



The Inva'Ziles Project
(DCI-ENV/2011/221660: Preparation and testing of a comprehensive model
for preventing and managing the spread of invasive species on island
ecosystems)

IUCN Management response to the main recommendations of the Inva'Ziles Project
Independent Terminal Evaluation.

IUCN welcomes the findings of the Inva'Ziles Project Independent Terminal Evaluation and the overall positive assessment with regards to strategic relevance, effectiveness, efficiency, impacts and results, sustainability and adaptive capacity.

IUCN fully recognizes that the project can be unfolded in three stages as outlined by the Terminal Evaluation:

- Phase 1, pre-MTR (February 2012 – May 2015), during which the project was not efficiently implemented;
- Phase 2, the MTR process (May 2015 – January 2016) during which those responsible (the IUCN Project Team, EU and the Project Steering Committee - PSC) devised a process for turning the project around;
- Phase 3, post-MTR (January 2016 – July 2018), during which the project has been turned around to the point where it has achieved very encouraging results in terms of relevance, effectiveness, efficiency, outcomes toward impact and sustainability.

IUCN recognizes as well that considering the fact that Phase 3 ('the productive phase') only comprised of thirty-one months out of a total project duration of seventy-eight months (about 40%), the project could not fully deliver with respect to all activities, outputs and outcome. IUCN concurs also with the report's main conclusions outlining that:

- The Inva'Ziles project has been turned around in Phase 3
- Time constraints have focused prioritisation leading to some inevitable shortfalls
- Effective communication has been critical in the project's turnaround
- Personal qualities and relationships have been critical in the project's turnaround
- Sustainability is not guaranteed, and a follow-up project is required

The IUCN management response to this recent Independent Terminal Evaluation of the Inva'Ziles project therefore translates mainly into the development of an "Inva'Ziles 2" project during the coming months that will take into account the main recommendations of the terminal evaluation and the lessons learnt from this first Inva'Ziles project to adapt, where appropriate, our work and the design of Inva'Ziles 2.

In essence all the recommendations are agreed and IUCN will consider each of the recommendations below for the development an Inva'Ziles 2 project in 2019:

- Focus a project around the operationalisation of the Global Guidelines
- A regional approach must consider national specificities and priorities.
- Plan for a long project
- Plan for long-term sustainability
- Define realistic goals



- Build robust institutional arrangements
- Build in a comprehensive project inception phase
- Develop participatory adaptive management systems
- The appointment of suitable personnel is critical
- Cultivating good relationships is critical
- Intensively cultivate links with relevant initiatives and broaden stakeholder reach
- Implement a programme of exchange visits as part of a systematic information-sharing process
- Systematically build in scientific, technical and policy support
- Build a bridge between Inva'Ziles 1 and Inva'Ziles 2.

IUCN has already been proactively engaged in the development of an Inva'Ziles 2 project since 2017 by organizing two consultations during the last two Inva'Ziles Steering Committee meetings. In Seychelles in April 2017, the idea of an Inva'Ziles 2 project was explicitly raised by the project stakeholders followed by an internal consultation with IUCN staff on the challenges and opportunities for an Inva'Ziles 2 project. Given the enthusiasm of all the project stakeholders to engage in an Inva'Ziles 2 project, a second more detailed consultation capitalizing on the new Global Guidelines produced through the project took place during the last Inva'Ziles Steering Committee meeting in May 2018 to identify regional and national priorities, see annex 1 and 2. Following the identification of regional and national priorities during last Inva'Ziles Steering Committee meeting, preliminary contacts and engagement with the national GEF mechanisms and potential partner organisations have been pursued by IUCN in collaboration with the national stakeholders of the Inva'Ziles project.



Annex 1: Inva'Ziles 2 – preliminary priorities

Outputs from the InvaZiles 2 preparatory meeting, 17-18 May 2018, Mauritius

General principles and regional priorities

There is a need to capitalise as quickly as possible on what was achieved through **Inva'Ziles 1** and **strengthen and sustain the actions commenced, and to use the Guidelines and gap analysis of national plans to identify key areas for action. This need was expressed by Comoros, Mauritius (Rodrigues) and Seychelles. In particular, more and larger management projects are needed. All four countries also expressed the need to implement National Invasive Species Strategies and Action Plans (NISSAPs), and that actions under a Phase 2 project should contribute to achieving NBSAP goals.** A new project should also attempt to ensure the sustainability of WIONIS (the regional invasives network), establish regional joint planning and programming, and secure a permanent regional coordinator position.

