



# ADAPT ISLAND

## **LIFE Adapt'Island Project evaluation by ADAPTOM - Synthesis**

European Commission

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# 1. Context

The ADAPTOM project was born out of a consensus among French institutions dedicated to the biodiversity preservation. These instances have noticed:

1. The lack of hindsight and feedback to assess the effectiveness and limitations of Nature-based Solutions<sup>1</sup> (NbS);
2. Their need for 1) networking on this subject at the level of the Overseas Territories, and 2) a census of NbS, and 3) common evaluation methods;
3. The need to value certain traditional or ancestral practices.

Following these conclusions, the ADAPTOM project responds to the needs of a clearly identified and already mobilized community of actors. The animation and monitoring of the project are based on a group of actors interested in experimenting with NbS. In order to remain as close as possible to the needs of the actors in the field, ADAPTOM's facilitation is based on the setting up of 8 workshops: a launching workshop, 6 inter-regional thematic workshops combining classroom work and site visits, and a closing workshop.

ADAPTOM focuses on inhabited tropical island overseas territories (Guadeloupe, Martinique, Mayotte, New Caledonia, French Polynesia, Reunion Island, Saint-Martin, Saint-Barthelemy, Wallis and Futuna) and answers five questions: What NbSs have been experimented in overseas territories? How do NbS projects constitute a breeding ground for promoting adaptation to climate change through the individual and collective learning that they generate? What value has been placed on their achievements and benefits? What role does regional cooperation play in their development? How can the scientific community usefully support the actors in the field who are experimenting and implementing them?

ADAPTOM evaluated the LIFE Adapt'Island Project as it represents one of the main NbSs projects within the spatial frame of its study; the inhabited tropical island overseas territories. Specifically, the LIFE Adapt'Island project is one of the two only projects in Guadeloupe to fit the NbS criteria.

LIFE Adapt'Island project analysis has resulted in an evaluation grid, the content of which is summarized in this document.

ADAPTOM evaluated the project through 8 variables, each one assessed through a relevant question. Those criteria are listed below:

## 1. Context

- *Is the local and national context favourable to the deployment and success of NbS?*

## 2. Governance

- *Is the governance of NbS favourable to its deployment and success?*

## 3. Funding

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<sup>1</sup> Nature-based Solutions™ leverage nature and the power of healthy ecosystems to protect people, optimise infrastructure and safeguard a stable and biodiverse future - IUCN

- *Do the NbS holder and its partners have the capacity to ensure NbS financing?*
4. Social acceptability
    - *Is there public support for NbSs?*
  5. Effectiveness of NbS in reducing risk
    - *Are the conditions required for NbS to be effective fulfilled? Does NbS reduce risk?*
  6. Studies, monitoring and evaluation
    - *Are studies, monitoring, and evaluation of NbS planned or conducted?*
  7. Co-benefits and negative collateral effects
    - *Have the co-benefits and negative collateral effects of NbS been anticipated and realized?*
  8. Adaptive dimension of NbS
    - *Does NbS contribute to the territory's adaptation to climate change?*

A system of indicators and scores (for each of the themes addressed) was used to ensure an objective, qualitative and quantitative evaluation. A score from 0 to 3 is assigned to each of the variables and sub-variables, with 0 corresponding to a poor result and 3 to an excellent result.

The results presented below are summarized and ranked in a grade descending order.

## 2. The ADAPTOM LIFE Adapt'Island project analysis grid; a synthesis

### 2.1. Variables with an excellent grade: 3

The **project cognitive context** (scientific, local, and indigenous knowledge) was evaluated at a score of 3. This rating corresponds to the existence of adequate knowledge to support the implementation of the NbS: existing knowledge in all relevant fields, up-to-date, accurate, robust, and derived from diversified and sufficient number of knowledge sources. Indeed, the LIFE Adapt'Island project has a scientific committee to support the project. This committee is able to evaluate the quality of the studies and experiments conducted within the framework of the project. The project also has scientific expertise acquired in the framework of the previous Cayoli project. However, the available knowledge is mainly in the field of ecology. A lack of expertise is noted for other areas of expertise that could be developed within the framework of this project such as geology. This lack of expertise is filled by partnerships that include experts and the West Indies University.

