

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: January 28, 2016
Screener: Kristie Ebi
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:	6923
PROJECT DURATION:	5
COUNTRIES:	Eritrea
PROJECT TITLE:	Mainstreaming Climate Risk Considerations in Food Security and IWRM in Tsilima Plain
GEF AGENCIES:	UNDP
OTHER EXECUTING PARTNERS:	Ministries of Local Government; Agriculture, Irrigation & Water Development; Natural Resources, Energy & Environment
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):
Concur

III. Further guidance from STAP

STAP welcomes the UNDP proposal "Mainstreaming climate risk considerations in food security and IWRM in Tsilima Plain (Eritrea)." The proposal aims to create the conditions necessary for transforming the baseline programs on which it builds to integrate measures to address the additional risks associated with climate change, to secure gains in food security and IWRM action plans even with the uncertainties related to a changing climate.

Issues that should be addressed in the full proposal include:

1. Page 6 indicates the information on climate trends presented in the PIF was taken from an inception workshop in 2010, based on SRES scenarios. STAP suggests looking at the recent projections from the CMIP5 experiments, as assessed by the IPCC in the WGI contribution to the 5th assessment report. Also, UNDP could look at the information available from CORDEX on trends and projections for that region of Africa.
2. The PIF makes frequent reference to incorporating current and future climate-related risks into the baseline projects. While a necessary activity, it would be helpful to have more detail on how these risks will be identified, the sources of weather data and climate projections that will be used, from where those data and projections will be obtained, how it will be determined that forecasts and projections have sufficient skill, and how (and whom) will be trained to use weather and climate data. The table on page 18 indicates projections will be improved and updated; it would be helpful for the full proposal to provide more detail on how this will be achieved.
3. It also would be helpful to include consideration of the extent to which proposed activities could be resilient to a range of possible future climate and development scenarios. While reducing current

vulnerability to climate variability is very important, activities also should consider what a changing climate could mean for particular practices as temperature and precipitation patterns change. UNDP could consider developing regional scenarios including emission pathways (RCPs) and shared socioeconomic pathways (SSPs) that can inform identifying adaptation options robust against a range of future climates and societal changes. Further information on the development of these new climate scenarios can be found at <http://www2.cgd.ucar.edu/research/iconics>.

4. STAP recommends the full proposal include more information on how various agricultural and livestock production technologies will be chosen and how they will be determined to be resilient to current and future climate change, including the criteria that will be applied and the indicators that will be used for monitoring and evaluation.
5. Table 18 indicates there will be a learning-by-doing component for iterative management; it would be helpful for the full proposal to provide more detail on how this will be achieved.
6. STAP suggests including the Ministry of Health, the WHO country office, and other health systems organizations as key stakeholders, to ensure that activities such as installing microdams and small water storage facilities do not also increase breeding grounds for vectors of infectious diseases, as has happened in other regions.
7. It would be helpful for the full proposal to more fully describe the training components of the proposed project.
8. STAP suggests including in the full proposal an assessment of the energy intensity of the "appropriate technologies employing modern agricultural inputs." It also would be helpful to assess the potential impacts of those technologies on ecosystem services. Further, STAP would appreciate understanding how technologies will be determined to be appropriate.
9. STAP recommends including more descriptions of, including criteria, for determining how climate research will be decided to be "innovative and strategic", what are the components of a "holistic analysis of resilience", what are the components of an "integrated approach to adaptation", and similar phrases that refer to processes and methods where additional clarity would be helpful.
10. STAP would be interested in understanding how diversion structures would be designed to capture more water during flash floods.
11. It would be helpful in the full proposal to have a more detailed description of the lessons learned in the GEF SLM tenure security project and how those will be applied in the proposed project.
12. STAP appreciates the intentions to increase gender equity through the project, and encourages UNDP to integrate gender aspects throughout the project and not just as a stand-alone activity. It would be interesting to understand in the full proposal how climate change threatens to increase inequality in Eritrea (page 7 of the PIF).
13. Note that the PIF is inconsistent on current levels of capacity in the scientific community, with statements saying capacity needs to be increased and the table on page 17 indicating there is sufficient capacity to undertake a wide range of activities from evaluating uncertainties to supporting policy design.
14. STAP suggest including an output to plan for scaling up.
15. As articulated in the PIF, the large numbers of baseline projects mean close coordination will be necessary. Providing further details in the full proposal would be appreciated.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Concur	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.
2. Minor issues	STAP has identified specific scientific /technical suggestions or opportunities that should be discussed

<p>to be considered during project design</p>	<p>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>
<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.</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> <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>