

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: March 01, 2013

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

FULL SIZE PROJECT **MULTI TRUST FUNDS**

GEF PROJECT ID: 5133

PROJECT DURATION : 5

COUNTRIES : Regional (Guinea, Mali, Mauritania, Senegal)

PROJECT TITLE: Senegal River Basin Climate Change Resilience Development Project

GEF AGENCIES: World Bank

OTHER EXECUTING PARTNERS: L'Organisation pour la mise en valeur du fleuve Senegal (OMVS)

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

1. The proposed project is designed to consolidate the process of strengthening of the Senegal River Basin Authority (OMVS) with the full participation of Guinea and builds upon several previous national and regional projects that have invested in strengthening the management of the Senegal River Basin.
2. STAP welcomes projects which seek integrated solutions to complex problems; in general STAP finds that the PIF presents relevant information about the baseline situation regarding the four countries and the Senegal River Basin Organization (OMVS). However, the Panel believes that the PIF does not adequately present the case for GEF or LDCF support; STAP has concerns about intervention logic in some components of the project concept, including anticipated environmental performance and the building of climate resilience.
3. The PIF lacks an adequate gap analysis and therefore does not present a clearly set out case for additional support beyond the baseline project described: the Senegal River Basin Multi-Purpose Water Resources Development Project (MWRD 2). In particular, the project baseline description, justification, activities and outcomes could be better described in the PIF to support subsequent decision making and implementation. For this reason STAP advises that the project concept should be subject to major revision and recommends that the following issues and proposed actions are addressed before CEO endorsement of a full project brief.
4. The PIF outlines proposals for use of LDCF and GEF Trust Fund utilization and STAP provides below its general observations that should be addressed by the project proponents and further detailed recommendations to be acted upon regarding each Component of the proposed project.

General observations

5. From an adaptation / LDCF perspective, STAP finds the additional cost reasoning in Component 2 vague. The last paragraph on page 12 notes "identify and plug gaps in project design with regard to needed adaptation measures". There is no detail about what the project is, what modifications could be done, and what the needed adaptation measures are. It is also not clear why current support from bilateral donors, MWRD (1 and 2) to the OMVS does not already tackle climate change and resilience in the basin?
6. The text on regional integration and the role of ECOWAS and the World Bank's ambition to support regional institutions is well described. Considering the key role of OMVS in the ECOWAS as a generator of multipurpose benefits that could be impacted by climate change this issue could have been one of the key aspects for this project to

tackle. This could be formulated as follows: How can possible outcomes in the water, energy and food nexus be threatened by climate change spilling over and impacting local and regional poverty and instability?

7. There is no mention in the PIF of the major Manantali dam in Mali and the Diama anti-salt dam in the delta that in themselves increase the resilience to drought and secure water supply for multipurpose use. A key issue in the basin is to continue to explore the trade-offs between navigation, irrigation, water supply and to restore ecosystem services. Climate change may contribute to increase the stress in the basin which in turn can contribute to strife.

8. Regarding the actual environmental status of the Senegal River Basin, the most directly relevant predecessor GEF funded project (GEF ID 1109) "Senegal River Basin Water and Environmental Management Program" invested in a TDA and SAP, resulting in formal adoption of the SAP by the OMVS. The terminal evaluation of that project noted that project success cannot be expected to be measured against environmental trend and/or status indicators, but only against process indicators, for the reason that the project was intended to be catalytic regarding strengthening of the OMVS and participation by member states. Nevertheless, as an enabling action, the project was expected to result in a functioning Environmental Observatory (Service de l'Observatoire de l'Environnement) for the Senegal River Basin which would be expected to be a fundamental actor (and feedback mechanism regarding development impacts) guiding improvement of the environmental status of the basin. At the close of the project the Observatory was reported not to be fully functional, and the present project concept, which mentions the continuing support for the Observatory by the Dutch funded linked project, does not mention in its baseline discussion whether the Observatory has reached full operational status. The full project brief should clarify the action proposed if any is required, to bring the Observatory to full operational status and to define outcome indicators regarding its planned function and connection with the present project.

9. Importantly, STAP notes that all of these interventions have to be placed within the context of the range of plausible future climate change outcomes. There is no indication that these have been considered in the development of the PIF, and whether this scenario building would be done subsequently, during the course of the project development.