The NbS **financial capacity to deploy** also scores three, corresponding to a comfortable budget: all the needs and/or key actions are well covered. Indeed, the budget is adequate as the GPMG is technically and financially supporting the project.

On another note, **the population is highly receptive** to NbS as 90% of the 50 people interviewed are in favour of their use.

LIFE Adapt'Island project makes a significant contribution to building flexibility through an **iterative learning process** based on continuous adjustments to the actions taken. This characteristic allows it to obtain the maximum score for the corresponding variable. This adaptation corresponds to constant adjustments as the project progresses such as: coral transplantation; from the restoration of the seagrass beds to the mooring. This iterative process involves an amendment to the European Commission and validations by the evaluator.

Finally, the variable “**NbS evaluation**”, also scores 3. This evaluation is presented here.

### 2.1. Variables with a good grade: 2

The **regulatory and land tenure contexts** receive a score of 2, corresponding to 1) the existence of policies and tools related to environmental protection, land use planning, and risk management and adaptation to climate change that can support the implementation of NbS. These policies and tools are partially implemented on the ground and provide significant support for the implementation of NbS. Indeed, the GPMG's mission is to manage and preserve the natural public domain and the natural spaces it owns or which are assigned to it, in accordance with the law N°2008-660 of July 4, 2008 on harbours reform. 2) the public ownership of all or most of the NbS perimeter. However, due to its status, this perimeter is not specifically dedicated to environmental protection and restoration actions, which could generate conflicts of use and reduce support for NbS in the longer term. Indeed, the GPMG has dedicated land in the natural areas management strategy. These areas are guaranteed for the long term via the Port Nouvelle Génération project. These environmental zones are included in the GPMG's biodiversity action plan (Cayoli) and are subject to specific actions. These actions are part of the GPMG environmental policy.

In terms of **governance**, 1) the identification and involvement of relevant stakeholders (including potential winners and losers), 2) the contribution of NbS to local capacity building (development of partnerships, training, awareness raising, education, information, events...) as well as the capacity of the NbS holder and its partners to anticipate and resolve conflicts received a score of 2. Indeed, the Conservatoire Du Littoral - CDL (French institution and other major landowner / biodiversity manager) is involved from the very beginning of the project. In addition, the cities and agglomeration communities are largely involved as members of the scientific committee and the steering committee. Diversified and regular actions are carried out for school children and the general public. These actions concern the scientific dissemination via international conferences, the sensitization of boat owners, the training of service providers on good practices etc. The dissemination will be mainly realized in the 2<sup>nd</sup> part of the project. Finally, Eco-moorings management is integrated into the marina concession and will have no impact on the project in terms of governance.

The **long-term financial viability** is well thought out and has a high probability of being ensured by the developer and its partners. Indeed, the project is not part of the GPMG's compensatory measures. The approach is part of the GPMG's long-term strategy, a transfer to the Environment Department is already underway and the provisional budget is validated. The strategy is therefore sustainable in the very long term.

The public is **fairly confident** that NbSs **are effective in reducing coastal hazards**. Indeed, 42% of the 50 respondents are somewhat confident in the effectiveness of NbSs, 34% are confident to very confident and 24% have limited confidence.

Regarding the **effectiveness** of NbS **in reducing risk** and in terms of 1) understanding of the functioning of the coastal system and the processes involved in reducing the associated risk and 2) the degree of technical readiness during implementation, the LIFE Adapt'Island project scores a 2. This score corresponds to 1) a good understanding of coastal processes, the causes of erosion or flooding, and how NbS will reduce the risk, based on experience and scientific knowledge, and local and indigenous knowledge. 2) The holder and its partners were quite technically ready to deploy NbS. In addition, they have partners who cover the technical needs or have deployed a strategy to acquire the required technical capacity in a timely manner. Indeed, a good understanding of ecosystem functioning and risk reduction processes, based on the expertise of the team and the scientific committee, has been demonstrated. Nevertheless, the absence of a precise evaluation of the risk reduction potential for the marine part is highlighted. It will be done only for the project terrestrial actions and through a hydrological study.

