invasive weed and is currently localised to the main island in the Vava'u group. The herbivore psyllid *Heteropsylla spinulosa* (Homoptera: Psyllidae) was introduced from Fiji as part of an integrated management strategy for controlling the invasive weed. A recent terrestrial fauna survey of Vava'u coordinated by MECC will provide updated information on the current status of invasive terrestrial species.

*Bidens alba* continues to spread in very dense swaths across the main island in Vava'u.

Giant African Snail *Achatina fulica* was intercepted in the Ma'ufanga area on two separate occasions in 2013 by Quarantine officers.

The potential for invasion through ships' water ballast is real in Tonga, due to the lack of a proper facility and lack of a control process in place. Marine and Ports need to collaborate with Division of Fisheries in designing policies to alleviate this problem. Also attention should be drawn to marine organisms on ship's hulls which could be another source of invasive species. A proper facility would be very expensive but other temporary measures like sampling of water ballast for laboratory testing could be ideal for the time being.

Priority species are identified in the NBSAP (2006).

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Inter-island movement. Priority pathways are identified in the NBSAP. The NBSAP will be revised in the coming months, and is due to be completed by December 2014.

**Work with the NPPO to conduct risk analysis:** The Ministry of Agriculture & Forestry and Fisheries (MAFFF) is the competent authority for biosecurity, and who are in contact with the National Plant Protection Organizations (NPPOs). A local expert within MAFFF is member of the Invasive species Technical Working Group, coordinated by competent authority for invasive species, who are responsible for invasive species issues and the implementation of the NISSAP. The NFP for NPPOs lies with MAFFF. The updated NBSAP will contain the measures to be in place.

**IAS eradication and related plans:** The Pacific rats (*rattus exulans*) are expected to be eradicated in the last quarter of 2014 on one of the islands in the Vava'u archipelago, Tonga. Rationale for that project is stated under National Invasive Species Strategy and Action Plan for Tonga (NISSAP) that was developed last quarter of 2013 and now in the endorsement process. Four pilot sites were proposed to be conducted, with surveys to see of the possibility for eradication in terms of invasive species.

One of these sites has completed its survey and the results recommended eradicating the Pacific rats from that site. Operational Plan to eradicate Pacific rats is now being developed, and will be completed by the third quarter of 2014.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** UNEP/GEF (under the UNEP/GEF Project: Prevention, control and management of invasive alien species in the Pacific Islands executed by SPREP and the Environment Division, MLECCNR (see below for more details).

Tonga is developing proposals to achieve Aichi Biodiversity Target 9 on Invasive Alien Species as outlined in its NISSAP.

**Eligible for STDF Project Preparation Grant:** LMIC (at least 20% co-financing)

**Source information:** NBSAP 2014- <<http://www.cbd.int/doc/world/to/to-nr-05-en.pdf>>

## *Trinidad and Tobago*

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.)** Trinidad and Tobago is a signatory to different trade agreements throughout the region and as a result trade among CARICOM countries have increased. This increase in trade has created avenues for the introductions of alien species that can potentially become invasive. Recently, Trinidad and Tobago has experienced a surge in the frequency of introductions with respect to IAS; these pests include the Citrus Black Fly, Citrus Leaf Miner, Black Sigatoka Disease, the Red Palm Mite, Coconut Moth and the Giant African Snail, this coincides with the increase in the importation of agricultural commodities which has the greatest potential for the entry of IAS. In fact, the importation of agricultural commodities has increased by 200% over the past 15 years. This is strong evidence that Trinidad and Tobago needs implement more stringent measures to limit these harmful introductions.

Other species cited as invasive in Trinidad and Tobago are the spike-topped apple snail or mystery snail (*Pomacea bridgesii*), the red-eared slider (*Trachemys scripta elegans*), Invasive bamboo (species not specified), and Red palm mite (*Raoiella indica*).

CABI under the ISC and the MTIASIC project have assisted the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago update their national IAS lists. Through its Plantwise Knowledge bank it can generate a list of crop pest and diseases based on published information and can provide assistance to countries in doing pest risk analysis. CABI is also part of the Caribbean Plant Health Directors Forum which in effect is the regional NPPO for the Caribbean.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No information found. CABI, under the MTIASIC project working with National Executing Agencies have generated some information in this regard for the Bahamas; Dominican Republic; Jamaica; Saint Lucia and Trinidad and Tobago.

