

# 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: @@@@ @@, @@@@

Screeener: Thomas Hammond

Panel member validation by: Thomas Lovejoy  
Consultant(s): Doug Taylor

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

**FULL SIZE PROJECT**    **GEF TRUST FUND**

**GEF PROJECT ID:** 4763

**PROJECT DURATION :** 5

**COUNTRIES :** Mexico

**PROJECT TITLE:** Strengthening Management Effectiveness and Resilience of Protected Areas to Protect Biodiversity under Conditions of Climate Change

**GEF AGENCIES:** UNDP

**OTHER EXECUTING PARTNERS:** National Commission for Protected Natural Areas (CONANP), National Forestry Commission (CONAFOR), National Commission for Knowledge and Use of Biodiversity (CONABIO)

**GEF FOCAL AREA:** Biodiversity

### 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 this project and commends the proponents for preparing a well referenced PIF. The project is both innovative and ground breaking, and has the potential for development of effective and transformative approaches in addressing climate resilience challenges in protected area management with high replication potential within the GEF protected area portfolio. STAP encourages the GEF Secretariat to consider the theme of this project within its learning and knowledge management priorities in NRM, and the Panel would welcome an opportunity to play a role in project implementation, through for instance participation on a scientific advisory committee if this is envisioned.

The approach proposed in the project builds on the well documented baseline work of Mexico to develop strategies for mitigation and adaptation to climate change based on sound science. While STAP strongly supports this project there are several aspects of the project that STAP proposes that could benefit from additional clarification. In addition, STAP wishes to stress the protected area management issues that could provide guidance in similar areas of BD portfolio within the GEF partnership.

Fundamental to the work of Component 1 are datasets providing baseline information about ecosystem and species distribution and status and also the established criteria under which the existing protected areas were designated in the first place. The ideal climate change response within a country would be to re-designate protected areas based upon the needs revealed by comprehensive ecological surveys and dependent species distributions in response to predicted change, resulting in possibly radical changes to boundaries of PAs across a country. This will rarely be possible, particularly if some PAs have historically been designated using criteria less well informed by conservation data. For example, Hannah, et al (2007) examining areas in Mexico, South Africa and Peru, discuss the compromises necessary to achieve change, which appear to be relevant to the decision making process required during implementation of the present project.

STAP well understands that much data collection work has already been undertaken in Mexico on the likely change to species distributions and ecosystem boundaries under climate change scenarios, and that it is possible to model changes at relatively high map resolutions. While Mexico's work is exemplary, STAP accordingly advises that there is a danger that the project as presented may be too ambitious in its data needs and that early choices will need to be made to focus on priorities for monitoring ecosystems and species that are sustainable in terms of human and financial resources and systems for the long term and capable of not only tracking key conservation impacts but capable of informing future changes to the protected areas system

From a practical perspective, therefore, it would be useful for the proponents to outline their strategy to deal with the realities of present PA boundaries and the criteria to be considered (e.g. prioritization of vulnerable/endemic species, core habitats within ecosystems) that will drive the need for change to existing PA boundaries or designation of new PAs. In particular it would be useful to document under what circumstances land swaps, offsets, and other compensatory measures or other trade-offs might be desirable that can facilitate PA evolution.

Under Component 2, the PIF suggests that production systems resilient to climate change will be encouraged to reduce the chances of expansion of cultivation including into PAs. This is an interesting area to explore and could lead to compatible crop diversification and increased genetic diversity, however, precautions should, be taken to avoid the potential for introducing invasive species on the margins of or within PAs.

Component 3 work could usefully assist the GEF to modify its Management Effectiveness Tracking Tool (METT) to include climate change relevant management effectiveness metrics. Improved management effectiveness for resilience or adaptation of PAs to climate change is not currently tested within the METT, therefore the project could consider piloting additions to the METT which would track progress regarding climate-related management requirement.

Finally, STAP encourages project proponents to consider the obvious transboundary issues with regard to migratory species and ecosystem based adaptation in project design and in particular the opportunities for synergy and collaboration. The US National Parks Service is currently in the process of establishing its science and research priorities for the next decade. The US Forest Service has already contributed to the development of CONANP's climate strategy. The US Fish and Wildlife Service also has an international program with a strong interest in migratory species of high conservation value to both countries.

References:

Hannah, et al. 2007. Protected area needs in a changing climate. *Front Ecol Environ*; 5(3): 131-138

IUCN-WCPA - Overview of role of protected areas in climate mitigation and adaptation:

[http://www.iucn.org/about/union/commissions/wcpa/wcpa\\_work/?8437/Natural-Solutions-Protected-Areas-helping-people-cope-with-climate-change](http://www.iucn.org/about/union/commissions/wcpa/wcpa_work/?8437/Natural-Solutions-Protected-Areas-helping-people-cope-with-climate-change)

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Consent</b>	STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may state its views on the concept emphasising any issues that could be improved and 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.
<b>2. Minor revision required.</b>	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include: (i) Opening a dialogue between STAP and the proponent to clarify issues (ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review 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.
<b>3. Major revision required</b>	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement. 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.