

STAP SCREENING TEMPLATE

GEF ID	11111
Project title	Strengthening Climate Resilience on the Comoros Coastal Zone Through Ecosystem-based Adaptation
Date of screen	8 June 2023
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1. Summary of STAP's views of the project

STAP acknowledges the project “Strengthening Climate Resilience on the Comoros Coastal Zone Through Ecosystem-based Adaptation.” The project currently proposes to address a wide range of potential climate-related impacts on people and the environment in Comoros through 4 main components: 1) enabling environment for EbA; 2) restoration and improved management of coastal ecosystems; 3) fostering participation in the blue economy; and 4) MEL.

However, the current PIF unevenly connects climate trends to the socio-ecological systems of Comoros, making the relevance and importance of these trends to some of the described challenges unclear. Further, while the PIF captures multiple climate futures, it does not integrate this into the changing systems of Comoros (i.e. rapid urbanization, substantial poverty) to more fully capture the wide range of possible futures for the systems it presents as under stress. This project has the potential to deliver a wide range of adaptation benefits provided the overall logic (and underlying assumptions) underpinning the objective is sharpened during PPG phase.

Note to STAP screeners: a summary of STAP's view of the project (not of the project itself), covering both strengths and weaknesses.

STAP's assessment*

- Concur - STAP acknowledges that the concept has scientific and technical merit
- Minor - STAP has identified some scientific and technical points to be addressed in project design**
- Major - STAP has identified significant concerns to be addressed in project design

Please contact the STAP Secretariat if you would like to discuss.

2. Project rationale, and project description – are they sound?

See annex on STAP's screening guidelines.

STAP appreciates the EbA approach of the proposed project and its awareness that hard infrastructure solutions are frequently maladaptive. If all project assumptions hold up, the project is likely to deliver adaptation benefits in the form of reduced exposure to hazards, reduced sensitivity to the hazards and their impacts, and increased adaptive capacity (see STAP Information Document [A Typology of Climate Change Adaptation Benefits: Exposure, Sensitivity, and Adaptive Capacity](#)). However, the PIF's presentation of the problem is complicated and somewhat disorganized, calling some of these assumptions – ranging from the impact of climate change on specific environmental assets to the capacities of local populations – into question.

While STAP appreciates that the PIF included more than one climate future, allowing for a range of possible future conditions against which to select interventions for robustness, the PIF does not clearly present more than one future of the *system* – that is, we have a sense of how the climate might change, but how might urbanization trends progress? How might the development of the economy take shape? What will be the impact of a changing population which continues to grow and with more than half under 20 years old? It is

difficult to assess which EbA interventions make the most sense in light of future conditions when the only conditions presented are climate.

For example, the PIF focuses the discussion of coastal flooding risk around increases in sea level and the increased likelihood of exposure to cyclones. Aside from an early mention of sand extraction from beaches, at least in part accelerated by increasing urban development in the country, there is no integration of climate and other drivers of change. But while we have a sense of climate futures in Comoros, what are the futures of urbanization and sand extraction?

On the other hand, there are lost opportunities to clearly link the climate hazard to what appears to be a more systemic framing of the challenge. The PIF mentions how on-shore erosion can contribute to the challenges faced by key coastal ecosystems, which is a useful representation of the system, but does not effectively link that system to the climate driver. A review of the evidence for climate impacts used by the PIF developers (the World Bank CCKP) suggests that the decrease in mean annual precipitation noted by the PIF is not only very small, it obscures a more important trend. As the PIF notes, precipitation will actually increase during the rainy season, taking the form of larger rain events that can produce substantial erosion that then impacts coastal ecosystems.

The PIF provides a great deal of information about threats to ecosystems and biodiversity in Comoros, such as mangrove dieback, coral bleaching, and shifting locations of fish species. These are sometimes poorly linked to climate change (for example, the PIF offers no data on ocean temperature change that might drive coral bleaching apart from a reference Comoros's initial national communication in 2002 (20 years ago) that a rise in sea-surface temperature in 1998 led to coral bleaching).

A different class of issue has to do with the framing of local decision-making. STAP appreciates that this project will build on excellent processes of community engagement such as seen in earlier GEF projects. However, this engagement was not part of the development of the PIF and there are numerous points in the document where there appear to be unsubstantiated claims about the decisions and needs of the population.

