



GLOBAL OPPORTUNITY FOR LONG-TERM DEVELOPMENT - INTEGRATED SOUND MANAGEMENT OF MERCURY IN INDONESIA'S ARTISANAL AND SMALL-SCALE GOLD MINING (GOLD-ISMIA)

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MID-TERM REVIEW REPORT



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Acronyms and Abbreviations

APRI	Indonesian People's Mining Association (Asosiasi Pertambangan Rakyat Indonesia)
ASGM	Artisanal and Small-scale Gold Mining
CEO	Chief Executive Officer
UNDP CO	UNDP Country Office
CSO	Civil Society Organization
CTA	Chief Technical Advisor
GEF	Global Environment Facility
GoI	Government of Indonesia
IPR	People's Mining Permits (Izin Pertambangan Rakyat)
KLHK	Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan)
MTR	Mid-Term Review
M&E	Monitoring and Evaluation
NIM	National Implementation Modality
NGO	Non-Governmental Organization
OJK	Indonesia Financial Service Authority (Otoritas Jasa Keuangan)
PB	Project Board
PIR	Project Implementation Review
PM	Project Manager
PMU	Project Management Unit
PPG	Project Preparation Grant
PSC	Project Steering Committee
ToR	Terms of Reference
UNDP	United Nations Development Programme
GEF TT	GEF Tracking Tool
WG	Working Group
WGC	Working Group Coordinator

Acknowledgement

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1. EXECUTIVE SUMMARY

Project Information Table

Project Title	GEF GOLD Indonesia: Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (ASGM) or ISMIA		
UNDP Project ID (PIMS #):	5872	PIF Approval Date:	25 October 2016
GEF Project ID (PIMS #):	9707	CEO Endorsement Date:	21 June 2018
Country(ies):	Indonesia	ProDoc Signature Date:	5 September 2018
Region:	Asia	Date project manager hired:	1 Feb 2019
Focal Area:	Chemicals and Waste	Inception Workshop date:	26 March 2019
GEF Focal Area Strategic Objective:	GEF-6	Midterm Review Date:	January–April 2021
Trust Fund:		Planned closing date:	5 September 2023
Executing Agency/ Implementing Partner	Ministry of Environment and Forestry (KLHK)		
Other execution partners:			
Project Financing	<i>at CEO endorsement (US\$)</i>	<i>at Midterm Review (US\$)</i>	
[1] GEF financing:	6,720,000	2,817,072	
[2] UNDP contribution:	112,000	48,000	
[3] Government:	2,541,880 (in kind)	12,955,262	
[4] Other partners: (APRI)	3,000,000	2,352,500	
[5] Total co-financing [2 + 3 + 4]:	28,600,880	15,355,762	
PROJECT TOTAL COSTS [1 + 5]	35,320,880	18,172,834	

Project Description

The project aims at protecting human health and the environment by reducing or eliminating mercury use in the Indonesian artisanal and small-scale mining sector (ASGM). In order to address the challenges and barriers, the project supports national and regional government capacity building to regulate and provide improved extension services to the ASGM sector, help miners to formalize, and process ore more efficiently and responsibly, link machinery manufacturers, equipment distribution networks, and financial networks to miners in a way that promotes innovative financing of mercury free technologies, and support the establishment of routes to market for mercury-free gold to increase the income of ASGM miners.

The Government of Indonesia has selected the following six priority project sites to receive the assistance: Hargorejo village, Kulonprogo District (Yogyakarta), Logas village, Kuantan Singigi District (Riau Province), Buwun Mas village, West Lombok District (West Nusa Tenggara Province); Hulawa village, North Gorontalo District (Gorontalo Province); Tetelu village, North Minahasa District (North Sulawesi Province), and Anggai village, South Halmahera district (North Maluku Province).

The project support is provided to ASGM communities in these locations through the following 4 interrelated components:

- Strengthening institutions and policy/regulatory frameworks for mercury-free ASGM
- Establishing financing lending arrangements to provide loans for mercury-free processing technologies
- Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization
- Monitoring and evaluation, raising awareness and disseminating lessons learned on phasing out mercury in the ASGM sector

GEF approved this intervention as a full-size project in 2018 for a period of 5 years. The project is being implemented following UNDP's national implementation modality (NIM), according to the Partnership Framework Agreement between UNDP and the Government of Indonesia.

Project Progress Summary

Under the institutional strengthening component, the project conducted assessment on the existing regulations relevant to ASGM and identified policy needs and gaps relevant to each of the six project sites. Based on the results of the field assessment and the policy gap analysis, a set of recommendations for harmonization and improvement of the regulatory framework and national policy on the ASGM sector have been submitted to relevant ministries.

In line with the Indonesia commitment under the Minamata Convention, the project facilitated development of guidelines for drafting sub-national action plans on mercury reduction and elimination and further assisted in preparation of the Regional Action Plans in 6 provinces and 8 districts in Indonesia.

A training programme was prepared and delivered to almost 300 officials from the provincial, district, subdistrict, and village governments with responsibilities for the ASGM sector in the 6 pilot project sites.

Under the financing component, the project supported a detailed assessment of the selected ASGM sites and initiated potential partnerships with commercial banks. In this regard, the project supported development of 8 financial mechanisms for provision of loans from the financial entities to ASGM miners. However, operationalization of the financial mechanisms is pending on provision of support and guidance from the Indonesia Financial Service Authority (OJK) that will review the financial mechanisms only in 2022-2023.

With the aim to enhance the miners' capacity to access the financial products, a series of training events on record keeping, financial reporting and development of loan applications was provided to 364 participants. The training was supported by a guidebook on the business and financial management that was delivered to ASGM miners and miner's cooperatives. As a follow up to the training, the project extended assistance to five miner groups for preparation of loan applications.

The project delivered 481,853 US\$ in micro-grants to six legally registered miners' cooperatives holding mining community permit. The support was provided for increasing the capacity of the cooperative members, increasing the cooperatives' capital capacity to maintain

stability of the gold price, increasing the level of trust of financial entities/banks to cooperatives, and providing safety work insurance to cooperative members.

A desk study was completed on ASGM for assessment of the ASGM practices and associated challenges from various perspectives and technical, environmental, health and social aspects of ASGM. For introduction of alternative mercury-free technology to the whole ore mercury amalgamation processing, a comprehensive 5-day training session was organized for 33 participants from the 6 project sites.

The project appointed a consultant for development of a detailed engineering design and building a prototype of a small-scale mercury-free gold processing equipment with the capacity to process 150-250 kg of ore with low capital, operational and maintenance costs as well as possibility to construct the plant from locally available materials. The prototype was tested at the government laboratory and in a field trial in a selected ASGM location.

Under the project sub-component on formalisation of ASGM miner groups, the project supported development of training modules covering procedures for establishing cooperatives and village-owned enterprises in the ASGM sector, principles and procedures on application for people's mining permits and on operation of processing facilities, as well as procedures for mineral processing and waste management. The training also covered safety procedure of mining activities and practical use of personal protective equipment with distribution of PPE to 1,500 miners in the 6 project locations.

The project extended assistance to 10 miner groups with establishment permits for miners' cooperatives that is one of the requirements attaining IPR. Moreover, the project financially supported issuance of 4 Environmental Impact Assessment (EIA) documents.

The project commissioned a study on mapping and analysis of the existing ASGM gold markets that highlighted lack of standards for determining gold purity at ASGM locations. The study recommended training of artisanal gold miners on using standardized methods on-site for determining gold purity as a first step towards certification of mercury-free gold from the ASGM sector. For practical implementation of the study results, the project-initiated collaboration with the National Standardization Agency of Indonesia (BSN) on development of a national standard and certification system for mercury-free gold produced from the ASGM sector.

Based on a comprehensive awareness raising strategy and a variety of awareness raising materials and media such as videos, comic strips, storytelling events, posters, calendars, flyers, merchandise, a massive campaign was implemented in the six project locations. The format of the activities was fine-tuned to the situation and conditions in each location and key messages were adapted to the local context to ensure easier understanding of the target audiences.

The project has established its website and regularly updated it with project news items, reports, publications, photos and video. In order to share the achievements and experience with similar project, the project interacted with similar projects under the planetGOLD Global initiative through sharing of communication products and lessons learnt from implementation.

In November 2019, the project made a presentation at the COP-3 of the Minamata Convention in Geneva for sharing the implementation plans and strategies as well as initial lessons learned from the starting phase of implementation.

Gender mainstreaming has been an essential element of the GOLD-ISMIA project as it aims at integrating gender equality concept into ASGM policies and promote equal and inclusive access to financial services and capacity building events. To this end, the project conducted gender mapping in ASGM in the 6 project areas and developed a module for gender sensitization in ASGM. The module was used throughout the capacity building activities in order to enhance capacity of government entities in understanding a gender equality and equity principle and a concept for community development based on inclusive participation.

Furthermore, the project supported elaboration of the concept of gender-responsive village, based on the idea to encourage village authorities to promote gender balance in their institution and the community level. Based on the concept, a gender-responsive village was established in the Kuantan Singingi regency under cooperation with the Ministry of Women Empowerment and Child Protection.

MTR Ratings & Achievement Summary Table

Measure	MTR Rating¹	Achievement Description²
Progress Towards Results	Project Objective Rating: Moderately Satisfactory (MS)	Mid-term target achieved for established partnerships for ASGM, data on number of beneficiaries not available
	Outcome 1 Rating: Satisfactory (S)	Mid-term target achieved on capacity building and the project is on-track to achievement of improved policies and regulations
	Outcome 2 Rating: Moderately Satisfactory (MS)	Mid-term targets achieved on capacity building and development of financial mechanisms, but not on operationalization of the mechanisms and availability of finances to ASGM
	Outcome 3 Rating: Moderately Satisfactory (MS)	Mid-term target achieved on capacity building, not achieved on formalization of ASGM groups and amount of gold sold to formal markets
	Outcome 4 Rating: Satisfactory (S)	Mid-term targets achieved for awareness raising as well as communication
Project Implementation & Adaptive Management	Rating: Satisfactory (S)	Functional, effective and efficient management arrangements, project governance, monitoring & evaluation as well as reporting and communication
Sustainability	Rating: Moderately Likely (L)	Potential risks to sustainability identified

Concise summary of conclusions

Insufficiencies in the project results framework, in particular poorly defined indicators and their target values, are not conducive to operational monitoring of progress towards achievement of the Outcomes and Objectives.