Attempt to ensure the collaboration of regional partners such as France (Reunion, Mayotte, TAAF) and South Africa, some of which are not eligible for GEF funding.

Regional or multinational priorities

Include elements that were not the primary focus on Inva'Ziles 1, including especially:

- Environmental education in schools
- A feasibility study for regional regulations and standards, e.g. covering harmonised risk assessment and risk management process.
- National legislation review, improvement and harmonisation in key areas
- Early detection reporting system – supported by a regional rapid eradication capacity
- Biosecurity, including pathway analysis and inter-island controls.
- Jointly selected target species for priority eradication (e.g. Indian Crow) and management (e.g. by biocontrol)

A1. Planning and decision making

Comoros

Institutionalise and strengthen national mechanisms for invasive species management, particularly the National Invasive Species Committee and first NISSAP. Incorporate invasive species planning and management into Protected Area management plans and programmes.

Madagascar

A priority is to **create a multi-stakeholder, cross-sectoral national invasive species committee and then by 2020, develop a National Strategy for the Fight against Invasive Species that complements their current NBSAP.**

Mauritius

Many actions are to be undertaken through a GEF 6 'mainstreaming' project. One aspect that isn't being addressed (though may be identified as a priority through the new NISSAP being developed through GEF 6) and needs to be is **the use of modelling, pathways analysis and risk assessments to identify priority actions, this will need increased technical capacity and mobilisation of data to be achieved.**



Seychelles

Already have the National Biosecurity committee which has been established under legislation (Animal and Plant Biosecurity Act 2014). A priority would be to **fully engage the National Biosecurity Agency in the Regional aspects of the project** (networking, data sharing, joint capacity building etc.), they should be the lead agency for the Seychelles. The current NISSAP is now out of date (2010-2015). A priority would be to **review the NISSAP including what has been implemented, and produce a new one** bearing in mind capacity of the National Biosecurity Agency. The **composition of the National Biosecurity Committee needs to be reviewed**, ensure relevant stakeholders are represented.

A2. Generating support

Comoros

Develop awareness raising campaigns targeted at the public, politicians and other key decision makers (e.g. private sector). Need expert assistance to identify the best means to get invasives on to the political agenda. Incorporate invasive species into the formal education curriculum. Expand cost-benefit analyses as a tool for increasing support for invasives management, building on the work begun in InvaZiles 1. Work as far as possible with local communities, on all aspects of invasive species management.

Madagascar

Building awareness with political decision makers is critical to mobilise support for implementing any actions that come out of the NISSAP.

Mauritius

A priority for Mauritius is the **need to develop effective public awareness and key message campaigns, and improved engagement with the formal education sector particularly for island of Mauritius** (these aspects not being addressed through the GEF 6 project). In addition, while the NBSAP provided a case study on costs of IAS to water provision, **more capacity is needed to undertake research on the economic costs of potential and established IAS in particular to key ecosystem services, and cost-benefit analysis for management actions**. Identification of funding sources is also needed, especially for the NGO/civil society. **Building long-term private sector and community participation is required**, however in Rodrigues local communities are already well engaged, and there is much smaller private sector.

Seychelles

Development of an educational awareness programme (incl. materials) to support community engagement – this should be action oriented, e.g. inclusion of bounties. To support the development of the new NISSAP, **an economic assessment of the impacts of current and potential IAS needs to be undertaken** – particularly upon the tourism sector [this could be done at the national or regional level]. More **mainstreaming of IAS actions into other relevant sectors** needs to be undertaken, particularly with port management, agriculture and tourism. Mapping IAS to the SDGs could support this process.

A3. Building capacity

Comoros

Develop and strengthen links to sources of technical advice and expertise. Build institutional capacity for managing invasives, especially staffing and skills, and establish training programmes. Produce a development plan for ninvases management facilities and infrastructure (including biosecurity). Establish a national invasives database. At a regional level, an early detection alert system supported by an information exchange network is needed.



Madagascar

Capacity building is needed to support the prioritisation of IAS and management measures, but also to implement biosecurity at-border, and rapid eradication (which could be provided through building regional capacity that could be shared across the WIO region).

