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:	November 10, 2017
Screener:	Sarah Lebel
Panel member validation by:	Annette Cowie
Consultant(s):	

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

FULL-SIZED PROJECT	**GEF TRUST FUND**
GEF PROJECT ID:	9405
PROJECT DURATION:	5
COUNTRIES:	Niger
PROJECT TITLE:	Integrated Management of Oasis Ecosystems of Northern Niger (IMOE -NN)
GEF AGENCIES:	UNEP
OTHER EXECUTING PARTNERS:	Division of Land Restoration and Tree Planting, Ministry of Environment, Urban Sanitation and Sustaianble Development
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 welcomes the UNEP proposal "Integrated Management of Oasis Ecosystems of Northern Niger (IMOE-NN)". The project's stated objective is to conduct integrated natural resources management to alleviate land degradation, address loss of biodiversity, reduce emissions of GHGs, maintain forest and oasis ecosystem services and improve livelihoods in the Air Massif of Niger. STAP appreciates the comprehensive description of the target environment and project context. STAP believes this ambitious PIF is relatively well developed both scientifically and technically, yet the current proposal lacks a clear theory of change. Below are some recommendations to help improve the quality and sustainability of the project:

1. The description for Component 1 begins with the phrase "arrest the current open access regime that oases and especially arid valley forests fall within". While it is understood that this is intended to reduce the degradation of those ecosystems, it is unlikely to bring the expected benefits unless done with careful engagement with local stakeholders. STAP appreciates the comprehensive listing of stakeholders and their potential roles. For guidance on multi-stakeholder engagement and governance, STAP suggests the project proponents refer to STAP's recent "Guidelines for embedding resilience, adaptation and transformation into sustainable development projects (RAPTA)", available here: http://stapgef.org/rapta-guidelines .
2. Building resilience is mentioned as an objective in several instances, but there is no indication of how resilience will be assessed or enhanced. The RAPTA guidelines cited above provide guidance on assessing resilience, through identifying the vulnerable aspects of the social-environmental system and proximity to thresholds. RAPTA provides guidance on building resilience, and further encourages consideration of the need for adaptation or transformation, which may be necessary if the current system is unsustainable under anticipated stressors and shocks, such as due to climate change.
3. With respect to global environmental benefits, of the thirteen points listed it is not clear for many of them how they deliver global environmental benefits.

4. With respect to coordination, in elaborating the project, detail on how it will link with the projects listed, particularly the Niger component of the Food Security Integrated Approach Pilot, should be provided.
5. The PIF details the strong reliance on firewood to supply energy in Niger. Thus alternative energy sources, and alternative livelihoods for those currently supplying firewood and charcoal, will be necessary to ensure the success of measures to restore forests. In elaborating the project, the proponent should provide detail of feasible solutions to these challenges.

6. The Knowledge Management section of the PIF appears particularly weak, and merely states a few lessons learnt from existing projects. STAP encourages the project developers to consider putting in place a formal knowledge management system, and may therefore wish consult its ongoing advice on Knowledge Management to the GEF at http://www.stapgef.org/knowledge-management-gef as well as some of the knowledge management tools that are currently recommended – see, for example http://www.knowledge-management-tools.net/knowledge-management-systems.html.
7. STAP would welcome, in addition to the screenshots taken from the EX-ACT tool, a list of the assumptions which were made. For instance section 3.1.2 assumes manure application for both millet and sorghum production, which translates in the model to 1.54 tCO2 ha-1 yr-1 (see EX-ACT technical guidelines here: http://www.fao.org/fileadmin/templates/ex_act/pdf/Technical_guidelines/EX-ACT_technicaldescription_EN_v7.pdf). However, manure is a sparse resource in Niger, and farmers typically can only apply it to 10-40% of their fields (see e.g. Williams T.O., Powell J.M. and Fernandez-Rivera S. 1995. Manure availability in relation to sustainable food crop production in Semi-Arid West Africa: evidence from Niger. Quart. J. Intl Agricul. 34: 248–258). At such low crop yields (i.e. 190kg/ha for sorghum and 400kg/ha for millet), it is unlikely that those areas use much manure at all. Studies such as Fatondji et. al. (2006, available here: http://www.academia.edu/download/45633852/Effect_of_planting_technique_and_amendme20160514-1710-1d6z3wi.pdf) have demonstrated that with manure application in zai pits, millet yields are significantly higher. Thus, for this particular case, it is likely that the assumptions made in the PIF are significantly overestimating the carbon sequestration potential of the millet and sorghum annual systems, hence the need to justify those assumptions.

STAP advisory response	*Brief explanation of advisory response and action proposed*
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 to be considered during project design	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 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.
3. Major issues to be considered during project design	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: (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. The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP's concerns. 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.