Component 1.

10. Component 1(a) that is focusing on the inclusion of Guinea in the OMVS is important. However, is this not part of the on-going activities of the OMVS and other donor support programs? It is one of the most important parts of the OMVS work program currently to get the fourth riparian on board in the program, therefore the project brief should clarify the reasoning for the use of GEF Trust Funds.

11. Component 1(b) regarding OMVS institutional strengthening; it is not clear how the interventions (apart from the vulnerability assessments) lead to mainstreaming climate change adaptation into the OMVS operations / plans. This should be clarified.

Component 2.

12. The causal connections between project activities and the LDCF strategic objectives and outputs are not clearly specified. The relevant activities as described on page 14 (Component 2) are largely about stock-taking and performing a vulnerability assessment. While these are indeed welcome as enabling activities, it would have been reasonable for the PIF to spell out more clearly how these activities would contribute to adaptation-related outcomes. There is also little detail about the specific climate-related risks, and how they might change in the future. It would be useful to clarify these two points.

13. To what extent will the work proposed be guided by the well thought out framework already proposed under the 'Special Initiative on Climate Change' section (5.3) of the SAP? This SAP section clearly sets out costed proposals for four categories of investigations consistent with the aims of Component 2(a), yet is not mentioned in the PIF. STAP recommends that the proposed activities Component 2 (ii) and (iii) are framed by the existing SAP 'Special Initiative on Climate Change'.

14. The project concept has included a sub-Component (2a) to update the 2007 TDA and subsequently update the SAP if necessary. STAP is concerned that the cyclical nature of this process may, unless carefully considered, impede or delay river basin management actions to be taken that should be driven by the present SAP. STAP would welcome a clear set of criteria presented within the project brief that would guide a decision on SAP updating.

15. Component 2(b) targets knowledge and dissemination lists e.g. strengthening of hydrometric network. Surely that activity would be part of the major phase two of the MWRD2? Please clarify.

Component 3.

16. Some adaptation measures are mentioned in paragraph 2 on page 16 – however, there is little to indicate (beyond the general notion of water conservation) how they would enhance coping, particularly in relation to the range of future climate change outcomes. Therefore this gap should be addressed in the project brief.

17. STAP has concerns about Component 3(b), dealing with implementation and piloting and in connection with the proposed artificial flood regime. In particular there is no description of where in the basin such a pilot would be implemented. This is a very difficult task to do in a highly regulated river basin. The scale of the release of water is of concern, the location (tributary or main stem) and potential externalities of the release of water are amongst many issues that would need to be clearly described and justified in a full project brief. STAP notes that even if it were possible to release sufficient water to mimic historic flood-recession hydrological conditions it would appear unlikely that "natural environmental flows", as described in the PIF, could be achieved. Please address these concerns in the project brief.

18. Finally it would be helpful to describe more fully how or whether the OMVS Environmental Observatory will be engaged with this set of actions, regarding its responsibilities concerning the monitoring of water flows and quality, biodiversity and ecosystems, population and economy.

Further information

19. Regarding dam releases to support a flood-recession pilot; the project could usefully be informed by work done on modelling the impact of dams used for irrigation and water releases informed by digital elevation models within the Upper Niger River. This, together with its Inner Niger Delta, supports a shifting cultivation and fishing community in its floodplain similar to that in the Senegal River Basin. A decision support system for water management has been piloted for the Upper Niger: GIRE-Decidaid, based on the findings of a Dutch-funded project (Zwarts, et al, 2006), which could offer practical experience to the present project regarding water releases and interaction with dams within a very similar West African context.

References:

Earle, A., Jørgensen, A. & Jørgensen, J. (Eds.) (2010). Water without Borders: From Rhetoric to Practice in Transboundary Water Management. London: Earthscan.

GIRE-Decidaid. Royal Haskoning. See for example:

http://www.worldwaterweek.org/documents/WWW_PDF/2010/sunday/K23/Cisse_GIRE_DecidAidE.pdf

Zwarts, et al, 2006. The Economic and Ecological Effects of Water Management Choices in the Upper Niger River: Development of Decision Support Methods. Water Resources Development, 22-1 135-156.

<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.
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