



Mitigating the Threat of Invasive Alien Species in the Insular Caribbean Project

TERMS OF REFERENCE FOR INVASIVE ALIEN SPECIES EXPERT

1.0 PURPOSE

The purpose of the terms of reference is to set out the responsibilities of the Invasive Alien Species Expert to complete the development of Jamaica's Invasive Alien Species (IAS) Critical Situational Analysis and the National Invasive Species Strategy & Action Plan under the Global Environment Facility (GEF)/United Nations Environment Programme (UNEP)/Centre for Agriculture and Bio-Science International (CABI)/Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (MTIASIC)Project.

The IAS Expert will be asked to:

- Update Jamaica's IAS Critical Situation Analysis
- Conduct Regulatory Impact Assessment on the Pet Trade in Jamaica
- Finalize technical version of Jamaica's Draft National Invasive Species Strategy and Action Plan in Policy format
- Produce non-technical version of Jamaica's National Invasive Species Strategy and Action Plan.

2.0 BACKGROUND

Invasive Alien Species (IAS) are reported as being the number one threat to major threat to the vulnerable marine, freshwater and terrestrial biodiversity on islands and the second major threat to worldwide biodiversity after habitat destruction. IAS are a major interest to the Island of Jamaica as they pose a direct threat to the high level of the Island's biodiversity. Jamaica's industries are centred on the country's biodiversity. As such a decrease in biodiversity threatens the livelihood of fishers, farmers, and persons employed to the tourism industry. Negative impact on these industries as a result of IAS will result in a significant reduction in Jamaica's gross domestic product (GDP). The

project objective is to mitigate the threat to local biodiversity and economy from IAS. This will be achieved through five main initiatives:

1. Increasing the national capacity to address potential risks posed to biodiversity of global significance from invasive alien species;
2. Increasing regional cooperation to reduce risk posed to biodiversity of global significance from invasive alien species;
3. Strengthening access to data and establishment of best practice, and public awareness of IAS;
4. Increasing capacity to strengthen prevention of new IAS introductions; and increased capacity to detect, respond, control and manage IAS impacting globally significant biodiversity; and
5. Implementation of pilot projects to control and manage the spread of the Lionfish (*Pterois volitans* and *Pterois miles*) in Jamaica; protection of the endemic Jamaican Iguana through monitoring and selective removal of invasive predators; and control and management of the invasive Paper Bark Tree (*Melaluca quinquevervia*) and the invasive Wild Ginger (*Alpinia allughas*) (Paper Bark Tree) in the Black River Lower Morass.

The major outputs of the national project are:

1. Development of National IAS Strategy
2. Establishment of Caribbean-wide Cooperation and Strategy
3. Knowledge generation, management and dissemination
4. Increase capacity to strengthen prevention of new IAS introduction in terrestrial, freshwater, and marine systems
5. Increase capacity to detect, respond, control and manage IAS impacts in terrestrial, freshwater, and marine systems

The Project is being implemented by the National Environment and Planning Agency (NEPA) through its Projects Planning and Monitoring (PPM) Branch. A Project Implementation Unit (PIU) is established in this Branch. The PIU works closely with the officers of the Ecosystems Management and Protected Areas Branches of NEPA for technical guidance.

3.0 PROJECT OBJECTIVES AND ACTIVITIES

The activities being undertaken to meet Project objectives and fulfil output requirements are as follows:

- Strengthening the enabling policy and institutional environment for cross-sectoral prevention and management of invasions
- Implementing communication and prevention strategies that emphasises pathways and an ecosystem approach to managing invasions
- Developing and implementing appropriate risk analysis procedures for non-native species importations
- Early detection and rapid response procedures for management of nascent infestation
- Managing priority alien species invasions in pilot sites to ensure conservation and sustainable use of biodiversity

4. CONSULTANT'S SCOPE OF WORK

4.1 *Critical Situation Analysis*

- The IAS Expert shall review and update Jamaica's Critical Situation Analysis. The document should include but not be limited to the following:
 - *Context, objectives and scope*, also to define the limitations of this study.
 - *Historic overview*: what has been done in terms of the subheadings below prior to this project? Use Kairo et al. (2003) as minimum baseline known, followed by progress made during initial project development phase.
 - *Biodiversity Inventories*: links are sufficient for public domain information (e.g. clearinghouse mechanism), but grey literature listings should be shown in detail. This will also require estimating the credibility of such sources, e.g. for taxonomic identification. Subdivide by ecosystems: terrestrial, marine and freshwater.
 - *Prevention*: How does the country (aim to) prevent the introduction of IAS? What is being done (policy and on the ground)? Identify all the gaps and challenges.
 - Pathways: To what extent have these been analyzed? What intervention opportunities are in place? If applicable, subdivide by ecosystems: terrestrial, marine and freshwater, alternatively by high level taxonomic group.