¹ MTR rating scores are explained in Annex 8

² Details on the achievement are given in the respective sections Progress towards results, Project implementation and Adaptive management and Sustainability

By the MTR stage, good progress has been observed under the respective project components on institutional strengthening and awareness raising. The activities on access to finance and technical support have been slowed down due to the COVID-19 restrictions.

Micro-miners currently do not have any capability to test ore grade and to model their resource. Engaging with small-scale miners at the exploration stage could be an effective step supporting efforts to reduce and eliminate mercury use.

Interventions for mercury-free ore processing techniques produce the desired effect only if accompanied with opportunities for increased profits. An effective way to convince miners to switch to mercury-free techniques is to demonstrate economic consequences of the inefficiency of the whole ore amalgamation process.

Cyanidation of amalgamation tailings contributes to formation of mercury-cyanide complexes and thus exacerbates the level of environmental pollution through discharges of final tailings into the local drainages. Although the project has informed the miners on ways to control the cyanide use and toxicity in the amalgamation tailings, this issue would require further attention in order to minimize the risk of environmental sustainability.

Delay in field testing of the mobile cyanidation plant, coupled with the continued lack of access to financing for ASGM groups, poses a risk to wide roll out of the mobile processing plant. Failure to successfully deploy the mobile cyanide plant in the ASGM communities would hamper achievement of the target of reduction of mercury use before the end of the project.

Without knowledge about new sources of gold, ASGM operators have little or no incentive for taking out loans for ASGM operations. Information about new sources of gold is also a critical requirement for development of compelling business plans with a clear value proposition and revenue model to attract financial institutions to roll out loan schemes to ASGM groups.

Some ASGM co-operatives established in the project field locations do not offer any management or assistance services directly related to ASGM operations to its members. Therefore, support to formation of cooperatives similar to co-ops in other sectors is not likely to be an effective measure for mercury reduction and elimination strategies.

Emission of mercury vapour to the air is a serious public health problem as available reports prove very high mercury levels in the air in populated areas around processing centres and gold shops. This issue would require some attention in the remaining period of implementation.

The ISMIA Project Board is constituted on exclusive participation of several line ministries and other agencies of the Government. The PB is considered as an interim body for coordination and oversight of mercury reduction efforts until an effective alternative will have been created and institutionalized to assume this responsibility.

The complexity of the issue of mercury reduction in ASGM operations could not be fully addressed under the current ISMIA project but will require a continued intervention over a longer time that could be ensured through preparation of a follow-up project.

Recommendation Summary Table

No.	Recommendation
1	The Project Management Unit should discuss with the Implementing Partners to revise the project results framework in order to have measurable indicators and achievable end-of-project target values. The revised logframe should be put for approval by the Project Board.
2	In the remaining time of the project. PMU should accelerate activities under Components 2 and 3 as access to financing and technical support are critical for achievement of the planned reduction in mercury use.
3	The project Implementation Partners should consider cooperation with the Geological Agency of Indonesia for establishment of ore testing facilities in the project field locations for determination of concentration of gold in the ore.
4	The PMU should ensure that trainings of the ASGM operators include practical demonstration of low efficiency of the whole ore amalgamation process and its consequences on profitability of the micro-miners' operations.
5	The PMU should ensure training of the ASGM operators includes education about management of final tailings after cyanidation.
6	The PMU should intensify activities related to small-scale cyanidation in order to provide clear and customized guidance to the ASGM communities. In particular, the field testing and demonstration of the mobile cyanidation plant should be accelerated. The project should collect and share the experience from the demonstration and early use of the mobile processing plant.
7	The PMU should consider provision of support for specific capacity building on mineral prospecting including facilitation of access to relevant services and equipment, in cooperation with the Geological Agency of Indonesia.
8	The PMU should intensify consultations with the project ASGM communities about ownership and structure of miner co-operatives for distribution of loans for ASGM operations. Such consultations should include owners of ASGM operations and local investors, If possible, the project should also consider support for small-business loans to individuals who are legal ASGM operators.
9	The PMU should consider targeted awareness raising events about mercury pollution from burning amalgams including methods for preventing this pollution
10	The PMU, in cooperation with the GoI, should consider inclusion of APRI in the project activities including presence on the Project Board.
11	The Implementing Partners from the GoI in cooperation with UNDP should consider continued inter-ministerial coordination of activities on mercury reduction in ASGM under the National Action Plan on Mercury Reduction and Elimination (RAN – PPM), including consideration of temporary institutionalization of the ISMIA Project Board until official establishment of a permanent coordination body.
12	The PMU in cooperation with UNDP and the GoI Implementing Partners should develop an exit strategy for the project to encourage strong commitment to sustainability. The exit strategy should include discussion with key GoI stakeholders for possibility of preparation of a follow-up project under funding from GEF-8.
13	The PMU in cooperation with the UNDP CO should consider initiating a pilot assessment of the ways the ISMIA project interventions contribute to gender equality e.g. through monitoring the changes under the concrete case of establishment of the gender-responsive village. The results of the pilot assessment would serve as a basis for development of gender impact indicators for future programming.

2. INTRODUCTION

This report presents the findings of the Mid-Term Review (MTR) of the UNDP/GEF project “*Global Opportunity for Long-term Development - Integrated Sound Management of Mercury in Indonesia’s Artisanal and Small-scale Gold Mining*”, further referred to as the ISMIA project.

Purpose of the MTR and Objectives

As outlined in the GEF Monitoring and Evaluation Policy, Mid-Term Reviews are mandatory for all GEF-financed full-sized projects and constitute an important part of the GEF projects’ monitoring and evaluation plan. MTRs are primarily undertaken for adaptive management purposes, i.e. to identify challenges and outline corrective actions to ensure that a project is on track to achieve maximum results by its completion. In order to fulfil the above purpose, MTRs are conducted in order to assess the projects’ progress towards results, implementation and adaptive management for improvement of outcomes, facilitate early identification of risks to sustainability and provide supportive recommendations.

The objective of the MTR is to provide the project partners i.e. GEF, UNDP, key stakeholders/ private institutions and the Government of Indonesia, with an independent assessment of progress towards achievement of the project objectives and outcomes as specified in the Project Document. MTR also provides independent assessment of early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. Last but not least, the MTR also reviews the project’s strategy and risks to sustainability of the project results.

As a standard requirement for all projects financed by GEF, this MTR has been initiated by the project Implementing Agency, in this case UNDP. This MTR has been conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects³.

Scope and Methodology

This MTR covers all activities undertaken in the framework of the ISMIA project. The time scope of the MTR is the implementation period of the project from September 2018 up to April 2021. The geographic scope of the evaluation is Indonesia.

The MTR has been carried out using a participatory approach that seeks to inform and consult with key stakeholders associated with the project using the primary evaluation criteria for GEF MTRs listed in the Terms of Reference for the evaluation, i.e. Project Strategy, Progress towards Results, Project Implementation & Adaptive Management, and Sustainability.

The Terms of Reference (ToR) for the MTR is provided as Annex 1.

³ Guidance for Conducting Midterm Reviews of UNDP-supported, GEF-financed Projects UNDP-GEF, 2014
 GEF Evaluation Policy, GEF/ME/C.56/02/Rev.01, June 13, 2019
 UNDP Evaluation Guidelines, UNDP, 2019

MTR Approach and Data Collection Methods

The MTR used the following evaluation instruments:

Evaluation Matrix: An evaluation matrix was constructed based on the evaluation scope presented in the TOR. The matrix is structured along the four GEF evaluation criteria for MTRs and includes principal evaluation questions. The matrix provided overall direction for the evaluation and was used as a basis for interviewing stakeholders and reviewing project documents. The evaluation matrix is provided as Annex 2.

Documentation Review: The evaluators conducted a review of documents that were made available by the UNDP CO as well as other documents found from various other sources.

Interviews: The evaluators conducted a number of virtual consultations through zoom platform with the key project stakeholders using semi-structured interview questions. Through the interviews, the consultants obtained information about the key informants' impressions and experiences from implementation of the project. Triangulation of results, i.e. comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, was used to corroborate or check the reliability of evidence. The interview guide is provided as Annex 3 and the list of people interviewed as Annex 4 to this report.

Data analysis: The evaluators used a combination of the above methods for gathering information in order to triangulate information and data and thereby ensure their accuracy and robustness. After the data collection phase with conducting interviews, observing selected outputs and reviewing data from existing data sources, data analysis followed as the final phase of MTR. Data analysis involved organizing and classifying the information collected, tabulating it, summarizing it, and comparing the results with other appropriate information to extract useful information that responds to the evaluation questions and fulfils the purposes of MTR. In this process, the evaluators took care of checking factual evidence ensuring its accuracy and translating the data into usable formats or units of analysis related to the evaluation questions. List of documents consulted is provided as Annex 5 to this report.

Structure of the MTR Report

This report closely follows the structure of the MTR report outlined in the Terms of Reference that was prepared by UNDP Country Office in Indonesia as the commissioning unit for this MTR.

The following elements that have been covered in the MTR:

Project Strategy

- Project design
- Results framework/logframe

Progress Towards Results

- Progress towards outcomes analysis
- Remaining barriers to achieving the project objective

Project Implementation and Adaptive Management

- Management arrangements
- Work planning
- Finance and co-finance
- Project-level monitoring and evaluation systems
- Stakeholder engagement
- Reporting and communications

Sustainability

- Financial risks to sustainability
- Socio-economic risks to sustainability
- Institutional framework and governance risks to sustainability
- Environmental risks to sustainability

The first part of the report describes the project background and summarizes factual information that was assembled during the initial data collection phase. The second part contains information that was collected through consultations with the key stakeholders and desk review of relevant documentation. The third part provides evidence-based conclusions connected to the findings from the second part and recommendations in the form of corrective actions for the design, implementation, management arrangements as well as for monitoring and evaluation of the project.

Constraints and Limitations

The findings and conclusions contained in this report are based primarily on a thorough desk review of documents that were made available to the evaluators, as well as on a series of virtual interviews conducted thorough the Zoom platform.

In this way, the MTR consultants were able to conduct a detailed assessment of progress towards the expected results. However, due to the travel restrictions related to COVID-19 outbreak, the consultants were not able to visit any of the 6 project sites and observe changes for documentation of results on the ground. It was also not possible to interview directly and obtain opinions of a wider circle of the target beneficiaries, in particular, those from vulnerable groups.