**Eligible for STDF Project Preparation Grant:** Not eligible

**Source information:** National Invasive Alien Species Strategy Trinidad and Tobago  
<http://greentnt.org/sites/default/files/documents/reports/Draft%20T&T%20NatInvasiveSpeciesStrategy.pdf>  
Fourth National Report of Trinidad and Tobago to the Convention of Biological Diversity. 2010. The Cropper Foundation. <[http://www.biodiversity.gov.tt/pdf/4th\\_National\\_report\\_CBD\\_2010\\_changes\\_inc.pdf](http://www.biodiversity.gov.tt/pdf/4th_National_report_CBD_2010_changes_inc.pdf) >

## **PROJECTS**

**Project title:** Fourth National Report of Trinidad and Tobago to the Convention of Biological Diversity

**Objective(s):** To provide an update on the status of implementation of the Convention in Trinidad and Tobago, and assesses the progress of the country in meeting the 2010 Biodiversity Target

**Major Achievement(s):** There has not been significant progress in controlling IAS

**Links to supporting documents, URLs, etc.:**  
[http://www.biodiversity.gov.tt/pdf/4th\\_National\\_report\\_CBD\\_2010\\_changes\\_inc.pdf](http://www.biodiversity.gov.tt/pdf/4th_National_report_CBD_2010_changes_inc.pdf)

## *Turks and Caicos Islands*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Mr Bryan Naqqi Manco      **Institution:** Department of Environment & Maritime Affairs, Turks & Caicos Islands      **Email:** bnaqqimanco@gmail.com

**1a. Priority given to CBD 8(h):** Low

**1a. Reason for response:** Draft legislation to ratify and implement CBD locally was shelved during UK Direct Rule and has not been restarted, despite pressure to do so. A large amount of work that has already gone into the draft legislation.

**2a. Available resources:** Severely limiting

**2c. Gaps or barriers to resource mobilization:** Government finances are severely restricted. The country is in considerable debt following a large loan during, and overspending prior to, UK Direct Rule.

**3a. National policies related to IAS:** Yes – as a separate strategy.

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** Yes

**3e. Details of Actions:** Agriculture legislation, including Plant Health Ordinances. Other policies are still not officialised as part of ratified legislation.

### **5. Project development and implementation:**

- Discussion on potential projects under way
- Completed projects
- Current funded projects / projects being implemented

**6a. Intended project title:** Project not yet identified.

### **7. Information sought from the workshop:**

To have a way to launch the effort toward the local ratification of CBD in the Turks & Caicos Islands (TCI), and to augment current projects related to invasive plant pest through better familiarisation with Aichi Target 9 and possibility of proposals.

### **8. Objectives for participating in the Montreal workshop:**

Bring attention to TCI's need to fully ratify CBD to protect its endemic and native species, as well as to become more familiar with funding opportunities available and methods for proposal writing.

### **PRIORITY SPECIES AND PATHWAYS**

#### **Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):**

Priority species are not identified in the NBSAP. The Turks & Caicos Islands Government has not yet enacted legislation that would locally/ nationally ratify CBD, and has thus not yet drafted NBSAPs.

The NBSAP for Turks & Caicos Islands has yet to be drafted. Whilst TCI is under the umbrella of the United Kingdom for CBD, there is not yet local legislation which ratifies CBD within TCI.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Priority species are not identified in the NBSAP (see above).

**Work with the NPPO and others to conduct risk analysis:** The Turks & Caicos Islands Department is very newly formed (2005) and the Territory does not have scientific or academic institutions with the capacity to act as NPPOs. However, the Department of Agriculture and Department of Environment & Maritime Affairs have collaboratively and separately, with cooperation from UK Government and NGO bodies (Food & Agriculture Research Agency and



Royal Botanic Gardens, Kew) on some level of introduced plant pest identification and cataloguing. The TCI Department of Agriculture has had difficulty in universally enforcing phytosanitary measures in the past.

**IAS eradication and related plans:** The process of risk analysis cannot be considered in the NBSAP because there is not yet an established NBSAP for TCI.