For example, Barrier 3 asserts that “Despite being more and more aware and impacted by climate change, local communities lack knowledge about i) adaptation strategies that are relevant to their environment and ii) how to implement them. In particular, while coastal defense works have been spontaneously built by coastal inhabitants in attempts to halt coastline retreat, these grey infrastructures are poorly dimensioned and their impacts on upstream and downstream sedimentary dynamics are not assessed and monitored which could lead to increased erosion problem.” While local communities might lack knowledge of formal adaptation strategies, the likelihood that they are not already adapting to some impacts is very low and these actions should be accounted for. Further, while these communities might not undertake formal assessment and monitoring of the impacts of coastal defense works, it is very unlikely that they are completely unaware of such impacts. Failing to account for local knowledge and action in the context of adaptation can result in lost opportunities to build on local capacity and knowledge while alienating the communities the project is intended to benefit.

Under Barrier 5, the PIF asserts “There might also be limited knowledge on the environmental value of maintained and healthy ecosystems and little understanding of how environmental degradation and unsustainable livelihoods practices will in turn negatively impact individual household incomes, and contribute to vulnerability in light of climate change.” If true, this would be extraordinarily unusual – but this framing of local communities suggests that all they need is better information and knowledge, which might obscure structural factors (such as low incomes and limited employment opportunities) that make degrading activities plausible, if not attractive. In short, these assertions may misdiagnose the challenge as it rests in local communities and thus misinform the selection and design of interventions.

Table 2 presents the assumptions/risks underlying the ToC. STAP notes that A2: communities are willing to and able to partake in the project activities) and A3: Successful pilots of EbA approaches help demonstrate the business case for EbA adoption are critical and interlinked – earlier statements in the PIF make it clear that a convincing case has not been made for EbA in the past. The PIF does not clearly explain how this project will produce different results given this prior history.

Component 3 is aimed at fostering participation in the Blue Economy, but does not offer a framing of what the blue economy is in general, and what it means for Comoros in particular. For many island nations, the blue economy is synonymous with the national economy, but the PIF does not clearly state this for Comoros. Based on the indicative activities, it appears that the blue economy is focused on supporting primarily MSMEs and fisherfolk. However, according to the PIF, coastal areas also host most of the country's key infrastructure including ports, airports, power plants, water plants, oil and gas depots, and roads. Reference to the blue economy is typically inclusive of all activities occurring along the coastline (for example, tourism and fisheries) as they tend to be inter-related and inter-dependent. The STAP document [The GEF and the blue economy](#) offers a useful way of framing this issue that could inform the development of a more coherent project component during PPG phase.

Note: provide a general appraisal, asking whether relevant screening guideline questions have been addressed adequately – not all the questions will be relevant to all proposals; no need to comment on every question, only those needing more attention, noting any done very well, but ensure that all are considered. Comments should be helpful, evaluative, and qualitative, rather than yes/no.

3. Specific points to be addressed, and suggestions

- 1) STAP recommends that the project revisit the problem statement and clearly identify the *systems* implicated in the problem. Climate vulnerability is not driven by the hazard, but by underlying structures of vulnerability (such as economic systems that limit livelihoods opportunity, social systems that exclude some people from decisionmaking and social mobility, etc.). Climate hazards play out on those underlying structures to produce specific forms of vulnerability that should be addressed through adaptation activities. The PIF contains good information that could be used to do this, but in its current form this information is not integrated and therefore difficult to understand systemically.
- 2) STAP further recommends that the climate drivers discussed by the project be limited to those relevant to the problems the project seeks to address. For example, a small downward trend in annual precipitation is not going to create a significant challenge for Comoran communities. A trend toward large precipitation events in the rainy season, however, is likely to drive more erosion and siltation of key coastal ecosystems. The project should be focusing its design on the latter.
- 3) STAP recommends that once the project has more clearly focused its goals, it ensure that it can connect climate change to an impact with evidence. For example, the project needs to substantiate the claim that ocean temperatures are increasing rapidly enough to create harm to key coastal ecosystems.
- 4) STAP recommends that once the project has more clearly focused its goals, it develop two or more integrated simple narratives of plausible futures for the socio-ecological systems in question – such as the example of coastal erosion discussed above. The STAP brief [Using simple narratives to ensure durability of GEF investments](#) provides guidance for such an effort. STAP further recommends that these simple narratives be used to further focus the proposed project interventions, focusing on those that are robust across these different futures.
- 5) STAP recommends that in the PPG stage the project carefully test its assumptions about coastal communities, their capacities, and their decision-making. STAP has produced a [decision tree for adaptation rationale](#) that can guide project designers in this effort.

