

Independent Terminal Evaluation

Improve the Health and Environment of Artisanal and Gold Mining Communities in the Philippines by Reducing Mercury Emissions

UNIDO ID: 120016

GEF Project number: 5216



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO INDEPENDENT EVALUATION DIVISION

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LIST OF ACRONYMS AND ABBREVIATIONS

ASGM	Artisanal and Small-Scale Gold Mining
BPS	Bureau of Products and Standards
BOC	Bureau of Customs
BSP	Bangko Sentral ng Pilipinas
BT	Ban Toxics
CCO	Chemical Control Order
DENR	Department of Environment and Natural Resources
DOH	Department of Health
DOLE	Department of Labor and Employment
DTI	Department of Trade and Industry
EMB	Environmental Management Bureau
FASPS	Foreign-Assisted & Special Projects Services
FDA	Food and Drug Administration
GEF	Global Environment Facility
GMP	Global Mercury Project
LGU	Local Government Unit
MGB	Mines and Geosciences Bureau
MIA	Mercury Initial Assessment
NAP	National Action Plan
NASSM	National Association of Small-Scale Miners
NGO	Non-Governmental Organization
NCIP	National Commission on Indigenous Peoples
NIP	National Implementation Plan
NPC	National Project Coordinator
NPM	National Project Manager
NSP	National Strategic Plan
OFF	Operational Focal Point
OSHC	Occupational Safety and Health Centre
PIR	Project Implementation Review
PM	Project Manager
POPs	Persistent Organic Pollutants
PSC	Project Steering Committee
SAICM	Strategic Approach to International Chemicals Management
TE	Terminal Evaluation
TOR	Terms of Reference
TWG	Technical Working Group
UN	United Nations
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNITAR	United Nations Institute for Training and Research
UP-NPMCC	University of Philippines – National Poison Management and Control Center
UP-PGH-NPC	University of Philippines – Philippines General Hospital – National Poison Centre
WHO	World Health Organization

GLOSSARY OF EVALUATION-RELATED TERMS

Conclusions	Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.
Logframe	Management tool used to improve and facilitate the planning, design, implementation and monitoring of interventions, most often at the project level, also in literature referred to as LFA – Logical Framework Approach. It involves identifying strategic elements of the project (inputs, activities, expected deliverables (outputs), specific objective (outcome) and overall objective (goal)) and their causal relationships (“results chain”), indicators, and the assumptions or risks that may influence success and failure. Related term is Results-based Management (RBM).
Outcome	The likely or achieved short-term and medium-term effects (including policy and institutional changes) of an intervention’s outputs. Will materialise <i>after</i> the intervention outputs have been delivered and is clearly outside the control of the project management.
(Expected) Results/ Outputs	The products, capital goods and services which result from the activities of a development intervention (the “deliverables”); may also include changes resulting from the intervention which are relevant to the achievement of outcomes. The outputs are fully within the responsibility and control of the project management.
Effectiveness	The extent to which the development intervention’s results/ outputs and objectives were achieved, or are expected to be achieved, as compared to the work plans and budgets, taking into account their relative importance.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results/outputs. It is thus a measure of productivity.
Impacts	Positive and negative, primary and secondary long-term consequences/effects/ results produced by a development intervention, directly or indirectly, intended or unintended, foreseen or not foreseen. Such effects could be economic, political, social, technical or environmental, both on local and national level, primary and secondary. (A related term is “outcome”, but this is normally used directly related to the <i>planned</i> effect of the project outputs).
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries’ requirements, country needs, global priorities and partners’ and donors’ policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances and framework conditions.
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor. Indicators should preferably be measured in quantitative terms, but also qualitative indicators are used. Indicators should be SMART (specific,

	measurable, achievable, realistic and time-bound)
Lessons learned	Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome and impact.
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions.
Results	The outputs, outcomes or impact (intended or unintended, positive and/or negative) of a development intervention at various levels and points in time (the Results Chain refers).
Sustainability	The likelihood of continuation of benefits (and prospects of the expansion and/or replication thereof) from a development intervention <i>after</i> major development assistance has been completed, and the external funding has ended (the probability of continued long-term benefits/impact). The resilience to risk of the net benefit flows over time.

Executive Summary

A. Introduction

1. The Global Environment Facility (GEF) medium size project (MSP) *“Improve the Health and Environment of Artisanal and Gold Mining Communities in the Philippines by Reducing Mercury Emissions”* was implemented from March 2013 to June 2016 by the United Nations Industrial Development Organization (UNIDO). The main national partners of the project were the Department of Environment and Natural Resources (DENR), Department of Health (DOH), and Ban Toxics (BT), with the following financing sources: GEF: \$ 550,000; co-financing (cash and in kind): \$ 1,631,070; Total: \$ 1,631,070.

2. The overall objective of the project was to improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions. In particular, the project aimed to introduce mercury-free technology in 2 small-scale mining areas, and to supplement this effort by providing health training to rural health care workers in the proper diagnosis of mercury poisoning.

B. Evaluation of findings and conclusions

3. The main purpose of this terminal evaluation was to assess the performance of the project (in terms of relevance, effectiveness, and efficiency), to determine its impacts (actual and potential) including their sustainability, and to propose a set of recommendations in view of ongoing activities and replication.

4. This project is highly relevant as the Philippines has signed the Minamata Convention. With the assistance of UNEP and UNITAR, it is undertaking activities for an early ratification of the Convention. Furthermore, recognizing the need for sound management of mercury and mercury-containing wastes, it has developed a NAP on mercury to reduce releases including in the ASGM sector.

5. The project is consistent with the GEF 5 Focal Area Strategy for Chemicals. In particular, in strengthening local and national capacity to effectively reduce mercury use, emissions, and exposure in artisanal gold mining communities, the project is very relevant with Outcome 3.2 of GEF Chemicals focal area.

6. Effectiveness of the project is considered satisfactory. Most of the stated objectives have been successfully achieved. A significant number of miners, including both males and females, have been trained to use mercury-free method to extract gold, and a number of them have already shifted to this mercury-free technique. As a result, the use of mercury for gold mining has been considerably reduced in the project areas, and the communities are fully aware of the dangers of mercury on human health and environment. The mobilization of significant co-funding increased efficiency of the project.

7. The approach originally agreed upon by stakeholders was adopted in project implementation. The overall project management and supervision was satisfactorily done by a UNIDO PM who was adequately assisted by support staff. At the national level, the project was satisfactorily executed by DENR, DOH, and Ban Toxics. However, delay due to changing of project site decreased efficiency to some extent.

8. Some financial and socio-political risks that could jeopardize sustainability of project outcomes have been identified. However, as these risks can be easily mitigated by appropriate measures, chances for continuous sustained impact of the project are considered high.

C. Recommendations

9. The project has successfully been completed, achieving most of the stated objectives. For continued relevance and sustainability of project outcomes, this terminal evaluation proffers the following recommendations:

- i. The project has been successful and has produced tangible results. In particular, the project has been quite successful in training the miners to shift to mercury-free method, thus reducing the use of mercury at the project sites and lessening exposure to mercury (as observed in miners during the health assessments). It is recommended (for BT and DENR) that these positive outcomes be summarized and disseminated to other ASGM communities in the Philippines.
- ii. Some miners have indicated that the initial investment cost to shift to mercury-free method might constitute a barrier. It is recommended (for LGUs, BT, and miners' association) that a mechanism for financial assistance be set in order to facilitate shift to mercury-free gold mining in the ASGM sector.
- iii. For continued relevance and impact of the project, when the CCO on mercury is adopted, the relevant authorities (DENR) should ensure that it is strictly enforced to make availability of mercury difficult.

- iv. The results of the health assessment have not yet been disclosed to miners. DOH should proceed rapidly to inform the miners about the outcome of these assessments.

C. Lessons Learned

10. Valuable lessons, which emerged during the implementation of this project, include:

- i. The project site had to be changed as the LGU of one of the project sites was no longer supporting the project, thereby causing a delay of about one year in the implementation process. Hence, securing the commitment of partners ahead of time through signed agreement can avoid delays in project execution.
- ii. At the beginning, when the project, aiming at reducing the use of mercury in gold mining, was introduced to miners, they were reluctant to participate for various reasons including: loss of income if not working; mercury method is quick to extract gold. However, when the miners' communities were informed about the health problems that they might suffer from if exposed to mercury, they gradually started to change their mind. In particular, the women, knowing that they will be particularly affected if exposed, convinced the miners to participate in the project. Engaging proper awareness-raising activities and building their confidence are the basis to secure the commitment of the communities.

Part I Evaluation Background

I.1 Information on the evaluation

11. This terminal evaluation (TE) was undertaken in compliance with GEF¹ and the UNIDO² evaluation policies in order to promote accountability for the achievement of the project objectives through the assessment of results, effectiveness, processes, and performance of stakeholders involved during project implementation.

12. The evaluation was undertaken from September 2016 – November 2016 by a team of independent consultants constituted by Dr. Nee Sun CHOONG KWET YIVE, international consultant, and Allan VILLANUEVA, national consultant.

I.2 Scope and objectives of the evaluation

13. The TE covered the whole duration of the project from its starting date in March 2013 to the completion date in June 2016. It was conducted in accordance with the UNIDO Evaluation Policy³ and the UNIDO Guidelines for the Technical Cooperation Programme and Project Cycle.⁴ In particular, it followed the GEF Guidelines for GEF Agencies in Conducting Terminal Evaluations⁵ and the GEF Monitoring and Evaluation Policy,⁶ and assessed the project with emphasis on those components for which GEF funds were required.

14. The TE should provide an analysis of the attainment of the project objective(s) and the corresponding technical components or outputs. Through its assessments, the exercise should enable the government, the national GEF Operational Focal Point (OFP), counterparts, GEF, UNIDO, and other stakeholders and donors to verify prospects for development impact and promoting sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators, and management of risks.

15. To enhance project relevance, effectiveness, efficiency, and sustainability by proposing a set of recommendations with a view to ongoing and future activities, the TE will additionally make recommendations for UNIDO and the GEF that may help for improving the selection, and for enhancing the design and implementation of similar future projects and activities in the country and on a global scale upon project completion.

¹ [http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.project document](http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.project%20document)

² <http://www.unido.org/en/resources/evaluation/evaluation-policy.html>

³ UNIDO (2015). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/(M).98/Rev.1).

⁴ UNIDO (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006).

⁵ GEF (2008). Guidelines for GEF Agencies in Conducting Terminal Evaluations (Evaluation Office, Evaluation Document No. 3, 2008).

⁶ GEF (2010). The GEF Monitoring and Evaluation Policy (Evaluation Office, November 2010).

16. The TE will finally draw lessons of wider applicability from experience gained in this pilot project on ASGM for replication across the Philippines and in countries in other regions.

I.3 Information sources and availability of information

17. The availability of information for evaluation purposes was satisfactory. Soft copies of documents produced during project implementation were submitted to the evaluation upon request. These documents include: the project document, progress reports of national counterparts, Project Implementation Review (PIR) reports, consultants' reports, reports of contracted activities, minutes of technical working group (TWG) meetings, reports of workshops (e.g., inception, awareness raising, training, etc.), and reports of other activities such as assessment of miners' health undertaken by DOH. These documents were submitted by the UNIDO Project Manager (PM), and by national stakeholders (DENR, DOH, and Ban Toxics) during the country mission undertaken on 26 – 30 September 2016. A list of documents submitted to the evaluation is given in annex 2.

I.4 Methodological remarks, limitations encountered, and validity of the findings

18. Gathering of missing information as well as verification of information through interviews were done during the country mission which was undertaken on 26 – 30 September 2016. The major stakeholders of the project were interviewed at different locations. The National Project Coordinator (NPC), the Department of Environment and Natural Resources Head Quarters (DENR HQ), DOH HQ, Ban Toxics (BT), and UNIDO country office were interviewed in Manila, while the regional offices of DENR, DOH, and Mines and Geosciences Bureau (MGB) were interviewed in Davao City, located about 1,000 kilometers south of Manila in Mindanao island. The representatives of local government unit (LGU), medical health workers involved in the project, and project beneficiaries (miners' communities, women, and youth groups) were interviewed at Barangay Mt. Diwata (aka "Diwalwal"), Municipality of Monkayo, which is located 159 kilometers northeast of Davao City.

19. During the mission, it was not possible to interview the head of the Department of Health (DOH) in Manila and the Ban Toxics National Project Manager (NPM), who were both on travel. The latter was interviewed via Skype on her return from her mission. On the other hand, the head of the DOH, when back in office, informed the evaluation that she was not aware of the project since she was nominated at this position only recently. She nevertheless referred the evaluation team to a DOH officer who was directly involved in the project, who was eventually interviewed through a questionnaire that was emailed to him. He was also contacted by telephone for further information and clarification. The UNIDO project manager (PM) was interviewed in Vienna on 3 October 2016. A list of persons interviewed is given in Annex 3.

20. The preliminary findings based on the field mission in the Philippines and interviews in Vienna were presented to national stakeholders and UNIDO country office on 30 September 2016 in Manila, and to UNIDO HQ on 4 October 2016 in Vienna, respectively. The feedback and comments received during these presentations have been considered in this report.

II. Country and Project Background

II.1 Project background

21. Artisanal and small-scale gold mining (ASGM) is one of the most significant sources of mercury release into the environment in the developing world, and accounts for about 15% of the world's annual gold production. Mercury is often used in ASGM to help separate gold from sediments using rudimentary processing methods. Workers combine mercury with gold-laden silt to form an amalgam, which is heated, often in or near homes, to evaporate the mercury and leave gold.

22. In the Philippines, ASGM occurs in more than 40 provinces, and provides important subsistence-level income for about 300,000 miners and their families. For the past five years, ASGM activities have been producing at least 80% of the Philippines' yearly gold supply. With that comes the annual release of an estimated 70 to 140 metric tonnes of mercury, which is approximately 3.6-7.2% of the current estimated total anthropogenic mercury emissions worldwide at 1,921 metric tonnes (Mercury Watch Database). A United Nations (UN) study in 2006 found significant mercury contamination at levels up to 50 times World Health Organization (WHO) standards among surveyed gold miners. Gold rushes are occurring in various places, including Diwalwal, where UNIDO implemented a project aiming at assessing the health impact of mercury on mining and downstream population in 1998-2000. The project underlined the need for more awareness raising as it appeared that both study groups were heavily affected.

23. In 2011, Ban Toxics, along with Dialogos (a Danish non-governmental organization [NGO]), the International Committee of Environmental, Occupational and Public Health, the Geological Survey of Denmark and Greenland, and the University of Copenhagen, initiated a 3-year project entitled: Reducing Mercury Use in Artisanal and Small-scale Gold Mining in the Philippines (2011-2014). The project under evaluation is a follow-up of the efforts initiated by Ban Toxics to reduce mercury emissions.

II.2 Project Summary

Overall Objective

24. The overall objective of the project was to improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions. In particular, the project aimed to introduce mercury-free technology in 2 small-scale mining areas, and to supplement this

effort by providing health training to rural health care workers in the proper diagnosis of mercury poisoning. Specifically, it sought to assist the government to develop, implement, and facilitate the demonstration and replication of mercury reduction/elimination projects, enable local and national stakeholders to receive health, techniques and technology trainings, and promote policy reforms based on the lessons learned to reduce mercury use, emission, and exposure in ASGM activities.

