

STAP guidelines for screening GEF projects

Part I: Project Information	Response
GEF ID	10166
Project Title	Strengthening human and natural systems resilience to climate change through mangrove ecosystems conservation and sustainable use in southern Benin
Date of Screening	25 November 2020
STAP member screener	Edward Carr
STAP secretariat screener	Guadalupe Duron
STAP Overall Assessment and Rating	<p>Minor issues to be considered during project design</p> <p>STAP acknowledges FAO’s proposal “Strengthening human and natural systems resilience to climate change through mangrove ecosystems conservation and sustainable use in southern Benin”. The project aims to increase the adaptive capacity of human and natural systems to climate change through mangrove ecosystem restoration in southern Benin. The project will target communities and their agricultural, forestry, and fisheries practices.</p> <p>STAP appreciates the description of the problem in the theory of change. To strengthen the problem analysis, STAP recommends using a systems analysis. This will allow for a more rigorous description of the drivers, shocks, key stakeholders needed to enact change, and linkages (including cross-scale linkages) between biophysical and social elements. Reflecting this systems analysis in the theory of change will also be important to continually assess the resilience of the social-ecological system –and monitor for opportunities to adapt, or transform the social-ecological system to address known, and unknown, risks and shocks. STAP highlights below the need for incremental adaptations to deliver transformational change.</p>

	<p>As climate risks are considered in the design of the project, STAP recommends paying close attention to the impact of sea level rise on mangrove ecosystems in Lake Ahémé and Porto Novo lagoon and Lac Nokoué. Current literature indicates that mangroves will be affected by a sea level rise of 6-7 millimeters a year. Thus, it will be important for the project to consider different pathways that sustainably overcome the long-term changes resulting from sea-level rise, and other climate risks.</p> <p>Below, STAP describes further its guidance.</p>	
Part I: Project Information B. Indicative Project Description Summary	What STAP looks for	Response
Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	The goal of the project, increased resilience of mangrove ecosystems and their dependent agricultural, forestry and fishery communities in southern Benin, appears to be clearly defined in relation to the problem diagnosis in the project justification.
Project components	A brief description of the planned activities. Do these support the project's objectives?	
Outcomes	A description of the expected short-term and medium-term effects of an intervention. Do the planned outcomes encompass important global environmental benefits/adaptation benefits?	
	Are the global environmental benefits/adaptation benefits likely to be generated?	
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	
Part II: Project justification	A simple narrative explaining the project's logic, i.e. a theory of change.	
1. Project description. Briefly describe:	Is the problem statement well-defined?	The problem statement is most clearly articulated in the ToC document: <i>Mangrove ecosystems in Benin's coastal areas are rapidly eroding, which</i>

<p>1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)</p>		<p><i>threatens globally significant biodiversity, undermines the provision of good and services to surrounding communities, and increases the vulnerability to climate change of human and natural systems.</i></p> <p>The challenges Benin faces with regard to climate change and biodiversity are well-mapped in the PIF. STAP appreciates that the project has considered more than one plausible climate future in its problem statement. However, STAP suggests that in the design stage the project move from an extensive listing of challenges to an understanding of their interconnections that might inform the identification and design of effective interventions that ameliorate as many challenges as possible while minimizing the risk of interventions that exacerbate risks and challenges even while addressing others. Just as the PIF rightly characterizes barriers and threats as a web, so too the challenges this project seeks to address are also a web.</p>
	<p>Are the barriers and threats well described, and substantiated by data and references?</p>	<p>The barriers are well-described, but the PIF does not include data or references to support these descriptions. This may be a product of the fact that the barriers are largely institutional (capacity, existing models for management, existing investment and management plans) for which evidence is not likely to be found in reports or refereed literature.</p>
	<p>For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?</p>	<p>Yes, the drivers include climate change impacts (changes in temperature and precipitation), other natural drivers like wave and wind erosion, and human pressures such as the use of mangrove products in local livelihoods. The objective, to increase the adaptive capacity of human and natural systems to climate change through mangrove ecosystem restoration and sustainable use, is clearly defined and crosses the climate change adaptation and biodiversity focal areas.</p>