Note: number key points clearly and provide useful information or suggestions, including key literature where relevant. Completed screens should be no more than two or three pages in length.

*categories under review, subject to future revision

ANNEX: STAP'S SCREENING GUIDELINES

1. How well does the proposal explain the problem and issues to be addressed in the context of the **system** within which the problem sits and its drivers (e.g. population growth, economic development, climate change, sociocultural and political factors, and technological changes), including how the various components of the system interact?
2. Does the project indicate how **uncertain futures** could unfold (e.g. using simple **narratives**), based on an understanding of the trends and interactions between the key elements of the system and its drivers?
3. Does the project describe the **baseline** problem and how it may evolve in the future in the absence of the project; and then identify the outcomes that the project seeks to achieve, how these outcomes will change the baseline, and what the key **barriers** and **enablers** are to achieving those outcomes?
4. Are the project's **objectives** well formulated and justified in relation to this system context? Is there a convincing explanation as to **why this particular project** has been selected in preference to other options, in the light of how the future may unfold?
5. How well does the **theory of change** provide an "explicit account of how and why the proposed interventions would achieve their intended outcomes and goal, based on outlining a set of key causal pathways arising from the activities and outputs of the interventions and the assumptions underlying these causal connections".
 - Does the project logic show how the project would ensure that expected outcomes are **enduring** and resilient to possible future changes identified in question 2 above, and to the effects of any conflicting policies (see question 9 below).
 - Is the theory of change grounded on a solid scientific foundation, and is it aligned with current scientific knowledge?
 - Does it explicitly consider how any necessary **institutional and behavioral** changes are to be achieved?
 - Does the theory of change diagram convincingly show the overall project logic, including causal pathways and outcomes?
6. Are the project **components** (interventions and activities) identified in the theory of change each described in sufficient detail to discern the main thrust and basis (including scientific) of the proposed solutions, how they address the problem, their justification as a robust solution, and the critical assumptions and risks to achieving them?
7. How likely is the project to generate global environmental benefits which would not have accrued without the GEF project (**additionality**)?
8. Does the project convincingly identify the relevant **stakeholders**, and their anticipated roles and responsibilities? is there an adequate explanation of how stakeholders will contribute to the

development and implementation of the project, and how they will benefit from the project to ensure enduring global environmental benefits, e.g. through co-benefits?

9. Does the description adequately explain:

- how the project will build on prior investments and complement current investments, both GEF and non-GEF,
- how the project incorporates **lessons learned** from previous projects in the country and region, and more widely from projects addressing similar issues elsewhere; and
- how country policies that are contradictory to the intended outcomes of the project (identified in section C) will be addressed (**policy coherence**)?

10. How adequate is the project's approach to generating, managing and exchanging **knowledge**, and how will lessons learned be captured for adaptive management and for the benefit of future projects?

11. Innovation and transformation:

- If the project is intended to be **innovative**: to what degree is it innovative, how will this ambition be achieved, how will barriers and enablers be addressed, and how might scaling be achieved?
- If the project is intended to be **transformative**: how well do the project's objectives contribute to transformative change, and are they sufficient to contribute to enduring, transformational change at a sufficient scale to deliver a step improvement in one or more GEBs? Is the proposed logic to achieve the goal credible, addressing necessary changes in institutions, social or cultural norms? Are barriers and enablers to scaling be addressed? And how will enduring scaling be achieved?

12. Have **risks** to the project design and implementation been identified appropriately in the risk table in section B, and have suitable mitigation measures been incorporated? (NB: risks to the durability of project outcomes from future changes in drivers should have been reflected in the theory of change and in project design, not in this table.)