Mauritius

Building networks and co-operation needs to be institutionalised across different sectors. At a regional level, the **IOC needs permanent IAS capacity to drive network forward. In Mauritius, additional capacity is needed on technical, scientific and taxonomic support.** National and inter-island infrastructure and facilities should be addressed through the GEF 6 project, but **there is a need to improve capacity at a regional scale. Additional resources on best practice for management measures (control/eradication/prevention) is needed.**

Seychelles

There is a **need for ongoing capacity building programmes**, in particular to support the mainstreaming objective. An IAS levy upon trade/shipping could be used to fund various capacity issues, incl. databases and app. There is a **need for shipping container cleaning technology**, and the **National Biosecurity Agency in general needs additional capacity.** New information resources are needed, along with innovative education and awareness programmes, that target specific stakeholder groups, using positive messaging (what you can do) to generate behaviour change and garner political support. The **production of an App** that can support stakeholders in the identification of IAS, record new sightings, and link to global databases (e.g. GISD/EICAT) – this will help address limited capacity issues for many key stakeholder groups.

A4. Legislation, policy, and protocols

Comoros

Review and rationalise legislation relevant to invasive species. **Develop regulations to implement the existing Law that prohibits introductions.** Revise the National Biosecurity Framework.

Madagascar

The development of national legislation and policies on IAS is needed, in particular to mandate biosecurity measures and pathway management.

Mauritius

Most actions will be undertaken through the GEF 6 'mainstreaming' project.

Seychelles

National legislation is already in place, but there are provisions for additional regulations. **A priority would be the provision of capacity for enforcement activities.**

B1. Baseline and monitoring change

Comoros

Carry out priority surveys and populate a national invasives database. Document introduction pathways. Participate in regional marine invasives programmes (surveys and management).

Madagascar

A national IAS checklist is needed, along with pathway of introduction analysis.



Mauritius

Information on **IAS checklists and GIS data is a priority for Rodrigues**, but less so for Mauritius. The **identification of key pathways of introduction, and species surveys at sensitive sites is also needed**. An **horizon scan is also urgently needed** to identify potential IAS threats to Mauritius and Rodrigues.

B2. Prioritisation

Comoros

Carry out a **pathway analysis and implement risk assessment for biosecurity purposes**.

Madagascar

Development of risk assessments and risk management protocols is urgently needed. An horizon scan is also needed to identify future potential IAS.

Mauritius

Development of **risk assessments and prioritisation processes** may come out of GEF 6 project (need to check). They are a priority, and need to be inter-island specific as risks could be different.

Seychelles

Existing risk assessment process needs to be reviewed, and the development of a Western Indian Ocean **regional standard for undertaking RAs is also needed**. A **review of existing risk assessment processes is needed**, and a **regional approach to developing standards would be beneficial**.

B3. Research on priorities

Comoros

Develop an **invasive species research plan, based on objective prioritisation of the national list**.

Madagascar

A priority is to conduct **invasive species surveys** (animals and plants), construct the **list of IAS to guide management actions**, and also **define priority control methods** (biological, chemical, physical etc.) for target species.

Mauritius

One aspect that is a priority and not part of the GEF 6 project is the need to undertake research on IAS ecology, and their impacts. A review of management techniques is also needed e.g. Opuntia in Rodrigues, Tibouchina in Mauritius), **including on bio-control**, however some have already been done under the PAN project.

Seychelles

There is a need for research on some of the country's priority species.

C1. Biosecurity

Comoros

Capacity and facilities for animal and plant quarantine services are needed for at-border controls. Develop and incorporate a risk assessment and positive list (white-list) process into import controls, supporting the existing law. Implement existing agreements such as ballast water management. Develop an early detection and rapid response service, either nationally or regionally.



Madagascar

Capacity and facilities are needed to be developed to put in place at-border controls. By 2025, a major priority for Madagascar is to ensure that management measures are in place to prevent the introduction, management of pathways for the introduction of alien and invasive species.

Mauritius

Most actions will be undertaken through the GEF 6 ‘mainstreaming’ project. However these need to look **at inter-island aspects** (between Rodrigues and Mauritius), if this isn’t addressed it will be a priority. The strategic planning of measures for **pre-border, at-border, and post-border control** will be done through the GEF 6 project, a **priority for future projects will be the implementation of these measures.**

Seychelles

While biosecurity exists through border control and quarantine facilities, **capacity building is needed** to increase effectiveness. In addition, an **early detection and rapid response capability is needed** to support eradication of incursions. At the regional or international level, **the establishment of a rapid response fund** to provide funds and capacity quickly to undertake eradications before IAS become established is needed. The trade/shipping sector, possibly through a levy system, could support the funding of such a fund.