25. To achieve these objectives, the following components were developed:
Component 1: Strengthen national capacity to effectively manage mercury by establishing a formal national institution and training of key stakeholders.

Component 2: Develop and deliver health education, techniques and technology training programs, including early recognition and identification of mercury poisoning at the community level, to reduce mercury in ASGM.

- 26.** The expected results were the following:
- a) A national ASGM institution was to be established to facilitate the process of mercury reduction/elimination. This was to be built on the momentum of the Philippine Strategic Approach to International Chemicals Management (SAICM) project, the Danish government/Dialogos/Ban Toxics non-mercury technique project, and the Ban Toxics/US Department of State mercury storage project.
 - b) Health education, technique and technology programs, and mercury poisoning surveillance program that could be later replicated nationwide was to be developed, and capacity increased through delivery of training programs.
 - c) National and local stakeholders in the Philippines were to be sensitized and able to replicate technical successes at other ASGM sites aiming to reduce overall mercury use, emissions, and exposure in country; and, important lessons learned were to contribute and promote sound national management policies on mercury in the future.

Project duration and costs

27. Table 1 gives all relevant information on the project, namely: project costs and co-financing, donors, duration, implementing and executing agencies.

Table 1: Information on Project

Project title:		Improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emission
UNIDO Project number:		120016
GEFSEC project ID:		5216
Project site:		Philippines
Implementing agency:		UNIDO
Government coordinating agency:		Republic of Philippines, Department of Environment and Natural Resources (DENR), Department of Health (DOH), and Ban Toxics (BT)
Planned project duration:		24 months
Start date		December 2012
Actual start date		March 2013
Planned implementation end		December 2014
Actual implementation end		June 2016
Project costs (\$)	GEF grant :	
	Project:	550,000
	PPG:	
	Support costs:	
	Sub-total	550,000 (excluding support costs)
	Co-funding:	
	UNIDO (cash):	50,000
	Government (cash & in-kind):	1,031,070
	Sub-total	1,081,070
	Total	1,631,070 (excluding support costs and PPG)

II.3 Project implementation arrangement and implementation modalities

28. For this project, UNIDO was the GEF agency and Ban Toxics was the main executing partner organization. In addition, DENR was responsible for the organization and management of the national technical working group meetings, inception workshop, while DOH was involved in the health education training workshops.

29. UNIDO was responsible for overall project implementation, monitoring, and reporting. A Project Manager (PM) was nominated within UNIDO Head Quarters (UNIDO HQ) to manage the project. He was supervised by a senior professional staff of the Department of Environment and was assisted in his tasks by support staff. Due to staff movement, the UNIDO PM changed towards the end of the project in August 2015. The new PM stated that the handover was done adequately, and the transition phase was not difficult as he was already managing similar projects. UNIDO coordinated closely with its office in Manila, Philippines, for project monitoring and supervision to ensure quality implementation by the main executing partner, Ban Toxics. UNIDO made these services available as part of its in-kind contribution to the project.

30. UNIDO, as the implementer, and Ban Toxics, as the main executor of the project, were jointly responsible to deliver project results, coordination of stakeholders, and management of pilot projects. A National Project Manager was nominated within Ban Toxics to manage project activities. In coordination with DENR and DOH, UNIDO and Ban Toxics provided technical expertise and guidance. All project components were implemented in collaboration with a variety of local and national stakeholders, including the local governments, local communities, miners' communities, community health workers, local associations and groups, and others.

Stakeholders / Institutions involved

31. The implementation of the project required the involvement of a number of national stakeholders. During the project development, discussions were undertaken mainly with representatives of DENR, which was the coordinating agency, and a National Project Coordinator (NPC) was nominated from this Department. The Department of Health was one of the executing partners of the project. It was involved in the health education training workshops and the monitoring of the health of miners at the pilot site. The University of Philippines – Philippines General Hospital – National Poison Centre (UP-PGH-NPC) was also involved in these monitoring activities.

32. Ban Toxics, an NGO registered in 2008, was the main executor of the project. It was responsible for project management and delivery of results at the pilot sites. In particular, it was in direct contact with the LGUs, local communities, and the miners.

33. The National Commission on Indigenous Peoples (NCIP), an agency responsible for protecting the rights of indigenous peoples in the Philippines, was also involved in the project, and it was a member of the technical working group. The Mines and Geosciences Bureau (MGB), a primary government agency under the DENR, assisted in the implementation of activities at pilot sites. It also participated in regional workshops during which it provided useful information.

34. The LGUs of Compostela Valley Province and of Barangay Mt. Diwata (Diwalwal) were very much involved in the project and facilitated the implementation of activities at the pilot sites. The miners from Benguet mining community were recruited to act as master trainers at the project sites.

II.4 Positioning of UNIDO

35. UNIDO has been working in the ASGM for more than 20 years and in 17 countries. The Global Mercury Project (GMP), a UNIDO initiative, was launched in 2002 with financial support from the Global Environment Facility (GEF) under the international water focal area, and was co-financed by partner countries and civil society. Several countries participated in this pilot program, including Brazil, Indonesia, Lao People's Democratic Republic, Sudan, Tanzania, and Zimbabwe. The GMP worked with governments, NGOs, industry, and community stakeholders to remove existing barriers that prevent the introduction of cleaner artisanal gold mining extractive technologies. This experience was recognized when UNEP set up its Global Mercury Partnership area and called upon UNIDO to lead the ASGM area.

36. UNIDO is also currently implementing similar projects in West Africa and Latin America. It is the UN agency in charge of industrial development with the ultimate aim of reducing poverty through productive activities. Developing the ASGM sector is exactly this, as UNIDO's projects in the sector contribute to reduce the health and environmental damages of the activity while increasing the productivity of workers. Moreover, ASGM typically occurs in very remote areas, and the projects help provide mining populations with a more sustainable income source; therefore, empowering the rural population.

III. Project Assessment

A. Design

37. The project document contains relevant, precise, and concise information to achieve the overall objective of the project, which was to improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions. The goal is realistic and achievable given that UNIDO is implementing similar projects in other regions (see paragraph 36). Moreover, Ban Toxics, the main partner of the project, has been an active UNEP mercury partner in the area of ASGM and has also been the lead NGO organizer, along with DENR Environmental Management Bureau, for the 2010 UNEP ASGM Global Summit held in Manila, Philippines. It was the local partner of Dialogos (Danish NGO) in the Philippines for the implementation of the miner-to-miner training that introduced and experimented zero mercury techniques in ASGM areas, and the training of rural health care workers in the proper diagnosis of mercury poisoning. Additionally, the former PM of Ban Toxics was much involved in the development of the National Action Plan for the Philippines.⁷

⁷ Interview data

38. A participatory approach was adopted during the preparatory phase. The project was developed in consultation with the major stakeholders / partners that included DENR, DOH, Ban Toxics, and LGUs. The Benguet mining community, to which the master trainers of the project belonged, was identified during the preparatory phase.

39. A comprehensive Project Results Framework (PRF) (annex A of the project document) describes in details the expected outcomes and outputs of the project. In general, the proposed indicators and means of verification for each of the activities therein are, in general, adequate to monitor progress, and the proposed means of verification are also appropriate. The proposed assumptions in the PRF are realistic for successful implementation success. However, the project document could have benefitted from a set of detailed activities to achieve the stated outputs and outcomes.

40. Low-level potential risks identified in Part II Section B.4 and adequate mitigation measures have been proposed. The timeframe provided as annex F of the project document seems adequate to deliver the proposed outputs.

41. Appropriate project implementation arrangements are described in Part II Section B.5 of the project document. In particular, the role of key partners have been clearly described for the effective implementation of the project. Similarly, the proposed monitoring and evaluation (M&E) plan (Part I section H) seems appropriate to effectively monitor progress. However, the independent terminal evaluation of the project is not mentioned and costed in the M&E plan.

42. Despite that a set of detailed activities as well as a costed terminal evaluation are missing in the project document, the project design nevertheless rates as **satisfactory**.

B. Relevance

Relevance to the country and target groups

43. This project is highly relevant as the Philippines signed the Minamata Convention on Mercury on 10 October 2013. With the support of UNEP, Chemicals through the Mercury Initial Assessment (MIA) project, and UNITAR, it is undertaking activities for an early ratification of the Convention. Additionally, with the assistance of UNEP and Chemicals through the MIA, the Philippine government has developed a National Strategic Plan (NSP) for the phase-out of mercury in the ASGM sector for the period 2011 – 2020. The Director of the Foreign-Assisted & Special Projects Services (FASPS) of DENR stated that ASGM is mainly considered part of the informal economy and is hardly regulated. According to him, the project is assisting the country to

address this issue, especially with regard to the illegal use of mercury in the sector.⁸

44. The miners interviewed indicated that the project was very relevant as it was about their health and livelihood. With the project, they became aware about the negative effects of mercury on health and environment, and more importantly (according to them), they were trained to extract gold using a zero mercury technique as mercury will no longer be available in the near future. The women and youth groups of the miners' community, who participated in the information, education, and communication (IEC) activities of the project, also indicated the high relevance of the project as, prior to the project, they were not aware of the toxicity of mercury.⁹ For example, before the project, it was common to see children playing with mercury—a situation that is no longer the case after the project was implemented.

Relevance to GEF

45. The proposed project is directly in line with the GEF 5 Focal Area Strategy for Chemicals. Under the Chemicals Strategy, the project aims “to promote the sound management of chemicals throughout their lifecycle in ways that lead to the minimization of significant adverse effects on human health and the environment,” in particular Objective 3 to “pilot sound chemicals management and mercury reduction.” It is also very consistent with Outcome 3.1 “country capacity build to effectively manage mercury in priority sectors,” and Outcome 3.2 to “contribute to the overall objective of the SAICM of achieving sound management of chemicals throughout their lifecycle in ways that lead to the minimization of significant adverse effects on human health and the environment.” This project was planned to support the GEF Chemicals focal area by strengthening local and national capacity to effectively reduce mercury use, emissions, and exposure in artisanal gold mining communities in the Philippines. Specifically, it sought to assist the government to develop, implement, and facilitate the demonstration and replication of mercury reduction/elimination projects, enable local and national stakeholders to receive health, techniques and technology trainings, and promote policy reforms based on the lessons learned to reduce mercury use, emission, and exposure in ASGM activities. The project is also consistent with the aim of GEF 5 Chemicals focal area to support countries in preparation for the entry into force of the internationally legally binding treaty on mercury, which is currently being negotiated.

⁸ Interview data with DENR

⁹ Interview data with community at Diwalwal

Relevance to UNIDO

46. The project is highly relevant with regard to UNIDO's mandate to support developing countries and countries with economy in transition to achieve sustainable development given the project has focused to improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions by implementing zero mercury techniques for the extraction of gold. Furthermore, UNIDO is also currently implementing similar projects in other regions (see paragraph 36) with the ultimate aim of reducing poverty by providing the ASGM populations with a more sustainable income source; therefore, empowering these rural populations.

47. The rating on relevance is **highly satisfactory**.

C. Effectiveness

48. The project was developed to deliver 4 outputs organized under two components (excluding Project Management Component), and designed to contribute to 2 outcomes as stated in the project document. The following paragraphs discuss the achievement of outputs and activities during implementation.

49. **Outcome 1: National capacity fostered to effectively manage mercury**

50. **Output 1.1: A national institution for mining community (ASGM) is established**

A National Association of Small-Scale Miners (NASSM) was established in 2016¹⁰. This association is registered with the Department of Labor and Employment (DOLE), and with the help of Ban Toxics, it is in the process of getting a legal status.¹¹ Prior to the establishment of NASSM, miners at Diwalwal and Labo formed ASGM associations. BT assisted these miners to organize as an association by providing office space and guidance on how to run an association. These miners' associations at Diwalwal and Labo and other associations of nearby locations generated momentum to push forward and to have provincial mining summit that happened during the project. These developments eventually paved the way to have the NASSM in order to make their voice heard at the national level. Ultimately, summits gathering ASGM associations were organized annually. The 4th ASGM summit was conducted in Davao in April 2016 with more than 130 participants. An ASGM coalition

¹⁰ <http://bantoxics.org/nationwide-coalition-for-artisanal-and-small-scale-mining-call-on-pres-duterte-for-support/>

¹¹ Interview data with former PM of Ban Toxics

workshop was conducted in June where the vision, mission, and goals of the coalition were discussed and finalized.

51. Output 1.2: Key stakeholders from Department of Environment and Natural Resources, Department of Health, and ASGM institution are sensitized and trained to manage mercury effectively through active participation in the project.

Activities to deliver this output have been satisfactorily carried out. As planned, a Technical Working Group (TWG) was established composed of representatives from major stakeholders including DENR, Ban Toxics, DOH, Food and Drug Administration (FDA) of DOH, Occupational Safety and Health Centre (OSHC) of the Department of Labour and Employment (DOLE), Bureau of Products and Standards (BPS) of the Department of Trade and Industry (DTI), and different sections of the Environmental Management Bureau (EMB) (see paragraph 76). A total of seven TWG meetings and four regional consultation workshops nationwide were organized and conducted by DENR. For some of the TWG meetings, representatives of academia, local government units (LGUs), and NGOs were co-opted. As for the regional consultations, a wide range of stakeholders was invited to participate, including representatives from the ASGM associations, regional members of the TWG, academe, LGUs, and NGOs. During these meetings and consultations, the discussion topics included: proposed amendments to the Chemical Control Order (CCO) regarding mercury and mercury compounds; proposed timeline for the phase-out of mercury dental amalgam; and, revised inventory of mercury uses and emission sources in the country. The activities for this output generated the following main conclusions: CCO to be amended as per the requirements of the Minamata Convention and a national storage facility for mercury, mercury compounds, mercury-added products, and mercury-containing wastes required. It was suggested that the government should provide an interim storage facility for the collected mercury, mercury compounds, and mercury-added products during the transition period. The proposed CCO, which was drafted by a national consultant, is still being circulated for comments within offices in DENR.

52. Outcome 2: Mercury use, emissions, and exposure reduced at ASGM pilot sites

Ban Toxics, already involved in ASGM activities prior to this project, was responsible to undertake activities for this outcome. In this endeavor, BT was assisted by Dialogos, a Danish NGO. Their partnership started in 2011 when BT with Dialogos initiated a 3-year project entitled: Reducing Mercury Use in Artisanal and Small-scale Gold Mining in the Philippines (2011-2014) (see paragraph 23).

53. Output 2.1: Training programs are developed and delivered at two pilot demonstration sites for government agencies, local NGOs, communities, and other relevant stakeholders on: health risks of mercury and early recognition and identification of mercury poisoning

The following two pilot sites were identified during the preparatory phase: Municipality of Pasil, located in Kalinga Province, and Barangay Mt. Diwata (Diwalwal), found in Compostela Valley Province. Ban Toxics established contacts with the LGUs of these two localities. Implementation of activities started in 2013 at these two localities. However, for various reasons, including concerns over the safety and security of project staff and the diminished LGU support for the project, BT took the decision to replace Pasil with Labo of Camarines Norte Province. This replacement caused about one year delay in project implementation. The approval by the LGU of large-scale mining operations in Pasil was one of the reasons for its diminished support for the project. It should be pointed out that although Pasil was no longer in the project, a number of activities were already undertaken at this site.