**Contact details of PRA experts:**

Chris Malumphy, FERA: chris.malumphy@fera.gsi.gov.uk

Martin Hamilton, RBG Kew: m.hamilton@kew.org

Dexter Gordon, TCI Department of Agriculture: dgordon@gov.tc

**IAS eradication and related plans:** TCI has not yet developed one national plan for the eradication of all invasive species, but management programmes are in place for some invasive species. The Caicos Pine Recovery Project seeks to eradicate the introduced pine tortoise scale insect, but total eradication is unlikely. The Department of Environment & Maritime Affairs (DEMA), along with several NGOs including TCI ReefFund is working towards eradication of lion fish (*Pterois volitans*). The Turks & Caicos National Trust is partnering with Royal Society for the Protection of Birds on cat and rat eradication on some of the small islands where the endemic TCI rock iguana lives. There is some interest from outside NGOs along with DEMA in the control of *Casuarina equisetifolia*.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** The following projects are helping TCI to meet Aichi Biodiversity Target 9:

- Pie tortoise scale: United Kingdom Government's Darwin Plus fund
- Feral cats and rats: Royal Society for the Protection of Birds
- Lionfish: TCI ReefFund

TCI is developing proposals with DEMA for work on invasive species issues. However, due to TCI's political situation, funding eligibility is difficult to find. As an Overseas Territory of the UK, TCI is ineligible for conservation funding intended for independent Small Island Developing States both due to its dependant status and the fact that as part of the UK, it is not considered a developing country. Furthermore, TCI is ineligible for most UK-based funding because it is not within the UK, and is managed through the UK's Foreign Office.

**Eligible for STDF Project Preparation Grant:** Not eligible

**PROJECTS**

**Project title:** Caicos Pine Recovery Project

**Duration:** 2008-2016

**Objective(s):**

Species recovery project to save national tree from introduced invasive scale insect.

**Donor(s):**

2008-2009: Turks & Caicos Islands Government

2010-2013: Overseas Territories Environment Programme

2014-2016: Darwin Plus

**Project title:** Lionfish control project

## *Tuvalu*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Ms. Tilia Tima      **Position:** Government Official      **Institution:** Not specified  
**Email:** tilia.tima@gmail.com; ttima@gov.tv

**1a. Priority given to CBD 8(h):** Not stated

**1a. Reason for response:** Tuvalu does not have the necessary tools [to manage IAS]. Also there is no invasive species strategy in place.

**3a. National policies related to IAS:** No

**6a. Intended project title:** Addressing Invasive Seaweed Species in Tuvalu

**6b. Objective(s):** To address/find out about the invasive seaweed and how they can solve the issue.

**6c. Targeted donor(s):**

- UNEP
- New Zealand
- USAID
- GEF
- UNDP

**6d. National or regional project:** National

**7. Information sought from the workshop:**

- To know more about invasive alien species.
- How they can tackle/adapt to these invasive species
- To broaden knowledge and understanding of alien invasive species

**8. Objectives for participating in the Montreal workshop:**

- As a biodiversity officer, to know more about invasive alien species and how to address the impacts to the country's biodiversity.
- To learn how to write proposals
- To explore ways to minimize the impacts of invasive alien species.

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** Invasive species is a major threat that Tuvalu is currently facing. Through the NBSAP Project, awareness programmes have been able to highlight the reality of invasive species and their impact as a threat to Tuvalu's biodiversity. What can be deduced from the results of workshops held under this process is that there is a real need to sensitise communities on the importance of understanding both the positive and the detrimental effects of Invasive species. While it may be premature to assume that this is entirely a case of lack of awareness. Interviews with locals reveal that new discoveries of the medicinal value of floral invasive species such as Mile-a-Minute (*Persicaria perfoliatum*) makes it difficult for locals to acknowledge any negative impacts of invasive species. Another such example is the Yellow Dots (*Wedelia trilobata*) which is a popular ornamental plant used for making traditional head garlands. Due to the limited terrestrial species diversity people are naturally inclined to introduce new plants and crops for various purposes including diet supplementation (e.g. New Zealand yam/sweet potato *Oxalis tuberosa*). Invasive plants are introduced either by women as ornamental plants or through agricultural ventures. Recently the development of the Sport Stadium on the Island of Funafuti has also introduced foreign species from Fiji from where the soil was imported.

Some priority species have been identified in the NBSAP but not in a systematic manner. Tuvalu is in the processing of revising its NBSAP which provides an opportunity to incorporate a much larger number of invasive species into the revised NBSAP.

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** No information found. See above comments on the Tuvalu NBSAP.

**Work with the NPPO and others to conduct risk analysis:** Currently there is a "contradiction" between this issue with the Department of Environment and Department of Agriculture. They are looking at ways to improve this so there is a good coordination between the two sectors.