3. PROJECT DESCRIPTION AND BACKGROUND CONTEXT

Project Context

Artisanal and small-scale gold mining (ASGM) is the largest source of mercury pollution on Earth. In this practice, elemental mercury is used to extract gold from ore as an amalgam that is typically isolated by hand and then heated to distil the mercury and isolate the gold. These mining activities largely take place in the so-called “informal” economy in which participants operate unlicensed or without legal authorization that makes a reason why effective regulation of mercury emissions is extraordinarily difficult⁴.

In 2015, about 1,220 tonnes of mercury were released into the terrestrial and freshwater environments, as a result of ASGM, accounting for more than one third of global mercury emissions⁵. ASGM has experienced explosive growth in recent years due to the rising gold prices and the increasing difficulty of earning a living from agriculture and other rural activities.⁶ It is practiced in many forms and contexts and provides livelihoods for millions of people in the developing world who do not have access to viable alternatives.

ASGM has many associated environmental and occupational health issues, particularly when practiced informally or with limited technical and material resources. The health effects on the miners are dire, with inhaled mercury leading to neurological damage and other health issues. The communities near these mines are also affected due to mercury contamination of water and soil and subsequent accumulation in food staples, such as fish—a major source of dietary protein in many ASGM regions.

The Minamata Convention on Mercury, adopted in October 2013, focuses on the entire life cycle of mercury, including controls and reductions across a range of products, processes and industries where mercury is used, released or emitted. As ASGM is the largest source of mercury pollution worldwide, reforming this sector is a priority for the Convention. The milestone of the 50th ratification of the Convention was reached in August 2017 and brought into force the most comprehensive effort to control the trade, use and emissions of mercury. The Convention combines measures in the form of obligations with voluntary actions in order to catalyze global, regional and national intersectoral action needed to promote and protect the health and well-being of populations that depend on ASGM.

The Government of Indonesia has achieved key milestones towards elimination of mercury in ASGM, including signing the Minamata Convention in October 2013 and the ratification of the Convention on 22 September 2017 through the issuance of Law No. 11/2017. Thus, Indonesia is committed to abiding by the legal obligations that bind the parties to the Minamata Convention.

⁴ The Mercury Problem in Artisanal and Small-Scale Gold Mining, by J. Esdale, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5969110/>

⁵ 2018 Global Mercury Assessment, UNEP, 2019

⁶ Global Trends in Artisanal and Small-Scale Mining : A review of key numbers and issues, IGF and IIED, 2017.

Challenges that the project addresses

Before the ISMIA project, the Government of Indonesia had undertaken significant steps toward elimination of mercury in ASGM. Following earlier legislative efforts prohibiting use of mercury and the amalgamation of mercury to extract gold, the Ministry of Environment issued the Ministerial Decree No. 23/2008 on technical guidance on how to prevent, minimize pollution and/or damage to the environment caused by ASGM. Additional efforts undertaken by the Government to improve practices in the ASGM sector and the phase-out of mercury included establishment of the Indonesia Centre for ASGM and convening a Technical Working Group to coordinate activities and support mercury phase out in Indonesia (Ministry of Environment Decree No. 141/2011).

The Government had also started the formalization process of the ASGM sector. Law 4/2009 on Minerals and Coal Mining permits mining only in mining areas designated by the central Government after consultation with the Indonesian parliament and regional governments. Under Law 23/2014 on Regional Governance, the regional (province) government has the authority to issue mining licenses for commodities of metal as mineral, coal, non-metal mineral and rocks in artisanal mining areas.

Regulatory and policy barriers:

Despite the adoption of the above law, significant challenges remained with regards to their implementation as they required harmonization in terms of responsibilities and building capacities of regional (provincial) governments to administer these new responsibilities. The devolution of ASGM responsibilities and the administration of mining regulations to the provinces, without concomitant increases in funding, staffing, or capacity building in those regional offices has been hampering progress of the formalization efforts. With limited capacity and unclarity about responsibilities with respect to issuance of permits and licenses, regional and local entities are not able to support the ASGM formalization processes to the extend necessary.

Institutional barriers:

The main barriers on the side of miners that hampered development of a responsible ASGM include lack of formalization of the sector and access to finance. Weak miners' cooperatives and organizations, poor governance and insufficient capacity for pooling capital hamper efforts towards pursuing licenses and permits from the authorities. Their engagement in the formalization process faces uncertainties and delays in their interactions with regional and local bureaucracies that process their applications. Lack of legitimacy and poor financial credibility of the ASGM sector prevented access to credits for transformative and mercury-free technologies.

Awareness Barriers:

Low level of awareness among populations at risk on mercury and its health and environmental hazards result in a low level of protection measures and insufficient segregation and management of mercury-containing waste. Absence of knowledge on adopting best practices in priority sectors. No support is being provided to artisanal miners in adapting best practices, severely jeopardizing their health but also the environment.

Financial barriers:

Finance entities (banks, microfinance institutions, and other lenders) do not commonly provide loans to the ASGM sector, as the risks are often perceived to be too high and such entities do not have the expertise and experience to review ASGM loan applications or develop financial products that are tailored to the ASGM sector.

Environmental barriers:

Environmentally unfriendly practices applied by the ASGM sector, coupled with poor personal protection and safety practices, hinder ASGM miners' ability to demonstrate the level of stewardship required for environmental and water use licenses that are critical elements of the formalization process. The ASGM sector is also constrained by absence or low capacity of local equipment and service providers, including consulting firms for exploration, mine safety, process engineering, environmental risk mitigation, environmental impact assessments, etc.

Project description and strategy

The project is composed of 4 interrelated Components structured into 10 Outcomes.

Component 1: Strengthening Institutions and the Policy/Regulatory Framework for Mercury-free ASGM

Outcome 1.1 aims to advance the capacity of national and local institutions, government agencies, private sector partners as well as NGOs and CBOs to develop national and/or local systems that have the capacity to assess, plan, support, implement and monitor sustainable and mercury-free interventions in the ASGM sector.

Outcome 1.2 focuses on assessment of policies, plans, regulations, standards and measures in order to propose changes to the enabling environment for the process of application for local concessions and issuance of environmental licenses and other permits) as a first step towards reduction of mercury use in ASGM. In the next step, it envisages improvement of policy and regulatory measures for further progress towards mercury phase-out in the ASGM sector.

The ultimate goal of strengthening institutions and the policy/regulatory framework at national, provincial and local level is to improve the coordination among entities, improve the capacity of entities for regional and local oversight of ASGM mining activities, and make the formalization process simpler, transparent, affordable and timely.

Component 2: Establishing Financing Arrangements for Provision of Loans for Mercury-Free Processing Equipment

For miners, one of the most significant and pernicious barriers to the development of a responsible ASGM sector is access to finance.

Finance entities (banks, microfinance institutions, and other lenders) do not commonly provide loans to the ASGM sector as the risks are often perceived to be too high and such entities do not have the expertise and experience to review ASGM loan applications or develop financial products that are tailored to the ASGM sector. On the other hand, miners' cooperatives and organizations do not have much experience in record keeping and reporting (e.g. resource exploration and estimation, production tracking, economic modeling, and full life cycle mine

planning) or the preparation of loan applications, which can increase their access to conventional and new financing options.

The purpose of this component is twofold, i) to establish partnerships with finance entities and build their capacity and understanding to develop financial products tailor-made to this sector, and ii) build capacity of the miners' cooperatives and organizations in developing loan/investment applications for mercury-free processing equipment/investments and subsequently assist with application for loans or investments.

Outcome 2.1 foresees assessment of existing financial products in terms of accessibility and suitability for women mining groups and for improved understanding of the ASGM sector training of staff of the financial entities in the (re)design of these financial products, so they suit women and men mining groups' needs. Furthermore, it envisages establishment of partnerships with finance entities and building their capacity to develop financial products suitable to the sector and to appraise applications from miners.

Outcome 2.2 includes awareness raising of women miners on the availability of various incentives and loan facilities that meet their needs and capacity building of miners' cooperatives and organizations for preparation of loan/investment applications for mercury-free processing equipment and/or investments.

Component 3: Increasing Capacity for Mercury-Free ASGM through Provision of Technical Assistance, Technology Transfer and Support for Formalization

The main target of this project component is to reduce or even eliminate the release and use of mercury by providing capacity building support to ASGM mining communities for adoption of alternative gold ore processing technologies that use less or preferably no mercury, as well as for application of socially and environmentally sound ASGM practices (e.g. sound management of mining tailings). To ensure cost-effectiveness and sustained use of the mercury-free alternative technologies, the project envisages also support to ASGM miners in their formalizing processes, in order to facilitate access to formal financing for purchase of alternative cleaner technologies.

Outcome 3.1 was developed on basis of socioeconomic baseline surveys and mercury/gold mass balance inventories that had been conducted for each of the six priority project sites. Its purpose is to eliminate the use of mercury by supporting ASGM mining communities in the adoption of alternative gold ore processing methods that utilize less or even no mercury. The envisaged support includes building the capacity of ASGM mining communities for use of mercury-free alternative technologies and for application of socially and environmentally sound ASGM practices (e.g. sound management of mining tailings).

Outcome 3.2 aims at making the mercury reduction efforts and the adoption of alternative technologies cost-effective and sustainable by supporting ASGM miners to reach a certain stage of formalization in order to gain access to legal subsurface rights, obtain permit to establish/operate a processing plant as well as designing processing and waste management plan. The improved formalization is ultimately expected to facilitate access to formal financing of purchase cleaner technologies, boost sustainability of income opportunities and provide safer working conditions for a durable phase-out of mercury in the long-term. This part also

includes plans to link the artisanal miners with gold buyers and refiner companies in order to establish routes to market for the gold mined in responsible manner.

Outcome 3.3 supports formation of partnerships with gold buyers and refiners for establishing access to formal markets with mercury-free gold and tailings. It uses brokerage of uptake arrangements with international refiners, local banks and fund transfer/holding agents as tools for paving the way to high-value gold markets while also increasing income stability of the miners and their willingness to engage in responsible gold production and trade.