- Risk assessment: To what extent have risks on introduction and their potential impact been assessed? Is there a prioritized list of “most feared” – if so, include
- Sectoral involvement should cover:
 - roles and responsibilities, including conflicts of interest, with specific agencies listed
 - national repositories (libraries, databases, collections, etc.)
 - capacities (human resource as well as infrastructure), including their limitations
 - projects (past and on-going)
 - relevant professional training received during the past five years should be listed, with information whether or not trainee serves in a function relevant to the training received.

Whenever a subdivision may be warranted, do this by ecosystems: terrestrial, marine and freshwater.

- Legislation and policy, include relevant Multilateral Environment Agreement (MEA) membership and compliance
 - Public awareness and education: For what types of potential but absent IAS is there awareness? This includes the on-going public awareness baseline study as well as awareness-raising activities to date (within a five years time-frame – everything older should be summarized under “historic overview” above, unless the importance of an event warrants otherwise).
 - Active involvement in regional and international initiatives, including databases: also includes representatives (with affiliation) on relevant bodies, e.g. Convention on Biodiversity (CBD) focal points, Caribbean Invasive Species Working Group (CISWG) etc.
 - National Highlights:
 - Where this has not been done during PPG, an in-depth treatise of the Component 4 pilot project, following the template of subheading or paragraphs of the above, but including additional details, e.g. locally important initiatives and stakeholder groups who may not have been knowingly exposed to IAS issues before
 - Anything else considered worth mentioning by national working group
- *Early detection, rapid response and IAS control*: What mechanisms are in place - and which ones are lacking - to respond quickly and effectively to a new introduction? How are conflicts of interest handled? What is being

done (policy and on the ground)? Identify all the gaps and challenges including specific examples of lessons learnt.

- IAS Inventories: all that is known should be listed in as much detail as available. Identify the gaps and weaknesses. Subdivide by ecosystems: terrestrial, marine and freshwater.
- Impact: to what extent has this been assessed? Are there any cost-recovery mechanisms?
- Sectoral involvement should cover the same as above under prevention; a cross reference is enough for repeat information
- Legislation and policy, incl. relevant MEA membership and compliance
- Public awareness and education: For what types of current IAS is there awareness and which ones are still underestimated?
- Active involvement in regional and international initiatives as above
- National Highlights:
 - Where this has not been done during PPG, an in-depth treatise of Component 5 pilot projects (as for Prevention)
 - Anything else considered worth mentioning by national working group/steering committee.

➤ *References*

4.2 Regulatory Impact Assessment (RIA) on Jamaica's Pet Trade

Facilitate and undertake a Regulatory Impact assessment on the Pet Trade

- To develop RIA tools customized to carry out impact assessment of pet trade in Jamaica
- To undertake Regulatory Impact Assessment of the Pet Trade inclusive of:
 - Identifying and facilitating meetings/consultations with relevant Government of Jamaica entities, pet traders, animal rights and environmental non-governmental organizations;
 - Collecting information on the current activities of those working within the pet trade in Jamaica;
 - Compiling and tabulating this information into matrix form;
 - Assessing impact of pet trade on environment; the economy; social welfare and cost of compliance and enforcement
 - Identifying the best regulatory methodology and propose the way forward through a discussion paper/ approach paper for further discussion with stakeholders

Training programme in technical and administrative aspects of Regulatory Impact Assessment for regulatory bodies

Objective

The objective of this training programme is to provide staff from regulatory bodies with technical knowledge of RIA and policy analysis in general.

Activities

Design and deliver a training programme for regulatory bodies including the following topics and training methodologies:

