

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: April 16, 2014

Screeener: 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: 5764

PROJECT DURATION : 4

COUNTRIES : Indonesia

PROJECT TITLE: Sustainable Management of Peatland Ecosystems in Indonesia (2014-2018)

GEF AGENCIES: IFAD

OTHER EXECUTING PARTNERS: Ministry of the Environment

ASEAN Secretariat

Global Environment Centre

Local Government Agencies

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):
Consent

III. Further guidance from STAP

STAP welcomes IFAD's proposal "Sustainable Management of Peatland Ecosystems in Indonesia (2014-2018). The project aims to reduce greenhouse gas emissions from peatlands and improve the livelihoods of the adjacent communities. By building on the ASEAN Peatland Forest Project (APFP) implemented between 2010 and 2014, this initiative intends to build capacity for sustainable peatland management, and reduce peatland degradation through multi-stakeholder involvement. Identifying and involving the multiple stakeholders affected by changes in peatland management and its ecosystem services is important to design appropriate interventions, including policies, on restoration. The components (and their sub-components) describing these actions are defined clearly in the proposal. The project intends to address a critically urgent and very complex issue in a comprehensive manner, and the project proponents have carefully designed all the elements. In this regard, the proponents demonstrate an excellent understanding of the root causes and the most effective approaches to address them. STAP appreciates the very well-written and soundly justified proposal.

STAP also notes the technical nature of the project, especially component 2. In the comments below, it recommends for IFAD to engage STAP during the design of the proposal, so it may contribute to targeted advice on peatland methodologies for Indonesia.

1. STAP appreciates the data on carbon sequestration (and greenhouse gas emissions) from peatlands, data on land use change of peatland ecosystems, and information on endemic flora and fauna in Indonesia provided in section A.1. It would be useful to provide references for this information, as well as for other details in other parts of the document (e.g. description of peatlands in Riau Province, output 2.3).

2. Given the innovative nature of component 2 (assessment of potential greenhouse gas emission reductions from targeted peatlands) and interest in contributing to the methodologies under development, or currently under use, in Indonesia, STAP offers to assist in developing the assessment. STAP's contributions could include reviewing the methodology and suggesting experts from its network that could contribute to the methodology.

3. The proposal is largely focused on the reduction of fire. It appears that the proponents have come up with potentially effective responses to this. However, another big issue causing massive loss of carbon is drainage of peatland for cropping. The issues of subsidence caused by drainage is mentioned, but it is not clear how the proposed sustainable management of peatlands will control these carbon losses due to oxidation caused by drainage.

4. Although the proposal mentions deforestation as a major cause of peat loss, and seeks funding from sustainable forest management programme, the strategies described are largely focused on managing peatlands after clearing. There appears to be little effort directed to reducing deforestation. Identifying and promoting sufficiently attractive alternative livelihoods will be a key challenge to managing this most fundamental driver of peatland emissions.

5. The global environmental benefits aim to improve ecosystem services on carbon sequestration, biodiversity, and water supply (or quality) and flow regulation. STAP recommends identifying indicators for each of these ecosystem services, so the global environmental benefits can be monitored by the project. Monitoring the performance and impact of the project also will contribute to the project's incremental cost reasoning.

6. The project states the "key global environmental benefits will arise from the protection, rehabilitation and sustainable management of key peatland areas." STAP recommends specifying the peatland conditions for each target site, so that restoration strategies are based on their ecological characteristics. For example, restoration of highly degraded peatlands may require different approaches than less degraded sites. Additionally, it will be important that estimates of carbon emission reductions are specific to each site, since more degraded peatlands may take more time to reduce emissions than less degraded areas.

7. STAP suggests accounting for the spatial distribution of the costs and benefits of peatland restoration. This information will help inform decision-making on peatland restoration, and account for a spatial analysis (and valuation) of peatland ecosystem services. Spatially targeting peatland restoration practices is important because the same restoration technique/strategy may not produce the same outcome in all locations due to the biophysical, social and economic characteristics of the peatlands. Thus, a spatial analysis of the flow of ecosystem services can assist in prioritizing the peatland areas that can be targeted to maximize the delivery of ecosystem services (or global environmental benefits), reduce costs and maximize benefits, across multiple stakeholders. The project developers can refer to the following paper outlining a framework for spatially assessing peatland restoration: Glenk, K. et al. A framework for valuing spatially targeted peatland restoration. Ecosystem Services. (In Press).

8. STAP suggests that detail be provided on how the estimates of carbon dioxide reduction on page 13 have been derived. This information is critical to quantifying the global environmental benefits the project expects to generate.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	<p>STAP acknowledges that on scientific or technical grounds the concept has merit. However, STAP may state its views on the concept emphasizing any issues where the project could be improved.</p> <p>Follow up: The GEF Agency is invited to approach STAP for advice during the development of the project prior to submission of the final document for CEO endorsement.</p>
2. Minor revision required.	<p>STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development.</p> <p>Follow up: One or more options are open to STAP and the GEF Agency: (i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions. (ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.</p>
3. Major revision required	<p>STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design.</p> <p>Follow-up: (i) The Agency should request that the project undergo a STAP review prior to CEO endorsement, at a point in time when the particular scientific or technical issue is sufficiently developed to be reviewed, or as agreed between the Agency and STAP. (ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP</p>

concerns.