

# 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, 2013

Screener: Thomas Hammond

Panel member validation by: Annette Cowie; Brian Huntley  
Consultant(s): Margarita Dyubanova

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

**FULL SIZE PROJECT    GEF TRUST FUND**

**GEF PROJECT ID:** 5285

**PROJECT DURATION :** 6

**COUNTRIES :** Indonesia

**PROJECT TITLE:** Strengthening Forest and Ecosystem Connectivity in RIMBA Landscape of Central Sumatra through Investing in Natural Capital, Biodiversity Conservation, and Land-based Emission Reductions (RIMBA)

**GEF AGENCIES:** UNEP

**OTHER EXECUTING PARTNERS:** Directorate General for Regional Development of the Ministry of Home Affairs.

**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 proposal that has a goal to "protect biodiversity and to increase carbon stocks across the RIMBA critical landscape of Sumatra by enhancing forest ecosystem connectivity through green economic development", whereby Green Economy supported by the project is defined as an economy that is (i) low carbon, (ii) resource efficient and (iii) socially inclusive. GEF incremental support through this project is used to improve on the national spatial planning and its related local governance program through (1) building a multi-agency partnership and agreed vision towards green economy in RIMBA, (2) conducting and agreeing on scenario analysis for green economic development of land, forest and water resources, (3) develop or re-align 9 District Spatial- and 9 Economic Development Plans to respect land and ecosystem services values as well as agreed green economy targets, and (4) significantly raising the investment profile for enhanced forest connectivity, carbon sequestration and biodiversity conservation in RIMBA corridor.

Overall, STAP believes this PIF is innovative in its approach to achieve Green Economy development through programmatic reliance on global environmental benefits that include reduction in carbon emissions from LULUCF and the protection and sustainable management of globally significant tropical forests and globally threatened species.

It is clear that there has been considerable effort in consultation and that there is broad support for the approach. While the proposal is conceptually sound, there is insufficient detail provided on many aspects to assess whether the implementation is likely to be successful.

STAP wishes to raise certain concerns that are important for the project success:

1. The definition of 'Ecosystem services' changes throughout the proposal and should be clearly stated in order to properly calculate Natural Capital and monitor it. STAP appreciates that the risk is identified that PES may be insufficient incentive to induce behavioural change. STAP would like to see details of how the project proposes to make PES operational and sustainable to deliver tangible and measurable results on the ground.
2. Output 1.2.1 should be modified to Modifications to land use, forestry, and financial policies of government institutions that will incorporate ecosystem services and ensure replication.
3. The proposal cites 'green economy targets' in several places. Please consider adding the definition of such targets. The proposal also offers very little evidence of lessons learned from successful "Green Economy" precedents. The

concept of Green Economy as outlined by the Green Economy UNEP reports is weakly translated into the practical activities of this project.

4. The Risk Analysis section lacks an important threat to the project of leakage, including through illegal trade. Please describe the approach on how the project will monitor and mitigate this risk.

5. STAP questions the incremental reasoning behind renewable energy activity. The proposal intends to provide renewable energy through hydropower and biofuels while not giving description of these activities. Indonesia has committed to reducing national greenhouse gas emissions by 26%, and up to 41% with international support, by 2020 [1]. Why this goal could not be achieved without GEF support and how is it linked to the rest of the proposal? The 5MW appears to be an arbitrary target, not based on an assessment of suitable sites for micro hydro, or available biomass for bioenergy.

6. Section A.4 Coordination mentioned many excellent GEF and other initiatives (Tiger Initiative and others) that are currently happening in the baseline of the project. It will be useful to list these initiatives in the Baseline section of the PIF and provide a plan for coordination with these initiatives to ensure the highest impact of GEF investments and avoid repetition of efforts of other projects.

7. The distinction between three investment areas and their alignment lacks clear rationale.

8. It is not clear what technology is being proposed to generate electricity from biofuels using oil palm residues. Please clarify.

9. It is inappropriate to categorise agro-forestry and plantations as degraded forests.

10. The calculations of C benefit assume that the current rate of deforestation and forest degradation continues "unabated", yet the proposal also quotes current government policies to eliminate conversion of natural forests (from 2003!), eliminate deforestation of natural forests by 2020, and rehabilitate 1million ha per year. While these targets seem unlikely to be achieved, the BAU case should take into account the impacts of these policies: the estimated benefits of the project must be incremental to the likely impacts of these policies.

11. There is misplaced precision in estimates of avoided emissions. While the figures for carbon stocks and sequestration are realistic on a per ha basis, it seems that the areas involved are quite arbitrary. Why, for example, is it assumed that 10000 ha of heavily degraded forest will be restored in one region, but only 500 in another? If there is a sound basis for this difference, it should be stated.

12. The data presented in the Annex in support of the C calculations are difficult to interpret. The large temporal changes would appear to indicate variation in definitions and/or uncertainty in quantification, and so lend doubt to the estimates of rate of deforestation.

13. On what basis has the area to be restored or protected been calculated? It seems unlikely that the nominated large area of heavily degraded land could actually be "fully restored" with the specified resources. Degraded land is often eroded or affected by other limitations e.g. acidity, Al toxicity, P deficiency, so successful reforestation of such sites is a resource-intensive activity, and may not be justified. The PIF mentions abandoned and failed plantations – these are evidence of the challenges in reforestation, and suggest that the assumption of 100% success in restoration is unrealistic.

14. There is no detail provided of the intended forest restoration activities, so it is not possible to determine whether the planned activities are soundly based.

15. There is a heavy focus on spatial planning, but it is not clear what the envisaged plans will encompass. That is, will they focus on planning of protected areas and sites for forest restoration, or also plan zoning for specific agricultural activities and urban expansion? Urban encroachment is identified as a major threat. STAP is pleased to see the intention to contribute data to support the NCA, but it is not clear what the proposed database will actually contain, and what data will be contributed by this project.

16. The loosely linked baseline projects would seem to be a "shaky" foundation to base project interventions.

Sources:

1. UNEP. Green Economy Advisory Services. Indonesia's Pathway to Green Economy. Available at <http://www.unep.org/greeneconomy/AdvisoryServices/Indonesia/tabid/56278/Default.aspx>

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. <b>Consent</b>	<p>STAP acknowledges that on scientific or technical grounds the concept has merit. However, STAP may state its views on the concept emphasizing any issues where the project could be improved.</p> <p>Follow up: The GEF Agency is invited to approach STAP for advice during the development of the project prior to submission of the final document for CEO endorsement.</p>
2. <b>Minor revision required.</b>	<p>STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development.</p> <p>Follow up: One or more options are open to STAP and the GEF Agency:</p> <ul style="list-style-type: none"> <li>(i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions.</li> <li>(ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.</li> </ul>
3. <b>Major revision required</b>	<p>STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design.</p> <p>Follow-up:</p> <ul style="list-style-type: none"> <li>(i) The Agency should request that the project undergo a STAP review prior to CEO endorsement, at a point in time when the particular scientific or technical issue is sufficiently developed to be reviewed, or as agreed between the Agency and STAP.</li> <li>(ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.</li> </ul>