54. Activities to train health care workers and other relevant stakeholders of the project sites were properly planned and undertaken. For instance, DOH partnered with the University of Philippines – National Poison Management and Control Center (UP-NPMCC) to deliver the training for which the following modules were prepared:

- Module 1: Environmental sources and fate: Chemical properties of mercury
- Module 2: Human exposure to mercury, toxicology of exposure
- Module 3: Public health aspects of mercury exposure
- Module 4: Hands-on training on the application of health assessment protocols for doctors, barangay health workers.

55. In collaboration with DOH and UP-NPMCC, BT organized and delivered health education training sessions for rural health workers, the Municipal Council members, and other relevant stakeholders at project sites including Pasil,¹² At the three project sites (Diwalwal, Pasil, and Labo), a total of 60 rural health care workers, 25 peer educators, and 30 local partners were trained.

56. The health care workers of Diwalwal¹³ indicated that they were generally satisfied with the training provided by UP-NPMCC, and stated that their capacity was built on how to assess cases of Hg poisoning and how to manage such cases. However, they mentioned that although a checklist on Hg poisoning symptoms was given to them, they found it difficult to confirm if a

¹² Training session in Pasil was undertaken before decision was made for its exclusion from the project.

¹³ Interview data

person was indeed contaminated with mercury given that these symptoms are similar to those of common diseases (e.g., cough, colds, or fever). Generally, they would refer unclear cases to the hospital.

57. DOH in collaboration with UP-NPMCC undertook two health assessments of small-scale miners who would shift to alternative free-mercury method. The first assessment was done in 2013, and the second one, in 2015. For both assessments, the common complaints of the miners were weakness, low back pain, easy fatigability, and headache. The most common clinical diagnoses identified amongst the miners included hypertension, gingivitis, and dermatitis. For these two assessments, blood mercury levels and total mercury in hair of respondents were also determined. The results of these assessments are reported in Table 2 below. The mercury levels for the second assessment were much lower for the second assessment (ppb level) than for the first assessment (ppm level), which tend to indicate that when the miners shifted to mercury-free technique for gold extraction, the levels of mercury in their hair and blood decreased drastically. The miners have not been informed about results of these health assessments. It is recommended that actions be taken by DOH to inform the miners about the outcome of the assessments.

Table 2: Results of two assessments¹⁴

	1 st Assessment (2013)				2 nd Assessment (2015)		
		n*	Mean (ppm)	Range (ppm)	n*	Mean (ppb)	Range (ppb)
Diwalwal	Blood	51	6.22	0.91 – 34.66	17	3.75	2.14 – 7.18
	Hair	51	3.82	0.49 – 52.34	17	NR*****	NR*****
Camarines Norte	Blood	17	Nd****	–	26	nd	nd
	Hair***	17***	3.95	nd – 29.95	26*****	nd	nd
Pasil**	Blood	37	0.26	0.12 – 0.51	-	-	-
	Hair	37	1.18	0.11 – 10.20	-	-	-

*n, number of respondents; **2nd assessment not done at Pasil as it was no longer a project site from 2014; ***Hg was detected in hair of 4 respondents only; in 13 others, Hg not detected; ****nd: not detected; *****Only one respondent had an abnormal level of 5 ppm in hair; in 25 others, Hg not detected; *****NR: not reported: Hg levels for hair were not mentioned in the report.

58. A number of activities and initiatives were also undertaken at the project sites to raise the awareness of the local communities about the dangers of mercury on human health and environment. The activities included production and distribution of pamphlets and posters, which were in local languages, radio interviews in local languages, training of youth groups on Toxic- (including mercury-) Free School Programmes, and women groups informed on need for

¹⁴Data reported in Table 2 are taken from reports submitted by DOH.

mercury-free gold mining. The women were the most exposed as, in general, they were tasked to recover the gold by burning the mercury gold amalgam.

59. To promote project visibility, the media was invited to cover the activities of the closing workshop held on 13 – 14 June 2016 in Puerto Princesa City. For instance, the local press (e.g., Palawan Times, Palawan News, and Palawan Star), the local radio (Radio ng Bayan), as well as the Philippines Information Agency attended the workshop during which the main outcomes of the project were presented.

60. Output 2.2: *Techniques and technology training programs for miners to reduce mercury in ASGM are developed and delivered at two pilot demonstration sites (e.g., low and/or non-mercury methods and how to make equipment using low-cost and locally available materials)*

BT was responsible to undertake / organize the activities for delivery of this output. These activities, which were adequately planned and run, included:

- Preparation and delivery of modules on mercury-free method for ASGM
- Training of trainers by the master miners of the Benguet community
- Construction of mercury-free facility at the project sites
- Training of miners on mercury-free technique for gold mining

61. For the construction of the mercury-free facility, the LGUs provided cash co-financing (Diwalwal: Php 200,000; and, Labo: Php 350,000), a plot of land, support for building the facility, a water tank, and building materials.

62. The achievements at the two project sites were:

- 562 (355 M + 207 F) miners trained (direct beneficiaries)
- 2,043 (1,047 M + 996 F) miners trained (indirect beneficiaries¹⁵)
- 5 ball mill stations using mercury-free method
- 29 ball mill stations in transition to mercury-free method
- 368 kg of Hg reduced per year
- Potential reduction of 8,082 kg Hg per year

63. At the beginning, when the project, aiming at reducing the use of mercury in gold mining, was introduced to miners, they were reluctant to participate for various reasons including: loss of income if not working; and, mercury method is quick to extract gold. However, when the miners' communities were informed about the health problems that they might suffer from if exposed to mercury, they gradually started to change their mind. Aware that they would be particularly affected, the women convinced the miners to

¹⁵ Indirect beneficiaries are the families of the miners.

participate in the project.¹⁶ According to the miners, the following positive impacts of the project have occurred:

- Increased awareness on the negative impacts of Hg on health and environment (e.g., children no longer play with Hg, see paragraph 44)
- Lesser number of miners buying mercury
- Perceived lower number of illnesses among family members
- Bigger amount of gold recovered using gravity
- Miners satisfied with the changing process

64. The miners interviewed also reported that miners who have relocated to other areas/localities have begun their own gravity method (mercury-free method), and have trained miners of these new areas on this method. It is reported that about 20 miners in Agusan Del Norte province, and 10 miners in Surigao Del Sur province were using this mercury-free method. On the other hand, the miners mentioned that the gravity technique was difficult, and that patience and discipline were required for successful gold extraction. They also highlighted that one month of training was required to fully master the technique.

65. The project has been quite successful in achieving most of the stated objectives, and for these reasons, the rating on effectiveness is **satisfactory**.

D. Efficiency

66. The project was originally planned to start in December 2012. However, the actual start date was moved to March 2013, with the inception workshop held in August 2013, in Ortigas, Pasig City. The official closure date was supposed to be December 2014, but due to delays encountered, the official closure date was 30 June 2016. The decision for extension of the project was discussed during the 4th TWG meeting held on 30 June 2015. During this meeting, an extension up to December 2015 was agreed upon by the members. Eventually, a no-cost extension up to June 2016 was granted to allow for completion of project activities. The final workshop of the project was held in Puerto Princesa City, Palawan on 13 – 14 June 2016.

67. As already discussed previously (see paragraph 53), the project was delayed mainly due to the changing of project site from Pasil to Labo. For the execution of the project, subcontracts were signed in 2013 between UNIDO and the three main national partners: DENR, Ban Toxics, and DOH for amounts of \$62,240, \$390,000 and \$37,730, respectively (Total: \$489,970, see first item in Table 3). The disbursement of funds from UNIDO to the national

¹⁶ Interview data with miners at Diwalwal

counterparts were in tranches upon submission of reports as planned in the contracts. The national counterparts confirmed this modality and stated that funds were transferred timely with no particular delay.¹⁷ Table 3, which does not yet include expenses for TE, shows the expenditures of GEF funds as of April 2015:

Item	EXECUTED BUDGET in 2013	EXECUTED BUDGET in 2014	EXECUTED BUDGET in 2015	Total Expenditure (\$) (2011-present)	%
				(27 April 2015)	
Contractual Services	489,970.64	-37.37	-80.00	489,853.27	89.1
Internat. Cons/Staff	9,056.00	8,851.16		17,907.16	3.3
Internat. meetings	2,274.95			2,274.95	0.4
Local Travel	2,091.17	816.30		2,907.47	0.5
Nat. Consult./Staff				0.00	
Other Direct Costs	1,274.32	-34.97		1,239.35	0.2
Staff Travel	89.54			89.54	0.0
Total (\$)	504,756.62	9,595.12	-80.00	514,271.74	93.5

Table 3: Expenditures as of 15 April 2015 (GEF funds only)

(Source: Table taken from the terms of reference of this terminal evaluation)

68. As of April 2015, a total of \$ 514,271.74 (99.4%) of the GEF funds (\$550,000) has been spent, representing 93.5% of GEF funds. As can be seen in Table 3, the contractual services, which are the subcontracts with the national counterparts, represent 89.1% of total GEF funds. Given that all outputs have been satisfactorily delivered, and despite the delay of 18 months for completion of activities, it can be stated that the project has been quite cost effective. The mobilization of cash and in-kind co-funding¹⁸ (from DENR: \$150,000; DOH: \$75,000; BT: \$20,000; and also from LGUs [see paragraph 60]) contributed to efficiency of the project.

69. Although the project has been delayed by 18 months, the project has been effective in terms of delivery of outputs, and for these reasons, the rating on efficiency is **satisfactory**.

¹⁷ Interview data with DENR, DOH, and BT

¹⁸ Figures provided by DENR, DOH, and Ban Toxics

E. Sustainability of project outcomes

Financial risks

70. For the miners and ball mill operators to change to mercury-free method (gravity method), an initial investment cost of Php 5,000 (equivalent to about \$100) is required to buy materials for construction of sluice boxes and to buy cloth and pans. Many of the miners indicated that they cannot make such initial investment and would require some financial assistance. They proposed that some kind of revolving funds could be made available for them to shift to the gravity method. For these reasons, the financial risks are considered moderate.

Socio-political risks

71. The Philippines has signed the Minamata Convention, and has taken initiatives for its early ratification (see paragraph 43). Having developed a National Strategic Plan (NSP) for the phase-out of mercury in the ASGM sector for the period 2011 – 2020 gives an indication on the commitment of the Philippine government to properly manage mercury. However, as mentioned earlier (paragraph 53), the replacement of Pasil with Labo as project site was due to the diminished LGU support for the project. The approval of large-scale mining operations in Pasil contributed to this decreased LGU support for small-scale mining operation. There are thus some risks that LGUs may not give full support to phase out mercury in the ASGM sector. For these reasons, the socio-political risks are considered moderate.

Institutional framework and governance risks

72. This is a follow-up project of a project in the ASGM sector initiated by Ban Toxics in collaboration with Dialogos (paragraph 43). Furthermore, the Philippine government is fully committed on the phase-out of mercury in the ASGM sector (paragraph 70). Additionally, one of the outputs of the project is the amendment of the CCO on mercury for the sound life cycle management of the chemical. For these reasons, the evaluation considers that risks related to institutional framework and governance are low.

Environmental risks

73. The project is considered ecologically sustainable as it promotes the phase-out of mercury in the ASGM sector through the use of gravity method for gold extraction. Furthermore, no environmental risk that can influence or jeopardize the project outcomes and future flow of project benefits has been identified; therefore, this risk is considered to be low.

74. Although some financial and socio-political risks have been identified, these risks can be mitigated by adequate measures; hence, the overall rating on **sustainability** is **likely**.

F. Assessment of monitoring and evaluation systems

Monitoring and evaluation design

75. The design for monitoring & evaluation (M & E) is consistent with UNIDO's standard procedures. The proposed plan in the project document is adequate and allows for monitoring progress and impact at output level. The project results framework (PRF) (annex A of the project document) proposes adequate objectively verifiable indicators, their sources of verification, and assumptions for the project objectives, outcomes, and outputs. The evaluation, however, notes that the design did not include an independent terminal evaluation. Moreover, the design could have benefitted from an adequate costed monitoring and evaluation plan that would have included costs of different monitoring activities, including inception report, reports on impact indicators, progress and final project reports, PIRs, annual financial reporting and audits, establishment of management information system, mid-term and terminal evaluations. Nonetheless, the overall proposed approach to monitoring progress and project evaluation in terms of activities and deliverables (reports) (Part I Section G of project document) is adequate and clearly linked to project reporting, oversight, and governance. The rating on monitoring and evaluation design is **moderately satisfactory**.

Monitoring & evaluation implementation

76. As mentioned earlier (paragraph 65), the inception workshop was held in August 2013. It was organized jointly by BT and DENR and was attended by the major stakeholders and partners of the project, including UNIDO regional office, DOH, DOLE, customs, LGUs, miners' communities, local communities, and NGOs. The purpose of the ASGM project as well as planned activities and outcomes were presented to the participants.

77. As planned, a National Project Coordinator (NPC) was nominated within DENR, the host institution of the project. The Technical Working Group was established and was constituted by representatives from: EMB-Environmental Quality Division, EMB-Air Quality Management Section, EMB-Chemicals Management Section, EMB-Hazardous Waste Management Section, EMB-Water Quality Management Section, EMB-National Capital Region, EMB Regions 4A and 4B, DOH, DOH-Food and Drug Administration (FDA), DOLE-Occupational Safety and Health Center (OSHC), Department of Trade and Industry (DTI), Bureau of Customs (BOC), Bangko Sentral ng Pilipinas (BSP), DENR-MGB, dental sector, NPC, and project consultant. The TWG met seven times on the following dates: 26 March 2014, 13 March 2015, 30 June 2015, 07 August 2015, 09 October 2015, 23 October 2015, and 19 May 2016. The objectives of the meetings were: to review progress of project activities; to discuss the CCO on mercury and other related issues to mercury management such as the need for a national storage facility for mercury and mercury wastes or national mercury inventory; and, to decide on the extension of the project.

For example, during the 5th TWG meeting held on 9th October 2015, progress on the assessment of the health of miners was presented by DOH, while BT reported on the training of miners, and DENR presented the amended CCO on mercury. The last two TWG meetings were mainly devoted to the CCO on mercury. During the 6th meeting, comments gathered during the four regional consultations were reported to the group.

78. A project manager (PM) was nominated within Ban Toxics and was responsible to manage and monitor project progress at the project sites. Reports were submitted timely to UNIDO. Similarly, a Project Coordinator was nominated within DOH to coordinate activities and was responsible to report to UNIDO. The PIR reports, available to the evaluation team, were also submitted timely. Although not mentioned in the project document, the terminal evaluation is being undertaken.

79. The rating for **M&E implementation** is **satisfactory**.

Budgeting and funding for M&E activities

80. As mentioned earlier (paragraph 74), the M&E activities were not costed. Budgeting and funding for M&E activities is rated **moderately unsatisfactory**.

