

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 04, 2011

Screener: Guadalupe Duron

Panel member validation by: Emmanuel Sanginga; Michael Anthony

Stocking

Consultant(s):

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

FULL SIZE PROJECT MULTI TRUST FUNDS

GEF PROJECT ID: 4511

PROJECT DURATION : 8

COUNTRIES : Regional (Burkina Faso, Benin, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Sudan, Senegal, Chad, Togo)

PROJECT TITLE: Sahel and West Africa Program in Support of the Great Green Wall Initiative

GEF AGENCIES: World Bank

OTHER EXECUTING PARTNERS: Governments of participant countries, Regional Centers of Excellence

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):
Major revision required

III. Further guidance from STAP

STAP's review below is based on the proposal submitted to PMIS on 31 March 2011.

This Program Framework Document (PFD) is a comprehensive presentation of what the Great Green Wall Initiative (GGWI) would wish to achieve. The early sections of the PDF present broad landscape management scenarios that will contribute to the improved and more climate resilient resource based livelihoods and ecosystem function in West African and Sahelian countries. This is presented in a situation where most international, national agencies and people have been operating for some time through existing projects (such as TerrAfrica and other GEF funded projects) running more or less independently. Indeed, it is an ambitious program. The main question is what additional opportunities the new initiative might add? This PFD does not bring out clearly why and what GGWI is now being advocated for. The presentation of the material is not very clear and it is difficult to understand what exactly the program wants to achieve. An alternative view is that the proposal raises numerous issues without prioritizing them and outlining how they could be achieved.

Some activities outlined in this initiative seem to be a repetition of the previous work carried out by several GEF and national and international agencies. Response to the following questions will help the proponent to be clear. Is the development of this PDF based on changes the various stakeholders or the countries would like to see? Are these based on identified gaps in knowledge, new opportunities and/or challenges? What are the theories of change? How can we be sure that any change will lead to better development?

There should be indications that the same institutions have transformed, are transforming or are being transformed to act differently in the new initiative and that the consequences of this transformation will lead to the proposed ways of overcoming the still significant, major, critical and ongoing challenges in the targeted areas and countries, so that the described outputs and outcomes (some are repetitive and vague) are based on lessons learned. The activities should be better described and possibly respond to basic questions of whom, what, how and where. These success stories should then be scaled up and out based on good practices and knowledge backed by strong scientific evidence.

As such, STAP does not recommend this proposal until it addresses the points in this review. STAP deems this proposal as a "major revision required". (See note at the end of this review on what is required to respond to a major revision.)

Below, STAP provides more detailed comments

1. The scientific rationale of the program is weak. For example, the sustainable land and water management (SLWM) interventions are not well-defined. The proponents also do not define explicitly the rationale for the interventions, or where they will take place, and how will they be delivered. Details on indicators also are needed to justify and assess the scientific rationale of the program, and how it intends to measure and monitor the expected multiple global environment benefits at the country level and across the region. The proposal indicated it will build on TerrAfrica's monitoring and evaluation indicators, but this is poorly referenced. As such, STAP requests for the proponents to detail how the global environment benefits will be tracked and monitored, and how the program will build on TerrAfrica's indicators 'if at all.

2. Although there are some researchable promising aspects such as integration of solutions, multiple global environment benefits, and several management options at the landscape level that serves all countries, these are poorly developed and the whole the scientific quality of this PDF is disappointing. The inclusion of a section on the scientific approach and methodology might shed light on the thinking of the proponents.

3. This PFD does not provide a coherent conceptual and integrative framework. It would benefit from including such a framework. This PFD should show how the three GEF strategic goals (page 7) and the four components of the program design (page 15) constitute useful elements that could be incorporated and elaborated into a conceptual framework applicable to the different countries. It might be illuminating to show the links between these four components diagrammatically. The drafting team should move from the current fragmented portfolio of several separate projects spread among nine targeted countries to develop a new integrated conceptual, methodological and managerial approach. With a Program of such magnitude, it will be essential to focus on 'cross-boundary (international) issues as land degradation, desertification, water pollution, climate change and their impacts don't respect national boundaries. Confining studies within countries would not enable addressing problems of 'global' nature. STAP strongly recommends that the conceptual framework and theories of change are strengthened and include, inter alia, a clearer understanding of the heterogeneity in the rural stakeholders (who vary by socio-economic class, gender, age etc), targeted landscapes, management options and countries.

