## Summary of conclusions, recommendations and lessons

#### Brief summary

The project has significantly contributed to effect reforms in the Seychelles regulatory framework that would provide an enabling environment for the implementation of an effective biosecurity system.

Said system comprises a designated biosecurity agency, the Seychelles Agricultural Agency, responsible for risk assessments and treatments to prevent IAS entry into the Seychelles and a National Biosecurity Committee to coordinate the enforcement of the newly enacted Biosecurity Act among government agencies, as well as constitute a forum to share information on status, trends and treatments for invasive alien species.

However, the reform process suffered delays that make it take a longer timeframe than expected. Consequently, the project needed to extend its implementation timeframe from five to seven years to be able to accompany said reform process to its conclusion.

Moreover, it took almost three quarters of a year for the project implementation to recover from the untimely death of Ms. Danielle Dugasse, project coordinator and official of the Biosecurity Agency. This tragedy affected the project at the critical midterm point of implementation.

The project did recover and was able to achieve vast majority of its targets. However, there were some shortcomings in project achievements, including sustainability issues related to the retention of capacities and financial sustainability of the strengthened biosecurity system, as well as coordination issues related to divergent visions on biosecurity by different stakeholders.

#### Summary of Conclusions

The project was well designed, with strong vertical coherence in its strategy, i.e. the results chain logically led to the project objective of achieving *increased capacities to prevent and control the introduction and spread of Invasive Alien Species through Trade, Travel and Transport across the Production landscape*.

The results are well formulated and based on a sound situational analysis of the context relevant to the development objective that was agreed with national stakeholders. However, the project strategy assumed a common vision of biosecurity among relevant stakeholders, as well as the absence of major risks to the planned timeframe for policy and regulatory framework reforms. Both assumptions did not hold true and constituted factors that hampered project implementation

Political and institutional changes effected after project design, including the downsizing of the public sector and the split of environment and natural resources responsibilities among two ministries played a role in the implementation of the project but did not substantially alter the conditions for its implementation, as the impact of the institutional reform affected the project mostly by introducing new coordination dimensions among newly created agencies.

The project management structures demonstrated its solidity throughout the project implementation timeframe, managing to complete the vast majority of outputs of the project. The coordination unit demonstrated to have the capacity to address challenges posed by different views or even indifference towards biosecurity by some institutional players.

The monitoring and evaluation system was well planned and executed in general terms. However, there were some weaknesses in terms of quality of one outcome indicator, monitoring data of several indicators and the timeframe of the midterm review. One critical outcome indicator on ratio of government to non-government expenditure on IAS control was non-specific, i.e., changes of the variable could have been caused by factors other than the intended financial sustainability of the biosecurity agency, as well as being based in the wrong assumption that the biosecurity service could retain at least part of the income generated by fees and fines.

Monitoring and reporting was generally well conducted albeit with insufficient data on the following indicators: “ratio of IAS expenditure”, “threaten species status change” and “awareness on biosecurity”.

The project strategy is very relevant to the Seychelles, both as an instrument for the implementation of the main environmental policy, and as an answer to the main threat to the islands’ unique native terrestrial ecosystems.

The project decisively contributed to policy and regulatory reforms, developing a biosecurity policy and strategy that laid the ground for the final enactment of the Biosecurity Act in 2014. This act does not only provide the legal framework for risk assessments, inspections, treatments and collection of fees and fines, but, by being aligned with internationally recognized standards, has substantially facilitated the successful WTO membership candidature of the Seychelles.

However, the project could only partially achieve the objective of establishing a cost-recovery mechanism for the biosecurity service. Although the Biosecurity Act does provide the tools necessary for the collection of fees for processing permits and fines for violations, the fees and fines are not necessarily linked with the costs involved in processing permits and conducting inspections, nor with the potential damages caused by violations. More importantly, even increased revenue from fees and fines will be directed back to the treasury’s consolidated fund, without any guarantee of reinvestment in biosecurity activities. Thus, a cost-recovery mechanism that would include these two elements, correspondence between service/ damage to fee/ fine, and commitment with investment in biosecurity should be established for financial sustainability.

The project did not develop a concrete awareness strategy that included specific targets and indicators. Thus, awareness measures for the general public and travelers may have only had minor effects. Furthermore, key institutional stakeholders still need more awareness on the implications of the new policy and regulatory framework supported by the project.

The project’s support for the Plant and Animal Health Service as biosecurity agency was both strategic and in conformity with the project design, as well as being suggested as the best option by relevant institutional stakeholders from the Ministry of Environment at the design and inception stages of the project.