81. The overall rating for **monitoring & evaluation** is **moderately satisfactory**.

G. Monitoring of long-term changes

82. The project design did not include a long-term monitoring system.

H. Assessment of processes affecting achievement of project results

Preparation and readiness

83. As discussed earlier (paragraph 37), the project document contains relevant, precise, and concise information to achieve the objectives of the project. A participatory approach was adopted involving the main stakeholders (paragraph 38) to develop the project. More importantly, the miners from the Benguet mining community, who have a long history of gold extraction using gravity method, were identified during the preparatory phase. BT was already collaborating with these miners and a good relationship was established. They were eventually recruited to become the master miners for the training of miners at the project sites on the gravity method.

84. Contacts with the LGUs of project sites (Pasil and Diwalwal) were also made during the preparatory phase, which contributed to a quick start of the project. However, for reasons mentioned earlier (paragraph 53), Pasil was

replaced with Labo as project site, which caused about 1 year delay in project implementation.

85. Although the terminal evaluation was not mentioned and costed, the monitoring & evaluation plan proposed was adequate to monitor progress (paragraph 74). All the major stakeholders / partners were fully aware and prepared at the start of the project as they were involved since the preparatory phases (e.g., DENR, DOH, LGUs, BT, and master miners). For these reasons, the rating on preparation and readiness is **satisfactory**.

Quality at entry

The recruitment of contractors and national experts was done through a transparent process. For example, for the recruitment of a national consultant to conduct the health training workshop and community health surveillance (part of Output 2.1), DOH undertook a call for application exercise to select the best candidate.¹⁹ This approach allowed for the recruitment of experienced consultants or the contracting of prestigious institutions. For example, the consultant who was hired to work on the CCO had past experience on similar assignments.²⁰ Similarly, the University of Philippines – National Poison Management and Control Centre was contracted to undertake the training of rural health care workers.

Country ownership

86. Country ownership is high. As mentioned earlier (paragraph 43), this project is highly relevant as the Philippines is a party to the Minamata Convention and is working towards its early ratification. Well before the Convention was open for signatory in October 2013, the Philippines had already taken initiatives for the sound management of mercury and mercury-containing wastes. For instance, it produced a report on “National action plan (NAP) on mercury and mercury-containing wastes management”²¹ in June 2010. This report recognized that the ASGM sector was one of the leading sources of mercury emissions and discharges in Philippines. It also recognized that the law that regulates the small-scale mining sector²² did not have provisions to address mercury releases produced in the mining process, and that this had to be addressed.

¹⁹ A copy of the terms of reference for this application was submitted to the evaluation team.

²⁰ Interview data with NPC

²¹ “National action plan (NAP) on mercury and mercury-containing wastes management,” June 2010. Environmental Management Bureau, Department of Environment and Natural Resources, DENR Compound, Diliman, Quezon City, Philippines.

²² RA 7076: People’s Small Scale Mining Act of 1991; and, DENR AO 1997-30: Small-Scale Mine Safety Rules and Regulations.

87. Rating on **country ownership** is **satisfactory**.

Stakeholder involvement

88. The involvement of the major stakeholders has been satisfactory. The three main national partners were DENR, DOH, and BT. While DENR was the host Department of the project, responsible for running the meetings of the TWG, and for the amendment of the CCO on mercury, DOH was responsible for the training of health care workers and assessment of health of miners, and BT was responsible for implementation activities at project sites to phase out mercury in ASGM by proposing alternative methods. In their endeavor, DENR and DOH were assisted by their regional offices in Davao City. A number of bureaus of DENR were also involved in the project, including EMB and MGB, which provided support and assistance at project sites. For example, three officers of the MGB regional office in Davao City assisted BT in activities at the pilot sites.²³ The LGUs of Diwalwal, Compostela Valley, and Labo, Camarines Norte were also very much involved in the project.

89. As mentioned earlier (paragraphs 51 and 76), a number of other stakeholders were involved as members of the TWG, or participated actively in the four regional consultation workshops organized by DENR.

90. **Stakeholder involvement** is rated **satisfactory**.

Financial planning

91. UNIDO managed all the GEF funds and applied standard procedures for the disbursement of funds, sub-contracting, procurement of services or equipment, and for payment. The budget allocation was also done according to what was planned in the project document.²⁴ For the execution of the project, subcontracts were signed with the three major partners: DENR, DOH, and BT, which were executing the project at the national level (see paragraph 66). The transfers of funds to the beneficiaries followed the agreed terms of reference in the signed contracts. Before the release of funds, the national counterparts (DENR, DOH, and BT) had to submit progress reports or planned deliverables.²⁵ For example, in the case of DOH for which a contract amounting to \$37,730 was signed in May 2013, on signature of contract, an amount of \$9,432.50 was released, a further \$18,865 was paid on submission of interim product, and a final payment of \$9,432.50 was made on submission of the final product.

92. At the national level, the funds were managed according to the existing internal procedures. For DOH and DENR, the procedures were similar given that both are governmental bodies. Furthermore, unless existing standard

²³ Interview data with MGB Region XI, Davao City

²⁴ Interview data with UNIDO PM

²⁵ See footnote 24

procedures at these institutions were strictly adhered to, request were not approved and thus payment or release of funds were not done²⁶. The payment of national consultants or contractors was done according to the terms of reference of the contracts. For example, for the national consultant who worked on the CCO on mercury, payment was done only when the report submitted was to the satisfaction of DENR.²⁷ In the case of BT, the organization has its own system for managing the funds. Annual financial reports were submitted to UNIDO, and the BT accounts are generally externally audited by a private accounting firm.²⁸

93. Rating on financial planning is satisfactory.

UNIDO supervision and backstopping

94. UNIDO supervision of the project was done through progress and annual progress reports submitted by DENR, DOH, and BT (the three main partners of the project), attendance to TWG meetings, and field visits. Both the UNIDO PM and UNIDO Country Office (CO) were involved in the supervision of the project. The country office was mainly involved in supervision at project sites and attendance to TWG meetings. For example, an officer of the CO undertook a field trip to Davao City on 17 – 19 November 2013 to discuss project issues with local counterpart (LGU) in Monkayo. The CO attended 5 of the 7 TWG meetings.

95. As mentioned earlier (paragraph 29), due to personnel movement, a new PM was nominated (in August 2015) to take over, which was not a problem as he was already involved in the implementation and management of 38 projects of which 8 were on mercury.²⁹ According to him, detailed, well-structured progress, as well as financial reports were timely from the three partners (DENR, DOH, and BT). The former PM undertook a field mission in 2013; unfortunately, a copy of the mission report was not available to the evaluation. Feedbacks gathered during the evaluation mission indicate that the different partners and stakeholders highly appreciated the support and supervision provided by both the UNIDO HQ and the Country Office.³⁰ In particular, BT indicated that the collaboration with the former UNIDO PM was very good, and that he was very responsive to the needs of the project but was very strict with regard to procedures.³¹

96. The rating on UNIDO supervision and backstopping is highly satisfactory.

Co-financing and project outcomes

²⁶ Interview data with NPC, DENR

²⁷ See footnote 26

²⁸ Interview data with BT

²⁹ Interview data

³⁰ Interview data with DENR, BT, and DOH

³¹ Interview with former PM of BT

97. Besides the in-kind contribution of the national partners, such involvement of a number of government officers both at central and regional offices (e.g., MGB and DOH officers of Davao regional offices) in project activities, and provision of office and laboratory space, the project has been quite successful in mobilizing a significant amount cash co-financing (see paragraph 68), including from the LGUs, which contributed to increased efficiency of the project.

Delays of project outcomes and sustainability

98. As discussed in depth previously (paragraph 53), the delay encountered was mainly due to the change of project site. However, this delay did not impact on the project implementation as most of the project objectives have been achieved. Furthermore, there are already visible signs of positive impact of the project: miners are changing to mercury-free method (paragraphs 62 and 64); communities largely aware of the hazardous nature of mercury on human health (paragraph 63); reduced amount of mercury in use in ASGM sector (paragraph 62); and, levels of mercury considerably reduced in blood and hair of miners who have shifted to mercury-free method (paragraph 57). The delays encountered would not impact on the sustainability of project outcomes; it would rather be the initial investment required for miners and ball mill operators to change to mercury-free method (paragraph 70) and lack of support of LGUs (paragraph 71) that might put at risk the project outcomes.

Implementation approach

99. The approach originally agreed upon by stakeholders was adopted in project implementation. GEF funds were managed by UNIDO. For the execution of the activities at the country level, contracts were signed with DENR, DOH, and BT (paragraph 67). The overall project management and supervision was done by the UNIDO PM with adequate administrative assistance by dedicated support staff.³² At the country level, supervision was also done by the UNIDO Country Office which participated in TWG meetings and undertook field trips to project sites (paragraph 94).

100. At the national level, the project was executed by DENR, DOH, and BT. As discussed earlier, an NPC was nominated within DENR to coordinate activities, for which the agency was responsible to undertake, such as: establishing the TWG; organizing the corresponding meetings; hiring of consultant to amend the CCO on mercury (paragraphs 51 and 77); and, organizing the inception and closing workshops (paragraph 66). Similarly, a coordinator was also nominated within DOH to coordinate the training and monitoring activities of the project (paragraphs 55 and 57). The activities at the project sites were adequately managed by a PM nominated within BT (paragraphs 60 and 78), and assisted by three project officers.

³² Interview with UNIDO PM

101. By undertaking the terminal evaluation (although not planned in the project document), the project is set to promote accountability for the achievement of the project objectives through the assessment of results, effectiveness, processes, and performance of stakeholders involved during project implementation.

102. Involving all the major stakeholders since the preparatory phases was set to promote ownership of the project. As mentioned earlier, ownership is very high amongst all the stakeholders, and chances for sustainability of the project are high, although some financial and socio-political risks that might jeopardize project outcomes have been identified (paragraphs 70 and 71).

I. Project coordination and management

103. As planned, the project was implemented by UNIDO, from which a PM was nominated in 2013, with a full-time support staff providing assistance in project execution. The former UNIDO PM was involved in the formulation of the project, and already created a good line of communication with the major national partners (DENR, BT, and DOH) of the project during the preparatory phase.³³ According to the second PM, there was no particular problem during project execution, and an excellent working collaboration was established with the three main national partners. Reporting to UNIDO was timely and, in general, the partners were always responsive and active.

104. As mentioned earlier (paragraph 100), at the national level, execution of the project was done by the DENR, DOH, and BT. Coordinators were nominated within DENR and DOH, and an NPM was nominated within BT. In general, a good working collaboration was established among the three partners; and thanks to support provided by regional offices (e.g., DENR, DOH, EMB, and MGB) and the LGUs, implementation of project activities was successfully completed.³⁴ BT indicated that securing the support of the LGUs as well as gaining the trust of miners' and local communities were essential and necessary conditions to achieve success.

105. The rating on **project coordination and management** is **satisfactory**.

J. Gender mainstreaming

106. The project was not designed to make explicit provisions on gender mainstreaming. Nonetheless, both genders were involved in the project activities including supervision and coordination. For example, the NPM as well as two of the NPCs were females. Furthermore, in the ASGM sector, BT

³³ Interview with BT and DENR

³⁴ Interview data with BT, DENR, MGB, and LGUs

highlighted the important role of women in all aspects at the household and community level as well as in the mining activities. For these reasons, BT focused on building women and women organizations' capacity on Hg-free method and techniques in gold extraction, knowledge on gender rights, advocacy, and participation in ASGM peer education activities. A number of activities and support were geared towards communicating and raising awareness among stakeholders that women in ASGM play a major role in the labor force. For example, an opportunity was provided to women of the ASGM communities to participate in the Municipal Committee on Women's Welfare in Camarines Norte, and to lobby for a policy that supports women's welfare and improved conditions in the ASGM community. As mentioned earlier (paragraph 62), a significant number of women of the local communities received training and participated actively in project activities.

K. Procurement issues

107. As mentioned earlier, the UNIDO standard procedures were followed for procurement services. At the national level, the three project partners applied their own internal procedures for procurement of services or equipment. No particular problem was encountered during project execution.³⁵

L. Overall assessment

108. According to the TOR of this evaluation (annex 1), it is required to assess and rate the different categories of the project, according to the GEF format, from Highly Satisfactory (HS) to Highly Unsatisfactory (HU). Rating for sustainability sub-criteria are as follows: Likely (L), Moderately Likely (ML), Moderately Unlikely (MU), and Unlikely (U). Table 4 below reports the assessment of the different categories based on the documents submitted (see Annex 2) and interviews carried out during the field mission.

Table 4: Summary assessment and ratings

	Evaluator's summary comments	Evaluator's rating
Attainment of project objectives and results (overall rating) Sub criteria (below)	Despite delay, most stated objectives achieved	S
Design	Monitoring and evaluation activities not costed and terminal evaluation not included in the design	MS

³⁵ Interview data with UNIDO PM, DENR, and BT

	Evaluator's summary comments	Evaluator's rating
Effectiveness	Project activities effectively implemented producing visible tangible results	S
Relevance	High relevance as project assisting the Philippines to reduce mercury emissions in ASGM sector	HS
Efficiency	Project quite cost effective despite delay	S
Sustainability of project outcomes (overall rating) Sub criteria (below)	Despite some financial and socio-political risks, identified project outcomes likely sustainable	L
Financial risks	Initial financial assistance required for miners to change to mercury-free method	ML
Socio-political risks	Securing support of LGUs is essential	ML
Institutional framework and governance risks	Adequate framework in place	L
Ecological risks	No environmental risk identified	L
Monitoring and evaluation (overall rating) Sub criteria (below)		S
M&E Design	M&E plan not costed and terminal evaluation not mentioned in M&E plan	MS
M&E Plan Implementation (use for adaptive management)	Planned monitoring and evaluation activities undertaken	S
Budgeting and funding for M&E activities	M&E activities not costed	MU
UNIDO specific ratings		
Quality at entry / Preparation and readiness	Quality experts engaged and participatory approach adopted to develop project	S
Implementation approach	Agreed approach adopted	S
UNIDO supervision and backstopping	Adequate supervision	HS
Overall rating	Most project objectives achieved	S

- Highly satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Highly unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately likely (ML). There are moderate risks that affect this dimension of sustainability.
- Moderately unlikely (MU): There are significant risks that affect this dimension of sustainability.
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

IV. Conclusions, recommendations, and lessons learned

A. Conclusions

109. The overall objective of the project was to improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions. In particular, the project aimed to introduce mercury-free technology in 2 small-scale mining areas, and to supplement this effort by providing health training of rural health care workers in the proper diagnosis of mercury poisoning.

110. The main purpose of this terminal evaluation was to assess the performance of the project (in terms of relevance, effectiveness, and efficiency), to determine its impacts (actual and potential) including their sustainability, and to propose a set of recommendations in view of ongoing activities and replication.

111. This project is highly relevant as the Philippines has signed the Minamata Convention. With the assistance of UNEP and UNITAR, it is undertaking activities for an early ratification of the Convention. Furthermore, recognizing the need for sound management of mercury and mercury-containing wastes, it has developed a NAP on mercury to reduce releases including in the ASGM sector.

