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**MEETING HOST:**



**The GEF/CABI project “mitigating the threat of invasive alien species in the insular Caribbean”**

U. Krauss<sup>1</sup>, M. Bilz<sup>2</sup>, V. Lopez<sup>1</sup>, K. McLaughlin<sup>3</sup>, P. Polar<sup>1</sup>, M. Seier<sup>4</sup>, and S. Murphy<sup>4</sup>. <sup>1</sup> CABI Caribbean and Latin America, Gordon Street, Curepe, Trinidad & Tobago; Corresponding author: [u.krauss@cabi.org](mailto:u.krauss@cabi.org); <sup>2</sup> CABI Head Office, Nosworthy Way, Wallingford, OX10 8DE, UK; <sup>3</sup> United Nations Environment Programme (UNEP), Washington Office, 900 17<sup>th</sup> Street, NW Suite 506, Washington, DC 20006, USA; <sup>4</sup> CABI Europe-UK, Bakeham Lane, Egham, Surrey, TW20 9TY, UK.

**ABSTRACT.** Invasive Alien Species (IAS) pose a major threat to the vulnerable aquatic and terrestrial biodiversity of Caribbean islands and to people depending on this biodiversity for their livelihoods. Caribbean states have recognized the need for a regional strategy and expressed strong interest in linking up their national efforts in implementing Article 8 (h) of the Convention on Biological Diversity (CBD) to mitigate the threats of IAS in the Caribbean. The project proposed through CABI and UNEP for GEF funding aims to widen this narrow scope of dealing with IAS by establishing an extensive framework addressing IAS that threaten aquatic and terrestrial ecosystems and their biodiversity in the Caribbean. This framework will build on existing national measures in the plant and animal health sector and feed biodiversity capacity into the project by linking with national and regional stakeholders. The proposed project will provide the participating countries and other partners in the Caribbean region with the necessary tools and capacity to address existing and future biological invasions. The five project components are:

- [1] Development of National IAS strategies in the five participating countries: Bahamas, Dominican Republic, Jamaica, St. Lucia, and Trinidad & Tobago
- [2] Establishment of Caribbean-Wide Cooperation and Strategy
- [3] Knowledge generation, management and dissemination
- [4] Prevention of New IAS Introductions in Terrestrial, Freshwater and Marine Systems
- [5] Early Detection, Rapid Response and Control of IAS Impacts

The project and its preparation is funded by the Global Environment Facility (GEF) and co-financed by the countries themselves and numerous partners. The first phase of the GEF funding cycle, the Project Development Facility-A (PDF-A) was successfully implemented from July 2006 to February 2007. In April 2008, the second phase, the Project Preparation Grant (PPG) of nine months duration commenced. If successful, this will be followed by a four-year Full Size Project focusing on the above-mentioned countries while benefiting the whole of the Caribbean region as well as global biodiversity.

**KEY WORDS:** Biodiversity, Caribbean, invasive species

## **INTRODUCTION**

Invasive Alien Species (IAS) pose a major threat to the marine, freshwater and terrestrial biodiversity of Caribbean islands and to people depending on this biodiversity for their livelihoods. The overall goal of the project is to conserve globally important ecosystems, the species and genetic diversity within the insular Caribbean. The objective is to mitigate the threat to local biodiversity and economy by IAS in the insular Caribbean, including terrestrial, freshwater and marine ecosystems.

The Caribbean, designated as one of the world's biodiversity hotspots by Conservation International, supports exceptionally diverse ecosystems (marine, freshwater and terrestrial) of global ecological and economic importance. Marine ecosystems comprise a major share of the region's globally important biodiversity, a fact recently recognized by the United Nations, which designated the Caribbean Sea as Special Area in 2006. The Caribbean small island developing states (SIDS) currently participating in the proposed project harbor centers of terrestrial and/or marine biodiversity of global significance.