**Contact details of PRA experts:** The Director of Agriculture is the IPPC focal point; Contact email: itaialausaveve@gmail.com.

**IAS eradication and related plans:** There is not a single plan. The invasive plan is partly in the NBSAP as well as the Agriculture policy. It needs to be reviewed and assessed.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** No major actions are being undertaken. Funding is only available to revise the NBSAPs. No projects have been developed at the moment but Tuvalu is looking for ways to improve this situation.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** National Biodiversity Strategy and Action Plan <http://www.cbd.int/doc/world/tv/tv-nbsap-01-en.pdf>

Fourth National Report to The United Nations Convention on Biological Diversity. 2009. Government of Tuvalu <<http://www.cbd.int/doc/world/tv/tv-nr-04-en.pdf>>

## *Vanuatu*

### QUESTIONNAIRE SUMMARY

**Name of respondent:** Ms. Lilly Fatdal      **Position:** GEF-PAS Invasive Alien Species Vanuatu Project Coordinator  
**Institution:** Department of Environmental Protection and Conservation (DEPC)  
**Email:** lfatdal@vanuatu.gov.vu

**1a. Priority given to CBD 8(h):** Medium

**1a. Reason for response:** There are national legislation and plans that are implemented which address this issue. For Example The DEPC is mandated by Environmental Protection and Management and Conservation Act No. 12 of 2002 Part 6 section 42 (2) (ii) allows the minister concerned to regulate the environmental effects of the proposed introduction of foreign organisms and (iii) for pest and weeds. There are certain challenges like limited resources which limits enforcement.

**2a. Available resources:** Good

**3a. National policies related to IAS:** Yes – as a separate strategy

**3d. Actions based on an IAS strategy or relevant sections of the NBSAP:** No

**3e. Details of Actions:** At the moment the Vanuatu National Invasive Strategy is at its final stage of development. Therefore activities are not yet happening.

**5. Project development and implementation:** Current funded projects / projects being implemented

**6a. Intended project title:**

1. Vanuatu's Inter Island Biosecurity Project
2. Implementation of the National Invasive Species Strategy and Action Plan

**6b. Objective(s):** To address and strengthen the present national mechanisms to control, manage and eradicate invasive species within the islands of Vanuatu.

**6c. Targeted donor(s):** GEF-6

**6d. National or regional project:** National

**7. Information sought from the workshop:**

1. Assistance in developing a project proposal for Invasive Species (proposed projects)
2. Funding opportunities

**8. Objectives for participating in the Montreal workshop:**

1. Learn of new and successful mechanisms that have been able to manage invasive species
2. Know how to adopt this successful mechanisms at the national level (Country level)
3. Format or outline a project proposal.
4. Find out about eligible funding organizations

### **PRIORITY SPECIES AND PATHWAYS**

**Priority species (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** The Vanuatu NBSAP has priority species listed.

A Global Environment Facility (GEF) funded project is currently being implemented in Vanuatu titled the "Prevention, Control and Management of Invasive Alien Species in the Pacific Islands". This is a multicountry project and includes the Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Niue, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu. Activities within the framework of this project include the conservation of priority species and ecosystems and the management of Invasive Alien Species (IAS).

The little fire ant (*Wasmannia auropunctata*) and the vine merremia (*Merremia peltata*). Crown-of-thorns starfish (*Acanthaster planci*) is a serious issue for coastal communities

**Priority pathways (with reference to NBSAPs, IUCN databases, regional strategies, etc.):** The Vanuatu NBSAP has priority species listed however the pathway management plan is not clearly stated. At the moment the National Invasive Species Strategy and Action Plan is under development, and has outlined the pathways and the pathway management plans.

Inter-island movement and related pathways are a serious issue; carrying vegetable and produced between islands can inadvertently move ants and even rats, etc.

**Work with the NPPO and others to conduct risk analysis:** Work is conducted with the NPPO - Biosecurity Vanuatu which is the government department that carries out PRA's. However, the currently updated NBSAP does not refer to phytosanitary measures.

**Contact details of PRA experts:** The contact person is Bule Sylverio, bsyverio@vanuatu.gov.vu.

**IAS eradication and related plans:** Currently there are no eradication plans in place but the current preparation [process for the NBSAP] includes some actions for the eradication of IAS.