112. The project is consistent with the GEF 5 Focal Area Strategy for Chemicals. In particular, in strengthening local and national capacity to effectively reduce mercury use, emissions, and exposure in artisanal gold mining communities, the project is very relevant with Outcome 3.2 of GEF Chemicals focal area.

113. Effectiveness of the project is considered satisfactory. Most of the stated objectives have been successfully achieved. A significant number of miners, including both males and females, have been trained to use mercury-free method to extract gold, and a number of them have already shifted to this

mercury-free technique. As a result, the use of mercury for gold mining has been considerably reduced in the project areas, and the communities are fully aware of the dangers of mercury on human health and environment. The mobilization of significant co-funding increased efficiency of the project.

114. The approach originally agreed upon by stakeholders was adopted in project implementation. The overall project management and supervision was satisfactorily done by a UNIDO PM who was adequately assisted by support staff. At the national level, the project was satisfactorily executed by DENR, DOH, and Ban Toxics. However, delay due to changing of project site decreased efficiency to some extent.

115. Some financial and socio-political risks that could jeopardize sustainability of project outcomes have been identified. However, as these risks can be easily mitigated by appropriate measures, chances for continuous sustained impact of the project are considered high.

B. Recommendations

116. The project has successfully been completed, achieving most of the stated objectives. For continued relevance and sustainability of project outcomes, the evaluation proffers the following recommendations:

- i. The project has been successful and has produced tangible results. In particular, the project has been quite successful in training the miners to shift to mercury-free method, thus reducing the use of mercury at the project sites and lessening exposure to mercury (as observed in miners during the health assessments). It is recommended (for BT and DENR) that these positive outcomes be summarized and disseminated to other ASGM communities in the Philippines.
- ii. Some miners have indicated that the initial investment cost to shift to mercury-free method might constitute a barrier. It is recommended (for LGUs, BT, and miners' association) that a mechanism for financial assistance be set in order to facilitate shift to mercury-free gold mining in the ASGM sector.
- iii. For continued relevance and impact of the project, when the CCO on mercury is adopted, the relevant authorities (DENR) should ensure that it is strictly enforced to make availability of mercury difficult.
- iv. The results of the health assessment have not yet been disclosed to miners. DOH should proceed rapidly to inform the miners about the outcome of these assessments.

C. Lessons Learned

117. Valuable lessons, which emerged during the implementation of this project, include:

- i. The project site had to be changed as the LGU of one of the project sites was no longer supporting the project, thereby causing a delay of about one year in the implementation process. Hence, securing the commitment of partners ahead of time through signed agreement can avoid delays in project execution.

- ii. At the beginning, when the project, aiming at reducing the use of mercury in gold mining, was introduced to miners, they were reluctant to participate for various reasons including: loss of income if not working; and, mercury method is quick to extract gold. However, when the miners' communities were informed about the health problems that they might suffer from if exposed to mercury, they gradually started to change their mind. In particular, the women, knowing that they will be particularly affected if exposed, convinced the miners to participate in the project. Engaging proper awareness-raising activities and building their confidence are the basis to secure the commitment of the communities.

Annex 1: Terms of reference of the evaluation



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent terminal evaluation of UNIDO project:

Improve the Health and Environment of Artisanal and Gold mining Communities in the Philippines by Reducing Mercury Emissions

UNIDO SAP ID: 120016

GEF Project number: 5216

24 JULY 2015

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I. Project background and overview

1. Project factsheet

Project Title	Improve the Health and Environment of Artisanal and Gold mining Communities in the Philippines by Reducing Mercury Emissions
GEF ID	5216
UNIDO project No. (SAP ID)	120016
Region	Asia and the Pacific
Country	Philippines
GEF Focal area(s) and operational programme	POPs
GEF Agencies (implementing agency)	UNIDO
Project executing partners	Republic of Philippines Department of Environment and Natural Resources (DENR), Department of Health (DOH) and Ban Toxics (BT)
Project size (FSP, MSP, EA)	MSP
Project CEO endorsement/Approval date	18 December 2012
Project implementation start date (PAD issuance date)	19 March 2013
Original expected implementation end date (indicated in CEO endorsement/Approval document)	31 December 2014
Revised expected implementation end date (if any)	31 December 2015 (extension requested in FY2015 PIR)
Actual implementation end date	End of 2015
GEF Grant (USD)	550,000
GEF PPG (USD) (if any)	
UNIDO inputs (USD)	50,000 (cash)
Co-financing (USD) at CEO Endorsement	1,081,070 (cash+in-kind)
Total project cost (USD) (GEF Grant + Co-financing at CEO Endorsement)	1,631,070
Mid-term review date	N/A
Planned terminal evaluation date	October - December 2015

(Source: Project document)

2. *Project summary*

The Philippine islands are located in Southeastern Asia, east of Vietnam. Philippines has a population of around 107.6 million, with 90% of the population being below 55 years of age (almost 53% of the population being below 25 years of age). Population growth rate is 1.81% (2014). Literacy rate of total population is 95.4%. Over one quarter of the population (26.9%) lives below the poverty line. Unemployment is at 7.2%; youth unemployment is at 16.3%.

Philippines has a GDP of USD 289.7 billion (official exchange rate, 2014) and a GDP real growth rate of 6.2% (2014). Services constitute the highest contribution to GDP with 57.8%, followed by industry at 31.5% and finally agriculture with 10.7%. However, agriculture sector engages around one third of the labour force (32%); the smallest share of the labour force being engaged in industry (15%) and the highest (53%) in services.

Agricultural products are plenty, such as sugarcane, coconuts, rice, corn, bananas, cassava (manioc, tapioca), pineapples, mangoes, pork, eggs, beef and fish. Industries are in the following sectors: electronics assembly, garments, footwear, pharmaceuticals, chemicals, wood products, food processing, petroleum refining and fishing. Growth rate of industrial production is estimated to be at 7.5% (2014).

Current environmental issues are uncontrolled deforestation especially in watershed areas, soil erosion, air and water pollution in major urban centers, coral reef degradation, increasing pollution of coastal mangrove swamps that are important fish breeding grounds. Philippines is party to various environmental international agreements, such as Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands, Whaling. Philippines signed the Stockholm Convention on Persistent Organic Pollutants in May 2001 and ratified it in February 2004.

Artisanal and small-scale gold mining (ASGM) is particularly common in Southeast Asia, especially in the Philippines, where it has been traditional livelihood. ASGM is one of the most significant sources of mercury release into the environment in the developing world, and accounts for about 15% of the world's annual gold production. Mercury is often used in ASGM to help separate gold from sediments using rudimentary processing methods. Workers combine mercury with gold-laden silt to form an amalgam, which is heated, often in or near homes, to evaporate the mercury and leave gold. Mercury is released into the air, where it is directly inhaled by workers and their families. It is particularly threatening to children, pregnant women, and women of childbearing age. The emissions from ASGM can also travel long distances around the globe, contributing to global mercury pollution and contaminating the world's fisheries.

In the Philippines, ASGM occurs in more than 40 provinces, and provides important subsistence-level income for about 300,000 miners and their families. For the past five years, ASGM activities have been producing at least 80% of the Philippines yearly gold supply. With that comes the annual release of an estimated 70 to 140 metric tonnes of mercury, which is approximately 3.6-7.2% of the current estimated total anthropogenic mercury emissions worldwide at 1921 metric tonnes (Mercury Watch Database).

The project aims to introduce mercury-free technology in 2 small-scale mining areas and supplements this effort by providing health training of rural healthcare workers in the proper diagnosis of mercury poisoning.

The project is funded through a GEF grant, amounting to USD 550,000, a UNIDO contribution of USD 50,000 (cash); and the counterparts' co-financing of USD 1,031,070 (cash and in kind), which amount to total project budget of USD 1,081,070.

Project implementation started in March 2013 and the initial project end date was in December 2014. However, a no cost extension has been requested to the end of 2015.

Regular Monitoring is foreseen in the project document. The TE is scheduled to take place from October to December 2015.

3. *Project objective*

The project aims to introduce mercury-free technology in 2 small-scale mining areas and supplements this effort by providing health training of rural healthcare workers in the proper diagnosis of mercury poisoning. Specifically, it will assist the government to develop, implement and facilitate the demonstration and replication of mercury reduction/elimination projects, enable local and national stakeholders to receive health, techniques and technology trainings, and promote policy reforms based on the lessons learned to reduce mercury use, emission, and exposure in ASGM activities.

Following are the **2 components** of the project:

Component 1: Strengthen national capacity to effectively manage mercury by establishing a formal national institution and training of key stakeholders.

Component 2: Develop and deliver health education, techniques and technology training programs, including early recognition and identification of mercury poisoning at the community level, to reduce mercury in ASGM

Following **results** are expected:

- a) A national ASGM institution will be established to facilitate the process of mercury reduction/elimination. This will build on the momentum of the Philippine SAICM project, the Danish government/Dialogos/Ban Toxics non-mercury technique project, and the Ban Toxics/US Department of State mercury storage project.
- b) Health education, technique and technology programs and mercury poisoning surveillance program that can be later replicated nationwide will be developed and capacity increased through delivery of training programs.
- c) National and local stakeholders in the Philippines will be sensitized and able to replicate technical successes at other ASGM sites aiming to reduce overall mercury use, emissions and exposure in country; and important lessons learned will contribute and promote sound national management policies on mercury in the future.

4. **Relevant project reports/documents**

The project has so far improved understanding of the risks of mercury, mercury free technologies, challenges and concrete strategies for necessary reforms within the ASGM communities. Local governments of pilot demonstration sites fully recognize and gauge efforts to undertake holistic interventions for ASGM communities. The project has also increased consciousness of working with women in the ASGM community. The bio- and environmental monitoring that have been conducted through the project served as the basis for decision making and planned actions among ASGM communities and local government agencies. The ASGM communities themselves have also been

empowered to establish multi-sectoral coordination bodies and actively participate in monitoring of mercury use, information dissemination and public awareness campaigns. The techniques and technology training programs provided to miners (including miner to miner trainings) are intended to increase the skills and knowledge of ASGM community on mercury free gravity concentration method through the provision of accessible mercury free training centers in the neighborhood. With improvement in knowledge, skills and expertise, the project will have a long term impact on the ASGM communities in country.

In the effort to strengthen coordination systems and provide holistic interventions in the pilot areas, the project has networked and built linkages with local government partners and civil society groups resulting into Ban Toxic's (BT) membership in the Municipal Solid Waste Management Board of Jose Panganiban (JP) and as well as with the Gender and Development Committee of JP. BT has also formally forged partnership with local government councils in Labo, Camarines Norte and Pasil, Kalinga despite delays and unforeseen challenges. The project can now leverage on these gains while ensuring sustainability of efforts. Given the recognition to participate in local special bodies in ASGM areas, BT and partners are in a good position to negotiate and lobby for added support and provide advisory role in the local government's development direction for the mining area – ensuring that policies and projects fully align to the needs and aspirations of women and children in the community. In building a solid foundation for the establishment of a sub-national ASGM, the project has raised awareness, mobilized and increased efforts in working with local ASGM groups such as the women's council in Diwalwal; the children and youth in Camarines Norte through the formation of young toxics watch group. In Camarines Norte, the project also produced short films that provide a glimpse of how children in the area views daily living in an ASGM setting. Thus far, activities on the ground provided opportunities for local stakeholders to participate, be informed and advocate for lasting change and development in their local mining areas. In developing and delivering health education programs to the community, the project facilitated series of peer to peer learning sessions among trained Health Care Workers (HCWs) and miner trainers.

This skill building exercises improved confidence and direction to our local ASGM partners in raising consciousness, strengthening community solidarity and skills to adapt mercury free (Hg-free) methods in gold recovery. In building capacity and establishing alternative economically viable opportunities for miners, Peer Educators organized 22 community orientations among ballmill owners and miners (Male:434; Female:513) in Diwalwal. Moreover, under the guidance of a Mining Engineer Consultant from Canada, 10 Peer Educators in Diwalwal were trained on effectively using gravity concentration method with particular emphasis on proper grinding, concentrating and sluicing. The learning visit enabled miners in Diwalwal to learn and appreciate the benefits of optimizing simple but cost efficient techniques in grinding, concentrating and panning. In terms of capacitating ASGM miners to fully adapt Hg-free method, the project is now modeling a micro-financing scheme with 4 technical miners who are willing to adapt but do not have the funds to bring in added equipment or refurbish ballmill facility for a Hg-free operation. To date, around 4 one-on-one coaching sessions have been organized in the Hg-free facilities of the technical miners in the neighborhood of Diwalwal. This strategy complements well with the centralized Hg-free facility established in collaboration with Mt. Diwata local government. This pilot initiative provides Diwalwal miners with much more accessible learning center and peer to peer learning exchange. The project hopes to gain added insight from this pilot activity which will be replicated in other ASGM areas where miners have difficulty adapting and accepting different and new ways of doing. Lastly, in terms of broadening the project's reach and maximizing media publicity, there were many media hits in broadsheets and online news, as well as in the UN & UNIDO newsletters and commercial TV-5 radio program. In social media, ASGM related publicity were shared and discussed in social media (BAN Toxics' Facebook and Twitter).

5. *Project implementation arrangements*

UNIDO: the GEF implementing agency.

Ban Toxics: the main executing partner. It is an Asian sub-regional NGO based in the Philippines that has been working on environmental justice and toxic chemical pollution since

2006. Ban Toxics has been actively engaged in mercury issue at the local, subregional, and international levels since 2006.

Department of Environment and Natural Resources (DENR): is the GEF Operational Focal Point. It is to be involved in the national technical working group and inception workshop portion of the project, especially in the political aspects of implementing Philippines' National Strategic Plan to phase out mercury in the ASGM sector and in scaling up low- and non-mercury techniques and technologies training in priority and appropriate regions.

Philippine Department of Health (DOH): is to work closely with partner agencies in implementation of all health related activities for the project, especially on the planning, formulation, delivery, and follow-up actions of the health education to national and local health specialists including referral and management of identified mercury poisoning cases.

Dialogos: a Danish medical NGO, is to provide technical expertise and guidance regarding the development of formal health education and awareness training programs.

A **Stakeholder Group** is to be convened at each of the selected pilot sites.

6. Budget information

The project is funded through a GEF grant, amounting to USD 550,000, a UNIDO contribution of USD 50,000 (cash); and the counterparts' co-financing of USD 1,031,070 (cash and in kind), which amount to total project budget of USD 1,081,070.

Project outcomes	GEF (\$)	Co-Financing (\$)	Total (\$)
1. Strengthen national capacity	90,000	243,070	333,070
2. Reduce mercury use, emissions and exposure	400,000	730,000	1,130,000
3. Monitoring and Evaluation	10,000	10,000	20,000
Total (\$)	500,000	983,070	1,483,070

Source: project document

Co-financing Source Breakdown is as follows:

Name of Co-financier (source)	Classification	Type	Total Amount (\$)
National Government	Government	In-kind	150,000
UNIDO	IA	Cash	50,000
Ban Toxics (US Department of State Grant)	Others	Cash	356,070
		In-kind	25,000
Dialogos	Others	Cash	500,000
Total Co-Financing (\$)			1,081,070

Source: project document.

