REVISED STAP SCREENING TEMPLATE, OCTOBER 2022

GEF ID	11780
Project title	Blue Corridor: connectivity for the conservation, restoration and sustainable use of marine ecosystems of global importance in the Southern Caribbean of Costa Rica
Date of screen	09 December 2025
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1. Summary of STAP's views of the project

STAP welcomes the proposal from Costa Rica on "Blue Corridor: connectivity for the conservation, restoration and sustainable use of marine ecosystems of global importance in the Southern Caribbean of Costa Rica". The project aims to create a 720 km^2 marine corridor between Cahuita National Park and Gandoca-Manzanillo Wildlife Refuge. It will restore and improve the connectivity of key ecosystems in Costa Rica's southern Caribbean by diversifying the livelihoods of local communities, Afro-descendent and Indigenous Peoples to effectively and sustainably create and manage the marine corridor. STAP is pleased to see the project's strong focus on supporting Indigenous Peoples and local communities, including Afro-descendent communities, and interventions related to improved governance and sustainable livelihoods. However, the project would benefit from clarifying (a) how it advances the GBF targets, and (b) deeper analytical rigor, stronger empirical grounding, and more operational and technical detail in key design elements.

The project rationale is based on a systems analysis, but needs to be supported by more rigorous and better referenced evidence, instead of relying so heavily on agency sources, with limited peer-reviewed literature and limited local data. The analysis of barriers is well grounded institutionally and is complemented by a reasonable description of the baseline, which however lacks some crucial information that makes it difficult to assess the additionality and complementarity of this project (e.g., the current areas and condition of each target habitat within the project area, a more appropriate description of global environmental benefits the poject will generate). The overall objective is consistent with GBF priorities, but more detail is needed on how it will contribute to GBF targets 1, 2, 3, 8, 10 and 22.

The Theory of Change is conceptually sound but is largely qualitative; the logical pathways to achieving outcomes are not all fully articulated, and some factors (e.g., what marine connectivity will be restored and how; trends in market dynamics of tourism and fisheries) are insufficiently analysed. Also, assumptions and sources/levels of uncertainty should be clarified. The causal pathways and mechanisms within the defined system are not always explicitly explained. The design of the components is sound but technical detail is uneven, with governance well defined but restoration, PES design and monitoring needing refinement. The analysis of risks is broadly adequate, as are the proposed mitigation measures, but with limited operational specificity or contingency planning.

STAP has identified some scientific and technical points to be addressed.

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.

The **project rationale** provides a good problem analysis and systems framing, with a narrative description of interacting drivers and multidisciplinary coverage of underlying issues and challenges. Environmental degradation is framed as a product of reciprocal interactions between climate, socio-economic, governance and finance drivers, which are effectively illustrated in a systems diagram (Fig. 2). Climate change is framed as an amplifying factor and threat multiplier, rather than as a stand-alone issue, and the political-institutional dimension is well integrated in the system. However, the proposal does not unpack entirely the mechanisms underlying some of the interactions it maps out (e.g., the importance of disease outbreaks for the health of coral reefs how governance fragmentation translates into overfishing, or how gender inequality affects marine ecosystems). Similarly, market drivers, such as tourism dynamics or fisheries price signals are acknowledged but not analyzed in any depth.

The supporting evidence is made up mainly of agency sources with very limited use of peer-reviewed scientific literature, and with the description of some of the environmental impacts and challenges (e.g.coastal erosion, habitat degradation) not supported by adequate measurable data or citations.

The proposal does not include a description or analysis of how **uncertain futures** could unfold, rather climate risk is presented as a linear predetermined process covering historical climate trends and with references to future conditions mostly limited to the IPCC high-emission scenarios (RCP8.5).

The proposal provides a fair description of the existing **baseline**, which is grounded in Costa Rica's marine governance architecture and a solid portfolio of international biodiversity and finance initiatives. This clearly demonstrates engagement with relevant national policies, donor-funded programs (e.g. Save the Blue Five, GIZ) and financial initiatives such as BIOFIN and the Blue Action Fund. However, the description lacks information about timeframes, performance metrics, spatial coverage and overlap analysis, and the results attributable to these initiatives, which makes it difficult to assess any potential overlaps and/or complementarity. The proposal would benefit from a clearer articulation of long-term financing and scaling pathways.

The **barrier** analysis is a clear strength of this proposal, as it provided a comprehensive diagnosis across governance, finance, technical capacity, livelihoods and knowledge systems, although **enabling conditions** (e.g. policy windows, institutional champions, community readiness, market fluctuations) are not systematically articulated.

The **project objective** is well aligned with the diagnosed problem and reflects a reasonable level of ambition, which is consistent with both the underlying project logic and GBFF priorities.

Overall, the **Theory of Change (ToC)** is well designed and credible at a conceptual level, with a coherent logic that connects system diagnosis (drivers & barriers) to interventions, outputs and long-term outcomes. The integrated, multi-pronged approach is appropriate for a complex socio-ecological system like a marine (coastal) corridor with multiple stakeholders. However, causal pathways are mostly qualitative and lack quantitative benchmarks or thresholds, e.g. what level of Payment for Ecosystem Services (PES) payment is needed to shift behavior; or what percentage reduction in fishing/pressure is expected. Moreover, the ToC seems based on a broad and possibly simplistic view and assumption that governance reform will happen, restoration and PES schemes will work, and social uptake will follow. The design does not embed, consider or even acknowledge the potential impact of exogenous shocks (e.g. climate change trajectories, economic crises, governance instability) into the ToC, limiting its robustness. The **ToC diagram** illustrates the overall logic adequately and is visually efficacious, although: a) it does not show any activities or long-term impact(s); and b) some of the linkages (i.e. arrows) are broken or interrupted, with outputs connected to barriers and outcomes in opposing directions (i.e. outputs → outcomes and outputs → barriers) when they should be sequenced (i.e. activities→ outputs→ barriers→ outcomes→ impact/objective).