Alien species introduced into the Caribbean usually constitute a regional problem, affecting not only each of the participating countries but potentially the Caribbean as a whole. The potential for such introductions, deliberate or accidental, is growing through the increase in international economic and cultural links in such diverse areas as agriculture, aquaculture, transport and trade (commodities and pets), tourism (e.g. ecotourism, hotel and golf-course landscaping, yacht traffic) and industrial development. The small scale of the Caribbean economies necessitates a regional approach, which is legally supported through the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention of 1983).

The project is being developed by CABI and UNEP for funding by the Global Environment Facility (GEF), in collaboration with a wide range of partners<sup>1</sup>, in three stages: the Project Development Facility A (PDF-A), the Project Preparation Grant (PPG, formerly PDF-B), and the Full Size Project (FSP). The project aims to reduce the overall risk posed by invasive alien species on a national and regional level, thereby safeguarding of biodiversity of global significance. In addition to preventive measures, pilot projects will also test other cost-effective and innovative approaches to combat invasive species in those areas with globally significant biodiversity which have already been impacted upon.

## **PROJECT DEVELOPMENT FACILITY-A (PDF-A) ACHIEVEMENTS**

Following the approval of an 8-month-long PDF-A phase in July 2006, activities were initiated in six pilot countries – The Bahamas, Cuba, Dominican Republic, Jamaica, St. Lucia and Trinidad & Tobago. The main objective of the PDF-A was to confirm the countries to be

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<sup>1</sup> Co-finance, in kind or in cash for PDF-A, PPG and/or FSP has been committed by: Bioversity International, CABI, CARICOM, CARINET, CERMES, CISWG, Florida A&M University, GISP, IABIN, IICA, InGrip, IUCN, RAC/REPMEITC, Smithsonian Institution, The Nature Conservancy, UNEP-CAR/RCU, University of Florida - IFAS, US Dept. of Agriculture-APHIS, US Dept. of Commerce-NOAA, US Dept. of State, and the University of the West Indies.

involved in the project and revisit the 'baseline situation' in order to refine the objectives of the two subsequent phases, PPG and FSP (Full-Sized Project) Three activities were undertaken towards the fulfillment of the objectives: a national consultation, an International Workshop (IWS) and two baseline desk studies.

In each country, the national consultations were coordinated by one or more lead agencies, using existing structures to involve relevant stakeholders in the process. A standardized questionnaire was circulated to capture current information in various sectors. Key stakeholders then attended an in-country workshop, facilitated by CABI, to review existing capacities and gaps in order to identify needs to be addressed and pilot activities to be set up under the FSP (Full-Sized Project). Structures to guide the in-country activities under PPG and FSP phases were also discussed.

Delegates from the pilot countries then joined representatives from 15 global and regional organizations at the IWS held in Trinidad & Tobago from 22-26 January 2007. During the week, the participants exchanged information, refined objectives and outcomes of the FSP and drew up tentative co-finance plans taking into consideration GEF's new Resource Allocation Framework IV (RAF IV). They also reviewed pilot activities and deliberated on coordination mechanisms for the PPG and FSP. Subsequently, CABI coordinated the finalization and submission of the PPG proposal to GEF, through UNEP, and to other funding agencies.

Two desk studies were undertaken in order to address the need for (1) information on marine IAS and their management and (2) legislative frameworks for IAS. The first study was commissioned by UNEP-CAR/RCU's sub-program "Conservation and Sustainable Use of Major Ecosystems in the Wider Caribbean" of the Regional Programme on Specially Protected Areas and Wildlife (SPA) to compile information on national and regional capacities and experiences on marine invasive species management programs in the Wider Caribbean, including ballast water (BW). The final report is available in the public domain<sup>2</sup>. The in-house review of current legislative framework in the six pilot countries revealed that there is currently no comprehensive legislation on invasive species per se. However all countries possess plant and animal health and quarantine legislation; other IAS are covered under legislation in specific areas such as apiculture, coastal and marine environments, forest, protected areas and wildlife.

## **PROJECT PREPARATION GRANT (PPG) DELIVERABLES**

PPG implementation was initiated in May 2008 with the creation of a national IAS team, headed by a national IAS expert in each of the five pilot countries. A roundtable at the beginning of PPG (3-4 June 2008) brought the partners together to discuss the status quo of their selection and to agree on the final PPG work program as well as the project management structure, including collaborative linkage leads.