UNIDO budget execution:

Item	EXECUTED BUDGET in 2013	EXECUTED BUDGET in 2014	EXECUTED BUDGET in 2015	Total Expenditure (\$) (2011-present)
				(27 April 2015)
Contractual Services	489,970.64	-37.37	-80.00	489,853.27
Internat. Cons/Staff	9,056.00	8,851.16		17,907.16
Internat. meetings	2,274.95			2,274.95
Local Travel	2,091.17	816.30		2,907.47
Nat. Consult./Staff				0.00
Other Direct Costs	1,274.32	-34.97		1,239.35
Staff Travel	89.54			89.54
Total (\$)	504,756.62	9,595.12	-80.00	514,271.74

Source: SAP database, 27 April 2015.

II. Scope and purpose of the evaluation

The terminal evaluation (TE) will cover the whole duration of the project from its starting date in March 2013 to the estimated completion date in the end of 2015. It will assess project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact.

The TE has the additional purpose of drawing lessons and developing recommendations for UNIDO and the GEF that may help for improving the selection, enhancing the design and implementation of similar future projects and activities in the country and on a global scale upon project completion. The TE report should include examples of good practices for other projects in the focal area, country, or region.

The evaluation team (ET) should provide an analysis of the attainment of the main objective and the corresponding technical components. Through its assessments, the ET should enable the Government, counterparts, the GEF, UNIDO and other stakeholders and donors to verify prospects for development impact and sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators. The assessment includes re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI.

The key question of the TE is whether the project has achieved or is likely to achieve its main objective of introducing mercury-free technology in 2 small-scale mining areas (as stated in the project document).

III. Evaluation approach and methodology

The TE will be conducted in accordance with the UNIDO Evaluation Policy, the UNIDO Guidelines for the Technical Cooperation Programmes and Projects, the GEF's 2008 Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations, the GEF Monitoring and Evaluation Policy from 2010 and the Recommended Minimum Fiduciary Standards for GEF Implementing and Executing Agencies.

It will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Office for Independent Evaluation (ODG/EVA) on the conduct of the evaluation and methodological issues.

The ET will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources, as necessary: desk studies and literature review, statistical analysis, individual interviews, focus group meetings, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The concrete mixed methodological approach will be described in the inception report.

The ET will develop interview guidelines or survey questionnaires as required. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

The methodology will be based on the following:

1. A desk review of project documents, including, but not limited to:
 - (a) The original project document, monitoring reports (such as progress and financial reports to UNIDO and GEF annual Project Implementation Review (PIR) reports), mid-term evaluation/review report, output reports (case studies, action plans, sub-regional strategies, etc.), BTOMR, end-of-contract report and relevant correspondence.

- (b) Notes from the meetings of committees involved in the project (e.g. approval and steering committees).
 - (c) Other project-related material produced by the project.
2. The evaluation team will use available models of (or reconstruct if necessary) theory of change for the different types of intervention (enabling, capacity, investment, demonstration). The validity of the theory of change will be examined through specific questions in interviews and possibly through a survey of stakeholders.
 3. Counterfactual information: In those cases where baseline information for relevant indicators is not available, the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.
 4. Interviews with project management and technical support including staff and management at UNIDO HQ and in the field and – if necessary - staff associated with the project’s financial administration and procurement.
 5. Interviews with project partners including Government counterparts, GEF focal points and partners that have been selected for co-financing as shown in the corresponding sections of the project documents.
 6. On-site observation of results achieved in demonstration projects, including interviews of actual and potential beneficiaries of improved technologies.
 7. Personal and telephone interviews with intended users for the project outputs and other stakeholders involved with this project. The evaluation team shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organisations.
 8. Interviews with the UNIDO Field Office in Philippines, and the project’s management members and the various national and sub-regional authorities dealing with project activities as necessary. If deemed necessary, the evaluation team shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.
 9. Other interviews, surveys or document reviews as deemed necessary by the evaluation team and/or UNIDO ODG/EVA.
 10. The inception report will provide details on the methodology used by the evaluation team and include an evaluation matrix.

IV. Evaluation team composition

The evaluation team will be composed of one international evaluation consultant acting as a team leader and one national evaluation consultant.

The ET should be able to provide information relevant for follow-up studies, including evaluation verification on request to the GEF partnership up to two years after completion of the evaluation.

Both consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions attached to these terms of reference.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the programme/projects.

The Project Manager at UNIDO and the Project Team in Philippines will support the evaluation team. The UNIDO GEF Coordinator will be briefed on the evaluation and equally provide support to its conduct.

V. Time schedule and deliverables

The evaluation is scheduled to take place in the period from October to December 2015. The field mission is planned to take one week by early-November 2015. At the end of the field mission, there will be a presentation of the preliminary findings for all stakeholders involved in this project in Philippines.

After the field mission, the evaluation team leader will come to UNIDO HQ for debriefing and presentation of the preliminary findings of the Terminal Evaluation. The draft TE report will be submitted 4-6 weeks after the end of the mission.

VI. Project evaluation parameters

The evaluation team will rate the projects. The **ratings for the parameters described in the following sub-chapters A to J will be presented in the form of a table** with each of the categories rated separately and with **brief justifications for the rating** based on the findings of the main analysis. An overall rating for the project should also be given.

A. Project design

The evaluation will examine the extent to which:

- the project's design is adequate to address the problems at hand;
- a participatory project identification process was instrumental in selecting problem areas and national counterparts;
- the project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;
- the project was formulated based on the logical framework (project results framework) approach;
- the project was formulated with the participation of national counterpart and/or target beneficiaries;
- relevant country representatives (from government, industries and civil society) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies; and
- all GEF-4 and GEF-5 projects have incorporated relevant environmental and social considerations into the project design / all GEF-6 projects are following the provisions specified in UNIDO/DGAI.23: UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP).

B. Project relevance

The evaluation will examine the extent to which the project is relevant to the:

- National development and environmental priorities and strategies of the Government and population of Philippines regional and international agreements. See possible evaluation questions under "Country ownership/drivenness" below.
- Target groups: relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.).
- GEF's focal areas/operational programme strategies: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies of GEF? Ascertain the likely nature and significance of the contribution of the project outcomes to the wider portfolio of GEF's Focal area and Operational Program of POPs.

- UNIDO's thematic priorities: Were they in line with UNIDO's mandate, objectives and outcomes defined in the Programme & Budget and core competencies?
- Does the project remain relevant taking into account the changing environment? Is there a need to reformulate the project design and the project results framework given changes in the country and operational context?

C. Effectiveness: objectives and planned final results at the end of the project

- The evaluation will assess to what extent results at various levels, including outcomes, have been achieved. In detail, the following issues will be assessed: To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?
- Are the project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, the evaluators should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project.
- How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups actually reached?
- What outputs and outcomes has the project achieved so far (both qualitative and quantitative results)? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?
- Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these (see also below "monitoring of long term changes"). Wherever possible, evaluators should indicate how findings on impacts will be reported in future.
- Describe any catalytic or replication effects: the evaluation will describe any catalytic or replication effect both within and outside the project. If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the project's catalytic role.

D. Efficiency

The extent to which:

- Was the project cost-effective? Was the project the least cost options?
- Has the project produced results (outputs and outcomes) within the expected time frame? Was project implementation delayed, and, if it was, did that affect cost effectiveness or results? Wherever possible, the evaluator should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects. Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?
- Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet requirements? Was the quality of UNIDO inputs and services as planned and timely?
- Was there coordination with other UNIDO and other donors' projects, and did possible synergy effects happen?

E. Assessment of sustainability of project outcomes

Sustainability is understood as the likelihood of continued benefits after the GEF project ends.

Assessment of sustainability of outcomes will be given special attention but also technical, financial and organization sustainability will be reviewed. This assessment should explain how the risks to project outcomes will affect continuation of benefits after the GEF project ends. It will include both exogenous and endogenous risks. The following four dimensions or aspects of risks to sustainability will be addressed:

- **Financial risks.** Are there any financial risks that may jeopardize sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF assistance ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.) Was the project successful in identifying and leveraging co-financing?
- **Sociopolitical risks.** Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?
- **Institutional framework and governance risks.** Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency, and required technical know-how, in place?
- **Environmental risks.** Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? The evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

F. Assessment of monitoring and evaluation (M&E) systems

- **M&E design.** Did the project have an M&E plan to monitor results and track progress towards achieving project objectives? The evaluation will assess whether the project met the minimum requirements for the application of the Project M&E plan (see Annex 3).
- **M&E plan implementation.** The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress toward project objectives by collecting information on chosen indicators continually throughout the project implementation period; annual project reports were complete and accurate, with well-justified ratings; the information provided by the M&E system was used during the project to improve performance and to adapt to changing needs; and the project had an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure. Were monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? Are there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly?
- **Budgeting and Funding for M&E activities.** In addition to incorporating information on funding for M&E while assessing M&E design, the evaluators will determine whether M&E was sufficiently budgeted for at the project planning stage and whether M&E was adequately funded and in a timely manner during implementation.

G. Monitoring of long-term changes

The M&E of long-term changes is often incorporated in GEF-supported projects as a separate component and may include determination of environmental baselines; specification of indicators; and provisioning of equipment and capacity building for data gathering, analysis, and use. This section of the evaluation report will describe project actions and accomplishments toward establishing a long-term monitoring system. The review will address the following questions:

- a. Did this project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component?
- b. What were the accomplishments and shortcomings in establishment of this system?
- c. Is the system sustainable—that is, is it embedded in a proper institutional structure and does it have financing? How likely is it that this system continues operating upon project completion?
- d. Is the information generated by this system being used as originally intended?

H. Assessment of processes affecting achievement of project results

Among other factors, when relevant, the evaluation will consider a number of issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the evaluators deem appropriate (it is not necessary, thus, to have a separate chapter on these aspects in the evaluation report). The evaluation will consider, but need not be limited to, the following issues that may have affected project implementation and achievement of project results:

- a. **Preparation and readiness / Quality at entry.** Were the project's objectives and components clear, practicable, and feasible within its time frame? Were counterpart resources (funding, staff, and facilities), and adequate project management arrangements in place at project entry? Were the capacities of executing institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?
- b. **Country ownership/drivenness.** Was the project concept in line with the sectoral and development priorities and plans of the country—or of participating countries, in the case of multi-country projects? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives from government and civil society involved in the project? Was the GEF OFP involved in the project design and implementation? Did the recipient government maintain its financial commitment to the project? Has the government—or governments in the case of multi-country projects—approved policies or regulatory frameworks in line with the project's objectives?
- c. **Stakeholder involvement and consultation.** Did the project involve the relevant stakeholders through continuous information sharing and consultation? Did the project implement appropriate outreach and public awareness campaigns? Were the relevant vulnerable groups and powerful supporters and opponents of the processes properly involved in a participatory and consultative manner? Which stakeholders were involved in the project (i.e. NGOs, private sector, other UN Agencies, etc.) and what were their immediate tasks? Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities? Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved?
- d. **Financial planning.** Did the project have appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds? Was there due diligence in the management of funds and financial audits? Did promised co-financing materialize? Specifically, the evaluation should also include a breakdown of final actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing.
- e. **UNIDO's supervision and backstopping.** Did UNIDO staff identify problems in a timely fashion and accurately estimate their seriousness? Did UNIDO staff provide quality support and advice to the project, approve modifications in time, and restructure the project when needed? Did

UNIDO provide the right staffing levels, continuity, skill mix, and frequency of field visits for the project?

- f. **Co-financing and project outcomes and sustainability.** Did the project manage to mobilize the co-financing amount expected at the time of CEO Endorsement? If there was a difference in the level of expected co-financing and the co-financing actually mobilized, what were the reasons for the variance? Did the extent of materialization of co-financing affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?
- g. **Delays and project outcomes and sustainability.** If there were delays in project implementation and completion, what were the reasons? Did the delays affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?
- h. **Implementation and execution approach.** Is the implementation and execution approach chosen different from other implementation approaches applied by UNIDO and other agencies? Does the approach comply with the principles of the Paris Declaration? Is the implementation and execution approach in line with the GEF Minimum Fiduciary Standards: Separation of Implementation and Execution Functions in GEF Partner Agencies (GEF/C.41/06/Rev.01) and the relevant UNIDO Regulations (DGAI.20 and Procurement Manual)? Does the approach promote local ownership and capacity building? Does the approach involve significant risks? If the execution was done by third parties, i.e. Executing Partners, based on a contractual arrangement with UNIDO, was this done in accordance with the contractual arrangement concluded with UNIDO in an effective and efficient manner?
- i. **Environmental and Social Safeguards.** If a GEF-4 or GEF-5 project, has the project incorporated relevant environmental and social risk considerations into the project design? What impact did these risks have on the achievement of project results? If a GEF-6 project, have the provisions specified in UNIDO/DGAI.23: UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP) tracking the relevant environmental and social (E&S) risks and applying appropriate E&S safeguards, established at the time of project design been followed? Have the identified E&S risks been appropriately mitigated?
- j. **Knowledge Management.** If a GEF-6 project, has the project incorporated a relevant knowledge management strategy, including plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share the knowledge, experiences and expertise generated by this project with the relevant stakeholders, UNIDO HQ, the GEF Sec and the broader GEF Network (i.e. GEF Agencies and other stakeholders)?

The evaluation team will rate the project performance as required by the GEF. The ratings will be given to four criteria: Project Results, Sustainability, Monitoring and Evaluation, and UNIDO related issues as specified in Annex 2. The ratings will be presented in a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in the same annex. As per the GEF's requirements, the report should also provide information on project identification, time frame, actual expenditures, and co-financing in the format in Annex 5, which is modeled after the GEF's project identification form (PIF).

I. Project coordination and management

The extent to which:

- The national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions...)?
- The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits...)?
- The national management and overall coordination mechanisms were efficient and effective? Did each partner have specific roles and responsibilities from the beginning till the end? Did each partner fulfill its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions...)?

J. Assessment of gender mainstreaming

The evaluation will consider, but need not be limited to, the following issues that may have affected gender mainstreaming in the project:

- How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?
- Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?
- To what extent socioeconomic benefits delivered by the project at the national and local levels included consideration of gender dimensions?

K. Procurement issues

The evaluation will consider the following evaluation questions that will feed in the Thematic

Evaluation on Procurement:

To what extent does the process provide adequate treatment to different types of procurement (e.g. by value, by category, by exception...)

- Was the procurement timely? How long does the procurement process take (e.g. by value, by category, by exception...)?
- Did the good/item(s) arrive as planned or scheduled? If not, how long were the delays? If delay, what was the reason(s)?
- Were the procured good(s) acquired at a reasonable price?
- To what extent were the procured goods of the expected/needed quality and quantity?
- Were the transportation costs reasonable and within budget? If no, please elaborate.
- Was shipping/delivery timely and within budget?
- Who was responsible for the customs clearance? UNIDO? UNDP? Government? Other?
- Was the customs clearance handled professionally and in a timely manner? How many days did it take?
- How long time did it take to get approval from the government on import duty exemption?
- Which were the main bottlenecks / issues in the procurement process?
- Which good practices can be identified?
- To what extent roles and responsibilities of the different stakeholders in the different procurement stages are established, adequate and clear?

