# 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 22, 2012 Screener: Thomas Hammond

Panel member validation by: Michael Anthony Stocking; Thomas Lovejoy

Consultant(s): Douglas Taylor

I. PIF Information (Copied from the PIF)
FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4792 PROJECT DURATION: 5 COUNTRIES: Mexico

**PROJECT TITLE**: Conservation of Coastal Watersheds in Changing Environments

**GEF AGENCIES**: World Bank

OTHER EXECUTING PARTNERS: Comisión Nacional de Ã□reas Naturales Protegidas (CONANP), Comisión Nacional Forestal (CONAFOR), Fondo Mexicano para la Conservación de la Naturaleza (FMCN), Instituto Nacional de EcologÃ-a

(INE)

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 revision required

### III. Further guidance from STAP

STAP welcomes this ambitious and challenging multi-focal area proposal on the integrated management of coastal watersheds around the Gulf of Mexico and Gulf of California that combines biodiversity conservation with integrated management of whole landscapes, and the intention to undertake comprehensive environmental monitoring along with building inter-institutional collaboration. The success of this project will ultimately depend on the close engagement of multiple stakeholders at all levels. A comprehensive risk analysis, including the risks of climate change-induced problems, will be particularly important; as will the on-going use of the monitoring data to track progress in the delivery of global environmental benefits and local livelihoods.

STAP raises a number of scientific and technical issues that will require consideration as the project preparation proceeds to a full proposal:

- 1. STAP has some concerns that the integration being targeted appears from the PIF to be restricted to the terrestrial landscape parts of coastal watersheds. Yet, the impacts of this project will have major implications for the immediate marine part of the coastal zone. CONANP, for example, has interests in a number of marine protected areas. Yet, as some observers have noted, Mexico's attempts to integrate environmental management have not succeeded because implementation continues to be in the hands of several independent government agencies (Bezaury-Creel, 2004, 2005). The interconnectedness between land and marine coastal management â€" environmentally in, for example, sediment and pollution discharges; and economically in human livelihoods suggests that it should be imperative that a wider view of †landscape' and †conservation' be taken (please see additional references below).
- 2. In view of the opening paragraph of our comments, the risk analysis at Section B4 appears somewhat superficial. The first risk ("lack of enforcementâ€|...") is essentially the risk that the project fails. This is not normally acceptable; risks should be external threats over which the project has no control. The third risk ("climate changeâ€|") is perhaps the most important because it is headlined in the project objective. STAP therefore questions why project activities in building adaptation and coping mechanisms in local communities are not mentioned. Instead it appears from the PIF that the management response is merely to have forums to discuss disaster responses. There will also be substantial risks that institutional rivalries and competition will render integrated management problematic; and that local communities reliant on natural resources within the watersheds will seek their livelihoods by exploiting other resources spatially. STAP suggests some innovative thinking on the possible scientific, technical, social, economic and institutional barriers that this project will likely face. Risk analysis here may include assigning probability and severity

scores to each risk; and then ensuring that project activities are designed appropriately to respond to the seriousness of risks and potential barriers. There are a number of references for quantitative risk analysis – see, for example, http://www.rand.org/pubs/working\_papers/2004/RAND\_WR112.pdf

- 3. In the identification of stakeholders, Section B5, STAP reminds the proponents of the importance of gender dimensions, especially in both the distributional aspects of benefit derived from project activities as well as the costs incurred. The World Bank has itself published an excellent overview of the importance of gender in Mexico with suggestions on the aspects that need to be understood and the management responses that will need to be taken see Katz, E.G. and Correia, M.C. eds. (2001). The Economics of Gender in México: work, family, state and market. Directions in Development Series, the World Bank, Washington DC.
- 4. For a multi-focal project such as the one proposed here, it is essential to draw a clear baseline of the status of certain key indicators drawn from the focal area strategies of GEF-5. STAP misses the inclusion of any consideration of these indicators or attempt to construct even a very preliminary baseline analysis. This will need attention, for reasons outlined in the next point.
- 5. The GEF places important emphasis on the choice and use of impact indicators to track the progress of a project especially in its delivery of global environmental benefits (GEBs), over and above the baseline position. The PIF makes little or no mention of GEBs, despite this being a normal requirement even at early planning stage. STAP suggests an urgent consideration of the key indicators for a project such as this, which might include changes in total system carbon, change in biodiversity, change in land cover and the poverty status of local communities. Erosion rates may also be included as these are mentioned in the PIF, but STAP warns that there are substantial methodological problems, including scale issues, which would make direct monitoring of erosion as an indicator of land degradation problematic.
- 6. Component 2 is entitled  $\hat{a}$  Connecting the landscape'. It is not obvious what this means and why the use of PES schemes should be able to connect the landscape . The GEF-5 Land Degradation strategy does include building a landscape approach to land management, through ensuring integrated management plans and actions. The rationale for the activities under this Component 2 need to be explained so that the scientific logic is clear and that the professional stakeholders can understand the bigger picture of what  $\hat{a}$  landscape' and  $\hat{a}$  integrated' really mean. The singular mention of PES is unlikely to achieve this. In the context of PES schemes to be supported by the GEF, the proponents' attention is drawn to the STAP advisory product on the subject, revised in March 2010: http://www.unep.org/stap/Portals/61/pubs/Publications/STAP%20PES%20publication%202010%20-%20website.pdf . There is no evidence in the PIF that this document has been consulted.
- 7. As the opening paragraph of these comments notes, STAP and the GEF pay particular attention to monitoring, especially of the beneficial impacts of project investments. Component 3 promises monitoring. However, most of the description under this component appears to refer to automated meteorological stations, which, while measuring important variables, could not in any sense monitor changes brought about by the project. STAP would like to see a discussion of the set of variables important both to the GEF and to national institutions that will be targeted for monitoring, the choice of measurement technique and the assignment of responsibility for measurement and reporting.
- 8. STAP appreciates that many of the above aspects will be developed in the PPG phase. However, given the recognized capacity of the local agencies involved in initiative as well as the significant experience gained by particularly CONAFOR in recent forest management PES schemes, nevertheless there should be a clear strategy at the outset for risk analysis, choice of impact indicators, identification of methods, choice of technologies and the implementation of monitoring and tracking.

#### References

Alix-Garcia, J. M., E. Shapiro, and K. R. E. Sims. 2010. The environmental effectiveness of payments for environmental services in Mexico: results from a pilot analysis. Working paper. University of Wisconsin, Madison.

Ferraro, P. J. 2011. The Future of Payments for Environmental Services. Conservation Biology, Volume 25, No. 6, 1134–1138

Bezaury-Creel, J E. 2004. "Las areas naturales protegidas costeras y marinas de México", in E Rivera-Arriaga, G J Villalobos-Zapata, I Azuz-Adeath, F Rosado-May (eds.). El manejo costero en México, Universidad Autónoma de Campeche, SEMARNAT, CETYS-Universidad, Universidad de Quintana Roo. México: CETYS-Universidad.

Bezaury-Creel, J.E. 2005. "Protected areas and coastal and ocean management in MÃ $\mathbb{C}$ xico". Ocean and Coastal Management, Vol. 48, No. 11-12.

STAP advisory		Brief explanation of advisory response and action proposed
response		
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.