Component 4: Monitoring and Evaluation, Awareness Raising, Capturing and Disseminating Experiences, Lessons-Learned and Best Practices

This component's overall purpose is to ensure the monitoring and evaluation of the project,

Outcome 4.1 aims at raising awareness of project stakeholders and beneficiaries on the dangers of mercury and ways to reduce its use in ASGM, as well as capturing project results, experiences, lessons-learned and best practices for publishing and dissemination. The awareness raising plan that will be developed and implemented as part of the project will contain important elements related to gender.

Outcome 4.2 was developed to conduct a gender assessment of the project impact as part of the Mid-Term Review and on these grounds further improve gender-related interventions.

Outcome 4.3 envisages sharing of results and information with the GEF GOLD global component in the form of reports and publications that summarize lessons-learned, best practices and experiences from this project.

The original project results framework is provided as Annex 6 to this report.

Expected project results

The project aims at protecting human health and the environment by reducing or eliminating mercury use in the Indonesian artisanal and small-scale mining sector. In order to address the above-mentioned challenges and barriers, the project will support national and regional government capacity building to regulate and provide improved extension services to the ASGM sector, help miners to formalize, and process ore more efficiently and responsibly, link machinery manufacturers, equipment distribution networks, and financial networks to miners in a way that promotes innovative financing of mercury-free technologies, and support the establishment of routes to market for mercury-free gold to increase the income of ASGM miners.

The Government of Indonesia has selected the following six priority project sites for the project: Hargorejo village, Kulonprogo District (Yogyakarta), Logas village, Kuantan Singigi District (Riau Province), Buwun Mas village, West Lombok District (West Nusa Tenggara Province); Hulawa village, North Gorontalo District (Gorontalo Province); Tetelu village, North Minahasa District (North Sulawesi Province), and Anggai village, South Halmahera district (North Maluku Province). The project is expected to support mining communities in these districts through formalization, increasing their access to finance, training on best practices in ASGM, establishing high efficiency and mercury-free gold processing plants, and

selling mercury-free gold to better paying formal markets. In parallel, the project also targets the improvements in the enabling environment for ASGM by strengthening national, provincial and district policy and regulatory frameworks for ASGM and increasing the capacity of institutions and the private sector that provide services (including financial) to ASGM miners. The improved enabling environment will not only benefit the selected project's priority sites, but ASGM miners located anywhere in Indonesia.

Global Environmental Benefits: The project addresses the global environmental problem of mercury release since the latter does not readily break down in the environment, bio-accumulates in the food chain, and is able to travel long distances far away from the place where it has been released. Because of its toxicity and its detrimental impact on human and environmental health, mercury is considered a global threat.

Socio-Economic Benefits: The project plays an important role in sustainable poverty alleviation primarily because it targets remote areas with minimal infrastructure where other industries could not function and because the small-scale artisanal mining employs of the least educated and the poor people. It is expected to contribute to increased and more sustainable earnings of the selected rural communities,

Knowledge Management: The project is expected to generate a significant mass of knowledge and technical capacity to help Indonesia to meet the obligations under the Minamata Convention to reduce and, where feasible, eliminate mercury use in ASGM. When the project ends, these materials and resources will continue to be available and to serve the wider ASGM communities in the future.

Project implementation arrangements

The GOLD-ISMIA project has been implemented following UNDP's national implementation modality (NIM), according to the Partnership Framework Agreement between UNDP and the Government of Indonesia.

The Implementing Partner for this project is the Ministry of Environment and Forestry (Kementerian Lingkungan Hidup dan Kehutanan - KLHK) that assumes responsibility and accountability for managing this project, including monitoring and evaluation of project interventions, achieving project Outcomes, as well as for effective and efficient use of project resources.

Oversight support for the project is provided by the Regional Technical Advisor at UNDP based in the Bangkok Regional Hub (IRH) that also carries out independent project monitoring functions.

Project timing and milestones

The submission of the GOLD-ISMIA project request was received by GEF on 14 December 2016. The GEF CEO approved the full-size project on 20 June 2018 for a period of 5 years. The signature of the Project Document by the Government of Indonesia on 5 September 2018 marked the official start of the project implementation. The planned closure date of the project is thus September 2023.

The specific timeline of the project is summarized in Table 1 below.

Table 1: Key dates for approval and start-up of the project

Milestone	Date
PIF Approval Date	25 October 2016
CEO Endorsement Date	21 June 2018
Project Document Signature Date (project start date)	5 September 2018
Project Inception Workshop	26 March 2019
Date of the Mid-term Review	January-April 2021
Expected Date of Terminal Evaluation	5 June 2023
Planned Closing Date	5 September 2023

The GEF grant approved for the GOLD-ISMIA project amounts to US\$ 6,720,000. Expected parallel co-financing of US\$ 28,600,880, composed of pledged contributions from several Government entities, the Indonesian Artisanal Mining Association (APRI) and UNDP, makes the total resources committed for the project US\$ 35,320,880.

Main project stakeholders

During the project preparatory phase, a simplified stakeholder analysis was conducted that provided an overview of the main project stakeholders, their interests in relation to the project itself, their influence on the project as well as importance for the success of the project.

The Project Document includes a brief stakeholder analysis and engagement plan that provide an overview of main project stakeholders as well as their respective roles and responsibilities in the ISMIA project. The stakeholder engagement plan for the project is the result of an ongoing dialogue with stakeholders throughout the project design and preparation.

Ministry of Environment and Forestry (KLHK) is the Implementation Partner for this project and the lead agency of the Government for implementation of the Indonesia National Action Plan (NAP) for mercury phase out. Under the NAP, the Ministry is the lead for regulations, pilot projects demonstrating alternative technologies, licensing, database development on mercury use in ASGM.

Agency for Assessment and Application of Technology (BPPT) is a national research institute, which has the tasks of carrying out duties of the Indonesian Government in the field of assessment and application of technology, as well as prioritizing partnerships for maximum utilization of technology and engineering outputs. It is responsible for implementation of the national policies on science, technology and innovation. Demonstration interventions under this project can help advance the Agency's mandate with respect to introduction and transfer of mercury-free alternative technologies and knowledge management.

Ministry of Energy and Natural Resources (KESDM) is responsible for reviewing the existing regulations to support mercury phase-out and prohibition in ASGM, dissemination of information on alternative technologies and issuance of mining permits. The specific responsibilities in this project include conflict resolution and formalization of ASGM at local level.

Ministry of Health (KEMENKES) is responsible for developing norms and standards, monitoring environment health quality, measure mercury exposure levels. The Ministry's role

in the project is related to raising people's awareness on environmental and health risks of continued mercury use in ASGM.

National Development Planning Agency (BAPPENAS) has a responsibility for strategic mid- and long-term planning for Government ministries and agencies.

Indonesian Community Miners Association (APRI) is mandated to represent interests of the small-scale miners.

ASGM mining cooperatives / village-owned companies and individual miners have interest in the project related to the expected efficiency gains of ore processing techniques/technologies through introduction of alternative technologies for reduction of input costs and increase gold yields, to expected increase of the mercury-free gold price by shortening the supply chain/route to gold markets, as well as to reduction of negative health and safety impacts.

Community Based Organizations (CBOs) have interests in the project related to expected improvements of the rights of citizens, increased livelihood opportunities for community members and enhanced health and safety of the ASGM communities.

A more detailed map of the stakeholders and their roles and responsibilities as identified in the Project Document is provided as Annex 7 to this report.

4. FINDINGS

This section brings a summary of empirical facts based on data collected during the review. The MTR team paid particular attention to cross-verification of the evaluative evidence using multiple sources of information and, to the extent possible, avoid overreliance on opinions obtained during the interviews with the project stakeholders.

Project Strategy

The MTR team conducted an analysis of the design of the project, as outlined in the Project Document, and assessed whether the project strategy is proving to be effective in reaching the desired results. In doing so, the evaluators judged the extent to which the project addresses country priorities and is country driven. Furthermore, the evaluators assessed the extent to which the project objectives are consistent with the priorities and objectives of the GEF.

Project Design

Indonesia was one of the six countries that participated in the Global Mercury Project (GMP), implemented from 2002 to 2007 by UNIDO. The overall goal of the GMP was to demonstrate ways of overcoming barriers to the adoption of best practices and pollution prevention measures that limit the mercury contamination of international waters from ASGM. The project in Indonesia managed three sites: Galangan, Katingan District, Central Kalimantan; Tanoyan, Bolaang Mongondow District, North Sulawesi; and Sekonyer Area, Kotawaringin Barat District, Central Kalimantan.

The GOLD-ISMIA project is aligned with the commitments of the Government of Indonesia under the Minamata Convention on Mercury. Indonesia signed the Minamata Convention on 10 October 2013 and ratified it on 22 September 2017.

Pursuant to Article 7.3 of the Minamata Convention, Indonesia was amongst the first countries that published the National Action Plan (NAP) for elimination of mercury in ASGM as a four-year strategy for the period 2014-2018. The NAP was based on three key components, namely (1) legal framework and institutional strengthening, (2) research and development, and (3) awareness and communication. Hence, two components of the GOLD-ISMIA project, namely Component 1 and Component 3, are directly linked to the NAP. In May 2019, the President of Indonesia signed a regulation on a follow-up NAP for the period up to 2030⁷.

The above facts demonstrate the continued high relevance of the project for the Government of Indonesia.

The design of the GOLD-ISMIA project is also consistent with the objectives of the donor agency GEF, as it is linked to the GEF initiative titled the Global Opportunities for Long-term Development of the ASGM Sector, also known as the GEF GOLD programme (GEF ID 9602), that was launched in February 2019. The GEF GOLD programme is implemented by a partnership of UN Environment, UNDP and UNIDO in collaboration with involvement of several other partners. It consists of a global project for knowledge management,

⁷ Presidential Regulation Number 21 of 2019 on the National Action Plan for Reduction and Abolishment of Mercury Use.

communications and outreach and related national projects in 8 countries (Burkina Faso, Colombia, Guyana, Indonesia, Kenya, Mongolia, Peru and the Philippines).

In June 2020, the GEF Council approved a second phase of the GOLD program known as GOLD+ (GEF ID 10569) with child projects in additional eight countries. The GOLD and GOLD+ programs are referred to collectively as “planetGOLD”.

Apart from the larger planetGOLD programmes, GEF has been supporting enabling activities designed to help the Parties to meet their commitments to the Convention, such as Minamata Initial Assessments (MIA) and National Action Plans (NAP). In cooperation with UN Environment, the Government of Indonesia is implementing another GEF project titled “Development of Minamata Initial Assessment and National Action Plan for Artisanal and Small-Scale Gold Mining in Indonesia” (GEF ID 9755).