- a) Overall context, trends and ideas: Introduction to regulatory reform, principles of smart regulation and good regulatory practices. Approaches from different international institutions and countries at the forefront of reform.
- b) Overview of the RIA system, inclusive of an outline of steps of the RIA process.
- c) Institutional strategies: Allocation of responsibilities among institutions, quality control, transparency and consultation, common standards. Useful case studies and examples from other countries, as well as a discussion of the Jamaican context are needed in particular. The trainer should guide the participants through the issues which are important to consider in order to successfully integrate the impact assessment methodology into policy development within regulatory bodies.
- d) Basic RIA concepts: Detailed training on technical aspects of evaluating benefits, costs, risk, time preferences, and uncertainty.
- e) Decision-making in RIA and public policy: This is an important segment, which should familiarize the participants with decision criteria in public policy (benefit-cost principle, cost-effectiveness principle and threshold principle) and analytical tools used in RIA (benefit-cost analysis, cost-effectiveness analysis, specific impact tests, standard cost model for administrative burdens, threshold analysis, risk assessment). Practical examples and exercises in order to grasp the concepts should be included. In particular, examples of RIA guidelines and commonly used impact tests should be presented and discussed. The participants should be encouraged to discuss their view of most significant impact assessments within their areas of regulation which will improve the quality of decision-making.
- f) Overview of alternative policy instruments: Campaigns, self-regulation, co-regulation, third-party regulation, market-based instruments, and especially performance-based rules. Performance management, and how it can be tied to RIA, is a particular area of interest.
- g) Data collection in RIA
- h) Stakeholder consultation in RIA: timing, scope and commonly used practices in consultation, again with examples and case studies.

This three-day training programme should be based predominantly on case studies, discussions, and other interactive training methodologies. Every training session should be accompanied by relevant slides and/or hand-outs outlining analytical frameworks and key points which the participants can apply in their work.

Output

As a result of the training, the participants will understand the procedural and conceptual changes brought on by the introduction of RIA into policy-making. They will be able to respond to the new requirements coordinated by the Government's Office for RIA, and effectively and purposefully fill out the initial RIA form for new legislative proposals, as well as understand the requirements and methods of full regulatory impact assessment.

Training programme in Regulatory Impact Assessment for business community and non-governmental organizations

Objective

The objective of this training programme is to provide representatives from business and non-governmental organizations with basic knowledge of RIA and their role in the consultation process.

Activities

Design and deliver a training programme for business and non-governmental organizations including the following topics and training methodologies:

- a) Overall context, trends and ideas: Introduction to regulatory reform, principles of smart regulation and good regulatory practices. Approaches from different international institutions and countries at the forefront of reform.
- b) Overview of the RIA system: steps of the RIA process.
- c) Institutional strategies: Allocation of responsibilities among institutions, quality control, transparency and consultation, common standards. Useful case studies and examples from other countries, as well as a discussion of the Croatian context are needed in particular. The participants should grasp the importance of their role in the RIA system, and gain an overall understanding of the institutional context.
- d) Basic RIA concepts: technical aspects of evaluating benefits, costs, risk, time preferences, and uncertainty.
- e) Stakeholder consultation in RIA: timing, scope and commonly used practices in consultation, again with examples and case studies.
- f) Decision-making in RIA and public policy: an overview of decision criteria in public policy (benefit-cost principle, cost-effectiveness principle and threshold principle) and analytical tools used in RIA (benefit-cost analysis, cost-effectiveness analysis, specific impact tests, standard cost model for

administrative burdens, threshold analysis, risk assessment). Practical examples and exercises in order to grasp the concepts should be included. In particular, examples of RIA guidelines and commonly used impact tests from four to five countries should be presented and discussed. Business-related impact assessments, as well as social and environmental assessment, should be given priority. The participants should discuss priority areas within their sectors which they consider should be subject to particular scrutiny.

- g) Data collection in RIA: what kind of information do regulators need in order to make decisions, and how can the participants help in the process.
- h) Overview of alternative policy instruments: Campaigns, self-regulation, co-regulation, third-party regulation, market-based instruments.

This two-day training program should be based predominantly on case studies, discussions, and other interactive training methodologies. Every training session should be accompanied by relevant slides and/or hand-outs outlining key lessons learned.

Output

As a result of the training, the participants will understand the procedural and conceptual changes brought on by the introduction of RIA into policy-making. They will be made aware of their important role in the consultation process, and will be motivated to become engaged in the regulatory reform, share information, and participate in the process.

4.3 Jamaica's National Invasive Species Strategy and Action Plan

- The IAS Expert shall prepare final technical and non-technical versions of the National Invasive Species Strategy and Action Plan for Jamaica using the Caribbean Invasive Species Strategy as a guide and information gathered from stakeholder meetings/consultations and national subject matter specialists. The Strategy should include but not be limited to the following:
 - Existing knowledge on IAS in Jamaica and their potential and/or impacts on native species and ecosystems;
 - Attempts and/or measures of eradication and control and likely outcomes where not possible in Jamaica and other small island states;
 - Legal framework and existing gaps in information; and
 - Management options and directions (prevention, detection, eradication, control, legislation, restoration, research and public awareness).
- The NISS should include an Action Plan geared towards the implementation of strategies and directions for IAS management in Jamaica. The NISS Action Plan should be developed for each ecosystem and should address but not be limited

to the following goals:

