STAP SCREENING TEMPLATE

GEF ID	**11108**
Project title	**Towards a better understanding of the Amazon Aquifer Systems for its protection and sustainable management**
Date of screen	**June 3, 2023**
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1. Summary of STAP's views of the project

This project in the Amazon basin aims to enhance multi-state cooperation to reduce threats to shared Amazon aquifer systems (AAS). By preventing its degradation from overexploitation and pollution, the project aims to improve water security and the resilience of vulnerable communities that depend on groundwater and ecosystems.

The rationale is sound and well documented, demonstrating how the aquifer systems are hugely important despite remaining poorly understood.

The initial design is clear and well structured. This project is not particularly innovative in its design, though the focus on transboundary cooperation for groundwater systems at this scale is unusual, and there is potential for innovation and scaling in the clearly identified pilot investments. In sharpening the project design, greater attention is recommended to the political economy of change, specifying lessons learned from prior efforts, and assessing risks.

Note to STAP screeners: a summary of STAP's view of the project (not of the project itself), covering both strengths and weaknesses.

STAP's assessment*

□ Concur - STAP acknowledges that the concept has scientific and technical merit

X **Minor** - STAP has identified some scientific and technical points to be addressed in project design

□ Major - STAP has identified significant concerns to be addressed in project design

Please contact the STAP Secretariat if you would like to discuss.

2. Project rationale, and project description – are they sound?

See annex on STAP's screening guidelines.

The rationale is sound and well documented, demonstrating how the aquifer systems are hugely important despite remaining poorly understood. The proposed project targets enhancing the overall understanding of the aquifer systems and facilitating multi-state cooperation to directly reduce threats such as overexploitation and pollution. The three corresponding components can be summarized as 1) better and detailed information; 2) policy assessment and recommendations; 3) pilot projects; and 4) a strategic action plan (SAP) for the Amazon Aquifer System (AAS).

The theory of change (ToC) provides a helpful and well-structured summary of change pathway, yet prompts several points for refinement:

- The assumption is that if people have greater knowledge, including through pilot projects, better capacity building, communication, etc. countries will agree to better coordinate management of the

aquifer which will lead to improved water security. This logic is similar to the logic of many transboundary water projects, including GEF ID 9770 in the Amazon basin. Is there evidence that these components alone are sufficient to result in improved water quality and use in the basin?

- It is questionable whether "an agreed SAP" is truly a suitable long-term outcome to target, as opposed to an output of component 4; a necessary but insufficient precondition for better, coordinated action.
- Figure 1 – the AAS problem tree – is a helpful illustration but would be strengthened by specifying relationships among particular root causes, problems and effects, which may in turn help strengthen the description of causal pathways in the ToC.

Component 2 seeks to 'diagnose' and address institutional inconsistencies and gaps among countries that would stand in the way of improved coordination on groundwater. It is not clear if this component will also examine issues of policy coherence *within* countries that may be driving decisions that inadvertently lead to poor groundwater usage and contamination.

The fact that pilot projects have already been identified is promising; however, what is the ToC for scaling these innovations (if successful)? Or is their main purpose to inform the development of the SAP, with the implication that the SAP is the primary vehicle for scaling?

There is good information regarding the relationship between this proposed project and the GCF proposal aimed at increasing the resilience of people and nature in light of climate change impacts on water availability and quality. Conversely, there is a noticeable lack of detail regarding how this project relates to GEF ID 9770 "Implementation of the Strategic Action Programme to ensure Integrated and Sustainable Management of the Transboundary Water Resources of the Amazon River Basin Considering Climate Variability and Change". There are many overlapping activities (e.g., component 2.6 in GEF ID 9770 to develop groundwater source protection solutions, component 3.1 to develop Amazon basin monitoring systems, etc.). What have been the lessons learned so far and how are they informing this proposed project? This seems particularly important since ACTO is the Executing Agency for both projects.

Stakeholder engagement is mainly focused at the 'highest political levels' – presumably in order to gain agreement on the SAP. Information is lacking on the role of IPLCs, academia, the private sector, civil society, etc. – apart from indicating the intention to include all in identifying "consensus actions to manage the AAS." This seems to ignore the inherent tensions and competing goals that are sure to emerge.

Risks are rated "low" across all categories besides climate, which is unconvincing given the threats to groundwater quality outlined in the project rationale, the low level of base knowledge, and the absence of suitable policy, regulatory and enforcement frameworks. While the project aims to mitigate these risks, they seem substantial in threatening achievement of successful outcomes.

Note: provide a general appraisal, asking whether relevant screening guideline questions have been addressed adequately – not all the questions will be relevant to all proposals; no need to comment on every question, only those needing more attention, noting any done very well, but ensure that all are considered. Comments should be helpful, evaluative, and qualitative, rather than yes/no.

