

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 10, 2010

Screeener: Douglas Taylor

Panel member validation by: Meryl Williams
Consultant(s):

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

FULL SIZE PROJECT **GEF TRUST FUND**

GEF PROJECT ID: 4212

PROJECT DURATION :

COUNTRIES : Global

PROJECT TITLE: Global Foundations For Reducing Nutrient Enrichment and ODFLB Pollution in Support of GNC

GEF AGENCIES: UNEP

OTHER EXECUTING PARTNERS: UNEP/GPA, UNESCO

GEF FOCAL AREA: International Waters

GEF-4 STRATEGIC PROGRAMS: IW-2;

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

1. STAP welcomes this project and its aim to provide an integrating platform for knowledge and approaches to reducing nutrient pollution from the land.
2. Although the project approach is generally sound, more attention needs to be given to the governance issues that currently constrain action on nutrient reduction, especially the economic and social dependence on the emitting industries and activities that create the problems, e.g., agriculture, energy production and urban waste. Policy and management action will likely not be based on modelling of cost effective nutrient reduction options, but rather on policy (and political) processes that are motivated by actions from different stages of the DPSIR (driver-pressure-state-impact-response) model, the motivation being situational. For example, in some cases, particularly severe events (e.g., a 'state' such as the seasonal occurrence of hypoxia or and impact such as closure of a shellfish bed from a HAB) will create the motivation for action. The work proposed in this project will provide the tools to target the 'response' phase effectively, or direct the research and assessment if suitable knowledge does not yet exist. What is additionally needed is study of the cross-sectoral/ministry approaches necessary for action. In this regard, the GEF-IW TDA/SAP and governance-first approaches could be very useful models. Although, as suggested in component D, stakeholder analysis will be useful, more than this is needed to address the economic and sectoral opposition that can arise when major changes, with associated costs, are needed to current practices. Usually, the industries or sectors that have to change practices are not the beneficiaries of the intervention. Conversely, the receiving environments and sectors have little leverage on distant land-based emitters. Additionally, national interest such as food security can intervene to block necessary changes, e.g. reducing fertilizer use on farms, unless win-win technological solutions exist.
3. In view of the above, the risk assessments should include the political risk of not being able to achieve the necessary changes due to competing and unequal short-term sectoral interests, such as food production versus the environment. The current risk description and risk measure do not address this risk adequately (see: Limited private sector involvement).
4. Also with respect to linkages, STAP recognizes the importance of science-policy linkages (see E: Risks etc) but points out that collaboration among different fields of scientists are needed also. Collaboration between e.g, agricultural scientists and ocean biogeochemists, and the perennial need for social and biophysical scientists to work together are just two examples of necessary science collaborations.
5. STAP is currently undertaking a project to develop guidance to GEF projects on dealing with coastal zone hypoxia (STAP IW#2 of the current STAP Work Program). The first phase of this project has identified nutrient reduction as

the main remedial action and is now developing expert advice on how and which GEF projects should address hypoxia. UNEP and GPA are involved with the STAP work which is complementary to this project.

6. With respect to hypoxia, Diaz and Rosenberg (2008) actually document 400 hypoxic areas (Diaz, R. and Rosenberg, R. 2008. Spreading Dead Zones and Consequences for Marine Ecosystems. Science 321, 926-929.) Prof Diaz also maintains a database of scientific references on occurrences of hypoxia verified in the scientific literature. This type of rigorous academic work needs to be incorporated into the projects work, as well as UN reviews and assessments.

<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: <ul style="list-style-type: none"> (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.