**Funded and planned projects to achieve Aichi Biodiversity Target 9 on Invasive Alien Species:** Currently Vanuatu has no projects specifically funded for this objective but some of the activities in the GEF-PAS IAS that is currently being implemented in Vanuatu are contributing towards meeting Target 9. Vanuatu is not currently developing a specific project proposal to achieve but is looking at developing something in GEF-6.

**Eligible for STDF Project Preparation Grant:** LDC (at least 10% co-financing)

**Source information:** Draft National Invasive Alien Species Strategy (under development). GEF PAS IAS project aims to build IAS management capacity at regional level aimed principally at biodiversity protection, but which clearly has social and economic benefits too. <<http://www.sprep.org/ias/project-overview>>

## **PROJECTS**

**Project title:** *Merremia peltata* (Big leaf) Control at Vatthe Conservation Area- Vanuatu

**Duration:** 4 years

**Objective(s):** To model and test a village-government partnership model of invasive species management. This action is based on community education, mobilization and grassroots leadership, with a view to replication across the Pacific.

### **Major Achievement(s):**

The development of a peer-reviewed *Merremia* Management Model

Community development committees have been established to engage the community, coordinate and provide sustainability to the project.

Educational resources are being developed to encourage a community-led approach, including an invasive species ID pocket guide, a community education flip chart and a media guide.

**Donor(s):** UNDP/GEF SGP

### **Executing Agency:**

Live and Learn

**Contact(s):**

Country Manager – Andrina KL Thomas

Email: andrina.thomas@livelearn.org

**Links**

**to supporting documents, URLs, etc.:**

<http://www.livelearn.org/sites/default/files/docs/Live%20%26%20Learn%20AR%202013%20E-version.pdf>

**Project title:** Crown of Thorn (COT) research

**Duration:** 4 years

**Objective(s):** Regional project implemented in Vanuatu through the Department of Fisheries & Institut de recherche pour le développement.

**Project title:** Community-based management of crown-of-thorns outbreak in Santo (pilot project)

**Duration:** 2013

**Objective(s):**

- 1) Pilot test a methodology of measuring the effectiveness of proper clean-up procedures using the reduction of COT density and individual size as indicators;
- 2) Pilot test the effectiveness of education and training materials and methods on COT control;
- 3) Pilot test effectiveness of the community-based COT clean-up procedures.

**Major Achievement(s):** This first phase of this project demonstrated that committed Vanuatu communities have the capacity to efficiently reduce COT densities on coral reefs

**Follow up:** The second phase will investigate the persistence of community commitment and benefits of COT removal after 6 months.

**Executing Agency:** The Asian Development Bank (ADB, 7753-REG: Strengthening Coastal and Marine Resources Management in the Coral Triangle of the Pacific - Phase 2)

**Partners:** The Department of Environment and Conservation

**Contact(s):** Pascal Dumas: pascal-paul.dumas@ird.fr

**Links to supporting documents, URLs, etc.:** <http://www.ctknetwork.org/wp-content/documents/pdf/Community%20Based-Management-of-Crown%20of%20Thorns-Outbreak-in-Santo.pdf>

*Annex VI*

**PROJECT DEVELOPMENT TEMPLATE**

**GENERIC INVASIVE ALIEN SPECIES AND ISLANDS**  
**PROJECT PROPOSAL TEMPLATE**

**COUNTRY/COUNTRIES**

**PROJECT TITLE**

**PROJECT DESCRIPTION**

*Please briefly describe the project you envision in two to three sentences and explain why it is important to island resilience the achievement of the Aichi Biodiversity Targets in the Strategic Plan for Biodiversity 2011-2020*

**TIMEFRAME**

*Please indicate the estimated number of years required to implement the project, ranging from 1 to 5 years.*

**ACTIVITIES**

*Please describe the main activities for this project:*

**EXPECTED OUTCOMES/OUTPUTS**

*Please describe the main outputs/outcomes of this project:*

**ALIGNMENT WITH PLANNING**

*Identify how the project is consistent with and supports sub national, national and/or regional planning efforts. List the specific sections of existing plans or those in development and how this proposed project is aligned.*

**STAKEHOLDERS**

*Identify key stakeholders (civil society organizations, indigenous people, gender groups and others as relevant) and describe how they would be involved in the project*

**OBJECTIVES**

**IMPLEMENTING INSTITUTION(S)**

*Please list the implementing institution(s) for this project –*

**AICHI TARGET 9**

*“By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.” (CBD Quick Guide to Aichi Target 9)*

*Please indicate how this project contributes toward achieving Aichi Target 9*

**Contribution to any other Aichi Targets**

*Please describe contributions to any other Aichi Target (if applicable).*



**INSTITUTIONAL CONTEXT**

*Please indicate the partners to be involved in this project and their roles.*

<b>PARTNER NAME</b>	<b>ROLE IN THIS PROJECT</b>
1.	
2.	
3.	
4.	
5.	