3. Specific points to be addressed, and suggestions

1. Greater attention to the political economy of change is recommended in sharpening the project design. This includes querying the political, institutional and economic incentives envisioned to drive behavioural change, beyond the mere production of data and formal agreement on plans.

2. As part of this, consider future narratives that take into account not only future climate scenarios but also other important factors that can influence water usage such as population, development, political stability, etc. The latter is particularly important for the successful implementation of transboundary water agreements. See Using simple narratives to ensure durability of GEF investments.

3. Detail how diagnosis of institutional inconsistencies and gaps will address issues of policy coherence *within* countries.

4. Within the theory of change, probe how the project will help to identify and scale successful innovations.

5. Detail lessons learned from prior and ongoing, related investments, including how these influence the design, with particular attention to links to GEF ID 9770.

6. Review risk characterization and stakeholder engagement plans with an eye on more realistically assessing the potential for divergent goals, competition and conflict, and mechanisms to address these meaningfully.

Note: number key points clearly and provide useful information or suggestions, including key literature where relevant. Completed screens should be no more than two or three pages in length.

*categories under review, subject to future revision

ANNEX: STAP'S SCREENING GUIDELINES

1. How well does the proposal explain the problem and issues to be addressed in the context of the **system** within which the problem sits and its drivers (e.g. population growth, economic development, climate change, sociocultural and political factors, and technological changes), including how the various components of the system interact?

2. Does the project indicate how **uncertain futures** could unfold (e.g. using simple **narratives)**, based on an understanding of the trends and interactions between the key elements of the system and its drivers?

3. Does the project describe the **baseline** problem and how it may evolve in the future in the absence of the project; and then identify the outcomes that the project seeks to achieve, how these outcomes will change the baseline, and what the key **barriers** and **enablers** are to achieving those outcomes?

4. Are the project's **objectives** well formulated and justified in relation to this system context? Is there a convincing explanation as to **why this particular project** has been selected in preference to other options, in the light of how the future may unfold?

5. How well does the **theory of change** provide an "explicit account of how and why the proposed interventions would achieve their intended outcomes and goal, based on outlining a set of key causal pathways arising from the activities and outputs of the interventions and the assumptions underlying these causal connections".

    - Does the project logic show how the project would ensure that expected outcomes are **enduring** and resilient to possible future changes identified in question 2 above, and to the effects of any conflicting policies (see question 9 below).
    - Is the theory of change grounded on a solid scientific foundation, and is it aligned with current scientific knowledge?
    - Does it explicitly consider how any necessary **institutional and behavioral** changes are to be achieved?
    - Does the theory of change diagram convincingly show the overall project logic, including causal pathways and outcomes?

6. Are the project **components** (interventions and activities) identified in the theory of change each described in sufficient detail to discern the main thrust and basis (including scientific) of the proposed solutions, how they address the problem, their justification as a robust solution, and the critical assumptions and risks to achieving them?

7. How likely is the project to generate global environmental benefits which would not have accrued without the GEF project (**additionality**)?

8. Does the project convincingly identify the relevant **stakeholders**, and their anticipated roles and responsibilities? is there an adequate explanation of how stakeholders will contribute to the

development and implementation of the project, and how they will benefit from the project to ensure enduring global environmental benefits, e.g. through co-benefits?

9. Does the description adequately explain:

   - how the project will build on prior investments and complement current investments, both GEF and non-GEF,
   - how the project incorporates **lessons learned** from previous projects in the country and region, and more widely from projects addressing similar issues elsewhere; and
   - how country policies that are contradictory to the intended outcomes of the project (identified in section C) will be addressed (**policy coherence**)?

10. How adequate is the project's approach to generating, managing and exchanging **knowledge**, and how will lessons learned be captured for adaptive management and for the benefit of future projects?

11. **Innovation and transformation:**
    - If the project is intended to be **innovative:** to what degree is it innovative, how will this ambition be achieved, how will barriers and enablers be addressed, and how might scaling be achieved?
    - If the project is intended to be **transformative:** how well do the project's objectives contribute to transformative change, and are they sufficient to contribute to enduring, transformational change at a sufficient scale to deliver a step improvement in one or more GEBs? Is the proposed logic to achieve the goal credible, addressing necessary changes in institutions, social or cultural norms? Are barriers and enablers to scaling be addressed? And how will enduring scaling be achieved?

12. Have **risks** to the project design and implementation been identified appropriately in the risk table in section B, and have suitable mitigation measures been incorporated? (NB: risks to the durability of project outcomes from future changes in drivers should have been reflected in the theory of change and in project design, not in this table.)