In relation to the UN Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development, the project contributes to several SDGs as summarized in Table 1 below.

Table 2: Relation of the GOLD-ISMIA project to UN SDGs

Sustainable Development Goals	SDG Targets Relevant to Mercury Reduction
1. End poverty in all its forms everywhere	1.4 Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance 1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions
3. Ensure healthy lives and promote well-being for all at all ages	3.9 Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination 3.D Strengthen the capacity of developing countries for early warning, risk reduction and management of national and global health risks
5. Achieve gender equality and empower all women and girls	5.C Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels
6. Ensure availability and sustainable management of water and sanitation for all	6.3 improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials,
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets 9.4 Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
12. Ensure sustainable consumption and production patterns	12.4 Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
15. Protect, restore and promote sustainable use of terrestrial ecosystems,	15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

In relation to SDG-3, through prevention of exposure of vulnerable people to mercury emissions and releases from the ASGM sector, the project contributes to reduction of the number of deaths and illnesses from hazardous chemicals (target 3.9). It also strengthens the national capacity for management of the risk of mercury poisoning (target 3.D).

Regarding SDG-8, the project supports formalization in the ASGM sector and development of strategies to promote the reduction of emissions releases, and exposure to mercury in the ASGM sector. These measures aim at improvement of the working conditions of miners, elimination of worst practices of mercury use in ASGM and a broader access to mercury-free methods (target 8.3, 8.4).

The project also makes a contribution towards achievement of SDG-5 on gender equality and empowerment of women. Through the collection of disaggregated data by sex, participation of women in project activities and development of strategies to prevent exposure of children and women to mercury use in ASGM makes contribution to the development of national sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels (target 5.C).

With regard to SDG-6, the project contributes improvement of water quality by reducing the release of hazardous chemicals in the ASGM areas (target 6.3).

Last but not least, the project contributes to SDG-12 through promotion of environmentally sound management of mercury and mercury wastes and significant reduction of mercury release to air, water and soil in order to minimize their adverse impacts on human health and the environment, according to the provisions of the Minamata Convention (target 12.4).

Results Framework/Logframe

The evaluators performed critical analysis of the project results framework in order to establish whether it has the necessary elements and whether it enables measurement of success and progress to success.

Design of the project is based on a Theory of Change (ToC) that is visualised on a diagram in Annex T of the Project Document. The ToC identifies root causes of the problems to be solved by the project and outlines the expected Outputs and Outcomes. However, instead of the Development Objective specific to the GOLD-ISMIA project, the ToC diagram shows a generic development challenge related to the use of mercury and its negative impact on humans and the environment.

Section IV of the Project Document (Results and Partnerships) provides textual format of the project results framework as it elaborates in more details on the planned results of the project. This text contains a list of total 74 Outputs, 10 Outcome Indicators and 4 Components/Outcomes of the project. However, the tabular form of the results framework (Section VI of the Project Document) shows only the Components/Outcomes and the Outcome Indicators as well as mid-term and end-of-project targets for the indicators.

Detailed analysis of the results framework table reveals that the Objective Indicators are a mere repetitions of the end-of-project targets, the 10 Outcome Indicators are formulated as Project

Outputs and the numerous Outputs listed in Section IV are in fact Activities. Table 3 below summarizes the main observations related to the project results framework.

Table 3: Assessment of the Outcome and Objective Indicators in the Project Document

Level	Indicators in the Project Document	Assessment	Suggested Modified Indicators
Objective	5 new partnership mechanisms with funding for gender friendly and sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national level	This is not indicator but the end-of-project target	Number of new partnership mechanisms for access to funding for gender friendly sustainable management solutions in the ASGM sector
Objective	200,970 direct project beneficiaries (80,390 females and 120,580 males) for which the risk of mercury exposure has been reduced	This is not indicator but the target for end-of-project impact	Number of direct project beneficiaries for which the risk of mercury exposure has been reduced
Outcome 1	National systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	This is not indicator but the project result	Number of government entities that increased their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector
Outcome 1	Enabling environment created through improved national policies and regulatory frameworks for ASGM and mercury phase-out in the ASGM sector	This is not indicator but the project result	Number of policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector
Outcome 2	Loans for the purchase of mercury-free processing equipment or investments are accessible to legalized ASGM miners and cooperatives	This is not indicator but the project result	Number of new/improved financial products or mechanisms (including women friendly financial products) established for the ASGM sector
Outcome 2	10 ASGM groups (of which 20% of the miners are women) are capacitated to apply for loans for mercury-free processing equipment/investments	This is not indicator but the end-of-project target	Number of miner groups (with % of women membership) trained in developing a loan/investment application (incl. undertaking technical and financial feasibility studies) Number of loan applications developed with technical support of the project Percentage of approved loan applications (developed with the project technical support)
Outcome 3	15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices	This is not indicator but the end-of-project target	Amount (tonnes/year) of mercury use/releases from ASGM avoided
Outcome 3	60 ASGM groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions	This is not indicator but the end-of-project target	Number of mining groups (with % of the miners are women) supported in their formalization processes
Outcome 3	Route to market for mercury-free gold improved/established	This is not indicator but the project result	Amount (kg) of mercury-free gold sold to the formal markets (kg)
Outcome 4	20,000 people (8,000 females and 12,000 males) of whom awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.	This is not indicator but the end-of-project target	Number of people (gender disaggregated with increased awareness on the dangers of mercury and ways to reduce its use in ASGM)
Outcome 4	M&E and adaptive management applied in response to needs and MTR and Terminal Evaluation findings.	This is not indicator but the project result	Number of adaptive management responses applied in response to MTR and TE recommendations
Outcome 4	Project results experiences, lessons-learned and best practices are captured, published, and taken up by the GEF GOLD Global Dissemination Platform for national and global dissemination, using report templates provided by the GEF Gold Global	This is not indicator but the project result	Existence and maintenance of GEF GOLD country project webpage Number of global ASGM events with participation of the project per annum Quarterly submission of information on project progress using agreed metrics and templates provided by the GEF GOLD

In summary, the project results framework contains several internal inconsistencies that hamper use of the project results framework as an effective tool for measurement of progress in the project implementation.

Progress Towards Results

Progress towards Outcomes analysis

The information presented in this section has been sourced from the first annual Project Implementation Review (PIR) for 2020, other relevant reports (e.g. reports under the planetGold platform) as well as information collected from interviews of the key project stakeholders.

The implementation progress is presented for each Outcome in separate Tables 4-7 and the overall progress towards the Project Objective is summarized in Table 8.

The Outcome ratings in Tables 4-7 are based on the premise that the project has to be completed within the officially approved implementation period, i.e. by the September 2023. Hence the rating scores are given on the expectation whether the Outcomes will or will not achieve their respective end-of-project targets by the end of the approved project period. The GEF guidelines for mid-term reviews require the evaluators to provide only one overall rating for each Outcome and the overall Objective. Rating at the level of Outputs is indicated by the colour shading of the last column in Tables 4 – 7 hence no text ratings are given at the level of Outputs.

Table 4: Achievements at MTR for Outcome 1

Component/Outcome 1: Strengthening institutions and the policy/ regulatory framework for mercury-free ASGM			
Indicators	Mid-Term Targets	Status at MTR	Rating⁸
1.1: National systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	Capacity of 11 government entities increased to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector	In-depth capacity assessments of the provincial and local government (October 2019) Training programme for 279 officials of 17 government entities (January – March 2020)	HS
1.2: Enabling environment created through improved national policies and regulatory frameworks for ASGM and mercury phase-out in the ASGM sector	8 policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector	Review of needs and gaps in existing policies and regulations required for ASGM formalization (2019) Guidelines for Preparation of Regional Action Plan for Reduction and Elimination of Mercury (RAD-PPM) (2020) 14 sub-national action plans drafted and 5 approved	S

In-depth capacity assessments of the provincial and local government officials in the 6 project sites were conducted by a national consultant. The target were officials in the provincial/local Office of the Environment (DLH), the Office of Energy and Mineral Resources (ESDM) and the Regional Development Planning Agency (Bappeda).

Based on the capacity assessments, a training programme was prepared and delivered as a series of 2-day face-to-face trainings in the 6 project sites between 16 January and 6 March

⁸ The indicator rating key: Green = Achieved, Yellow = On target to be achieved, Red = Not on target to be achieved

2020. The trainings were attended by officials from the provincial, district, subdistrict, and village governments with responsibilities for the ASGM sector in the 6 pilot project sites. Moreover, officials from several ministries of the central Government, namely KLHK, KESDM, BPPT, Bappenas, Ministry of Finance, Ministry of Economy, Maritime and Investment, and the UNDP team attended as observers.

The trainings were composed of the following 4 training modules:

- Module 1: Best and worst practices in ASGM
- Module 2: Gender mainstreaming in ASGM
- Module 3: Formalization of ASGM communities
- Module 4: Environmental management

The trainings enhanced capacities of total 279 government staff (146 males and 133 females) in 17 Government entities in the 6 project sites for assessing, planning and facilitating mercury-free interventions in the ASGM sector. The remaining part of the capacity building for about 60 officials in 16 Government entities at national level was scheduled for April 2020 but had to be suspended because of the COVID-19 outbreak. It is tentatively planned for 1st quarter 2021 pending cancellation of the social distancing restrictions.

For improvement of national policies and regulatory frameworks, the project supported a review of needs and gaps in policies and regulatory frameworks required for ASGM formalization and mercury phase-out. Out of 11 policy/regulatory topics reviewed, only 4 were found with existing policy or regulation, while the remaining 7 themes did not have relevant existing policy or regulation. The study elaborated 14 generic recommendations targeting relevant law at different levels (national, provincial, district/regency, village) and additional specific recommendations for the 6 pilot project sites.

Selected recommendations that resulted from the above analysis were submitted to relevant ministries in April 2020. Shortly after that, the Mining Law Revision (Law 3/2020) was officially promulgated. One of the recommendations from the project study, namely a special provision for allowing mining at depths up to 100 metres, (increase from the previous maximum depth of 25 metres) is already contained in the Law 3/2020.

