

# Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility  
(Version 5)

## STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: December 09, 2015  
Screener: Thomas Hammond  
Panel member validation by: Anand Patwardhan  
Consultant(s):

### I. PIF Information *(Copied from the PIF)*

FULL SIZE PROJECT	LEAST DEVELOPED COUNTRIES FUND
GEF PROJECT ID:	5902
PROJECT DURATION:	5
COUNTRIES:	Sierra Leone
PROJECT TITLE:	Adapting to Climate Change Induced Coastal Risks Management in Sierra Leone
GEF AGENCIES:	UNDP
OTHER EXECUTING PARTNERS:	Environment Protection Agency Sierra Leone
GEF FOCAL AREA:	Climate Change

### II. STAP Advisory Response *(see table below for explanation)*

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):  
**Minor issues to be considered during project design**

### III. Further guidance from STAP

STAP welcomes the UNDP proposal "Adapting to climate change induced coastal risks management in Sierra Leone". The project objective is to reduce the vulnerability of coastal communities to the negative impacts of climate change, including economic losses, in Sierra Leone. This will be achieved through a range of initiatives aimed at improving and internalizing scientific knowledge on climate change impacts on coastal zones. This includes, but is not limited to, the installation of oceanographic monitoring equipment, numerous modeling initiatives, and the development of a National Coastal Risk Information and Planning Platform. While STAP is supportive of the proposed project in general, STAP does have a number of observations related to the scientific and technical content of the PIF, and would like to recommend that they be considered during the course of project development. For this reason, STAP's advisory response is "minor revision".

STAP notes that Sierra Leone's NAPA (<http://unfccc.int/resource/docs/napa/sle01.pdf>) identifies three urgent and immediate actions in the coastal zones (page 46): 1. Develop an Integrated Coastal Zone Management Plan; 2. Rehabilitate degraded coastal habitats; 3. Develop and enact appropriate policies and regulations relevant to the development of coastal communities, urban growth planning, and wetland preservation. In this regard, STAP welcomes the emphasis on integrated coastal zone management (component 2); and recommends that stronger linkages with NAPA priorities could be pursued during the course of project development. For example, STAP notes that component 3 includes investments in coastal protection, including hard structural measures such as revetments "and suggests that non-structural and ecosystem-based approaches for coastal protection could also be considered and perhaps emphasized; given the need to restore coastal habitats and avoid further degradation.

It is unclear how human technical capacity to process and analyze the extensive new sets of oceanographic data will be built, beyond continuing the collaboration with IMBO and Fourah Bay College. In addition, it will

be important to address why the current monitoring equipment has gone into disrepair, and how local staff can be trained to better maintain future equipment.

The following additional points may be considered to further strengthen the project:

1. STAP values the mention of greater inclusion of women and youth groups. However, it will be important to develop more holistic approaches/plans/methods to engage with these key groups throughout the project. While not all groups may need to be involved at all stages of the project, it will be important to conduct a thorough assessment of the relevant stakeholders prior to engaging with the project further.
2. In the modeling of climate change impacts, it is recommended to assess a range of scenarios to enable more robust decision-making. Project decisions need to be based on a clear understanding of the uncertainties associated with climate change projections, especially when planning for coastal areas of West Africa where climate models generally perform poorly. It is recommended, if possible, to use data at a scale relevant to this project (e.g. regional climate models). Otherwise, it would be relevant to use General Circulation Model (GCM) data from CMIP5, which can be downscaled using a number of methods described in literature (e.g. using a weather generator). Modelers should never rely on data from a single GCM, but rather use a multi-model mean of as many different GCMs as possible. It is also recommended to look at projections for the 2050s (when the climate starts to depart from natural variability), rather than the 2090s where uncertainties can be overwhelming and hinder the planning process. All of the CMIP5 datasets are available freely online.
3. STAP welcomes the idea of creating a national coastal risk information and planning platform. However, it is not clear how this platform will be connected with and used to support integrated coastal zone management; or what institutional arrangements will be developed to ensure its sustainability.
4. Sand mining has been identified as a pressure that leads to coastal degradation. It would be important to identify interventions that would reduce this pressure and the underlying driver of youth unemployment. The PIF does not fully explain how the LDCF intervention would alter the current baseline “ which would be the 2013-2018 PRSP “ in a manner that enhances resilience.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Concur</b>	In cases where STAP is satisfied with the scientific and technical quality of the proposal, a simple “Concur” response will be provided; the STAP may flag specific issues that should be pursued rigorously as the proposal is developed into a full project document. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design prior to submission for CEO endorsement.
<b>2. Minor issues to be considered during project design</b>	<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.  (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>
<b>3. Major issues to be considered during project design</b>	<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.</p> <p>The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP’s concerns.</p>

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