

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: October 18, 2012

Screeners: Guadalupe Duron

Panel member validation by: Anand Patwardhan; Jakob Granit
Consultant(s):

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

FULL SIZE PROJECT MULTI TRUST FUNDS

GEF PROJECT ID: 5113

PROJECT DURATION : 5

COUNTRIES : Regional (Angola, Namibia, South Africa)

PROJECT TITLE: Enhancing Climate Change Resilience in the Benguela Current Fisheries System

GEF AGENCIES: FAO

OTHER EXECUTING PARTNERS: Benguela Current Commission (BCC)

GEF FOCAL AREA: Climate Change

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 FAO's proposal on "Enhancing Climate Change Resilience in the Benguela Current". The proposal is well-written and targets an important and vulnerable economic sector in the proposed region. It also demonstrates consistency with the SCCF / LDCF objectives. Currently, STAP rates this proposal as "Minor revision required", as it wishes to receive further clarity on the points indicated below that aim to strengthen further the scientific and technical merit of the proposal. In this regard, STAP looks forward to the FAO's responses prior CEO endorsement, and to reading the full proposal.

1. In the focal strategy framework (I.A.), the proposal appears to confuse outcomes and outputs. Some of the outputs indicated in Part A, appear to be outcomes.

2. In the project framework (I.B.), STAP has the following observations:

a. It would be useful to revisit the project framework, particularly the outcomes and outputs as some of these appear to be project activities. In addition, it would be useful to review these sections during the project development to ensure that outcomes represent the major downstream achievements to which the project will contribute; outputs are the project deliverables by the end of the project period, and; the activities are the processes leading to outputs.

b. The expected output 1.1.3 indicates that vulnerability assessments will be incorporated into the Benguela Current Commission SAP, and that relevant adaptation plans and actions are updated every 3-5 years. It would be useful to clarify further how will this be accomplished, and whether there are any institutional mechanisms being proposed that will allow for adaptation actions to be undertaken on an on-going basis.

c. For the expected outcome 2.1, it will be important to demonstrate vulnerability reduction in targeted fishing communities through objective measures, in addition to perceptual measures. At the moment, the indicator proposed is a purely perception-based index of vulnerability & risk.

d. It would be desirable to establish the baseline conditions in terms of fish catch, production and incomes of fishing communities.

e. What is the current baseline in terms of practices to deal with climate variability? To what extent will the current approaches be (or not be) adequate in the context of future climate change? How are best practices being determined (outputs 3.2.1, 3.2.2 and 3.2.3)?

f. No indicators have been suggested for project components #2 and #3 that deal with the critical aspects of piloting improved fisheries practices and capacity-building.

3. Under section B.1, STAP has the following observations:

a. While the problem statement is well defined, STAP recommends citing references (published and anecdotal) on the vulnerability and adaptive capacity of the fisheries sector, and communities, to climate change.

b. The proposal also identifies the importance of multiple stresses (economic, environmental) faced by the fisheries sector in the region (page 9). STAP suggests describing further these stresses in the proposal. Furthermore, STAP recommends further definition of the possible interactions between climate change and other stresses as climate change will no doubt compound present challenges.

c. It would be useful to have further clarification on what is the relevance of a framework of ecosystem approaches? Is the framework being adopted in the baseline, or being proposed to be adopted as a part of climate change adaptation? A further description of the "ecosystem-based" approach would be useful in this section.

d. What is the relative importance of different biophysical and socio-economic factors in determining current vulnerability? The proposal focuses largely on the biophysical factors (page 10). However, STAP suggests also focusing on socio-economic factors given their importance in understanding comprehensively the dimensions of climate vulnerability, such as changes in demand, development pressures on coastal regions, and other economic activities.

e. Similarly, STAP also recommends adding estimates of marine catch potential under climate change scenarios, if possible specific to the Benguela Current Large Marine Ecosystems (BCLME). This information would further describe the trends influencing the fisheries sectors, and the fisher-folks' vulnerabilities to climate change.

4. STAP pays careful attention to section B.2 as it considers explicit project baselines and indicators an important component of results based management. Therefore, the full-proposal will need to include the initial status of climate conditions, vulnerability, adaptive capacity as defined in the "Updated Results-Based Management Framework for the Least Developed Countries Fund and the Special Climate Change Fund and Adaptation Monitoring and Assessment Tool" GEF/LDCF.SCCF.9/Inf.4. For example, it would be useful to specify the outcome and output indicators for all three components. Currently, outcome indicators are defined only for the first two components. Likewise, STAP recommends adding baseline data in the "adaptation benefits" section, as well as indicators for each adaptation benefit to track the intended adaptation outcomes. This will help strengthen the scientific validity, and define more explicitly the additional cost rationale.