In spite of having the support of a majority of institutional stakeholders, the project approach was perceived by a minority yet key institutional actors as a divergence from a more traditional control and rehabilitation approach, primarily based on implementation of field activities. However, the project strategy did not prevent the deployment of “traditional” IAS eradication and control measures and in fact decisively supported such activities through a comprehensive effort in knowledge management and direct financial support of field activities.

In spite of this differences, and thanks to project support, the designated biosecurity agency, the Plant and Animal Health Service, together with the Customs Service is currently better able to inspect incoming passengers and cargo and hence the prevention of entry of IAS in the country has been significantly strengthened.

However, the biosecurity service has not yet sufficient capacity in terms of human and financial resources to conduct all necessary inspections, as mandated by the Biosecurity Act due primarily to lack of biosecurity approved premises, i.e. premises approved for the inspection, testing and treatment, and scarcity of qualified staff. Other biosecurity gaps still present are the lack of inspection of transit passengers at the Victoria International Airport, as well inter-island transport by boat and plane.

The National Biosecurity Committee (NBC), created with project support will play a crucial role in the successful enforcement of the biosecurity act. The NBC is mandated under the biosecurity act to act as the primary advisory body on biosecurity, thus advising actions by the biosecurity agency, as well as serving as an inter-agency coordination body.

Threats to the coordination among agencies are difference in levels of awareness of the economic and ecological threat posed by IAS, which can affect willingness to invest resources in IAS prevention and eradication, and, more marginally, competition for resources between advocates of a “preventive” approach that stresses control of entry paths and supporters of eradication actions against IAS already present in the country.

In fact, the NBC offers an opportunity to raise awareness on IAS among institutional actors, and to forge a common understanding of the necessary complementation of prevention and eradication actions based on the established fact that preventing entry of new IAS is more cost-efficient than eradication and rehabilitation, which was indeed the driver behind the project strategy. Yet again, it must be noted that civil society and private organizations involved in eradication and rehabilitation actions, as well as the vast majority of institutional actors from the two relevant ministries, Natural Resources and Environment, support the project’s approach.

The project has contributed to increase the current knowledge on IAS status, trends and management methods by producing and disseminating baseline stocktaking reports and funding research projects that yielded important results, such as better understanding of IAS ecology or determining the presence/ absence of pests in the country. Knowledge gaps still prevail in terms of documenting costs and cost-effectiveness of IAS management strategies.

More importantly, the project has significantly contributed to the development of capacities at the designated biosecurity agency, the Plant and Animal Health Service through trainings, and development of manuals. However, constraints of said biosecurity service in terms of capacity to recruit and retain qualified staff could hamper the implementation of the acquired capacity if the service budgets are not raised accordingly. In this respect, it must be noted that an important component of the project’s capacity development strategy involved the financing a masters degree in biosecurity for the project manager that included specific and critically needed skills for the biosecurity service. Only her death prevented the incorporation of this capacity into the service.

Although capacity issues at the Seychelles Agricultural Agency have hampered the development of the planned national IAS database, the National Invasive Alien Species subcommittee of the NBC is expected to have a central role in sharing knowledge on trends, status and management methods for IAS among stakeholders.

The project suffered important delays during the first two years of implementation, mostly related to the efforts to set-up the unified project coordination unit, for the new approach to the implementation of a significantly different GEF project portfolio. Also, government recruitment procedures for the recruitment of a new project manager resulted in delays of almost half a year.

Administration and disbursement of the project by the PCU and the UNDP was conducted in a timely and agile manner, only affected by factors beyond the control of both institutions, e.g. government procedures.

There were not any major shortcomings related to either disbursement or procurement processes.

The common management structure for the complete GEF-funded project portfolio resulted in lower management cost against the alternative of setting-up separated management structures. Hence, in spite of the extension of over two years from the original timeframe, management expenses have amounted only to 16% of the total project grant. Additionally, the terminal evaluation could account for a five-fold increase in the committed level of co-finances.

In terms of sustainability, and although policy instruments such as the National Agricultural Investment Programme and the National Biodiversity Strategy and Action Plan support funding the biosecurity system, there are significant risks of budget cuts affecting the Plant and Animal Health Service.

Failure to provide budgets according with the responsibilities acquired by this agency as designated biosecurity agency would not only compromise the sustainability of the project investments in capacity, but the whole enforcement of the new regulatory framework. Funding should not be dependent on externally funded project are likely to continue support for IAS management efforts in the Seychelles, as these projects tend to focus on eradication and rehabilitation actions.

