

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 06, 2016
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Consultant(s):

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

FULL SIZE PROJECT	GEF TRUST FUND
GEF PROJECT ID:	9380
PROJECT DURATION:	5
COUNTRIES:	Mexico
PROJECT TITLE:	Securing the Future of Global Agriculture Facing the Threat of Climate Change, Conserving the Genetic Diversity of the Traditional Agroecosystems
GEF AGENCIES:	FAO
OTHER EXECUTING PARTNERS:	National Commission for the Knowledge and Use of Biodiversity (CONABIO)
GEF FOCAL AREA:	Biodiversity

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):
Concur

III. Further guidance from STAP

STAP welcomes the FAO proposal "Securing the Future of Global Agriculture in the face of climate change by conserving the Genetic Diversity of the Traditional Agroecosystems of Mexico". STAP believes this is a well-structured project. It is thoughtful, has a good understanding of social processes (e.g. researcher-farmer learning), and the cause-effect logical between threats, barriers, outputs, outcomes, and the goal are solid.

In order to further strengthen the project, STAP makes the following two key recommendations:

1. STAP recommends that indicators for agro-biodiversity outcomes are included in the Project Summary, including some combination of areas conserved, species, agro-ecological systems and so on. It is important that the project has clear biodiversity goals around which the sound processes that are envisaged in the document can coalesce, and to which the project needs to be accountable.

2. STAP notes that the whole project (and other similar agro-biodiversity projects) hinge on two assumptions or hypotheses:

- that traditional agro-biodiversity farming are viable approaches, and
 - that markets, market chains and information/education can add value to traditional crops, tipping the economic calculus towards sustaining these systems rather than replacing them with modern monocultures.
- STAP therefore highly recommends that the Project is designed as an experiment to test these assumptions (hypotheses). They should be stated carefully (in the risks section), and indicators should be specifically designed to measure them. This will contribute greatly to global learning about agro-biodiversity.

Below are further observations regarding the PIF:

- a) The project objective is clearly stated. However, the Project Strategy principles (p19), while important, are unclear to the reader.

- is hard to follow,
 - in ii) the noun "excedents" does not appear in a dictionary, so the meaning is imprecise, and
 - in iv) surely there is a need to understand the comparative economics (as opposed to finances) of traditional farming systems versus modern agriculture, including externalities (nitrogen, soil damage), risks (not enough diversity), equity and so on
- b) The outcomes do not encompass important GEBs, and this is a gap in the project design, which needs targets and indicators for the conservation of agro-biodiversity systems and/or species. In a regular log-frame, these indicators would be at Purpose level.
- c) The expected outputs are likely to contribute to the outcomes, but outcomes 4.1 to 4.3 are challenging and may be the Achilles heel of the project. Note elsewhere the discussion of testing these as assumptions that need to be tested scientifically.
- d) The Outputs for Component 1 are logical, but the mechanisms for managing this knowledge are obviously complex and need to be articulated more clearly in the Project Document. However, the aspect of economics is missing from the information goals. How viable are traditional systems relative to modern systems (returns/ha, returns/investment) and does this change when we factor in externalities, risks, etc.?
- Component 2 is laudable in its approach, linking Higher Learning to local experience. As in participation and extension generally, the devil is in the details and the Project Document should outline this carefully, without losing the direct link between researchers and farmers (in other words, keep this direct interaction and avoid mediation through meso-levels of governance or government). Component 2 is very feel-good, so extra care needs to be taken to ensure that it really is, and avoids locking local people into poverty, avoids locking in redundant practices that need to evolve with the times, and avoids romanticizing traditional farming livelihoods.
 - Component 3 is sensible, linking interested public agencies, utilizing researchers for technical advice and monitoring the impact of policies. However, building such coalitions of interest usually depends far more on the presence of technically and politically astute leadership and sound process than organogram planning; is this available?
 - Component 4 is logical, but developing new markets and values may be harder than anticipated. The assumption that new values, value chains and products can be developed for agro-biodiversity needs to be tested, including (1) the use of education, communications and labelling on the one hand, and (2) exchange, sales transport and markets on the other.
 - The proposal to value agro-biodiversity is important, not only for this project. There is no such thing as non-economic value (p27), and perhaps the writers are trying to differentiate between "financial values" (which include only actual values in the market in terms of individual actors) and "economic values" (which include tangible, intangible, financial and non-financial values, priced according to their real value in terms of society (not individuals)). Thus financial value externalizes loss of biodiversity, soil degradation, excesses nitrogen etc., to society and includes agricultural subsidies, whereas these costs and benefits are internalized in an economic valuation while subsidies are removed.
 - STAP recommends that practical economic expertise or guidance is used to design or implement this output, perhaps only for a small number of species or systems.
- e) The barriers are reasonably well described, with a good understanding of past practice and the literature.
- f) The PIF provides good background material on organizations, and plant biodiversity, and Component 1 seeks to organize and improve databases on plant agrobiodiversity.
- g) The Project is likely to provide measurable GEBs, and is based on sound assumptions (with the exception of the assumptions that local agro-biodiversity is socio-economically viable, an assumption that needs to be tested). However, indicators need to be included in the log-frame/Project Summary table in terms of species, areas, agro-ecosystems, etc.
- h) The governance process (researcher-farmer) proposed by the Project are innovative and potentially highly effective. The Project should be carefully designed to provide learning to GEF on the establishment of agro-biodiversity approaches, including analyses of social approaches, and the economics etc. of value chains, traditional farming methods, etc. The project is specifically designed to provide databases on species and their uses.
- i) The table on stakeholders and their roles in the project is clear and comprehensive.
- j) The whole project hinges on the assumptions (risks) that traditional agro-biodiversity farming is a viable approach, and that markets, market chains and information/education can add value to traditional crops. STAP highly recommends that these assumptions (hypotheses) are stated carefully and also that the project is specifically designed to test them. This will contribute greatly to global learning about agro-biodiversity.
- k) The project has a sound knowledge of socio-economic issues and principles, and includes participatory processes and rural upliftment in its goals.
- l) The PIF is well informed, tapping some (but not all) knowledge of previous projects. Learning is limited largely to Mexico, with little reference to similar initiatives in Latin America and Asia. This Project could begin to address important questions, and should therefore pay more attention to how it will generate and share these lessons with GEF, in the scientific literature and so on.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Concur	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 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.
2. Minor issues to be considered during project design	<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. (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>
3. Major issues to be considered during project design	<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>