C2. Management of established invasives

Comoros

Following surveys and prioritisation exercises, design and establish the country’s first invasive species management programme, with priority target species and management goals determined according to best practice prioritisation and management protocols.

Mauritius

A priority is the **need to assess feasibility and cost management options for key species and habitats.** There are also priority management and eradication measures needed, in particular National (and regional) **crow prevention and eradication programme** – (eradication Mauritius, Madagascar); **Eradication and restoration of St Brandon** – a group of islands (rats/cats/mice etc.) and protocols for prevention; A request from minister of agriculture was the need for a **control programme for crab-eating macaque** is a big problem in forests (barrier – animal welfare; religious hindu implications; export for medical testing though this on decline); **Eradication and restoration of Acacia and other species (e.g. *Syzygium jambos*) from key sites in Rodrigues** – control in others; *Opuntia* control (potential biocontrol).

Seychelles

A standardised **method that will help identify the best (cost-effective and feasible) management option is needed** – a critical risk management process that will support risk assessments.

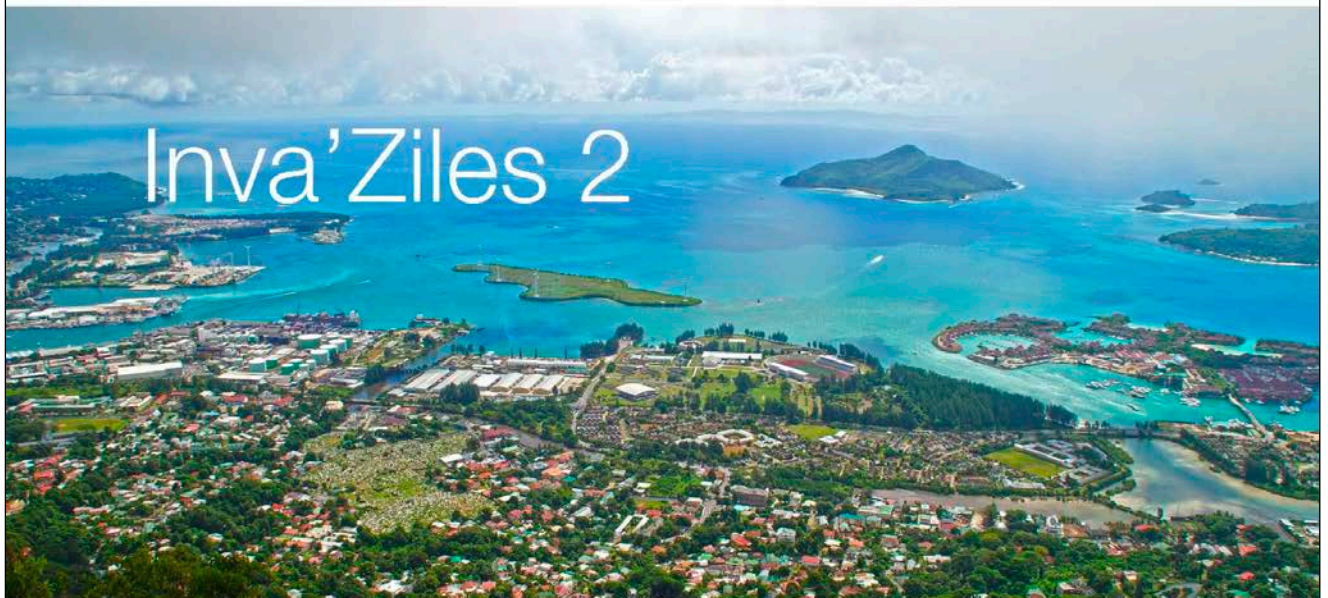
C3. Post management restoration

Comoros

Ensure that all management programmes are accompanied by monitoring and evaluation of outcomes, for planning restoration interventions.

Seychelles

Additional capacity is required for restoration work, and the **development of long-term monitoring and evaluation** of restoration projects is needed.