4. Research and Development (R&D) efforts on SLWM have long been pursued as separate disciplines. By integrating research across disciplines and across scales from farmer's field to landscape, we can put the pieces together to achieve the integrated, holistic approach required to synergize investments in water, soil, crops, environment and livelihoods. Often R&D excludes the socio-economic, gender, institutional and policy dimensions and uptake is not nearly at the pace required for widespread gains. Interventions required to bring this change about are less well understood. Many of the reasons are socio-economic, the very factors that the proposal tends to ignore.

5. Formulating some development and research questions in both physical and socio-economical terms with consideration of livelihood and equity issues, or of power relations and potential conflicts and need for trade-offs, will be useful and helpful to drive the expected outputs and outcomes from this initiative. These are important if the initiative wants to get its (largely physical) outputs to have positive outcomes and impacts for poverty reduction, improved livelihoods and well-being, as well as enhanced ecosystem services and environmental sustainability. There are clearly numerous assumptions underpinning this initiative which are not clearly expressed.

6. STAP strongly believes the activities proposed in this PDF need to go beyond "taking stock of what we have, and infusing new systems, procedures and principles of operation backed by strong scientific evidence". An exercise could be undertaken to review each of the ongoing projects (and baseline projects) against the objectives and agreed criteria in order to decide whether to continue them as they are, whether to discontinue them, whether to adapt and reorient them to better meet the new objectives and priorities, or whether to merge them with other project(s). Firstly, the "stock-taking exercise", should be ongoing during the whole process of the design phase. Second, change needs to go beyond the new implementation and management methods and procedures proposed above to include in this transition phase. There also is a need to specify a clearer set of integrated objectives and priorities based on consultation and engagement with stakeholders, particularly with rural poor populations who are the ultimate "target group", and with the policymakers.

Despite of using a broad approach for the different interventions there is a need to decide on the top priorities and those that will be leveraged. The following investment types are proposed: 1) investments

ready for full deployment or going to scale; 2) investments to be tested at a pilot stage; and 3) investments requiring refinement and research.

Specific comments and suggestions

8. The presentation style of the "Expected FA outcomes" and "Expected FA outputs" is not consistent. In some cases, the 'targeted' impacts are not properly shown while in most cases the target is not clearly stated "action not clear. e.g., CCM-5 "Restoration and enhancement of "including peatland (hectares)" is not 'complete' and may require adding "achieved" at the end. In most cases, measurable impacts are not shown and in some cases anticipated 'impacts' are not clearly presented or expressed.

Outcome and outputs are described as components and not really integrated. Integration of solutions that serves all countries is the major core for this project. It needs to be clearly demonstrated how this is done, what is the approach, methodology and verifiable indicators on how this has been achieved (See above).

9. On institutional coordination and support- The document indicates that special attention will be given so that the Program will include projects implementing priority activities that have not been sufficiently addressed before and that do not duplicate existing efforts. Nonetheless, these gaps are not well defined, or how will they be addressed by the proposal. Therefore, STAP recommends defining explicitly these gaps, as well as their responses.

10. The component on "link with southern systems" is interesting and good to see it. It is not possible to isolate the 'Sahel' region and re-green or re-habilitate it. There is interaction and feedback between the Sahel and humid zones in the south such that land use/cover changes in the south could affect rainfall pattern and amount in the Sahel and most activities in the Sahel could temper with resources and people in the south. The Program identified the concern and on the second paragraph line 3 of page 12 stated "Currently, tools etc that can address issues across geographic regions are in short supply". However, the Program does not show how such interaction and feedback will be handled if we run the Program within individual countries. Though they mentioned some counties such as Ghana which could be beneficiaries of the Program, it is not shown how the research component handles issues across political boundaries. That is, we know the major problems, drivers and consequences. But complexity arises when there is a difference in the "origin of a problem" and "destination of impacts of the problem". How can we resolve this at different scales (mainly international) if projects are 'specific within countries'? A project of global nature that aims to develop comprehensive decision support system is needed to address this.

11. Under "knowledge and technological barrier", the first paragraph (especially last line) should note that the scientific community is still struggling to define desertification let alone establishing consistent monitoring systems.