5. STAP recommends the project proponents describe explicitly the specific adaptation actions and measures in the full proposal. Currently, this lack of specificity prevents STAP from understanding fully the proposed interventions and their scientific rationale. For instance, STAP believes the proposal raises many statements about vulnerability and resilience (including ecosystem resilience) without adequately discussing the characteristics of vulnerability & resilience that may be observed, or monitored. Essentially, the proposal appears silent on the way in which climate change might pose an additional burden to the region and the way in which climate change may be a risk for development outcomes. STAP recommends addressing further these points in the proposal development: 1) Which of the current risk factors will be exacerbated? 2) Will there be new risks? 3) What might ocean acidification cause? 4) Are there coral colonies? 5) To what extent is the marine ecosystem productivity driven by nutrient delivery from inland?

6. Additionally, STAP encourages further clarification on why early warning systems are not considered as part of the baseline programme. Are these cyclone early warning systems or marine / ocean information systems?

7. Under component 1, STAP recommends for the project proponents to consider the potential positive impacts of climate variability and change on the fisheries sector. For example, some communities may benefit, or be less affected by, the changes in fish distribution. By accounting for these potential scenarios, it may assist the project to develop more targeted policies that strengthen its adaptation interventions in the fisheries and development sectors. (Refer to Badjeck, M.-C. et al. "Impacts of climate variability and change on fishery-based livelihoods". Marine Policy 34 (2010) 375-383.)

8. For component 1 and 2, STAP recommends emphasizing a multi-sector approach to adaptive management in order to minimize the negative externalities that may arise from the adaptive strategies used by other sectors (e.g. "â€œ

agriculture, water, coastal management). For example, irrigation and flood control may disrupt inland fisheries, while coastal protection approaches may enhance fisheries. (Again - refer to Badjeck, M.-C. et al. "Impacts of climate variability and change on fishery-based livelihoods". *Marine Policy* 34 (2010) 375-383.) This multi-sector approach is perhaps better known within FAO as an "ecosystem approach to fisheries and ecosystem approach to aquaculture" (EAF/EAA). STAP recommends drawing further from FAO's EAF/EAA and its holistic approach towards analysis/response mechanism for climate resilient fisheries. (Refer to <http://www.fao.org/fishery/topic/16035/en> and, De Young C., et al. "Building Resilience for Adaptation to Climate Change in the Fisheries and Aquaculture Sector". FAO-OECD Workshop. April 2012.)

9. Under Component 2, the intention to 'pilot improved climate-resilient fisheries practices' is not clear. Therefore, STAP suggests identifying some practical examples of what is intended, accompanied by data on their effectiveness obtained from practices in other countries, including FAO's recent experiences in formulating similar projects. Refer to <http://www.fao.org/fishery/topic/13789/en>

10. Although there is an intergovernmental body (the BCC) that is responsible for the project area, STAP believes the institutional and governance issues may be more complex as a result of the trans-boundary nature. If this is a potential concern for the project proponents, STAP recommends noting this as a potential risk, and defining mitigation measures.

11. The project appears to lack a description of the connection between the BCC and the Southern Africa Development Community (SADC) that promotes regional economic integration in the 14 SADC countries. The BCC is a project which is connected to SADC (the exact link is unclear) but what is most important is that SADC itself has several region wide policies addressing the natural resources sector including fisheries, energy, and other climate change mitigation and adaptation relevant policies that are mandatory for the SADC countries to transpose to national legislation.

Thus, STAP proposes for the project proponents to consider the desirability of some form of benefit sharing at the sub-regional, or SADC level, either in terms of economic value, or transfer of actual marine harvests, to mitigate future opportunity costs experienced by one country (e.g. fish catches) due to climate change, and related impacts, by offsetting windfall increases (e.g. due to stock migration to cooler waters) experienced by one or both of the other countries. STAP believes the BCC is ideally placed to use actual stock monitoring and scenario building to offer informed choices to its member countries regarding potential benefit sharing and examination of the maintenance of equity within coastal communities across the large marine ecosystem.

12. STAP is apprehensive that the Science Plan of the BCC does not appear to sponsor any form of scenario-building activity. Similarly the existing BCC State of the Ecosystem Information System (SEIS) does not have a component linked to data management that can use climate change-related data to inform models for use in participatory discussions with local stakeholders. STAP recommends for this form of participation, informed by science, to be included more explicitly within the project design.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	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. 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.
2. Minor revision required.	STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development. Follow up: One or more options are open to STAP and the GEF Agency: (i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions. (ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.
3. Major revision required	STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design. Follow-up: (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. (ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.