

**Part I: Project Information**

**GEF ID**

10086

**Project Title**

Reducing global environmental risks through the monitoring and development of alternative livelihood for the primary mercury mining sector in Mexico

**Date of Screening**

12/5/2018

**Screener**

Sunday Leonard

**Panel Member**

Ricardo Barra

**STAP Overall Assessment**

Minor

This is a critical instance of mercury pollution from ancient times in the Queretaro region, affecting human beings, and also biodiversity. The antecedents provided by the project are really impressive in terms of the amount of mercury produced in the area, but also how market-driven demands make the mercury mining more relevant in recent years, probably to supply the demand for mercury from ASGM in South America. The proposal has an ambitious objective to encourage better mining practices and also to provide alternative livelihoods for people currently exposed to mercury mining and wastes. It is helpful that there are alternative (non-mercury) mining activities available.

STAP believes that the barriers have been correctly identified. However, the role of illegal demand and markets, in this case from South America, as a significant driver and barrier need to be considered. This is particularly important since this seems to be a strong economic incentive to continue mercury mining because of the current low wages for alternative economic activities in the region.

The proposal intends to address the issue of sites contaminated with mercury. However, the type of remediation technology to be deployed was not mentioned. STAP recommends that the proponent explore the detailed scientific literature on this topic especially in the context of ongoing discussions on the topic within the Minamata Mercury Convention. Example publications include: <https://www.osti.gov/pages/servlets/purl/1265799>; <https://clu-in.org/download/remed/542r07003.pdf>; [\*\*Part I: Project Information\*\*  
\*\*B. Indicative Project Description\*\*  
\*\*Summary\*\*](https://clu-</a></p></div><div data-bbox=)

**What STAP looks for**

**Response**

Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	Yes
Project components	A brief description of the planned activities. Do these support the project's objectives?	Yes
Outcomes	A description of the expected short-term and medium-term effects of an intervention.	Yes
	Do the planned outcomes encompass important global environmental benefits?	Yes, avoided mercury release/production. Improved landscape and potential biodiversity benefits
	Are the global environmental benefits likely to be generated?	Yes, if the project is well implemented
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	Draft regulations on mercury; capacity building; alternative economic activities for mercury miners; evaluation and monitoring reports
Part II: Project justification	A simple narrative explaining the project's logic, i.e. a theory of change.	No explicit theory of change, but the sequence of activities and their outcomes represent a plausible logical framework that will could help achieve the project's objectives
<b>1. Project description. Briefly describe:</b>		
1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	Yes, with detailed and referenced information
	Are the barriers and threats well described, and substantiated by data and references?	Yes, well described

	<p>For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?</p>	<p>Not submitted as a MFA project, however, the project will generate landscape benefits. The project may also possibly generate biodiversity benefits</p>
<p>2) the baseline scenario or any associated baseline projects</p>	<p>Is the baseline identified clearly? Does it provide a feasible basis for quantifying the project's benefits?</p> <p>Does it provide a feasible basis for quantifying the project's benefits?</p>	<p>Yes.</p> <p>Yes</p>
	<p>Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?</p>	<p>Yes, the baseline clearly presents the starting point for achieving incremental benefits</p>
	<p>For multiple focal area projects: are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;</p>	<p>Not submitted as a MFA project, however, the project will generate landscape benefits. The project may also possibly generate biodiversity benefits</p> <p>Not submitted as a MFA project, however, the project will generate landscape benefits. The project may also possibly generate biodiversity benefits</p>
	<p>are the lessons learned from similar or related past GEF and non-GEF interventions described; and</p>	<p>The project should engage with the on-going GEF GOLD project.</p>

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	how did these lessons inform the design of this project?	See above
	What is the theory of change?	No explicit theory of change, but the sequence of activities and their outcomes represent a plausible logical framework that will lead to achieving the project objectives
	What is the sequence of events (required or expected) that will lead to the desired outcomes?	Characterization of primary mercury mining and reinforcement mechanism; capacity building; regulations strengthen; introduction of alternative livelihood; monitoring and evaluation
	· What is the set of linked activities, outputs, and outcomes to address the project's objectives?	See above.

· Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?

Yes, however, the alternative livelihoods element is complex because this will involve a major economic and cultural change for the communities involved. The proposal does not specify in detail the proposed alternatives and what criteria will be used to decide the alternative(s) chosen. Reconversion of mining communities is not an easy task, in particular when the community is culturally linked to mining activities. STAP recommends that further work be done to assess the best methodological approach for the alternatives, including the participation of the community, relevant stakeholders and project staff. The project deals with sites contaminated by mercury. However, the type of remediation technology to be deployed is not mentioned. STAP recommends that the project's proponents explore the detailed scientific literature on this topic especially the discussions on this topic in the Minamata Mercury Convention. Publications include:  
<https://www.osti.gov/pages/servlets/purl/1265799>; <https://clu-in.org/download/remed/542r07003.pdf>; [https://clu-in.org/contaminantfocus/default.focus/sec/Mercury/cat/Treatment\\_Technologies/](https://clu-in.org/contaminantfocus/default.focus/sec/Mercury/cat/Treatment_Technologies/);  
[https://www.researchgate.net/publication/274729292\\_In\\_situ\\_remediation\\_technologies\\_for\\_mercury-contaminated\\_soil](https://www.researchgate.net/publication/274729292_In_situ_remediation_technologies_for_mercury-contaminated_soil);  
<https://link.springer.com/article/10.1007/s11356-015-4316-y>. It is unclear from the PIF whether Mexico already has a policy on contaminated site management. If so, it will be important this policy is assessed, and if necessary, strengthened. If there is no such policy, this would be an important output for the project to develop.

· Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?

No. The basic assumption is that the chain of activities and their outcomes will work smoothly. Given the challenge associated with creating an alternative livelihood (see above) STAP recommends that alternative options should be considered (Plan B) in case if the ideal option for change does not work out

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?	Yes
	LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?	Not applicable.
6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits, and are they measurable?	<p>With respect to the Global Environment Benefits, there is a discrepancy between the amount of mercury to be reduced in the section on GEBs and information in the Core Indicators in the PIF. While the former indicates that 560 tons will be reduced, the later states that 140 metric tons of new mercury input to the global market will be prevented. This needs to be clarified. Furthermore, it is not clear how these numbers were derived. STAP recommends that a detailed analysis of how the GEBs were calculated should be presented. Further, while the project is presented as a chemicals and waste project, the Core Indicators suggest that the project will generate landscape benefits, which is valid. But nothing is said about this in Section 4 on Global Environmental Benefits. It is also likely that the project will also generate biodiversity benefits, but this seems not to have been considered. STAP, therefore, recommends that information on potential landscape and biodiversity benefits should be provided.</p>
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	Yes. However, considering the challenge of creating an alternative livelihood, it is important that an alternative plan be created in case Plan A is unsuccessful

Are the global environmental benefits explicitly defined?

With respect to the Global Environment Benefits, there is a discrepancy between the amount of mercury to be reduced in the section on GEBs and information in the Core Indicators at PIF. While the former indicates that 560 tons will be reduced, the later state that 140 metric tons of new mercury input to the global market will be prevented. This need to be clarified. Furthermore, it is not clear how these numbers were derived. STAP recommends that a detailed analysis of how the GEBs were calculated should be presented. Further, while the project is presented as a chemical and waste project, it is indicated in the Core Indicators at PIF page that the project will generate benefit for landscape, which is quite valid. However, nothing was said about this in Section 4 on Global Environment Benefits. Also, it is most likely that this project will also generate biodiversity benefits, but this seems not to be considered. STAP, therefore, recommends that information on potential landscape and biodiversity benefits should be provided.

Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?

Yes. But see above for comments on this

What activities will be implemented to increase the project's resilience to climate change?

Not considered in the PIF. STAP recommends that this be done

7) innovative, sustainability and potential for scaling-up

Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?

Possibly in the context of Mexico, creating alternative livelihood may be innovative depending on what alternative and method or mechanism are implemented. The innovativeness of the project will depend on whatever options are created.

Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?

Partially. The success of the project could be a model for a similar situation in Mexico, and other countries in Latin America

Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?

The objective is to transform the sector fundamentally in the long term

1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.

**2. Stakeholders.** Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?

This is a major deficiency in the PIF. STAP believes that the stakeholder analysis needs to be more detailed, including identification of additional stakeholders, their roles, and the strategy for engaging them

What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?

See above.

**3. Gender Equality and Women's**

**Empowerment.** Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project's results framework or logical framework include gender-sensitive indicators? yes/no /tbd

Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?

The PIF indicates that the project will ensure there are opportunities for women to contribute to and benefit from the project's outcomes, and that this will be explored and interventions designed to specifically benefit women. However, the proposal is silent on how this will be done. STAP recommends that this be done fully during the PPG stage

Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?

No

**5. Risks.** Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design

Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?

Yes

Are there social and environmental risks which could affect the project? Yes

For climate risk, and climate resilience measures:

- How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? Not provided in the PIF. Given that the project relates to landscape and biodiversity management, a climate risk assessment should be carried out, and if any substantial risk is identified, adaptation measures should be incorporated into the project's design
- Has the sensitivity to climate change, and its impacts, been assessed? See above
- Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? See above
- What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? See above

**6. Coordination.** Outline the coordination with other relevant GEF-financed and other related initiatives

Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects? Yes

Is there adequate recognition of previous projects and the learning derived from them? Yes

Have specific lessons learned from previous projects been cited? Yes

How have these lessons informed the project's formulation?

Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects? Yes

**8. Knowledge management.** Outline the "Knowledge Management Approach" for the project, and how it will contribute to the project's overall impact, including plans to learn from relevant projects, initiatives and evaluations.

What overall approach will be taken, and what knowledge management indicators and metrics will be used?

The use of UN Environment Live Platform as a knowledge management tool is an interesting approach for addressing the dissemination of information and lessons learned throughout the project development phase. It is also good that the project intends to engage the expertise of the Global Mercury Partnership. The Partnership offers opportunities to learn from ongoing activities as well as for knowledge generation and dissemination.

What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?

See above. The project will also benefit from the Extractive Industries hub currently under development in UN Environment.

## STAP Notes