It also is unclear why and to what extent resource users lack capacities and experiences to address SLWM and adaptation to climate change. It would be useful to provide literature sources, or highlight TerrAfrica outcomes, that support the statement- "Whereas local resources users often have detailed knowledge of their resources including spatial variations, and understand well how their environment has changed over time, they often lack knowledge on strategies that would allow them to increase production and conserve their natural resource base considering increased population pressures, climate change actual and potential impacts and increased land degradation."

Also, it is not clear whether farmers across the targeted countries lack the know-how to adopt sustainable natural resource management amidst population pressures and climate variability, or whether this situation characterizes more some countries and others less. If there are intra-regional differences, the proposal could identify what they are and what are intended targeted interventions. Moreover, it should be stressed that what farmers mostly lack is resources to implement their strategies.

12. Under economic and functional barriers (page 14), "integrated solution that involves different countries" and the issue of "connectivity between ecosystems" are mentioned. However, the proposal does not specify how transboundary ecological and climate change interventions will be designed and implemented since the "geographical scope of the intervention is national" as mentioned in the document.

13. On innovations and economics, these interventions should concentrate on the economic valuation of the ecosystems services starting by establishing the baseline that will be used for the determination of the different tradeoffs between the different sectors (forestry, agriculture and range land management) integrated in the landscape and component of environmental services (biodiversity conservation ,

production, water and C sequestration). It will be interesting if attempts are made to investigate how to determine and enforce "PES" involving cross-boundaries (international). Research questions such as 'how much should/could Sudan pay to Ethiopia for 'good watershed management practices' that can reduce siltation of the Geizera irrigation scheme? When we involve different nations, research question could be interesting but complexity will be high too. However, when addressing issues such as the impact of climate change, we need to address cross-boundary interactions, and be prepared to tackle complexity.

14. There is a need to make an inventory of the different mitigation and adaptation technologies, practices and knowledge and determine which ones have been successful, or failed. There might be a need for more research on both biophysical and socio-economic factors on the different components of SLWM and their linkages to climate change depending on the targeted landscape and country.

15. Under risks, STAP suggests to add the risk of not using appropriate scientific methods and tools which could lead to unsustainable outputs and outcomes. Sources of uncertainties might come from many directions, national and international systems as well as competition between different partners and institutions. On risks, these also could include PES barriers, and lack of property rights for women. The evidence suggests that more equitable access to natural resources for women increases agricultural productivity, agroforestry economic returns, and water use efficiency for irrigation.
http://siteresources.worldbank.org/INTARD/Resources/Sustainable_Land_Management_ebook.pdf

16. Under regional implementation (page 21), STAP wishes to note that it may be essential to "strengthen" capacity of Africans by establishing Regional Centers of Excellence related to land degradation (assessment, monitoring and restoration measures), climate change (modeling, predicting, and adaptation mechanisms). Projects could be there to do research and build capacity of people, but broader institutions, where capacities could be built and research experiments be conducted, are equally essential.

17. There are opportunities throughout the proposal to build-in specific gender interventions. For example, the proposal could specify further how land and water use planning and priorities to address livelihoods will take into account gender, given women's significant roles in agriculture, land management, food security, and water resources in the Sahel. STAP recommends that gender related interventions be built better throughout the document.

18. Clarify whether the "learning objective" in the knowledge management and monitoring section (page 15) is related to the GEF land degradation strategy learning objectives. If so, specify further how the program outcomes will contribute to the learning objective. Clearly, there is an opportunity for the program to contribute to learning objective #2. Measuring and tracking the delivery of multiple global benefits from land management and sustainable forest management will be important in order to quantify, and learn more precisely, how the land degradation portfolio can contribute to multiple benefits and ecosystem services. This knowledge and learning could be used to align more closely the land degradation strategy with other focal areas in GEF-6.

19. On payment for ecosystem services, STAP advises to use its advisory document "Payment for Ecosystem Services and the Global Environment Facility" to design, and identify potential threats for PES adoption and effectiveness. The report can be found at www.unep.org/stap

20. Given the significant weaknesses in this proposal outlined above, STAP kindly requests the opportunity to review the re-submission of this program framework document prior to final approval.

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.

<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.	<p>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:</p> <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 <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 revision required	<p>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.</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>