*Add additional rows as needed.*

**BUDGET AND CO-FINANCE**

<b>BUDGET BREAKDOWN</b>		
<b>ACTIVITIES</b>	<b>RESULTS</b>	<b>COST (USD)</b>
<b>TOTAL PROJECT FUNDING</b>		
<b>CO-FINANCE</b>		
<b>DONOR NAME</b>	<b>DESCRIPTION (donor, project name, weblink, etc.)</b>	<b>FUNDING (USD)</b>
<b>TOTAL CO-FINANCE</b>		
<b>TOTAL FUNDING NEEDED</b>		

*Annex VII*

**WORKSHOP EVALUATION**

31 evaluation forms were submitted anonymously by participants at the end of the workshop. The results are summarized below.

**Table 1:** compiled results of the evaluation for the capacity-building workshop

<i>Overall workshop expectations</i>	<b>Yes</b>	<b>No</b>	<b>No answer</b>	<i>Percent yes</i>	<i>Percent No</i>
Did the workshop meet your expectations?	26	2	3	<b>83.9</b>	<b>6.5</b>
Was there enough room for discussion and interaction?	24	5	1	<b>77.4</b>	<b>16.1</b>
Were you satisfied with the quality of presentations, inputs, knowledge of resource persons?	30	0	1	<b>96.8</b>	<b>0.0</b>
Were you satisfied with the style and pace of presentations?	26	2	3	<b>83.9</b>	<b>6.5</b>
Were you satisfied with the facilitation of the workshop?	29	2	0	<b>93.5</b>	<b>6.5</b>
Were you satisfied with the time schedule?	20	11	0	<b>64.5</b>	<b>35.5</b>
Were you satisfied with the organization of the workshop?	27	4	0	<b>87.1</b>	<b>12.9</b>
Were you satisfied with the venue, its facilities, service and food ?	29	1	1	<b>93.5</b>	<b>3.2</b>
Do you feel that this workshop will enhance your ability to formulate project proposals targeting IAS?	27	1	3	<b>87.1</b>	<b>3.2</b>
<b>Total number of evaluations:</b>	<b>31</b>				

**Table 2:** Summary of the usefulness of the sessions

<b>Usefulness of the sessions:</b>	<b>V. Good</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>None</b>	<i>percent v. good</i>	<i>percent good</i>	<i>V. good &amp; good merged</i>	<i>percent fair</i>
Introduction: Aichi Target 9 on IAS and expected outcomes of the workshop (Junko Shimura)	8	20	0	0	3	25.8	64.5	90.3	0
National Strategies and Actions on IAS in SIDS (John Mauremootoo)	8	18	5	0	0	25.8	58.1	83.9	16.1
Capacity-building for risk analysis, border controls, eradication and opportunities (Sonya Hammons)	8	19	4	0	0	25.8	61.3	87.1	12.9
The Global Invasive Species Information Partnership and its Global Register of introduced and Invasive Species (GRISS) (Shyama Pagad)	7	20	1	0	3	22.6	64.5	87.1	3.2
Global Island Partnership (GLISPA) (Kate Brown)	7	18	1	0	5	22.6	58.1	80.6	3.2
Island Conservation (Olivier Langrand)	11	15	1	0	3	35.5	48.4	83.9	3.2
National Invasive Species Council (Phillip Andreozzi)	6	20	1	0	4	19.4	64.5	83.9	3.2
Secretariat of the Pacific Regional Environment Programme (David Moverley)	8	19	2	0	2	25.8	61.3	87.1	6.5
<b>Donors, implementing agencies and experts to guide project proposal writing</b>	6	5	1	0	19	19.4	16.1	35.5	3.2
Global environment facility to support implementation of national and regional IAS strategies (David Duthie)	17	10	1	0	3	54.8	32.3	87.1	3.2
Navigation on LifeWeb to meet the needs and to promote National Strategies and action plans (Charles Besançon)	12	15	0	0	4	38.7	48.4	87.1	0