2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	The baseline, as articulated in the PIF, is largely centered on current conditions, rather than extending those conditions into the future to define likely trends in mangrove health and the adaptive capacity of the populations living around them. STAP recommends the project extend the baseline out, ideally to 2050 but to whatever extent possible with data at hand, to create a basis for the quantification of the project's impacts.
	Does it provide a feasible basis for quantifying the project's benefits?	It does not, because it does not provide a baseline into the future against which to measure project impacts.
	Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	It is not. The project will need to extend this baseline into the future to provide this reasoning.
	For multiple focal area projects:	
	are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;	There are multiple baselines, in that the project does characterize current climate impacts and other non-climate drivers of mangrove degradation. However, none of these are extended significantly beyond the present, and therefore none can specify the benefits of the project.
	are the lessons learned from similar or related past GEF and non-GEF interventions described; and	Yes, they are.
	how did these lessons inform the design of this project?	Lessons informing the current project include scaling up and climate-proofing biodiversity protection efforts in mangroves, reducing pressure on forest ecosystems by reducing demand for their products, successes in investments in resilient livelihoods, the creation of an internationally recognized biosphere reserve, sacralization of forested areas through local voodoo divinities, community reforestation of mangroves, village mangrove management plans, introduction of improved fireplaces, sustainable salt processing units, honey production, and eco-tourism.
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	STAP appreciates the inclusion of a ToC document with the PIF and the associated clearly articulated assumptions. By building the adaptive capacity of natural systems, increasing the adaptive capacity of human systems through livelihoods diversification

		<p>and development, and improving the enabling environment for the sustainable management of mangroves under climate change, the project will help communities in the project area acquire the technical capacities, financial means, knowledge and institutional support to plan and adapt to the impacts of climate change and to sustainably manage mangrove ecosystems. This, in turn, will result in increased resilience of mangrove ecosystems and their dependent agricultural, forestry and fishery communities.</p>
	<p>What is the sequence of events (required or expected) that will lead to the desired outcomes?</p>	<p>First, the project will put in place efforts to build the adaptive capacity of natural systems. Then it will build on this work by implementing efforts to build the capacity of human systems, principally through livelihoods development and diversification. Finally, the project will work to ensure that the enabling environment in Benin supports these efforts and works to transmit lessons learned from this project to others.</p>
	<p>What is the set of linked activities, outputs, and outcomes to address the project's objectives?</p>	<p>To increase the adaptive capacity of natural systems, the project will conduct an assessment of ecosystem services provided by mangroves to identify which should be restored and conserved. It will also strengthen local communities' and other stakeholders' understanding of mangrove ecosystem services (with particular attention to adaptation and biodiversity conservation), the extent of threats the mangroves face, and the costs and benefits associated with climate resilient, sustainably managed mangroves. From this foundation, the project will implement participatory climate resilient landscape management and conservation management planning and support the implementation of these plans. Implementation will include farmer field schools, the development community-based citizens' mangroves monitoring bodies, and the development of biomonitoring systems for mangroves.</p>

		<p>To increase the adaptive capacity of human systems, the project will build on the prior interventions from component 1 by introducing alternative nature-based livelihoods and facilitating access to markets and value chains that could make these livelihoods economically sustainable. These value chains will be selected in a gender-sensitive manner.</p> <p>To improve the enabling environment for the sustainable management of mangrove ecosystems under climate change, the project will conduct a gap analysis of legal instruments and institutional arrangements around mangrove ecosystem management in Benin and work to fill those gaps. The project will also undertake a capacity needs assessment among key national and regional stakeholder groups, and develop a capacity development plan. Finally, the project will develop a knowledge management strategy aimed at capturing and sharing lessons learned from this and similar projects, organizing awareness-raising campaigns, and undertaking knowledge-sharing with other countries in the sub-region.</p>
	<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p>	<p>Yes, the mechanisms of change are plausible. STAP appreciates the very clear articulation of assumptions in the ToC file. STAP also notes that the project assumes that the adoption of new livelihoods activities will be principally facilitated by demonstration of economic benefit (both in the PIF and assumption A2 in the ToC). An extensive livelihoods literature demonstrates that economic incentives, while part of livelihoods decision-making, are not always (or perhaps even often) determinative of decisions to take up a new activity. Also critical are questions of fit to the sociocultural context, as livelihoods activities are often closely tied to identity. STAP suggests that the project carefully consider the dimensions it will</p>