- Exclusion: prevent the establishment of new IAS
- Eradication or containment: eliminate, or prevent the spread of new IAS
- Effective management: reduce the impacts of widespread IAS
- Capacity building: ensure Jamaica has the commitment and ability to manage IAS

The NISS Action Plan should clearly outline:

- Challenges with IAS management in Jamaica
- Goals to address challenges identified
- Specific measurable outcomes and actions
- Key stakeholders who will implement specific actions
- Timelines for achieving each action

5. Deliverables

All products are to be founded on comprehensive stakeholder analysis and consultations.

Completion of deliverables is defined as:

- i. The deliverables listed in section 5 are completed and delivered to CABI/NEPA within the time specified; and
- ii. The National Steering Committee in Jamaica is satisfied with the documents so delivered to CABI/NEPA.

Schedule of Deliverables

Deliverables	Estimated Level of Effort	Estimated Due Date
1. Detailed work plan outlining schedule of activities in order to complete deliverables and methodologies (including literature research, consultations, document preparation etc.)	3 days	One week after contract signing
2. Critical Situation Analysis	15 days	Initial Draft: Due one (2) months after contract signing Final Draft: Due 1 week after receiving comments
3. Regulatory Impact Assessment on Jamaica's Pet Trade	20 days	Facilitate 4 RIA Consultations Consultation 1 of Report: Due 1 week after consultation Consultation 2 Report: Due 1 week after consultation Report on training in technical and administrative aspects of RIAs for Government entities: Due 1 week after training Report on training in RIAs for business community and NGOs: Due 1 week after training First Draft Outcome of RIAs (approach/discussion paper): Due 2 weeks after Consultation 2. Final Draft outcome of RIA

		(approach/discussion paper): 1 week after receiving comments
4. National Invasive Species Strategy and Action Plan	15 days	<p>Facilitate 4 NISS Consultations</p> <p>Consultation 1 Report: 1 week after consultation</p> <p>Consultation 2 Report: 1 week after consultation</p> <p>Consultation 3 Report: 1 week after consultation</p> <p>Consultation 4 Report: 1 week after consultation</p> <p>Initial Draft of Technical version: 2 weeks after 1st Consultation</p> <p>Final Draft of Technical version: 1 week after final consultation on draft</p> <p>Initial Draft of Non-technical version: 1 week after submission of final draft of technical version</p> <p>Final Draft of Non-technical version: 1 week after receiving comments on initial draft</p>

6. Duration and Timing

The total duration of the assignment is a maximum of six months (February 2013 – July 2013, inclusive).

7. Qualifications and Experience Required:

The IAS Expert should:

- Possess a University degree qualification, or equivalent, in a field relevant to the assignment
- Be conversant with the CBD guidance on IAS and its application
- Possess at least 5 years experience in undertaking similar assignments in island ecosystem scenarios, preferably with some regional ramifications / interactions
- Excellent oral communication skills and the competency to manage inter-group dynamics;
- Excellent written communication skills, with analytic capacity and ability to synthesize relevant findings for the preparation of quality reports;
- Demonstrate knowledge and experience in working on developing policy and guideline in for Small Island Developing States;
- Maturity and confidence in dealing with senior and high ranking members of national and international institutions, government and non-governmental organizations; and
- Possess solid working knowledge of English

8. Reporting Format

All final reports/deliverables shall be prepared and submitted to the Project Manager in Word format , 1.5 spacing (except for Tables), font Times New Roman 12pt, in the form of two electronic copies (one on compact disk and one by electronic mail), and two (2) hard copies. The draft reports/deliverables may be submitted in electronic format only and the final versions of all deliverables must be submitted in electronic and manual formats. Additionally, all documents prepared on behalf of NEPA under the project must include a Copyright page (See Appendix 1 of this TOR)

9. Logistics

The IAS Expert will be contracted to CABI for the duration of this contract.

Jamaica's MTIASIC Project Management Unit within NEPA will be responsible for logistical arrangements and other necessary support for consultations in Jamaica.

Appendix 1: Copyright page

Prepared by *insert Consultant's Name/company* for the National Environment and Planning Agency (NEPA)
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Submission of Bids

Please submit bids on or before February 22, 2013 to:

Ms. Sherries Simpson, Project Director, NEPA at sasimpson@nepa.gov.jm with copy to Ms. Faith Walker at fwalker@nepa.gov.jm