

# 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 11, 2016  
Screener: Thomas Hammond  
Panel member validation by: Annette Cowie  
Consultant(s): Guadalupe Duron

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

| FULL SIZE PROJECT         | GEF TRUST FUND  |
|---------------------------|---|
| GEF PROJECT ID:           | 9416  |
| PROJECT DURATION:         | 5   |
| COUNTRIES:                | Costa Rica  |
| PROJECT TITLE:            | Conserving Biodiversity through Sustainable Management in Production Landscapes in Costa Rica |
| GEF AGENCIES:             | UNDP  |
| OTHER EXECUTING PARTNERS: | MINAE   |
| 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 UNDP's proposal "Conserving biodiversity through sustainable management in production landscapes in Costa Rica". The objective is well defined and aligned with the proposed actions on biodiversity conservation and sustainable forest management in production landscapes. STAP is pleased the project aims to improve the geo-referencing capacity of the National Territory Information System (SNIT) to monitor land use change in private land under agricultural production. Satellite imagery will complement ground-based methods and data and help improve monitoring and policies on biodiversity conservation and sustainable forest management in the two target sites. STAP encourages UNDP and Costa Rica to continue sharing their learning on the use of remote sensing methods and data for the purposes of conserving biodiversity and improving forest management.

To strengthen the project design STAP recommends addressing the following points:

1. STAP welcomes the detailed description of the targeted areas. In the project design, STAP recommends describing the social and economic characteristics of the project sites along with the social-ecological relationships. It will be important to focus the analysis of land use change based on the relationship between people and ecosystems.
2. STAP suggests undertaking an analysis of the supply and demand of ecosystem services. This would generate results that are useful for analyzing synergies and trade-offs between ecosystem services, and for targeting policies, especially for PES schemes. This type of analysis would further strengthen the project's innovativeness on advancing knowledge and learning on meeting the project objective. The project developers may wish to consult this paper for further guidance on this topic: Locatelli, B. et al. "Synergies and Trade-offs Between Ecosystem Services in Costa Rica". Environmental Conservation, 2013.  
[https://www.researchgate.net/profile/Bruno\\_Locatelli/publication/258237686\\_Synergies\\_and\\_trade-offs\\_between\\_ecosystem\\_services\\_in\\_Costa\\_Rica/links/004635277ef0cd09ec000000.pdf](https://www.researchgate.net/profile/Bruno_Locatelli/publication/258237686_Synergies_and_trade-offs_between_ecosystem_services_in_Costa_Rica/links/004635277ef0cd09ec000000.pdf)

3. Additionally, the project developers may want to include a map that specifies the provisions and demand of biodiversity and ecosystem services based on their indicators. A spatial distribution of the ecosystem services would be beneficial for monitoring purposes, assessing the value of the ecosystem (e.g. demand of an ecosystem service is dependent on its spatial characteristics, such as number of downstream water users), and developing policies. The paper cited above can provide an example of a map of ecosystem services.

4. A prominent component of the proposal is the intention to develop "deforestation-free" certification of commodities. STAP would like to see more detail on this, in particular how leakage is to be managed (in cases where other land uses are displaced), and chain of custody ensured, in a manner that is both credible and practical. Given the similarities, and UNDP's involvement, with the GEF's Integrated Approach Pilot (IAP) "Taking Deforestation Out of Commodity Supply Chains", STAP recommends for UNDP to consider the methods used to address leakage, and, if appropriate, replicate them for this project.

Additionally, STAP recommends for UNDP and Costa Rica to consider strengthening the evidence base for the effectiveness of certification programs in generating benefits (local and global). For advice on this topic, STAP recommends its advisory document "Environmental Certification and the Global Environment Facility (2010): <http://www.stapgef.org/stap/wp-content/uploads/2013/05/Environmental-Certification-and-the-GEF.pdf>

5. Please provide further detail on the following: the strategy for reducing emissions from livestock systems; the "area-weighted Environmental Service Index"; evidence to support the proposed use of micro-corridors, live fences, silvopastoral systems documenting the benefits for connectivity and biodiversity conservation.

6. Please explain the often-repeated statement "Reduction in area converted annually from forest to other land use, from 21,707ha/yr to 354ha/yr, resulting in a net avoided deforestation and land degradation over the project area of 11,033ha". The arithmetic is hard to follow, the precision seems inappropriate, and the objective of reducing deforestation by over 98% - even if this is the target to be achieved after 5 years - seems unrealistic. The methodology used to calculate these estimates needs to be detailed in the project document.

7. It would be useful to provide further details on SINAMODICUT as it is intended to strengthen the effectiveness (and enforcement) of forestry regulations, and monitor land degradation. For example, further information on these issues would be useful: 1) is it a new program being established under the project?; 2) is SINAMODICUT based on satellite remote sensing?; 3) who will manage the program - there is reference in one place to a university consortium but it is unclear if this is the case; 3) on page 20, the PIF states that the project will use Landsat "is that for SINAMODICUT?"; and, 4) will Landsat imagery be adequate for the purposes of monitoring forest cover and land degradation (temporal frequency and spatial resolution)?

8. The project developers may wish to consult the Forestry Geographic Information System (FGIS) database for component 2, and for indicator data. The FGIS database can be useful for indicators of carbon stocks, and to assess the type of tree species at a spatial scale. Further information about the FGIS database can be found in the paper: Svob, S. et al. "The development of a forestry geodatabase for natural forest management plans in Costa Rica". *Forest Ecology and Management* 327 (2014) 240-250. <http://dx.doi.org/10.1016/j.foreco.2014.05.024>

9. STAP suggests its advisory document "Mainstreaming Biodiversity in Practice (2014) may be useful in project design: <http://www.stapgef.org/stap/wp-content/uploads/2014/04/Mainstreaming-Biodiversity-LowRes.pdf>

10. STAP notes the following minor details that should be corrected in the project document: 1) inaccurate use of the terms "trigger" (LUC is not a trigger of biodiversity loss; rather it is the pressures leading to LUC that are the triggers) and "opportunity cost"; and, 2) reference to oil palm as a domestically-consumed crop, rather than an export crop.

| <i>STAP advisory response</i> | <i>Brief explanation of advisory response and action proposed</i>   |
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| <b>1. Concur</b>              | 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 |

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|  | <p>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.</p>   |
| <p><b>2. Minor issues to be considered during project design</b></p> | <p>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:</p> <p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised.<br/> (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.</p> <p>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.</p>  |
| <p><b>3. Major issues to be considered during project design</b></p> | <p>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:</p> <p>(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.</p> <p>The GEF Secretariat may, based on this screening outcome, delay the proposal and refer the proposal back to the proponents with STAP's concerns.</p> <p>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.</p> |