

# 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: May 04, 2015

Screener: Guadalupe Duron

Panel member validation by: Annette Cowie  
Consultant(s):

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

**FULL SIZE PROJECT    GEF TRUST FUND**

**GEF PROJECT ID:** 8021

**PROJECT DURATION :** 5

**COUNTRIES :** Zambia

**PROJECT TITLE:** Zambia Lake Tanganyika Basin Sustainable Development Project

**GEF AGENCIES:** AfDB

**OTHER EXECUTING PARTNERS:** Ministry of Lands, Natural Resources and Environmental Protection MLNREP

**GEF FOCAL AREA:** Multi Focal Area

### 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 acknowledges the African Development Bank's (AfDB) proposal "Zambia Lake Tanganyika Basin Sustainable Development Project". The basin faces multiple environmental and socio-economic challenges that require an integrated approach. STAP believes the AfDB is well-placed to address these multiple and complex challenges affecting ecosystem services and livelihoods. It also is well-placed to strengthen institutional frameworks, and multi-stakeholder platforms responsible for managing the basin. The proposal begins to outline initiatives and actions that intend to address the barriers hampering an integrated landscape management approach. However, the proposal does not provide enough details on the ecosystem approach it will apply to address the barriers and achieve global environmental benefits through the proposed components. To strengthen further the proposal, STAP recommends addressing the following points during the design of the proposal:

1. STAP recommends detailing further how the GEF grant will complement the three components of the baseline project. As part of this information, STAP recommends defining how the project objective of the GEF grant will be linked to the wider AfDB loan, and how global environmental benefits will be achieved through the combination of both initiatives.
2. The proposal describes a number of environmental problems related to land degradation, biodiversity conservation, and climate change "and the threats associated with each of these problems" in the project justification section. STAP suggests strengthening these statements by citing references to scientific literature, and/or un-published and rigorous documentation based on local knowledge. Furthermore, STAP recommends development of a tighter linkage between the identified issues and the proposed interventions, and proposes that the project should focus on a narrower range of issues and interventions, to enhance the likelihood of sustained impact.
3. Poverty, limiting capacity to modify current slash and burn practices, and loss of productivity in Lake Tanganyika due to rising global temperatures, are identified as major challenges to this social-ecological system. It is not clear how the proposed interventions, focusing on encouragement of sustainable land management and sustainable forest management, will adequately address these challenges. To overcome this concern, STAP recommends that AfDB conducts a multi-stakeholder process to identify the key values, driving variables, and vulnerabilities in this social-ecological system, as part of the project development process.

STAP suggests that AfDB consider applying the Resilience, Adaptation and Transformation Assessment Framework (link) to guide this multi-stakeholder assessment process. Please refer to the following link to learn more about the resilience framework: <http://www.stagef.org/the-resilience-adaptation-and-transformation-assessment-framework/>

Application of the RATA procedure will assist the proponent to identify the multiple stressors influencing the sustainability of the lake ecosystem, and any linkages between the stressors.

Furthermore, STAP suggests that it may be useful to draw a distinction between multiple stressors (chemicals, nutrients, temperature) and multiple sources of a single stressor (e.g. nutrients from multiple agricultural enterprises). This will contribute in addressing knowledge gaps on the multiple stressors affecting large ecosystems and how to manage their complex and interacting relationships. (See Servos, M. et al. "Science and management of transboundary lakes: Lessons learned from the global environment facility program". Application of the RATA framework will also assist in identifying the most effective interventions to improve basin management, the challenges to their implementation, and appropriate indicators for monitoring and assessment.

4. Furthermore, STAP recommends conducting a stakeholder analysis so the project is rooted, and integrates local and scientific knowledge. STAP believes it is important for communities'/local stakeholders' knowledge to be used in the design and implementation of the proposal so they are in a better position to monitor and respond to the multiple challenges influencing their well-being and Lake Tanganyika's sustainability. Currently, the proposal outlines the intent to conduct stakeholder consultations, and STAP suggests specifying this further by describing: 1) how local stakeholders' understanding of land degradation, biodiversity loss, and climate change risks will be used to improve land management practices; and 2) how local knowledge will be used to complement and validate the monitoring and evaluation from scientific analyses, such as those being proposed in component. The project developers could refer to the following publications outlining the methodological steps necessary for stakeholder analysis: Reed, M. et al "Who's in and why? A typology of stakeholder analysis methods for natural resource management". Journal of Environmental Management 90 (2009) 1933-1949. Barrios, E. et al. "InPaC-S: Participatory Knowledge Integration on Indicators of Soil Quality – Methodological Guide". World Agroforestry Centre (2012)

5. STAP suggests identifying the indicators for each of the proposed global environmental benefits. Currently, the proposal does not include indicators, or suggests possible indicators.

6. STAP recommends strengthening the links between the three components. Generating data from ecosystem approaches (component 1 and 2) through suitable indicators will strengthen the monitoring and management of Lake Tanganyika. As M.R. Servos et al (2013) notes, baseline data in transboundary lake systems are often not available, or comparable. Therefore, it is important for the project developers to define how the monitoring of Lake Tanganyika in the northern province of Zambia will contribute to the monitoring and knowledge base of the comprehensive lake ecosystem. (See Servos, M.R. et al. "Science and management of transboundary lakes: lessons learned from the global environment facility program". Environmental Development 7 (2013) 17-31.)

7. STAP recommends integrating an assessment of the trade-offs between the environmental and socio-economic benefits and costs. Doing so will assist in developing actions that reflect the reality and capacities influencing local stakeholders' decisions on the management of multiple ecosystem services provided by the lake and its surrounding land resources.

<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>	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:  (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

	<p>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><b>3. Major issues to be considered during project design</b></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>