One of the key reforms affecting ASGM in the revised law is that it removes the authority of regional governments to issue all types of mining licenses and re-assigns this authority to the central Government. However, the revision also makes a provision for delegation of authority for the issuance of community-based mining licenses to regional governments.

According to the reports and studies produced under the project, there appears to be lack of harmonization regarding responsibilities and authorities of entities with respect to ASGM between the central legal frameworks (in particular Law 3/2020) and local laws and by-laws. Reportedly, there is a Presidential Decree under development expected to provide guidance on implementation of Law 3/2020 and its harmonization with other relevant legal regulations. Specifically, it will empower governors to regulate people's mining activities and thus reconcile the revised Mining Law with the Regional Governance Law 23/2014, section on sharing of authorities for energy and mineral resources.

In order to assist with fulfilment of commitments under the Minamata Convention and the Presidential Decree 21/2019 regarding National Action Plan on Mercury Reduction and Elimination, the project supported elaboration of the Guidelines for Preparation of Sub-National Action Plans on Mercury Reduction and Elimination (RAD-PPM) at the provincial and district levels. The Guidelines was officially approved and issued by the KLHK. Based on the Guidelines, the project further supported drafting sub-national action plans on mercury reduction and elimination for 6 provinces and 8 districts covering the project site areas.

Box 1: Summary of sub-national action plans (RAD-PPM) supported by the project

Province or District	Status of RAD-PPM
Riau Province	Drafted
D.I. Yogyakarta Province	Drafted
West Nusa Tenggara Province	Approved - Governor Decree No. 64/2020
Gorontalo Province	Approved - Governor Decree No. 71/2020
North Gorontalo District	Approved - District Decree No. 35/2020
North Sulawesi Province	Drafted
North Maluku Province	Drafted
Kuantan Singingi District	Approved- District Decree No. 74/2020
Kulon Progo District	Drafted
West Lombok District	Approved - District Decree No. 95/2020
North Minahasa District	Drafted
South Halmahera District	Drafted
Sumbawa District	Drafted
West Sumbawa District	Drafted

The project facilitated a virtual event for the official submission of the RAD-PPM of West Nusa Tenggara Barat Province to the KLHK on 16 December 2020. It follows from Box 1 that 5 of the 14 supported sub-national action plans have already been approved by the relevant province/district governments. The remaining action plans are expected to be approved by the relevant sub-national authorities during 2021.

Summary Assessment of Outcome 1:

The training component progressed well and with the series of trainings conducted in the 1st quarter of 2020 the actual number of capacitated governmental entities exceeded the mid-term target. However, the planned number of trainees was reached only in Riau, Gorontalo and Maluku Utara provinces while in the other provinces, namely Sulawesi Utara, and Nusa Tenggara Barat, the total number of training participants was less than planned because the trainings conflicted with other meetings that had to be attended by the targeted province/district officials.

Based on the rapid regulatory and policy assessment conducted during the PPG phase, the Project Document envisaged support from the project to be provided for drafting district and province regulations harmonized with the Mining Law and the new Regional Governance Law and development of guidance documents to support implementation of the regulations. The legal assessment conducted under Outcome 1 confirmed the need to enact a regional bylaw, or at least, a governor's regulation that incorporate crucial issues on people's mining. The analysis

found that although some provinces already have a regional by-law on mining but the by-laws fail to clarify the key issues on people's mining. This analysis confirmed the continued need of support for development of sub-national regulations.

The project supported preparation of sub-national action plans under the Minamata Convention. The elaboration of the sub-national action plans is one of the obligations under the Minamata Convention and is in line with Article 15a of the Presidential Regulation 21/2019 that mandates local governments to prepare sub-national action plans on mercury reduction and elimination. By this token, the project has assisted the country to fulfil this obligation under the Minamata Convention. However, the RAD-PPM is merely a document that will coordinate the efforts of technical agencies the sub-national levels and will have to be integrated with the regional planning system that is not only technical, but also a political issue.

A specific obligation under the Minamata Convention that has not been fully addressed in the sub-national action plans is the formalization of ASGM sector. The Convention called for "steps to facilitate the formalization or regulation of the artisanal and small-scale gold mining sector". Although the prepared sub-national plans have a section about issuance of licensing for cooperatives in the 5 ASGM locations, they do not provide clear pathway for the formalization. The approach of involving cooperatives is related only to economic shifting of the artisanal miners. Hence, the approved RAD-PPM is not likely to create sufficient political support for formalization of the ASGM sector.

Through the support for development of the sub-national action plans, the project made only indirect contribution to the strengthening of institutions and policy/regulatory frameworks for mercury-free ASGM and has not resolved the unclarity about authority to issue mining licenses that is hampering the progress towards solving the legislative part of the formalization challenge.

In preparation for guidance regulation from Law 3/2020, there is a need to assist local governments (at the provincial level) to draft policy and regulations that will accommodate people's mining operations, such as formalization (cooperatives establishment), licensing (EIA assessment), technical assistance, financial and marketing support as stated in the Law 3/2020.

Based on the above, **the progress under Outcome 1 is rated Satisfactory (S).**

Table 5: Achievements at MTR for Outcome 2

Component/ Outcome 2: Establishing financing lending arrangements to provide loans for mercury-free processing equipment.			
Indicators	Mid-Term Targets	Status at MTR	Rating
2.1: Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.	2 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector US\$ 35 million available to the ASGM sector through existing or new financial mechanisms US\$ 2.8 million allocated to the ASGM sector through approved loans	Preliminary desktop review for selection of financial partners (2019) Report on ASGM assessments and available financial products (2020) Draft MOU for financial partnership between the project and 2 local banks 8 improved financial mechanisms for loans to ASGM communities	MS
2.2: 10 ASGM groups (of which 20% of the miners are women) are capacitated to apply for loans for mercury-free processing equipment/investments	5 miner groups (of which 20% of the miners are women) are trained in developing a loan/investment application (incl. undertaking technical and financial feasibility studies). 10 loan applications developed (with technical support of the project) 50% of loan applications (developed with technical support of the project) approved	24 miner groups trained in capacity development workshops in 3 project ASGM communities (2020) 5 loan applications developed and submitted Micro-grants provided to 6 miners' cooperatives	S

Major parts of Component 2 were implemented with the assistance of an international NGO Pact. Firstly, Pact conducted a preliminary desktop review of the status and challenges of ASGM formal financing. The review was based on interviews with local banks, miner cooperatives, local government agencies and the Indonesian People's Mining Association (Asosiasi Pertambangan Rakyat Indonesia - APRI) and information obtained during the GOLD-ISMIA community kick-off meetings.

The preliminary review was followed by a more detailed assessment of the project ASGM sites and of available financial products based on interviews with several shortlisted local banks that operate in immediate proximity to each of the 6 project ASGM communities. The banks were selected based on their proximity and prevalence as prominent financial institutions in the project communities.

The assessment revealed that, despite general availability of financial products designed for small businesses, the banks have not been able to provide loans to the ASGM operators for two principal reasons, namely (a) lack of fully permitted (i.e. legal) mining operations, and (b) inconsistency in gold production related to a variety of technical and business reasons. Despite these critical barriers, the banks have expressed strong desire to partner with the project in order to develop financial products that meet the needs of the project ASGM operators.

Final selection of the financial sector partners for the project was made through comparison of the banks' respective products for SMEs and their indication of interest and willingness to work as lenders to the project ASGM communities. As a final step, two banks, namely Bank Rakyat Indonesia (BRI) and SulutGo Bank, were selected as the project financial sector partners,

A proposal of 8 financial mechanisms (including women friendly financial products), to be used for loans to ASGM communities, was developed, including several potential arrangements between miners' cooperatives, banks and state-owned financial entities. A draft MOU intended as a basis for agreed partnership between the selected banks and UNDP was

prepared and discussed with the two selected banks - to develop inclusive financial lending contracts designed to support ASGM applicants.

In February and March 2020, Pact carried out a series of 3-day capacity development workshops on access to finance for ASGM communities in Tatelu (Minahasa Utara, Sulawesi Utara), Hulawa (Gorontalo Utara), and in Anggai (Obi Island, Halmahera Selatan, Maluku Utara). Total 116 participants were trained in the three communities out of which 35 (28%) were women.

The workshops were designed primarily for miners, but also for local ASGM financiers, as well as for members of the mining cooperatives or other ASGM related businesses in the 3 communities. The contents of the workshops included methods for record keeping and reporting as well as understanding the requirements for formal financing. The workshops were supported by preparation of a guidebook on business and financial management that was distributed to the training participants.

As a follow up to the training, the project extended assistance to five miner groups for development of loan applications. One loan application was developed for a bank (BRI in Kulon Progo), while the remaining four applications were to savings and loan cooperatives (three in West Lombok and one in Kuantan Singingi).

As an activity not envisaged in the Project Document, the project provides micro-grants to legally registered miners' cooperatives holding mining community permit (IPR) to enhance their capacity for management and business. The cooperatives were invited to submit proposals to UNDP CO. The submissions were approved by a review panel established at the Quality Assurance Result and Evaluation Unit (QARE) of UNDP.

This support serves a number of purposes, including increasing the capacity of the cooperative members, increasing the cooperatives' capital capacity to maintain stability of the gold price, increasing the level of trust of financial entities/banks to cooperatives, and providing safety work insurance to cooperative members. As of December 2020, the project delivered USD 481,853 in micro-grants to six miners' cooperatives listed in Box 2 below.

Box 2: *List of micro-grants to GOLD-ISMIA ASGM miners' cooperatives*

Cooperative Name	Cooperative Location	Amount (US\$)
Plampang Tiga Cooperative	Kulon Progo District, DI Yogyakarta Province	77,046
Matuari Women Cooperative	Minahasa Utara District, North Sulawesi Province	76,790
Logas Cooperative	Kuantan Singigi District, Riau Province	86,489
Logas Hilir Cooperative	Kuantan Singigi District, Riau Province	86,489
Batu Emas Cooperative	Minahasa Utara District; North Sulawesi Province	77,385
Batu Api Cooperative	Minahasa Utara District; North Sulawesi Province	77,385

As follows from Box 2, the micro-grants were provided to cooperatives from 3 of the 6 project sites. Seven new miners' cooperatives from the project sites in the remaining 3 project sites, namely the North Maluku, Nusa Tenggara Barat and Gorontalo provinces are candidates for receipt of microgrants in 2021 with total sum of about USD 350,000. This will bring the total support provided through the microgrants facility to more than 830,000 US\$.