In preparation for the FSP, the PPG comprises three major activities:

- [1] Collate gaps in existing plans and policies as baseline for strategic review under the FSP (Full Sized Project)
- [2] Outline national and regional communication and capacity-building strategies for the FSP, also with a view towards the development of a Caribbean-wide cooperation and strategy under FSP

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<sup>2</sup> <http://www.cep.unep.org/newsandevents/news/2006/final-cabi-unep-car-rcu-report.pdf>

- [3] Develop criteria and initiate baseline surveys for species and sites selection for pilot projects, define pilot projects in five countries and provide incipient technical input for tentative project design and activity costing at national level, including coordination and monitoring & evaluation plan.

PPG Activity 1 will enable the countries to start developing or reviewing their national IAS strategies (FSP Component 1). Once each country knows the gaps and has an overview of existing as well as missing data and information they will be able to focus on closing these gaps in the FSP, e.g. by carrying out research and by drafting strategies and discussing them at governmental and stakeholder level.

PPG Activity 2 will support the countries' efforts in generating, managing and disseminating information and knowledge (FSP Component 3). Following on from the PDF-A, each country is in the process of completing the list of stakeholders concerned with IAS (including those not previously involved) and planning their involvement in FSP activities. This includes the identification of target groups for public awareness activities in the FSP. Simultaneously, more specialized training needs are being identified, which will then be addressed through capacity-building activities in the course of the FSP (Full-Sized Project).

In the pilot projects under the FSP, the countries will test different measures to prevent new IAS introductions (FSP Component 4) and to detect, respond to and control species invasions (FSP Component 5). The PPG Activity 3 will support the countries in deciding which sites and/or species are best suited for those pilot projects, a process initiated under PDF-A. Pilot projects can consist either of management of a certain species at different sites, or management of a particular site where there is one or more species invading. The countries will collect and review existing information regarding those sites and species to ensure feasibility and up-to-date priority activities before starting the FSP (Full-Sized Project).

Within PPG Activity 3, the executing agency and the project partner will develop a Project Monitoring and Evaluation (M&E) Plan and performance and result indicators in compliance with the GEF M&E Policy. At the end of PPG the project will have identified all relevant stakeholders and established baseline information as prerequisites for designing an M&E Plan and associated indicators. The indicators will follow the SMART principle and allow for setting specific and measurable expected results. It is intended to monitor and evaluate a diverse range of project impacts such as behavior change of stakeholders, financial sustainability of the project, institutionalization of IAS management including the implementation of strategies and policies, and ecosystem status including the reduction in IAS spread. The M&E Plan will link closely into the project's reporting cycle and dissemination activities. Furthermore, it will be designed in a way that allows GEF to carry out long-term evaluation after the FSP concludes.

## **OUTLOOK FOR THE FULL-SIZED PROJECT (FSP)**

The proposed GEF project aims to establish an extensive framework addressing IAS that threaten aquatic and terrestrial ecosystems and their biodiversity. It will hereby build on existing national measures in the plant and animal health sector to strengthen capacity to address biodiversity concerns and to link national and regional stakeholders. A regional framework, led

by the regional executing agency CABI, will ensure that enabling policy and capacity is built in a coordinated manner amongst participating countries and further engender replication in the region. The coordinated regional approach suggested will strengthen the ability of Caribbean countries to respond in a coherent, consistent and effective manner to invasive species prevention and mitigation in the region.

Prevention is widely viewed as the most cost-effective IAS management approach, but a “plan B” is often needed. The proposed project will provide the participating countries and other partners in the Caribbean region with tools they can easily amend and adapt for existing and future biological invasions. The pilot countries selected for the proposed GEF project are representative for the ecosystem diversity and species richness, as well as for the geophysical, political, socio-economic and socio-cultural complexity of Caribbean states. It is therefore anticipated that each participating country will act as a model for the wider dissemination of the project findings, and replication in the Caribbean region.