

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: September 21, 2009
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I. PIF Information

Full size project **GEF Trust Fund**

GEF PROJECT ID: 3915 **PROJECT DURATION:** 48 months

GEF AGENCY PROJECT ID:

COUNTRY(IES): Sudan

PROJECT TITLE: Integrated Carbon Sequestration Project in Sudan

GEF AGENCY(IES): IFAD

OTHER EXECUTING PARTNER(S): Forest National Corporation, Higher Council for Environment and Natural Resources, (Ministry of Agriculture, Animal resources and Irrigation)

GEF FOCAL AREA (S): Climate Change

GEF-4 STRATEGIC PROGRAM(S): CC-SP6 and CC-SP4

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: NA

II. STAP Advisory Response *(see table below for explanation)*

1. Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):
Consent

III. Further guidance from STAP

2. STAP provides its consent to this proposal on "Integrated Carbon Sequestration in Sudan". The objective appears to respond clearly to the problems identified in proposal, affecting the Butana region. The project interventions are also clearly defined and linked to the main issues. This is an example of an integrated project covering; firstly, carbon sequestration through agro-forestry and afforestation, secondly carbon stock conservation in existing forests through participatory forest management, thirdly reducing GHG emissions through improved wood cooking stoves and finally building capacity for monitoring of forest carbon. STAP fully supports the project and compliments the project authorities. However, STAP has the following comments to help strengthen the proposal -
 1. IFAD may wish to review the project outputs because they appear to be outcomes. For example, "participatory forest management ..." is an outcome (not an output) of forest and carbon stock management.
 2. The proposal expects to generate multiple global environment benefits. Climate change mitigation and adaptation benefits are defined more clearly than biodiversity, sustainable forest management, and land degradation benefits. Greater details on biodiversity, sustainable forest management and land degradation would clarify what benefits the project intends to deliver in these areas.
 3. The proposal could be more specific by defining the methods that will be used to estimate and analyze the results of carbon stocks from litter, forest biomass and soil.
 4. A good description of the baseline is provided. However, quantitative estimates will be required using scientific methods.
 5. Capacity building: Rationale for national level capacity building for policy makers is necessary, since this is a small project covering about 10,000 ha.
 6. PIF, quoting National Communication, states that 15,577 Gg (15 Mt) CO₂ states as coming from the LULUCF sector, which seems to be an insignificant proportion of the national GHG emissions.
 7. Butana region seems to be an arid region with average rainfall of 100 to 250 mm and the expected output states that about 38 tonnes of carbon per hectare as the net benefit. This seems to be high for

the arid region.

8. Butana region is arid and is likely to be adversely impacted by climate change. Thus it is desirable to consider the potential climate impacts on the project area as well as the species choice for the reforestation program.

9. The risks could also note the methodological challenges in estimating carbon stocks.

Component 1 -

a. It is unclear how the selection of tree species will be made for the afforestation efforts. For example, will communities be involved in selecting the species based on their needs? Also, it is not clear whether all species will be indigenous to the project area.

b. Perhaps the proposal could address the potential challenges of maintaining the irrigated plantation once the project ends. This is based on the assumption that irrigation systems would be a new practice in the region, requiring added investments that are made possible mainly through the project. Therefore, the proposal may wish to consider how the communities will continue managing the irrigated plantations after the project ends. Further, irrigation could be a luxury for forestry projects given the arid condition of the Butana region. There could be conflicts for water for food production versus forestry.

Component 2 -

a. The project will need to consider how to monitor wood harvesting because it will likely affect the live carbon pool. The project could note how it intends to monitor and estimate the removal of biomass from the plantations.

b. Forest management can contribute to soil moisture, which can strongly determine carbon assimilation in dry areas, such as in the Sahel - <http://www.cbmjournal.com/content/pdf/1750-0680-3-7.pdf> This component is tied intricately to afforestation and its ability to sequester carbon not only above ground, but below ground too. Perhaps the proposal can also reflect the importance of forest management on soil carbon.

Component 3 -

a. Training field practitioners is essential. Building capacity at the field level is important for designing carbon inventories, collecting local specific data, and designing monitoring systems. This could be noted in the proposal, since it does not specify that field practitioners will receive capacity building.

b. The proposal notes that targeted capacity building will ensure that "...mitigation benefits are monitored and reported correctly". Perhaps "analyzed" can also be added to this statement.

c. The project aims to establish a national carbon stock inventory system. This could be a very expensive component and its sustainability will be a challenge beyond the project period. Thus the rationale for the National Carbon Inventory needs to be reconsidered.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	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.
2. Minor revision required.	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.
3. Major revision required	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.