- To what extent there is adequate segregation of duties across the procurement process and between the different roles and stakeholders?

VII. Reporting

Inception report

This Terms of Reference (ToR) provides some information on the evaluation methodology but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the International Evaluation Consultant will prepare, in collaboration with the national consultant, a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type of and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Officer. The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework (“evaluation matrix”); division of work between the International Evaluation Consultant and National Consultant; mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable³⁶.

Evaluation report format and review procedures

The ET will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ after the field mission.

The draft report will be delivered to UNIDO Office for Independent Evaluation–ODG/EVA (the suggested report outline is in Annex 1) and circulated to UNIDO staff, the GEF OFP and national stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report provided by the stakeholders will be sent to UNIDO ODG/EVA for collation and onward transmission to the project evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The TE report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in Annex 1.

Evaluation work plan

The “Evaluation Work Plan” includes the following main products:

³⁶ The evaluator will be provided with a Guide on how to prepare an evaluation inception report prepared by the UNIDO Office for Independent Evaluation.

1. Desk review, briefing by project manager and development of methodology: Following the receipt of all relevant documents, and consultation with the Project Manager about the documentation, including reaching an agreement on the Methodology, the desk review could be completed.
2. Inception report: At the time of departure to the field mission, the complete gamete of received materials have been reviewed and consolidated into the Inception report.
3. Field mission: The principal responsibility for managing this evaluation lies with UNIDO. It will be responsible for liaising with the project team to set up the stakeholder interviews, arrange the field missions, coordinate with the Government. At the end of the field mission, there will be a presentation of preliminary findings to the key stakeholders in the country where the project was implemented.
4. Preliminary findings from the field mission: Following the field mission, the main findings, conclusions and recommendations would be prepared and presented in the field and at UNIDO Headquarters.
5. A draft terminal evaluation report will be forwarded electronically to the UNIDO Office for Independent Evaluation and circulated to main stakeholders.
6. Final terminal evaluation report will incorporate comments received.

Evaluation phases	Deliverables
Desk review	Development of methodology approach and evaluation tools
Briefing with UNIDO Office for Independent Evaluation, Project Managers and other key stakeholder at HQ	Interview notes, detailed evaluation schedule and list of stakeholders to interview during field mission
Data analysis	Inception Evaluation Report
Conduct of Field mission. Present preliminary findings and recommendations to key stakeholders in the field	Presentation of main findings to key stakeholders in the field.
Present preliminary findings and recommendations to the stakeholders at UNIDO HQ	Presentation slides
Analysis of the data collected	Draft Terminal Evaluation Report
Circulation of the draft report to UNIDO/relevant stakeholders and revision	Final Terminal Evaluation Report

VIII. [Quality assurance](#)

All UNIDO evaluations are subject to quality assessments by the UNIDO Office for Independent Evaluation. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO's Office for Independent Evaluation, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by the Office for Independent Evaluation). The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex 4. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO's Office for Independent Evaluation should ensure that the evaluation report is useful for UNIDO in terms of organizational

learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Office for Independent Evaluation, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1 - Outline of an in-depth project evaluation report

Executive summary

- Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations
- Must present strengths and weaknesses of the project
- Must be self-explanatory and should be 3-4 pages in length

I. Evaluation objectives, methodology and process

- Information on the evaluation: why, when, by whom, etc.
- Scope and objectives of the evaluation, main questions to be addressed
- Information sources and availability of information
- Methodological remarks, limitations encountered and validity of the findings

II. Countries and project background

- Brief countries context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project
- Sector-specific issues of concern to the project³⁷ and important developments during the project implementation period
- Project summary:
 - Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing
 - Brief description including history and previous cooperation
 - Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation
 - Positioning of the UNIDO project (other initiatives of government, other donors, private sector, etc.)
 - Counterpart organization(s)

III. Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section VI Project Evaluation Parameters). Assessment must be based on factual evidence collected and analyzed from different sources. The evaluators' assessment can be broken into the following sections:

- A. Design
- B. Relevance (Report on the relevance of project towards countries and beneficiaries)
- C. Effectiveness (The extent to which the development intervention's objectives and deliverables were achieved, or are expected to be achieved, taking into account their relative importance)
- D. Efficiency (Report on the overall cost-benefit of the project and partner Countries contribution to the achievement of project objectives)
- E. Sustainability of Project Outcomes (Report on the risks and vulnerability of the project, considering the likely effects of sociopolitical and institutional changes in partner countries, and its impact on continuation of benefits after the GEF project ends, specifically the financial, sociopolitical, institutional framework and governance, and environmental risks)
- F. Assessment of monitoring and evaluation systems (Report on M&E design, M&E plan implementation, and Budgeting and funding for M&E activities)
- G. Monitoring of long-term changes
- H. Assessment of processes affecting achievement of project results (Report – either integrated into the analysis of previously mentioned assessment areas or in separate chapters as deemed appropriate by the ET – on preparation and

³⁷ Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g. relevant legislation, enforcement capacities, government initiatives, etc.)

readiness / quality at entry, country ownership, stakeholder involvement, financial planning, UNIDO support, co-financing and project outcomes and sustainability, delays of project outcomes and sustainability, and implementation approach)

- I. Project coordination and management (Report project management conditions and achievements, and partner countries commitment)
- J. Gender mainstreaming
- K. Procurement issues

At the end of this chapter, an overall project achievement rating should be developed as required in Annex 2. The overall rating table required by the GEF should be presented here.

IV. Conclusions, recommendations and lessons learned

This chapter can be divided into three sections:

A. Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

B. Recommendations

This section should be succinct and contain few key recommendations. They should:

- be based on evaluation findings
- realistic and feasible within a project context
- indicate institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation if possible
- be commensurate with the available capacities of project team and partners
- take resource requirements into account.

Recommendations should be structured by addressees:

- UNIDO
- Government and/or Counterpart Organizations
- Donor

C. Lessons learned

- Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation
- For each lesson the context from which they are derived should be briefly stated

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, including an updated table of expenditure to date, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 2 - Overall ratings table

Criterion	Evaluator's Summary Comments	Evaluator's Rating
Attainment of project objectives and results (overall rating), sub criteria (below)		
Design		
Effectiveness		
Relevance		
Efficiency		
Sustainability of Project outcomes (overall rating) Sub criteria (below)		
Financial risks		
Sociopolitical risks		
Institutional framework and governance risks		
Environmental risks		
Monitoring and Evaluation (overall rating) Sub criteria (below)		
M&E Design		
M&E Plan Implementation (use for adaptive management)		
Budgeting and Funding for M&E activities		
Project management		
UNIDO specific ratings		
Quality at entry / Preparation and readiness		
Implementation approach		
UNIDO Supervision and backstopping		
Overall rating		

RATING OF PROJECT OBJECTIVES AND RESULTS

- Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Highly Unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results **may not be higher** than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits beyond project completion. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

Rating system for sustainability sub-criteria

On each of the dimensions of sustainability of the project outcomes will be rated as follows.

- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately Likely (ML). There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability.
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT M&E

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. Evaluation is the systematic and objective assessment of an on-going or completed project, its design, implementation and results. Project evaluation may involve the definition of appropriate standards, the examination of performance against those standards, and an assessment of actual and expected results.

The Project M&E system will be rated on 'M&E Design', 'M&E Plan Implementation' and 'Budgeting and Funding for M&E activities' as follows:

- Highly Satisfactory (HS): There were no shortcomings in the project M&E system.
- Satisfactory(S): There were minor shortcomings in the project M&E system.
- Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly Unsatisfactory (HU): The Project had no M&E system.

"M&E plan implementation" will be considered a critical parameter for the overall assessment of the M&E system. The overall rating for the M&E systems will not be higher than the rating on "M&E plan implementation."

All other ratings will be on the GEF six point scale:

HS	= Highly Satisfactory	Excellent
S	= Satisfactory	Well above average
MS	= Moderately Satisfactory	Average
MU	= Moderately Unsatisfactory	Below Average
U	= Unsatisfactory	Poor
HU	= Highly Unsatisfactory	Very poor (Appalling)

Annex 3 - GEF Minimum requirements for M&E³⁸

Minimum Requirement 1: Project Design of M&E

All projects will include a concrete and fully budgeted M&E plan by the time of work program entry for full-sized projects and CEO approval for medium-sized projects. This M&E plan will contain as a minimum:

- SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management;
- SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, indicators identified at the corporate level;
- Baseline for the project, with a description of the problem to be addressed, with indicator data, or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation;
- Identification of reviews and evaluations that will be undertaken, such as mid-term reviews or evaluations of activities; and
- Organizational set-up and budgets for monitoring and evaluation.

Minimum requirement 2: Application of Project M&E

Project monitoring and supervision will include implementation of the M&E plan, comprising:

- SMART indicators for implementation are actively used, or if not, a reasonable explanation is provided;
- SMART indicators for results are actively used, or if not, a reasonable explanation is provided;
- The baseline for the project is fully established and data compiled to review progress reviews, and evaluations are undertaken as planned; and
- The organizational set-up for M&E is operational and budgets are spent as planned.

³⁸ http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf

Annex 4 - Checklist on evaluation report quality

Independent terminal evaluation of UNIDO-GEF project:

Project Title:

Project Number:

Checklist on evaluation report quality

Report Quality Criteria	UNIDO Office for Independent Evaluation Assessment notes	Rating
A. The terminal evaluation report presented an assessment of all relevant outcomes and achievement of project objectives in the context of the focal area program indicators if applicable.		
B. The terminal evaluation report was consistent, the evidence presented was complete and convincing, and the ratings were well substantiated.		
C. The terminal evaluation report presented a sound assessment of sustainability of outcomes.		
D. The lessons and recommendations listed in the terminal evaluation report are supported by the evidence presented and are relevant to the GEF portfolio and future projects.		
E. The terminal evaluation report included the actual project costs (totals, per activity, and per source) and actual co-financing used.		
F. The terminal evaluation report included an assessment of the quality of the M&E plan at entry, the operation of the M&E system used during implementation, and the extent M&E was sufficiently budgeted for during preparation and properly funded during implementation.		

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

Annex 5 – Required project identification and financial data

The evaluation report should provide information on project identification, time frame, actual expenditures, and co-financing in the following format, which is modeled after the project identification form (PIF).

I. Dates

Milestone	Expected Date	Actual Date
Project CEO endorsement/approval date		
Project implementation start date (PAD issuance date)		
Original expected implementation end date (indicated in CEO endorsement/approval document)		
Revised expected implementation end date (if any)		
Terminal evaluation completion		
Planned tracking tool date		

II. Project Framework

Project component	Activity type	GEF Financing (in USD)		Co-financing (in USD)	
		Approved	Actual	Promised	Actual
1.					
2.					
3.					
4.					
5.					
6. Project management					
Total					

Activity types are:

- a) Experts, researches hired
- b) technical assistance, Workshop, Meetings or experts consultation scientific and technical analysis, experts researches hired
- c) Promised co-financing refers to the amount indicated on endorsement/approval.

III. Co-financing

Source of co-financing	Type	Project preparation		Project implementation		Total	
		Expected	Actual	Expected	Actual	Expected	Actual
Host gov't contribution							
GEF Agency(-ies)							
Bilateral aid agency(ies)							
Multilateral agency(ies)							
Private sector							
NGO							
Other							
Total cofinancing							

Expected amounts are those submitted by the GEF Agencies in the original project appraisal document. Co-financing types are grant, soft loan, hard loan, guarantee, in kind, or cash.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

title:	International evaluation consultant
Main Duty Station and Location:	Home based
Missions:	Missions to Vienna, Austria and Philippines
Start of Contract (EOD):	October 2016
End of Contract (COB):	December 2016
Number of Working Days:	25 to 30 working days spread over 3 months

1. ORGANIZATIONAL CONTEXT

The Office for Independent Evaluation is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. The Office for Independent Evaluation is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

2. PROJECT CONTEXT

Artisanal and small-scale gold mining (ASGM) is particularly common in Southeast Asia, especially in the Philippines, where it has been traditional livelihood. In the Philippines, ASGM occurs in more than 40 provinces, and provides important subsistence-level income for about 300,000 miners and their families. For the past five years, ASGM activities have been producing at least 80% of the Philippines yearly gold supply. With that comes the annual release of an estimated 70 to 140 metric tonnes of mercury, which is approximately 3.6-7.2% of the current estimated total anthropogenic mercury emissions worldwide at 1921 metric tonnes (Mercury Watch Database).

The project aims to introduce mercury-free technology in 2 small-scale mining areas and supplements this effort by providing health training of rural healthcare workers in the proper diagnosis of mercury poisoning.

Detailed background information of the project can be found the Terms of Reference (TORs) for the terminal evaluation.

DUTIES AND RESPONSIBILITIES

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days ³⁹	Location
1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and adjust the key data collection instrument of 3A accordingly (if needed); Assess the adequacy of legislative and regulatory framework relevant to the project's activities and analyze other background info.	<ul style="list-style-type: none"> • Adjust table of evaluation questions, depending on country specific context; • Draft list of stakeholders to interview during the field missions; • Brief assessment of the adequacy of the country's legislative and regulatory framework. 	5 days	HB
2. Briefing with the UNIDO Office for Independent Evaluation, project managers and other key stakeholders at UNIDO HQ. Preparation of the Inception Report	<ul style="list-style-type: none"> • Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; • Division of evaluation tasks with the National Consultant. • Inception Report 	2 days	Vienna, Austria
3. Conduct field mission to Philippines in November 2015 ⁴⁰ .	<ul style="list-style-type: none"> • Conduct meetings with relevant project stakeholders, beneficiaries, etc. for the collection of data and clarifications; • Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks; • Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the missions. 	7 days	Philippines
4. Present overall findings and recommendations to the stakeholders at UNIDO HQ	<ul style="list-style-type: none"> • After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed 	1 days	Vienna, Austria

³⁹ Minimum number of working days, total number of working days will range from 25 to 30.

⁴⁰The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days ³⁹	Location
5. Prepare the evaluation report according to TOR; Coordinate the inputs from the National Consultant and combine with her/his own inputs into the draft evaluation report.	• Draft evaluation report.	7 days	HB
6. Revise the draft project evaluation reports based on comments from UNIDO Office for Independent Evaluation and stakeholders and edit the language and form of the final version according to UNIDO standards.	• Final evaluation report.	3 days	HB
	TOTAL	25 days	

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in environment, energy, engineering, development studies or related areas

Technical and functional experience:

- Minimum 10 years' experience in environmental projects
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks.
- Knowledge of and experience in environmental projects management and/or evaluation (of development projects)
- Working experience in developing countries
- Experience in evaluation of GEF energy projects and knowledge of UNIDO activities an asset

Languages:

Fluency in written and spoken English is required.

Reporting and deliverables

- 1) At the beginning of the assignment the Consultant will submit a concise Inception Report that will outline the general methodology and presents a concept Table of Contents;
- 2) The country assignment will have the following deliverables:
 - Presentation of initial findings of the mission;
 - Draft report;
 - Final report, comprising of executive summary, findings regarding design, implementation and results, conclusions and recommendations.