The impacts of climate change on the entry and spread of IAS in the Seychelles are poorly understood and more research in the topic should be needed to assess this threat. However, two environmental factors do pose a threat to the sustainability of the biosecurity system: native species that can become invasive e.g. *Acanthaster planci* in coral reefs or *Merremia paltata* in terrestrial ecosystems and purportedly beneficial organism e.g. for biological control or to boost productivity.

#### Summary of Recommendations

Recommendations constitute short to medium term actions needed to consolidate project benefits or to address risks to sustainability. Recommendations of the terminal evaluation are contained in the following table with indication of the main actors for their implementation.

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| **Recommendation** | **Actors for the implementation** |
| Current confusion among some key stakeholders, particularly institutional actors on their roles and responsibilities under the Biosecurity Act, including membership, roles and functions of the National Biosecurity Committee should be immediately addressed through awareness and communication measures. | PCU, SAA and MoNRI, cooperation with NGOs |
| The Ministry of Natural Resources and the Ministry of Environment, with the support of the PCU should seek funding to further training and studies for staff from the biosecurity agency. This can not only be an important factor in bringing in critically needed skills and know how, but can also serve to motivate and increase visibility and prestige of the biosecurity agency. | PCU, MEE, MoNRI |
| Efforts should be made to disseminate the knowledge products generated by the project, with active engagement of the PCU, the Ministry of Natural Resources and the Ministry of Environment.  Key results in this endeavor would be finalizing the installation of the IAS database, promoting the activation of the National Invasive Alien Species Subcommittee (of the NBC) and incorporating the project’s research results in the communication actions of government and non-government actors. | PCU, key government agencies, particularly the SAA and the DoE-MEE, SIF (as member of the NBC and expert in IAS), other NGOs |

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| **Recommendation** | **Actors for the implementation** |
| Support must be given to a more needs-based allocation of budgets for biosecurity service functions[[1]](#footnote-1), involving a better coordination among the agencies and departments involved and making use of the new budget allocation mechanism, i.e. performance-based budget allocation and mid-term expenditure framework.  Also, fees and fines included in the Biosecurity Act should be reviewed to more accurately reflect the costs incurred by the biosecurity service.  The potential economic impacts of violation of the Biosecurity Act may reach enormous proportions, e.g. in the case of introduction of agricultural pests or accidental introduction of rats or parasites to outer islands. Hence, strict enforcement of a system of fines correlated with the damage cost is unrealistic and it could be even counterproductive if investments are scared away. Hence, the possibility of setting aside a fund or a liability insurance for agricultural, trade and tourism operators should be studied. | PCU, MoNRI, MEE, Ministry of Finance and Planning, General Attorney’s Office, UNDP’s BIOFIN |
| Include species with high risks of “invasiveness” such as *Acanthaster planci* in the list of regulated IAS to be included as one of the administrative provisions of the Biosecurity Act. This will likely prompt relevant government agencies to provide the necessary support to include monitoring and treatment of these species in management protocols | MEE, SNPA, MCSS, PCA, other NGOs |

#### Summary of Lessons Learned

Lessons learned constitute recurrent factors identified by the terminal evaluation that should be taken into consideration at the design and implementation phases of new projects. Therefore, lessons learned do not include implementation actors.

Project LFA indicators and its monitoring are critical to establish progress towards development objectives and therefore constitute the primary tool for adaptive management. Hence, at design and inception, it is necessary to rigorously test all indicators against SMART quality standards, particularly specificity, i.e. to establish if any factor other than the project can cause changes of the indicator variable.

Awareness strategies should have clearly defined objectives and target groups, as well as measuring mechanisms, i.e. the indicators and the methods to collect information e.g. surveys, as well as be provided with sufficient budget to cover the costs of monitoring. Failing to do that denies stakeholders the possibility of learning what strategies are most cost-effective for what awareness objectives. Strategic, specific investment in awareness, would likely yield better results than general, diluted messages.

As recruitments constraints are nothing new in SIDS context, contingency plans to avoid halts in project delivery could be developed by e.g. designating deputy project managers, pre-identification of experts, and signature of memoranda of understanding with implementing partners. However, it must be noted that the PCU and the UNDP did in fact implement all the measures mentioned above, including signing agreements with both the Department of Environment and the Seychelles Agricultural Agency and interim covering vacant positions by reassigning tasks of the remaining staff.

Accounting of expenditure should be consistent with budgeting. Mechanism to ensure this are, at project design, double check budget accounts and budget notes, and, during implementation coordinate expenditure accounting between UNDP and project implementation unit and keep documentation on “expenditure notes” to enable to track down project costs to activities.

1. i.e., for the PAHS and other government agencies involved in IAS control measures, e.g. Customs or DoE [↑](#footnote-ref-1)