		<p>assess when identifying, proposing, and implementing new livelihoods activities under this project. The project also assumes that unsustainable uses of the mangroves in the project area are the product of inadequate or incomplete local understanding of the value of mangrove ecosystem services. STAP recommends this assumption be validated before it is acted upon, as it is also frequently the case that those living around degraded ecosystems have <i>different</i> values and preferences for ecosystem services and working on changing values is very different than awareness-building.</p>
	<p>Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?</p>	<p>While the PIF does point to aspects where the project will have to be developed in the subsequent design of the project, or even in the course of project implementation, there is no explicit discussion of adaptations that might be needed to deal with changing conditions, including the impacts of sea level rise on mangroves. Other risks to the project, and possible adaptations needed, are covered in the risks section of the PIF. STAP recommends that as part of the effort to extend the baseline into the future described above, the project consider any likely near-term impacts that might influence project implementation and outcomes.</p>
<p>5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing</p>	<p>GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?</p>	<p>Yes, the project will put 120,000 ha of mangrove ecosystems under sustainable and climate resilient management to benefit biodiversity (including 70,000 ha within Ramsar sites) while catalyzing changes in people's behavior and mindsets, improved planning processes and institutional frameworks.</p>
	<p>LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?</p>	<p>Yes, it will.</p>
<p>6) global environmental benefits (GEF trust fund)</p>	<p>Are the benefits truly global environmental benefits/adaptation benefits, and are they measurable?</p>	<p>Yes, they are and they are measurable.</p>

and/or adaptation benefits (LDCF/SCCF)		
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	Yes, they are.
	Are the global environmental benefits/adaptation benefits explicitly defined?	Yes, they are – in terms of hectares of conserved area and the number of people benefiting from the mix of conservation and adaptation work under this project.
	Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation?	Yes, there are.
	What activities will be implemented to increase the project's resilience to climate change?	
7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	Yes, the project's innovations lie in the design and implementation of participatory climate-resilient mangrove ecosystem conservation and sustainable management plans that have not been implemented in Benin to this point.
	Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	The project will focus on developing system level, organizational, and individual capacities – specifically, working to develop institutional and individual capacities to facilitate the emergence of a system that is environmentally sound and economically viable. STAP recommends the project develop more specific plans for scaling up in the design stage of the project.
	Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	The project will require incremental adaptations, though long-term sustainability will require that these incremental adaptations add up to a transformation of the socio-ecological system around mangroves in Benin.
1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.		The map adequately describes the project activity locations. STAP recommends following its guidance on maps in its Earth Observation document as some key elements appear missing from the maps. STAP guidance can be found at: https://www.stapgef.org/earth-observation-and-gef

<p>2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.</p>	<p>Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?</p>	<p>Yes, they have.</p>
	<p>What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?</p>	<p>The Ministry of Living Environment and Sustainable development will be the executing agency. The Ministry of Agriculture, Breeding, and Fisheries will create the enabling environment for agricultural production improvement and increasing agricultural incomes and rural livelihoods. Local communities are beneficiaries of the project, but also key partners for the design and implementation of mangrove restoration and conservation plans, as well as the identification and implementation of alternative livelihoods activities. Civil society organizations will represent beneficiaries and partners and support the design of plans and livelihoods. The private sector will help identify alternative livelihoods activities and promising value chains, as well as ease access to those value chains. Research institutions will support the biomonitoring system for mangroves.</p>