3) Debriefing at UNIDO HQ:

- Presentation and discussion of findings;
- Concise summary and comparative analysis of the main results of the evaluation report.

All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Office for Independent Evaluation.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within Philippines
Start of Contract (EOD):	October 2015
End of Contract (COB):	December 2015
Number of Working Days:	30 working days spread over 3 months

ORGANIZATIONAL CONTEXT

The Office for Independent Evaluation is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. The Office for Independent Evaluation is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

The National Evaluation Consultant will evaluate the projects according to the Terms of Reference under the leadership of the Team Leader (International Evaluation Consultant). S/he will perform the following tasks:

<u>MAIN DUTIES</u>	Concrete/measurable outputs to be achieved	Expected duration	Location
Review and analyze project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); in cooperation with the Team Leader: determine key data to collect in the	<ul style="list-style-type: none"> List of detailed evaluation questions to be clarified; questionnaires/interview guide; logic models; list of key data to collect, draft list of stakeholders to interview during the field missions 	8 days	Home-based

<u>MAIN DUTIES</u>	Concrete/measurable outputs to be achieved	Expected duration	Location
<p>field and prepare key instruments in both English and local language (questionnaires, logic models) to collect these data through interviews and/or surveys during and prior to the field missions;</p> <p>Coordinate and lead interviews/surveys in local language and assist the Team Leader with translation where necessary;</p> <p>Analyze and assess the adequacy of legislative and regulatory framework in Philippines, specifically in the context of the project's objectives and targets; provide analysis and advice to the Team Leader on existing and appropriate policies for Philippines for input to the TE.</p>	<ul style="list-style-type: none"> • Drafting and presentation of brief assessment of the adequacy of the country's legislative and regulatory framework in the context of the project. 		
<p>Review all project outputs/publications/feedback;</p> <p>Briefing with the evaluation team leader, UNIDO project managers and other key stakeholders.</p> <p>Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with the Project Management Unit.</p> <p>Assist and provide detailed analysis and inputs to the Team Leader in the Preparation of the Inception Report.</p>	<ul style="list-style-type: none"> • Interview notes, detailed evaluation schedule and list of stakeholders to interview during the field missions. • Division of evaluation tasks with the Team Leader. • Inception Report. 	7 days	Home-based (telephone interviews)
<p>Coordinate and conduct the field mission with the Team Leader in cooperation with the Project Management Unit, where required;</p> <p>Consult with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.</p>	<ul style="list-style-type: none"> • Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission. • Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks. 	7 days (including travel days)	Philippines
<p>Prepare inputs and analysis to the evaluation report according to TOR and as agreed with the Team Leader.</p>	<p>Draft evaluation report prepared.</p>	6 days	Home-based

<u>MAIN DUTIES</u>	Concrete/measurable outputs to be achieved	Expected duration	Location
Revise the draft project evaluation reports based on comments from UNIDO Office for Independent Evaluation and stakeholders and edit the language and form of the final version according to UNIDO standards.	Final evaluation report prepared.	2 days	Home-based
TOTAL		30 days	

REQUIRED COMPETENCIES

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

Managerial competencies (as applicable):

1. Strategy and direction
2. Managing people and performance
3. Judgement and decision making
4. Conflict resolution

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in environmental science, engineering or other relevant discipline like developmental studies with a specialization in industrial energy efficiency and/or climate change.

Technical and functional experience:

- A minimum of five years practical experience in the field of environment and energy, including evaluation experience at the international level involving technical cooperation in developing countries.
- Exposure to the needs, conditions and problems in developing countries.
- Familiarity with the institutional context of the project in the Ministry of Industry and Trade is desirable.

Languages: Fluency in written and spoken English is required.

Absence of Conflict of Interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Office for Independent Evaluation.

Annex 7 – Project results framework

HIERARCHY OF OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
PROJECT DEVELOPMENT OBJECTIVE: Improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions	Mercury exposure to miner and their communities is reduced by 50% at pilot sites	Monitoring reports (prepared by Executing Agency) on mercury use at pilot sites (resulting from Output 2.2)	
OUTCOMES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
1. National capacity is fostered to effectively manage mercury, in particular: - A formal national institution for the mining community in the Philippines is functional - Participating stakeholders able to manage mercury effectively (through awareness, technical skills, expertise, lessons and recommendations from the pilot sites)	- ASGM institution is established, with staff, budget, status and premises in place - Increased awareness of the participating stakeholders (before/after the project) - % of key stakeholders agreeing with the statement that they have obtained new knowledge, skills and evidence in mercury management as a result of the project	-Project progress and monitoring reports -Surveys of key stakeholders indicating changes in behavior/knowledge acquired through the project trainings	Political will and commitment of the stakeholders to address mercury use in ASGM will continue; funding and personnel to sustain the institution is made available; local and national stakeholders willing to take on roles and responsibilities
2. Mercury use, emissions and exposure reduced at ASGM pilot sites	- Mercury use reduced - Proper management of mercury at mining sites observed by executing agency and experts - % of trained miners apply the methods and technologies provided by the project - Mercury poisoning cases decreased	-Project progress and monitoring reports -Surveys of miners indicating changes in behavior/knowledge acquired through trainings -Observations by project staff or experts who often visit the pilot sites	Local and national stakeholders stay engaged and attend trainings; techniques/technologies introduced yield measurable reduction in mercury use
OUTPUTS	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
1.1 A national institution for mining community (ASGM) is established	- An assessment study to identify the ideal setting for the ASGM institution - Its structure, roles, functions, staffing, budget, and sustainability are agreed by national stakeholders	Project progress report	Funding and personnel to sustain the institution is made available; local and national stakeholders willing to take on roles and responsibilities
1.2 Key stakeholders from Department of Environment and Nature Resources, Department of Health and ASGM institution are sensitized and trained to manage mercury effectively through active participation in the project	- No. of key stakeholders participate in project workshops and activities	-Project progress report -Observation from project staff -meeting minutes	Political commitment from the national government and support from stakeholders
2.1 Training programs are developed and delivered at two	- No. of training programme - Availability of training	-Training attendance records	Local mining communities stay

<p>pilot demonstration sites for government agencies, local NGOs, communities and other relevant stakeholders on: health risks of mercury and early recognition and identification of mercury poisoning</p>	<p>materials</p> <ul style="list-style-type: none"> - No. of miners trained (by gender) - No. of health and NGOs workers trained (by gender) - No. of community members trained (by gender and age) 	<ul style="list-style-type: none"> -Project progress and monitoring reports - Health monitoring reports 	<p>interested and engaged</p>
<p>2.2 Techniques and technology training programs for miners to reduce mercury in ASGM are developed and delivered at two pilot demonstration sites (e.g. low and/or non-mercury methods and how to make equipment using low-cost and locally available materials)</p>	<ul style="list-style-type: none"> -Number of miners trained (by gender) - No. of training workshops 	<ul style="list-style-type: none"> -Training attendance records -Project progress and monitoring reports including documentation of mercury use 	<p>Local communities willing to learn new techniques/technologies that reduce mercury use</p>

Annex 2: Lit of documents consulted

Types of File	Titles
Project Document	<ul style="list-style-type: none"> • Project Document: Improve the health and environment of artisanal gold mining communities in the Philippines by reducing mercury emissions
Progress Reports from DOH	<ul style="list-style-type: none"> • Accomplishment Report Department of Health 2013-2015 • Letter from DENR to UNIDO dated 10 October 2014 • Department of Foreign Affairs letter to DENR, cc DOH, dated 18 January 2013 • DOH Department Order No. 2013-0037 on sub-allotment guidelines for the disbursement/utilization of funds • DOH Terms of Reference • DOH personnel order on field visits • Technical Services for the UNIDO Project to Improve the Health and Environment of Artisanal Gold Mining Communities in the Philippines by Reducing Emissions • DOH Administrative Order 2016-0038 on the Philippine Health Agenda 2016-2022 • IEC material on mercury poisoning • DOH progress report
Progress Reports from DENR	<ul style="list-style-type: none"> • Project activities • A Preliminary Assessment of the Philippines' Readiness to Transition to Mercury-Free ASGM and Suggestions for Policy Reform • Work and financial plan (interim report) • Meeting Report 5th TWG Meeting Re: Updates on the DENR-EMB/DOH/BANTOXICS/UNIDO Project on " Improve the Health and Environment of Artisanal and Small-Scale Gold Mining (ASGM) Communities in the Philippines by Reducing Mercury Emissions • Letter of DENR to UNIDO dated 13 January 2016
Progress Reports from Ban Toxics	<ul style="list-style-type: none"> • Interim Report: January – June 2015 • Interim Report: July 1 – December 31, 2014 • Interim Report: January 1- June 30, 2014 • BAN Toxics Progress Report: June-December 2013
PIR 2016 and its attachments	<ul style="list-style-type: none"> • Project factsheet (co-financing) • Philippine National Coalition for Artisanal and Small-Scale Miners (news) • National Coalition for Artisanal Small-scale Miners (ASM) (PowerPoint) • Nationwide coalition for artisanal and small-scale mining call on Pres Duterte for support (press release) • 4th National Artisanal Small-scale Gold Mining Summit (program) • DAVAO DECLARATION OF SMALL-SCALE MINERS, AFFECTED COMMUNITIES AND CONCERNED STAKEHOLDERS • Statement on the Davao Environmental Summit and the issue of small-scale mining (press release) • Trainer's Manual

Types of File	Titles
	<ul style="list-style-type: none"> • UNIDO project Implementation Report (1 July 2015 – 30 June 2016) • Artisanal and small-scale gold mining in the in the Philippines: a briefer • Summative outcomes from 2013 (project results) • UNIDO June 2015 to June 2016 extension period • About BAN Toxics (1-pager)
PIR 2015	<ul style="list-style-type: none"> • Project Implementation Report (01 July 2014 to 30 June 2015)
PIR 2014	<ul style="list-style-type: none"> • Project Implementation Report (01 July 2013 to 30 June 2014) • Ban Toxics WORKPLAN (January to December 2014) • MEDIA LOG (JANUARY TO JULY 22, 2014) • Ban Toxics Progress Report June-Dec 2013 • DENR work plan • FEASIBILTY STUDY OF COMMUNAL MERCURY FREE ROD-MILL FACILITY IN ARTISANAL SMALL SCALE GOLD MINING IN MT. DIWATA, COMPOSTELA VALLEY • HANDS-ON TRAINING ON MERCURY-FREE GOLD MINING METHOD • LEVEL 1-2 MINER TO MINER TRAINING ON ASGM MERCURY-FREE GOLD PROCESS BARANGAY MT. DIWATA, MONKAYO, COMPOSTELA VALLEY

Annex 3: List of key informants interviewed

NAME	INSTITUTION	POSITION	DATE	LOCATION	EMAIL
Fakhruddin Azizi	UNIDO	Country Representative	26-Sep-16	Makati City	
Jose Ernesto "Ernie" Wijanco	UNIDO	National Programme Officer	26-Sep-16	Makati City	J.WIJANGCO@unido.org
Edwin G. Domingo	DENR head office	OIC – Director	26-Sep-16	Quezon City	misfasco@denr.gov.ph
Elvira "Beng" S. Pausing	DENR head office	NPC	26-Sep-16	Quezon City	pausingelvira@yahoo.com.ph
Nestor V. Patnugot	DENR-EMB Region XI	Chief	27-Sep-16	Davao City	smileytimesthree@gmail.com
Ma. Dolores Batoctoy	DENR-EMB Region XI	Chief	27-Sep-16	Davao City	malou_batoctoy@yahoo.com
Noel B. Angeles	DENR-EMB Region XI	Officer-in-Charge	27-Sep-16	Davao City	leoneraub@yahoo.com
Ronald Ewa	DENR-EMB Region XI	Area Inspector	27-Sep-16	Davao City	
Jose Erwin G. Clemeña, Jr.	DENR-EMB – (PMCC)	Chief of Staff / PMCC Coordinator	28-Sep-16	Diwalwal	
Mary Jean R. Remulfa	DENR-EMB – (PMCC)	Forest Tech II / PMCC Tech Assistant	28-Sep-16	Diwalwal	
Alnulfo M. Alvarez	DENR-EMB – (PMCC)	Supervising EMS / PMCC Focal Person	28-Sep-16	Diwalwal	
Ana Trinidad F. Rivera	Former DOH head office	Director IV	25-Oct-16	Manila	friveraana@gmail.com atrivera@fda.gov.ph
Rodolfo Antonio M. Albornoz	DOH	Medical Officer V (Division Chief)	12-Nov-16	Manila	rmaalbornoz@doh.gov.ph @gmail.com
Gloria Raut	DOH Region XI		27-Sep-16	Davao City	glo_2r2002@yahoo.com
Dr. Ella Joy N. Perez	Medical Center - Poison Center	Clinical Toxicologist	27-Sep-16	Davao City	smpcpoisoncontrol@gmail.com
Pedro J. Samillano	Mt. Diwata local government unit (LGU)	Punong Barangay	28-Sep-16	Diwalwal	
Leonardo Rates	Mt. Diwata LGU	Committee on Environment	28-Sep-16	Diwalwal	
Guillermo Dayot	Mt. Diwata LGU	Barangay Kagawad	28-Sep-16	Diwalwal	
Marvin C. Hugos	Philippine National Police	MDSSPS Supervisor	28-Sep-16	Diwalwal	
Shalimar Vitan	Ban Toxics	Chief Operations Officer	26-Sep-16	Quezon City	shally@bantoxics.org
Richard Gutierrez	Ban Toxics	Chief Executive Officer		Quezon City	rgutierrez@bantoxics.org
Evelyn Cubelo	Ban Toxics	NPM	7-Oct-16	Quezon City	eve@bantoxics.org
Arlene Galvez	Ban Toxics	GEF5 ASGM coordinator for Luzon	26-Sep-16	Quezon City	arlene@bantoxics.org
Jimbea Lucino	Ban Toxics	GEF5 ASGM coordinator for	26-Sep-16	Quezon City	jimbea@bantoxics.org

NAME	INSTITUTION	POSITION	DATE	LOCATION	EMAIL
		Mindanao			
Arleen Honrade	Ban Toxics	Assistant DPM	26-Sep-16	Quezon City	
Archie C. Ariza	Lambu, Diwalwal (Miners' Association)	President	28-Sep-16	Diwalwal	
Jose Seguerra	Miners' Association	Member	28-Sep-16	Diwalwal	
Marita Acot	Miners' Association	Member	28-Sep-16	Diwalwal	
Alma Andoy	Miners' Association	Member	28-Sep-16	Diwalwal	
Rommel Mider	Miners' Association	Member	28-Sep-16	Diwalwal	
Presila Tuling	Women's Association	Member	28-Sep-16	Diwalwal	
Airen Jimenez	Youth Association	Member	28-Sep-16	Diwalwal	
Elwin C. Virtucio	Youth Association	Member	28-Sep-16	Diwalwal	
Rey O. Pinay	Youth Association	Member	28-Sep-16	Diwalwal	
Riccardo Savigliano	UNIDO	PM	4 – Oct- 16	Vienna	r.savigliano@unido.org