

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 16, 2017
Screener: Guadalupe Duron
Panel member validation by: Michael Anthony Stocking
Consultant(s):

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

FULL-SIZED PROJECT	GEF TRUST FUND
GEF PROJECT ID:	9797
PROJECT DURATION:	5
COUNTRIES:	Regional (Cabo Verde, Gambia, Guinea-Bissau, Senegal)
PROJECT TITLE:	West Africa Regional Fisheries Program Phase 2
GEF AGENCIES:	World Bank
OTHER EXECUTING PARTNERS:	Sub Regional Fisheries Commission (CSRP)
GEF FOCAL AREA:	International Waters

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 World Bank's "West Africa Regional Fisheries Program Phase 2". STAP is pleased with the quality of the program, and appreciates the references used in the document to support the statements. STAP also believes the program is timely, given the drivers of overfishing, climate change and pollution that are affecting West Africa's fisheries. STAP supports the program's aim to upscale and expand on the activities from the first phase, particularly by strengthening the governance of fishery management, implementing policies to strengthen sectoral reforms on coastal and fisheries management. The program also will engage with the private sector to implement sustainable fisheries management and seafood value chains by strengthening governance reforms. STAP appreciates the blue economy approach the program will pursue to strengthen linkages between sustainable livelihoods, marine ecosystems, and economic growth. However, STAP is concerned that global environmental issues such as climate change and biodiversity conservation feature only slightly in the project documents; the program is primarily about fisheries development, regional cooperation and national policy reform.

To further strengthen the project during its design, STAP recommends addressing these points:

1. STAP urges the World Bank to revisit its PCN Section F where target contributions to global environmental benefits are tabulated. Only two substantive items feature apart from number of countries involved. It is STAP's view that a more visible approach to global environmental issues would substantially enhance the project and better justify GEF-finance.
2. Therefore, as the project is further developed, STAP would like to see a more scientifically-robust project structure that identifies the different types of vulnerability of national economies and their fisheries to climate change, along with an indicator-based approach to identify and measure vulnerabilities. Research at the WorldFish Center has suggested three primary components of vulnerability that could give a useful framework, especially in the context of the national data-sharing to be fostered by the project: viz

- a. Exposure: primarily the physical effects of climate change. The key drivers of interest will include: changes in air and water temperatures, precipitation, salinity, ocean circulation and mixing, nutrient levels, sea levels, and storm frequency and intensity.
- b. Sensitivity: to include dependence of national economies upon the social and economic returns from fisheries and related activities. A composite indicator has been suggested comprised of fisheries production (landings), and the contributions of fisheries to employment, export income and dietary protein.
- c. Adaptive capacity: or how potential impacts could be offset. An adaptive capacity index has been used that is a composite of four human development indices (healthy life expectancy, education, governance and size of economy).

See Allison, E.H.; et al. (2009). "Vulnerability of national economies to the impacts of climate change on fisheries" *Fish and Fisheries*. 10 (2): 173-196. doi:10.1111/j.1467-2979.2008310.

3. STAP further recommends that the World Bank detail the climate change impacts on fisheries in West Africa. This includes providing projected temperature change and how it will affect ocean temperatures, the ecology for marine organisms, and the projections for marine fish production, and catch potential in the target area. The following paper discusses the effects of climate change on fisheries in West Africa, and the adaptive responses of artisanal and industrial fishers. The World Bank will find useful the paper when designing the project: Belhabib, D. et al. (2016). "Overview of West African fisheries under climate change: Impacts, Vulnerabilities and adaptive responses of the artisanal and industrial sectors". *Marine Policy* 71 (2016)15-28.

4. Given the interlinked human and biophysical elements in managing marine ecosystems, and fisheries, the project may want to consider a social-ecological approach. This would involve assessing the resilience of the social-ecological system, and identifying measures that can improve their condition in the future, given rapid environmental change. Applying the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) Framework would be an option. STAP would be pleased to offer advice on how to use the RAPTA in the project design. Guidelines on the RAPTA can be found at: <http://stapgef.org/sites/default/files/publications/RAPTA%20Guidelines%20-%20Low%20Resolution.pdf>

As it designs the project and considers social-ecological systems, the World Bank also may find useful this paper on modelling physical, biological and human responses to climate change on marine ecosystems in fishery dependent societies, including in West Africa: M. Barange, et al. (2014) "Impacts of climate change on marine ecosystem production in societies dependent on fisheries". DOI: 10.1038/NCLIMATE2119

5. STAP also recommends detailing the climate resilient activities the project will pursue using GEF funds to reform fisheries and coastal management (page 50). The World Bank's Climate and Disaster Risk Screening Tools will be good to use when designing the project: <https://climatescreeningtools.worldbank.org/content/enabling-resilient-growth>

6. In strengthening the marine protected area system of Guinea Bissau, STAP recommends detailing the trade-offs between marine protected area management objectives and fishery management objectives. STAP also recommends for the governance arrangements to be specified, given their importance in managing competing needs from multiple stakeholders, and in applying data generated by the project (component 1) for adaptive management purposes. The following paper may be useful in developing component 2 on strengthening marine conservation initiatives in Guinea Bissau: Weigel, JY et al. (2014). "Marine protected areas and fisheries: bridging the divide". *Aquatic Conservation Marine and Freshwater Ecosystems*.

7. The project document describes the drivers of degradation on marine fisheries, including overfishing as a result of increased local and global demand for marine resources. STAP recommends detailing the risk of managing open access resources, such as marine fisheries in the high seas, and the potential limitations, or challenges, the project may face in meeting the project objective. For example, strengthening governance and legal frameworks in the countries (component 2) may be at risk when threats to marine fisheries in West Africa may stem from negative externalities allowing fishers to freely enter, access, and deplete marine resources.

8. It is unclear whether the program will draw from the GEF's program on "Areas Beyond National Jurisdiction" (ABNJ) to upscale good practices, or embed learning from its activities. STAP recommends for the World Bank to draw from the experience and learning of the ABNJ program if it already does not intend to do so: <https://www.thegef.org/topics/areas-beyond-national-jurisdiction>

<i>response</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>