Preventing impacts from invasive alien species across the Western Indian Ocean region

The Western Indian Ocean (WIO) islands biodiversity, economies, livelihoods and human well-being are being significantly threatened by invasive alien species (IAS). Through an EC funded project, called *Inva'Ziles*¹, which finishes in mid-2018, IUCN has built capacity, knowledge, strategies and partnerships in the WIO to build the foundations to address biological invasions. However, much remains to be done, and there is an urgent need to capitalize on the momentum built through the *Inva'Ziles* project if the region is to protect its unique biodiversity and associated ecosystem services from the impacts of new, and existing IAS.

Islands support 10% of the world's population and 15% of the world's biodiversity, many endemic to single islands or archipelagoes. However, they are highly vulnerable to the impacts of invasive alien

species (IAS). Not only are IAS the single biggest driver of species extinctions on islands, but they also are an ever increasing threat to local livelihoods impacting agriculture, ecosystem services and human well-being.

The WIO islands are no exception. While the situation varies between islands, in some cases with extremely serious invasions by alien plants, domestic and wild vertebrates, and micro-organisms - local livelihoods (including those based on tourism as well as natural products) and biodiversity have been negatively impacted on all WIO islands. Unfortunately, in many of the WIO islands there is an absence of information, experience, capacity and infrastructure for managing existing invasions and preventing new ones.

Inva'Ziles project phase 1

In order to begin addressing these urgent needs, between 2012-2018 IUCN worked in partnership with institutions in the WIO islands. It was the first

¹ <http://www.agriculture-biodiversity-oi.org/en/WIONIS/Inva-Ziles>

initiative to take a regional approach to IAS management in the WIO region, through a combination of regional and individual-country actions. Regional networking and collaboration were established by the creation of the Western Indian Ocean Network on Invasive Species (WIONIS)², while practical management action was done by assisting local organisations in the Comoros, Rodrigues Island (Mauritius) and the Seychelles to begin innovative new IAS management projects in their islands. The regional networking covered the entire WIO region (including the islands of the Comoros, Madagascar, Mauritius, Seychelles, Mayotte, Reunion and the Iles Eparses, and expanded to bring in neighbouring countries, and others with interests in helping the region. In addition, Inva'Ziles 1 financed data gathering and analysis on IAS in the WIO, and

assisted strategic planning at national and regional levels, and even at the global level with the production of a global islands guidance document on IAS planning and management.

Inva'Ziles project phase 2 - concept

There is an urgent need to capitalise as quickly as possible on momentum built through the Inva'Ziles 1 project and strengthen and sustain the actions that have commenced. Distinct national priorities, in line with their NBSAPs, underpinned by regional actions have been identified by national experts from the WIO, who have been unanimous in their calls for an Inva'Ziles 2. Some of these priorities are summarised below.

Regional priority actions

- Regional standards for risk analysis, incl. for risk assessments and risk management;
- Regional scale early detection reporting and alert system;
- Regional rapid eradication capacity;
- Regional biosecurity actions, including pathways analysis, capacity building, horizon scanning;
- Strengthening regional information sharing and communication through WIONIS network;
- Regionally prioritised eradications, e.g. Indian House Crow.

National priority actions

• Comoros

Implementation of a new National Invasive Species Strategy and Action Plan (NISSAP); establishment of National Invasive Species Committee; awareness raising campaigns targeted at the public and key decision makers; capacity building of key institutions for managing IAS and biosecurity; baseline monitoring on priority IAS.

• Madagascar

Establishment of National Invasive Species Committee; development of NISSAP; building capacity and infrastructure of key institutions for managing IAS and biosecurity; development of a national IAS checklist identifying priority IAS.

• Mauritius

Building on progress made through the national GEF 6 IAS project *Mainstreaming IAS Prevention, Control and Management* including implementation of priority biosecurity measures identified through the GEF 6 project; development of key awareness campaigns; incorporating cost-benefit analysis into IAS management decisions; research into priority IAS and management techniques; control of Acacia and other IAS at key sites in Rodrigues.

• Seychelles

Review of National Biosecurity Committee and progress made through old NISSAP (2010-2015) and produce new one; develop education & awareness programmes to support community and political engagement; economic assessment of impacts to key sectors; capacity building and mainstreaming of IAS actions for key sectors esp. port management, agriculture and tourism; develop IAS 'app' to support early detection and monitoring; develop enforcement and biosecurity capacity to support implementation of existing legislation; rapid response capability established and maintained.

This project will support the WIO islands in meeting the following global targets:



² www.agriculture-biodiversity-ol.org/en/WIONIS/WIONIS-the-Network