<p>3. Gender Equality and Women’s Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project’s results framework or logical framework include gender-sensitive indicators? yes/no/tbd</p>	<p>Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?</p>	<p>While the PIF recognizes that women often have different activities and emphases in their livelihoods when compared to men, it does not describe any specific gender-differentiated risks or opportunities. It does note that a gender responsive rapid assessment will be conducted early in the project implementation, but on the whole suggests that the principal beneficiaries of the project will be women, with the promotion of equality and empowerment extending to access to and control over resources and economic benefits and services. STAP recommends the project conduct the gender assessment at the design stage of the project to identify gender-specific opportunities and challenges, particularly social barriers to women’s participation in different livelihoods activities or environmental governance. These issues can then be address through project design before they become challenges for implementation and project outcomes. STAP also recommends the project include the development of gender-sensitive indicators at the project design stage. Such indicators should, at a minimum, allow for the collection of gender-disaggregated data.</p>
	<p>Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?</p>	<p>It is not possible to assess this through this PIF. STAP recommends assessing the social, economic, and environmental barriers to participation for a range of stakeholder groups at the design stage.</p>
<p>5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project’s control? Are there social and environmental risks which could affect the project? For climate risk, and climate resilience measures:</p>	<p>The risks are valid and comprehensive. There are both social and environmental risks that could affect the project, but the PIF describes how the project plans to address those risks.</p>

<p>achieved, and, if possible, propose measures that address these risks to be further developed during the project design</p>	<ul style="list-style-type: none"> • How will the project’s objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? • Has the sensitivity to climate change, and its impacts, been assessed? • Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? • What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? 	<p>The PIF does not detail how the project will be affected by climate risks between 2020-2050. As noted above, the baseline does not extend into the future, and as a result the measured benefits from the project also do not extend into the future. The sensitivity of the project to climate change and climate impacts has not been assessed, though the risks section does note that future climate change could hinder conservation and restoration efforts. For example, the literature asserts that a sea level rise above 5 millimeters a year will significantly impact mangrove ecosystems, and the services they provide to human and natural systems. Refer to: https://science.sciencemag.org/content/368/6495/1050</p> <p>As the project’s goals include building the resilience of both ecosystems and social systems in the project area, in some ways the project itself is an answer to how this risk will be managed. The PIF does not detail the capacity and information needed to address climate risk and resilience enhancement measures specifically, but it does discuss capacity needs across all project risks, including some attention to climate change and climate impacts.</p> <p>STAP recommends developing a systems-based theory of change, or implementing resilience assessments, that monitor adaptive capacity of the social-ecological system to cope with changes (foreseen and unforeseen). Refer to STAP’s theory of change primer, and RAPTA:</p> <p>https://www.stagef.org/theory-change-primer https://www.stagef.org/rapta-guidelines</p>
<p>6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives</p>	<p>Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?</p>	<p>Yes, it is.</p>

	Is there adequate recognition of previous projects and the learning derived from them?	Yes, there is.
	Have specific lessons learned from previous projects been cited?	Yes, they have.
	How have these lessons informed the project's formulation?	Yes, they have.
	Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?	Yes, there is.
8. Knowledge management. Outline the "Knowledge Management Approach" for the project, and how it will contribute to the project's overall impact, including plans to learn from relevant projects, initiatives and evaluations.	What overall approach will be taken, and what knowledge management indicators and metrics will be used?	The project does not yet have a developed knowledge management strategy, but intends to focus on the dissemination of lessons learned within and beyond the project, including through scientific, policy, and other networks. The PIF notes that a KM strategy will be developed, and STAP suggests this be completed at the project design stage.
	What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?	The plans are rather general at this point, as the strategy has not yet been developed. The plan generally revolves around knowledge exchanges with projects and networks having shared interests and engaging similar issues.

Notes

STAP advisory response	Brief explanation of advisory response and action proposed
<p>1. Concur</p>	<p>STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.</p>
	<p>* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that <i>“STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.”</i></p>
<p>2. Minor issues to be considered during project design</p>	<p>STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:</p>
	<p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;</p>
	<p>(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.</p>
	<p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>

<p>3. Major issues to be considered during project design</p>	<p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p>
	<p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>