Summary Assessment of Outcome 2: The capacity building part of Component 2 has exceeded the project mid-term target. Although the number of the proposed financial mechanisms has also exceeded the target, they remain unused as they have not been put into operation by the project financial sector partners. The reason is that the Indonesia Financial Service Authority (Otoritas Jasa Keuangan - OJK) has not yet provided a regulation and related guidelines for access to the proposed financing schemes for ASGM. For the same reason, the MoU discussed between UNDP and BRI has not been signed and BRI has not made any allocation of funding for the ASGM sector.

Interview with the BRI representative in Kulon Progo confirmed the findings of the reports by Pact under Component 2 of the project, namely that the financial institutions rate the financial risk of support the ASGM sector very high while they give only low to moderate rating to financial returns of the ASGM operators. This imbalance appears to be the main obstacle to extensive and scalable engagement of the project financial sector partners with the ASGM cooperatives or individual miners. It is therefore highly unlikely that financial entities will make available loan funding to the project ASGM communities at the level of loan funding that was anticipated in the Project Document.

The decision to provide micro-grants to formally registered miners' cooperatives was taken in order to address lack of available funding from the project financial sector partners. However, this is only a stop-gap and temporary solution that is not sustainable beyond the project time boundaries.

Although the project has made initial steps towards establishment of partnerships with financial institutions, further progress has been halted and engagement with legal financial entities remains a challenge of the project. The main challenge is the lack of guidelines from OJK on the proposed financial schemes for the ASGM sector that is obviously out of control of the project implementing team. The OJK has confirmed a timeframe for review of the developed mechanisms to be only in 2022-2023 and it remains to be seen whether the review will result in the required endorsement of the proposed financial mechanisms and/or issuance of a policy on financing of ASGM cooperatives. As it is clear that the lack of OJK endorsement will continue for the major part of the remaining project implementation period, it is suggested to revise the end-of-project financial targets for the Outcome Indicator 2.1 to more realistic values.

Based on the above findings, **the progress towards achievement of the end-of-project targets under Outcome 2 is rated Satisfactory (S).**

Table 6: Achievements at MTR for Outcome 3

Component/ Outcome 3: Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization			
Indicators	Mid-Term Targets	Deliverables at MTR	Rating
3.1: Amount of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices	Mercury use/releases from ASGM avoided by 5 tonnes/year. 150 kg of gold produced per year without mercury	Desk study on ASGM (May 2020) Feasibility studies for reprocessing mercury-containing amalgamation tailings (April – November 2020) Engineering design and prototype of a small-scale mercury-free gold processing plant (March – September 2020) Approval of the prototype by BPPT (October 2020) 5-day technical training for 34 participants (November 2020) Potential reduction of mercury use by 5.5 tonnes/year at four surveyed locations	MS
3.2: Number of ASGM groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions	At least 30 mining groups (of which 20% of the miners are women) supported in their formalization processes	10 miner groups supported in establishment of miners' cooperatives	MS
3.3: Amount (kg)mercury-free gold sold to the formal market	100 kg of mercury-free gold sold to the formal market	International webinar on gold certification for the ASGM sector in Indonesia (September 2020) Report on ASGM gold markets and certification of gold from the ASGM Sector (November 2020) Cooperation with the National Standardization Agency of Indonesia (BSN) (December 2020)	S

For the technology part of Component 3, the project commissioned a desk study on ASGM that makes assessment of the ASGM practices and associated challenges from various perspectives and compiles information on technical, environmental, health and social aspects of ASGM. The study is expected to serve as a comprehensive reference about gold ore mineralogy and its processing options that can be used for selecting the mercury-free processing technology that is most suitable for ASGM communities.

For introduction of alternatives to the whole ore mercury amalgamation processing, the project organized a comprehensive 5-day training session for 33 participants from the 6 project sites on 23-27 November 2020 in the Kulon Progo district, special region of Yogyakarta. The theoretical part of the training curriculum covered a broad range of topics, including awareness about dangers from utilizing mercury and techniques of mercury-free gold processing, measurement of the process performance, as well as control of waste disposal. In addition, participants also learned about procedures for formalization and legalization of ASGM and for obtaining mining license. The practical part of the training was conducted at the BPPT gold processing workshop in Kalirejo village.

In order to develop a mercury-free technological alternative suitable to ASGM communities in Indonesia, the project appointed a consultant for development of a detailed engineering design

(DED) and building a prototype of a small-scale mercury-free gold processing equipment with the capacity to process 150-250 kg of ore. The primary criteria used for the design of the plant were low capital, operational and maintenance costs as well possibility to construct the plant from locally available materials. The consultant's assignment further included testing of the prototype at BPPT laboratory and a field trial in a selected ASGM location.

The actual work on this assignment started in March 2020 but was delayed due to COVID-19 restrictions. The prototype built according to the DED was tested in a nationally accredited laboratory in July – August 2020. Still due to COVID-19 restrictions, the field trial scheduled at the Gorontalo Utara project site had to be postponed and instead further laboratory testing was conducted at BPPT laboratories to enhance the test results base. The field trial at Gorontalo Utara including training of the recipient community was rescheduled to March 2021.

The laboratory testing at the BPPT laboratories concluded that the plant is suitable for ores with gold content above 1 ppm, as for lower gold concentrations the effectiveness of leaching was found not satisfactory. With these results, the prototype was submitted for approval to BPPT. In the approval letter of 27 October 2020, BPPT stated that the prototype plant can be approved but recommended to conduct more field trials with varied gold ore types and contents in order to ascertain the performance for a variety of ASGM locations.

Further assistance under the technology component was provided in the form of feasibility studies for reprocessing mercury-containing amalgamation tailings. This assistance included a desk review of available techniques for recovery of mercury and gold from amalgamation tailings, laboratory analysis of samples taken from amalgamation tailings at ore processing facilities in the Sekotong sub-district in West Lombok, detailed engineering design of an approved technique of reprocessing mercury-containing tailings, as well as assessment of economic feasibility of the tailings' reprocessing.

Surveys conducted in four project villages (Anggai, Tatelu, Pelangan and Buwun Mas) found that amalgamation combined with ore grinding in rod mills was used as a pre-processing step for subsequent cyanidation. Based on these findings, the project CTA concluded that use of the rod mills at the above surveyed locations only for ore grinding without amalgamation would lead to a mercury reduction of 5.5 tonnes per year.

The project can claim contribution to the recent reduction of mercury use as an indirect result of the project training and awareness raising activities, in combination with recent regulatory restrictions on mercury use. The reduction can't be attributed directly to the project, as no use of cyanidation technology for primary ore processing was reported in the project field locations up to the MTR stage.

Under the project sub-component on formalisation of ASGM miner groups, the project supported development of training modules covering procedures for establishing cooperatives and village-owned enterprises (BUMDes) in the ASGM sector, principles and procedures on application for People's Mining Permits (Izin Pertambangan Rakyat - IPR) and on operation of processing facilities, as well as procedures for mineral processing and waste management. Apart from the pertinent legal and technical issues, the training modules covered guidance on leadership and advocating for the rights of ASGM communities. The training also covered

safety procedure of mining activities and practical use of personal protective equipment (PPE) in ASGM. This part was supported by distribution of PPE to 1,500 miners in the 6 project locations.

In this manner, the project extended assistance to 10 miner groups with establishment permits for miners' cooperatives that is one of the requirements attaining IPR. Moreover, the project financially supported issuance of 4 Environmental Impact Assessment (EIA) documents. Submission of EIA is required to obtain environmental permit AMDAL (Analisis Mengenai Dampak Lingkungan)⁹.

Three EIA documents were prepared by a professional national consultant company for the existing facilities on mercury-free processing plant operations and tailings management, at Sekotong in West Lombok District and Obi in South Halmahera District, both owned by the KLHK, and at Kulon Progo in Kokap District owned by the BPPT. The other EIA assessment in support to a cooperative at Kuantan Singingi, Riau province, was prepared by local Riau University. At the MTR stage, all four requests for mining permits were still in progress and issuance of IPR was on hold, waiting for the guidance from the central government to give authority to provincial government regarding ASGM's legal and technical issues.

Under the third sub-component of Outcome 3, the project commissioned a study on mapping and analysis of the existing ASGM gold markets. The data from the study indicate that the on-site gold price at ASGM locations is heavily affected by the length of the trading system and made suggestions for streamlining the route to formal gold markets and reducing thus the number of intermediary buyers/traders.

The study also highlighted lack of standards for determining gold purity at ASGM locations and recommended training of artisanal gold miners on using standardized methods on-site for determining gold purity as a first step towards certification of mercury-free gold from the ASGM sector. The study further recommends development of appropriate certification standards suitable for ASGM conditions and calls for strengthening the assistance to ASGM communities through formalization including trainings and mentoring as part of further assistance in the process of ASGM gold certification.

The project facilitated connection of the Batu Emas cooperative from Minahasa Utara with an ethical jewellery based in Bali regarding transition of 738 g of gold to a formal gold market. However, the cooperative could not meet the gold quality required by the buyer, hence the transaction was cancelled. The project also explored similar transition with PT-ANTAM, a state-owned refinery, and PT- Bukitmas, a new, private refinery based in Jakarta and further possibilities will be discussed with these refineries in 2021.

For practical implementation of the study results, the project initiated collaboration with the National Standardization Agency of Indonesia (BSN) on development of a national standard and certification system for mercury-free gold mined from the ASGM sector.

⁹ The legal basis for AMDAL is Government Regulation No. 22/2021 concerning Implementation of Environmental Protection and Management

Summary assessment of Outcome 3: The project results framework under Outcome 3 contains 3 indicators set at different levels. Indicator 3.2, namely the number of ASGM groups to be supported in formalization efforts, was set at the output level as the number of ASGM groups supported by the project is fully under control of the project team. Until the MTR stage, the project has fallen short of the mid-term target of support to 30 groups. However, the socio-economic surveys conducted under the project suggest that in some project locations (Kulon Progo, Minahasa Utara, Gorontalo) miners prefer to work independently and mining co-operatives registered in the past were found inactive. Therefore, the end-of-project target for this indicator (support to 60 groups) appears to be overambitious as the number of mining co-operatives actively seeking registration is much lower.