<b>Usefulness of the sessions:</b>	<b>V. Good</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>None</b>	<i>percent v. good</i>	<i>percent good</i>	<i>V. good &amp; good merged</i>	<i>percent fair</i>
Standards and Trade Development Facility (STDF) (Sonya Hammons)	12	16	0	0	3	38.7	51.6	90.3	0
<b>Day 2</b>									
Identification and development of national or regional projects on invasive alien species (Group Work)	9	15	3	0	4	29.0	48.4	77.4	9.7
Presentation: Work of the World Bank (Valerie Hickey)	12	15	3	0	1	38.7	48.4	87.1	9.7
Presentations of outputs of the workshop by Parties	7	17	6	0	1	22.6	54.8	77.4	19.4
<b>Total number of evaluations:</b>	<b>31</b>								

*Annex VIII*

**USEFUL REFERENCES AND WEBSITES**

**Global Environment Facility (GEF)**

- GEF Homepage [www.gefweb.org](http://www.gefweb.org)
- GEF Country Support Programme (CSP) Knowledge Facility for GEF Focal Points [www.gefcountrysupport.org](http://www.gefcountrysupport.org)
- GEF RAF [http://www.gefweb.org/interior\\_right.aspx?id=82](http://www.gefweb.org/interior_right.aspx?id=82)
- GEF FSP & MSP Templates: [http://www.thegef.org/gef/guidelines\\_templates](http://www.thegef.org/gef/guidelines_templates)

**Standards and Trade Development Facility (STDF)**

- Email: [STDFSecretariat@wto.org](mailto:STDFSecretariat@wto.org)
- Website: [www.standardsfacility.org](http://www.standardsfacility.org)

**Organizations relevant to Caribbean IAS work**

- CISWG- Caribbean Invasive Species Working Group: <http://www.caribvet.net/fr/system/files/ciswg.pdf>
- CARDI- Caribbean Agricultural Research and Development Institute: <http://www.cardi.org/>
- IICA- Inter-American Institute for Cooperation on Agriculture: <http://www.iica.int/eng/Pages/default.aspx>
- IUCN Costa Rica
- FAO Barbados: <http://www.fao.org/countryprofiles/index/en/?iso3=BRB>
- UWI: University of the West Indies
- Cuba National Center for Protected Areas
- Birdlife International: <http://www.birdlife.org/>
- RSPB-Royal Society for the Protection of Birds: <http://www.rspb.org.uk/>
- CARINET-Biosystematics Network of the Caribbean: <http://carinet.ecoport.org/welcome.htm>
- CARICOM/CEHI- Caribbean Community Secretariat, Caribbean Environmental Health Institute: <http://www.caricom.org/jsp/community/cehi.jsp?menu=community>
- OCTA-Overseas Countries and Territories Association – Caribbean Environment Programme: <http://www.cep.unep.org/calendar/overseas-countries-and-territories-association-octa-forum>
- DWCT- Durrell Wildlife Conservation Trust: <http://www.durrell.org/>

**Pathways management resources**

- IMO BWM Guidelines: <http://www.imo.org/OurWork/Environment/BallastWaterManagement/Pages/BWMGuidelines.aspx>
- International Standards for Phytosanitary Measures (ISPMs):
- OIE Terrestrial Animal Health Code (2014): <http://www.oie.int/international-standard-setting/terrestrial-code/access-online/>
- FAO Code of Conduct for Responsible Fisheries: <https://www.ippc.int/core-activities/standards-setting/ispms>
- <http://www.fao.org/docrep/005/v9878e/v9878e00.htm>

**International Plant Protection Convention resources**

- National IPPC contact points can be found at: [www.ippc.int/countries](http://www.ippc.int/countries).
- The Phytosanitary Resources page ([www.phyotosanitary.info](http://www.phyotosanitary.info)) includes risk analysis training materials, diagnostic guides, and pest information fact sheets.
- All International Standards for Phytosanitary Measures (ISPMs) can be downloaded from: <https://www.ippc.int/core-activities/standards-setting/ispms>

**Island Conservation ([www.islandconservation.org](http://www.islandconservation.org))**

- Threatened Island Biodiversity (TIB): <http://tib.islandconservation.org>
- Database of Islands and Invasive Species Eradications: <http://diise.islandconservation.org>
- Contact: [science@islandconservation.org](mailto:science@islandconservation.org)

**LifeWeb**

- LifeWeb Homepage <http://www.spain-unespforpas.org/cbd-lifeweb.html>
-