Regarding **studies, monitoring and evaluation**, the studies are evaluated as relatively diversified and thorough, and monitoring is carried out over the duration of the project and is implemented, but it does not address the risk reduction capacity. This will continue for 5 years after the end of the project.

When it comes to assessing **co-benefits**, many are expected or have been generated and benefit a relatively large and/or diverse workforce or group. The following co-benefits can be cited such as: mitigation, strengthening of biodiversity, depollution, improvement of the quality of life, job creation, knowledge enhancement. **Negative collateral effects** are also assessed. They are considered as minor and concern the cost of moorings.

Finally, the **adaptive dimension** of NbS is rated at 2. Both the transformational potential and the risk of maladaptation associated with NbS are concerned. Transformational potential is described as medium (medium scale, significant stakeholder involvement, moderate impact on risk reduction and coping practices). The project is indeed likely to set in motion a dynamic that will potentially be followed by other local actors. It is expected that all the stakeholders in the area will become more competent.

## 2.1. Variables to be improved : 1

**Technical background** scores 1 corresponding to no previous experimentation / partial previous experimentation. Technical skills to deploy NbS nevertheless exist, for example with the support of external partnerships. We note in particular the existence of previous experience in the restoration of marine environments (Cayoli project, coral farms) and terrestrial environments (habitat restoration but not in the field of depollution), technical skills implemented on the terrestrial environment (soil analysis, adaptation of plants in a saline environment, creation of nurseries, etc.).

In terms of **governance, human and technical skills and capacities** (including project management) are **limited**. Their initial mobilization and/or stabilization over time has been

difficult, which has been detrimental to the implementation of the project. Delays and difficulties were identified in the deployment of the project due to difficulties in maintaining human capacity on an ongoing basis (new team, etc.). The delays are mainly due to the pandemic and social movements. A request for extension has been made to the European Union in this sense. The increase in the team's skills in contact with the project allows it to access permanent positions and anchored in the territory.

**The preliminary economic evaluation** of the NbS is considered insufficient and inconsistent. In addition, the proposed alternative solutions are technically and financially unrealistic (e.g. dikes all around Guadeloupe) and environmentally inconceivable.

In terms of social acceptability, the **level of public involvement** is low to very low: in a limited number of actions and/or very occasional involvement and/or limited number of participants and/or selective involvement of certain groups (e.g. partnership with a school) and/or involvement of the population in a very limited area. This variable will nevertheless be revised upwards later on. Indeed, a major communication campaign is underway (2 documentaries for the general public have already been produced, the trilingual newsletter is being launched, as well as a print and digital press campaign, a brochure in French, Spanish and English, a travelling exhibition, trilingual roll-ups and a poster campaign). An Awareness project officer has been recruited since November 2022. Partnerships with schools are being set up as well as events with the families of GPMG employees. A framework agreement with the rectorate is currently being drafted. A conference was also organized on 25/11/12 by the GPMG as well as a boat trip with influencers and numerous publications on social medias.

Most of the sub-variables of the theme "**Effectiveness of the NbS to reduce the risk**" obtain a score of 1. Indeed, the consideration of temporal scales, the spatial scale, the potential for scaling up as well as the capacity to reduce the risk are not coherent. Indeed, the timeframe of risk reduction and duration of benefits is not taken into account in the project. The GPGM is nevertheless aware of the limits of the solutions on the marine part. There is no dedicated study for the risk part. The lack of risk reduction potential of the actions carried out in the marine environment is felt. The limited risk reduction potential of the actions carried out in terrestrial environment (restricted scale). Furthermore, no continuum is demonstrated in the actions carried out in these connected ecosystems. In addition, this project could be transferred to other ports in the Caribbean, but this action has not been carried out to date. It will be implemented to the Martinique and Guyana harbours. A lack of robust evidence is highlighted regarding the risk reduction capacity of the project.

The **identification** by the project leader and its partners **of potential co-benefits and beneficiaries** has not been studied through a dedicated study. Therefore, the score for this variable is 1.

And lastly, the **identification and prior evaluation of the negative collateral effects and losers** of the NbS has not been carried out. Potential negative collateral effects have been identified (disruption of uses, cost of eco-moorings) but, in the absence of dedicated studies, this information remains unverifiable and unquantifiable.