The design and structure of the **components** are coherent and well aligned with the ToC, and most interventions are technically plausible. Governance, finance, restoration and livelihoods are correctly identified as the preferred levers given the system analysis. However, technical depth is uneven across components. Governance and participation are well described especially from a procedural perspective, but target habitats for restoration and restoration methods, PES design, and monitoring protocols remain high-level and would benefit from more technical and operational details, and performance benchmarks.

The **stakeholders** analysis section provides a reasonably comprehensive stakeholder map, which includes: national agencies (e.g. INCOPESCA, Coast Guard), local government (e.g. Municipality of Talamanca), community associations and NGOs (e.g. MarViva, Raising Coral, COASTS), academia and the private sector (tourism chambers). The proposal outlines the roles and responsibilities of each group, in the "Institutional Arrangements" section on pg. 23 and provides a diagram, which is useful to illustrate the proposed governance structure. . The need to engage with the private sector is adequately recognized, but this remains largely aspirational as the proposal lacks a concrete engagement strategy/plan.

The proposal identifies a reasonable set of operational and institutional **risks**, which are broadly adequate. However, several entries reflect systemic level risks and uncertainties (e.g. climate shocks, systemic socio-economic pressures) that should be addressed in the ToC and project design (i.e. the components) rather than the implementation risk table. Mitigation measures are generally adequate but rely heavily on process measures (e.g. stakeholder engagement, capacity-building) with limited operational specificity or contingency planning.

3. Specific points to be addressed, and suggestions

- The proposal should provide a thorough description of the current status of biodiversity within the project area. Currently there is a list of some priority species and a list of ecosystems, however, the extent of different habitats and the current levels of degradation of these systems should be described.

- The proposal states that a marine corridor of 720 km^2 will be created, and this will contribute to Costa Rica's commitments to GBF target 3, also known as 30x30. It is unclear, however, whether the marine corridor will be a new protected area (PAs), and what the corridor is connecting, e.g., is it connecting existing PAs, or connecting different habitats, or migratory corridors for particular species. Furthermore, the narrative and results framework table indicate 28,650 hectares in new PAs or under improved management, making it unclear how the 720 km^2 corridor will be achieved. For example, coral cover in Cahuita has declined significantly since the early 1980's and it has been suggested that the coral ecosystems have undergone a phase shift from hard coral to macroalgae domination (Quezada-Perez 2023). See also STAP's paper on considerations for biodiversity conservation in the Anthropocene.

- The proposal should explicitly describe *how* system drivers translate into environmental outcomes. In particular, it should: i) explain which habitats will be restored and how, and justify that the proposed methods and locations for restoration will be feasible in the context of explain the mechanisms linking governance fragmentation to overfishing and weak enforcement; ii) clarify how PES schemes are expected to influence behavior and resource-use decisions; iii) strengthen the analysis of political-economy drivers, including tourism dynamics, fisheries markets, and tenure conditions.

- The supporting analysis should be strengthened by: a) integrating evidence and data from peer-reviewed scientific literature on coral reef restoration, marine connectivity, co-management, and marine PES; b) making better use of local quantitative data to support claims on erosion, sedimentation and biodiversity impacts.

- The proposal should introduce simple future narratives that explore different governance, economic and climate futures and assess how the corridor, governance and PES models would perform under these futures. This should then form the basis for designing interventions that will be robust across the plausible futures (**see STAP guidance on:** Using simple narratives to ensure durability of GEF investments).

- To strengthen the case for transformational change, the proposal should: i) quantify the baseline portfolio (i.e. timelines, spatial coverage); ii) demonstrate how the project avoids duplication and instead delivers integration and scale; articulate long-term financing pathways beyond the GBFF grant (**see STAP guidance on:** Enabling Elements of Good Project Design and Achieving transformation through GEF investments).

- The ToC narrative should be revised to improve technical credibility and robustness by: i) introducing quantitative thresholds and behavioral assumptions where feasible (e.g., PES levels, enforcement effort); ii) explicitly documenting the assumptions underlying each causal pathway; iii) reflecting external risks and systemic uncertainty in the ToC structure; iv) adjusting the ToC diagram logic flow, so that pathways follow a coherent sequence [activities → outputs → outcomes → impact]. (**See STAP guidance on:** developing ToCs)

- Improve the technical depth of project components by providing technical specifications for restoration approaches, ecological thresholds and monitoring protocols; technical criteria for the marine PES mechanism (i.e. eligibility, payments, verification methods, equity safeguards).

- Develop a private-sector engagement strategy (**See STAP guidance on:** Multi-stakeholder dialogue for transformational change).

- The risk framework should be refined by separating design-level uncertainty from implementation risk; introducing more contingency and trigger-based response measures (**See STAP guidance on:** Clarifying risks in GEF projects).

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.)