According to the government regulation, environmental license is needed in order to get IPR for the cooperatives. Hence it is important that the project supports cooperatives to get environmental license through EIA assessment.

Indicator 3.1, namely the amount of mercury to be avoided through the introduction of BAT/BEP, was set to measure progress at the outcome level. However, assessment of this indicator presents a challenge as ASGM communities do not keep any records of the amounts of mercury they use. Consequently, amount of gold produced serves as a proxy indicator but even this is not based on exact records but only on estimates that for one unit of gold produced the current amalgamation practices require use of 5-10 units of mercury.

There has been some previous experience with the cyanidation technology at Minahasa Utara, West Lombok and South Halmahera, while other sites have no record in prior experience in using a mercury-free technology. The proposed approach to reduce mercury use through technology transfer has not been implemented yet.

The field surveys conducted at the PPG stage established the cumulative baseline for the 6 project locations at about 13 tonnes mercury used per year. A survey conducted under the project two years later estimated the cumulative mercury use at about 2 tonnes/year. Miners in some of the project locations claimed they had recently transitioned to cyanidation and claim that they still use mercury only for testing the gold grade of their ores as this is the simplest and fastest tool to establish the amount of gold in the ore they extract.

It is therefore beyond any doubt that the use of mercury has dropped in the last couple of years in all project locations. The project can therefore claim contribution to part but not all of this reduction. In some locations, reduction of mercury use could have originated from treatment facilities that had been established before the GOLD-ISMIA project and also transition from mercury use could have resulted from introduction of the ban on use of mercury in ASGM that was promulgated in 2017.

Indicator 3.3, namely the amount of mercury-free gold sold to the formal gold markets, is in fact indicator of socio-economic impact of the transition from mercury use. Due to slow progress on establishment of a route to formal markets (under Outcome 4), there has been only very small amount of mercury-free gold produced under the project support and the mid-term target of 100 kg of mercury-free gold sold to the formal markets has not been achieved. Therefore, it is doubtful whether the project could come any close to the end-of-project target

of 350 kg of mercury-free gold to the formal markets hence it is suggested this target to be revised to more realistic amount.

Based on the above findings, the progress towards achievement of the end-of-project targets for Outcome 3 is rated **Moderately Satisfactory (MS)**.

Table 7: Achievements at MTR for Outcome 4

Component/ Outcome 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons learned and best practices.			
Indicators	Mid-Term Targets	Status at MTR	Rating
Number of people (gender disaggregated with increased awareness on the dangers of mercury and ways to reduce its use in ASGM)	Awareness raised of 12,000 people (5,000 female and 7,000 male) on the dangers of mercury and ways to reduce its use in ASGM	Field study (September-November 2019) Awareness raising strategy and materials (January 2020) 26 awareness raising events (March 2019 – December 2020) reaching about 8,000 people	S
Number of adaptive management responses applied in response to MTR and TE recommendations	15 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings	N.A.	
Existence and maintenance of GEF GOLD country project webpage Number of global ASGM events with participation of the project per annum Quarterly submission of information on project progress using agreed metrics and templates provided by the GEF GOLD	1 GEF GOLD country project webpage maintained. Country project participated in 1 Global ASGM Forum, 1 Annual Programme Conference, and 12 monthly programme/project calls on a yearly basis. Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration with the GEF GOLD global component. On a quarterly basis, information on project progress (using agreed metrics and templates provided by the GEF GOLD global component where appropriate) is submitted to the GEF GOLD global component.	Project webpage established and maintained (www.goldismia.org) Presentation at the Annual Conference of COP 3 of Minamata Convention in Geneva (November 2019) Quarterly activity reports to GEF GOLD global (starting from Q3/2019)	S

The awareness part of Outcome 4 was implemented by a public affairs consulting company. In order to design an awareness campaign corresponding to local conditions and main challenges in the target communities, the consulting company started with conduct of a field study in September - November 2019 for situation analysis that gathered inputs from the target beneficiaries in the 6 project locations, in particular those directly involved in ASGM practices.

The results of the field study, best practice studies from previous similar campaigns and discussions with UNDP and the project field facilitators shaped the development of a comprehensive awareness raising strategy based structured into communication objectives, approaches, target audiences, key messages, campaign implementation plan, and performance evaluation standards.

The strategy was based on targeting primary audience, i.e. individuals with the highest mercury exposure, namely drum operators and gold collectors who carry out amalgamation and burning

processes. Secondary audience included a broad range of beneficiaries such as the closest family of the primary audience, ASGM supply chain, district government and village officials, community leaders, people living around gold processing factories and shops, as well as local non-governmental organizations (NGOs) or community and youth organizations.

A variety of awareness raising materials, including videos, brochures, posters, and training modules were developed and put for review of the project implementing partners (KLHK, BPPT and UNDP) during a series of focus group discussions between November 2019 and January 2020.

Based on the approved campaign approaches and materials, the consultant implemented a campaign to reach total 1,200 participants in the six project locations with the format of the activities fine-tuned to the situation and conditions in each location and key messages adapted to the local context to ensure easier understanding of the target audiences.

The conduct of the campaign was severely affected by the start of the COVID-19 outbreak. After completion of the campaign in two locations, the rest of planned activities had to be postponed due to large-scale social restrictions imposed nationally. For the delivery of the campaign to the remaining four locations, the consultant collaborated with the Institute for Research and Community Service (LPPM) and leading universities in the four locations. The awareness campaign delivery is summarized in Box 3 below.

Box 3: Summary information on the awareness campaign in the GOLD-ISMIA project

Location	Date	Participants		
		Total	M	F
Buwun Mas Village, West Lombok, West Nusa Tenggara	2-5 March 2020	287	154	133
Tatelu Village, North Minahasa, North Sulawesi	11-16 March 2020	252	144	108
Logas Village, Kuantan Singingi, Riau	16-20 October 2020	239	181	58
Kalirejo and Hargorejo Village, Kulon Progo, D.I.Yogyakarta	2-10 November 2020	211	94	117
Anggai Village, South Halmahera, North Maluku	17-22 November 2020	231	173	58
Hulawa Village, North Gorontalo, Gorontalo	30 November – 2 December 2020	203	89	114
TOTAL GOLD-ISMIA project		1,378	923	455

For implementation of the field campaign, the project developed campaign media such as videos, comic strips, storytelling events, posters, calendars, flyers, merchandise, and online posts on social media (Instagram, Twitter, Facebook Youtube).

In addition to the awareness campaign through the consulting company, the project organized a number of awareness raising events in different formats, including the national and project site-specific inception workshops, focus group discussions and storytelling workshops with educational institutions. After the introduction of social distancing restrictions due to COVID-19 outbreak, the project arranged a series of webinars for various audiences.

Under the communication segment of Outcome 4, the project has established its website and regularly updated it with project news items, reports, publications, photos and video. In order to share the achievements and experience with similar project, the PM has regularly participated on monthly project calls with similar projects under the planetGOLD Global

(PGG) initiative and the project team contributed to the PGG communication group through sharing of communication products and lesson learnt from implementation. From the 3rd quarter of 2019 onwards, the project submitted quarterly activity reports to the PGG information platform using agreed metrics and templates.

In November 2019, the project made a presentation at the COP-3 of the Minamata Convention in Geneva for sharing the implementation plans and strategies as well as initial lessons learned from the starting phase of implementation.

Summary assessment of Outcome 4:

The raising awareness component progressed well, although it was negatively affected by the COVID-19 restrictions. Consequently, the project has not reached the mid-term target but it can be assumed that once the restrictions are lifted the project could proceed towards reaching the EOP target.

The sub- component on dissemination of information and knowledge sharing performed well. The project used several innovative ways of preparation of materials for education and information dissemination by using both online media as well as printed materials. The project public awareness activities were tailor made to a variety of target audiences ranging from government officials to general public.

Based on the above findings, the progress towards achievement of the end-of-project targets for Outcome 4 is rated Satisfactory (S).

Table 8: Achievements related for assessment towards the Project Objective

Project Objective: To reduce/eliminate the use of mercury in the Indonesian ASGM mining sector through provision of technical assistance, technology transfer, establishment of public private partnerships and facilitating access to financing for the purchase of Mercury-free processing equipment.			
Indicators	Mid-Term Targets	Status at MTR	MTR Rating
5 new partnership mechanisms with funding for gender friendly and sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national level	2 new partnership mechanisms with funding for gender friendly and sustainable management solutions of chemicals and waste established at national and/or subnational level	Draft Cooperation Agreement with Bank Rakyat Indonesia (2020) Proposal for partnership with PT ARI (2020)	S
169,622 direct project beneficiaries (67,849 females and 101,773 males) for which the risk of mercury exposure has been reduced	101,773 direct project beneficiaries (40,709 females and 61,064 males) for which the risk of mercury exposure has been reduced	No relation of the mid-term target to progress in implementation	N.A.

Assessment of progress towards the Project Objective:

The project has advanced work on establishment of a Cooperation Agreement with Bank Rakyat Indonesia (BRI) on establishment of a loan scheme for ASGM entities in the project areas that would provide funding to ASGM operators for equipment purchase for non-mercury technology. At the MTR stage, the Cooperation Agreement with BRI was still under development and has not been formally put in operation. The primary reason, already discussed under Outcome 2 above, is the general reluctancy of financial institutions to extend financing to ASGM sector due to continued perception of ASGM by as a high-risk sector and lack of regulatory guidance for ASGM lending from the national Financial Services Authority (OJK).

A specific reason is that due to the COVID-19 social distancing regulations, the BRI does not want to progress towards formal conclusion of the Agreement through virtual discussion modalities and platforms.

In April 2020, the project held a meeting with two companies associated under PT¹⁰ ARI (PT ANTAM & PT ANTAM Resourcindo) with the aim to establish a partnership facilitating route to gold markets for the project ASGM communities.

PT ARI has a number of requirements that a local source of gold has to fulfil, including that location must own WPR and ASGM operators must have IPR and AMDAL permits. Furthermore, a MoU is required between PT ANTAM and local cooperatives who manage the miners as well as a supporting letter from the local government and a declaration that no mercury is used in the gold ore processing. At the MTR stage, the project was about to link PT ANTAM with one ASGM cooperative in the Obi island that is on the verge to fulfilling all conditions laid out by PT ANTAM.

By the above work, the project has made significant progress towards the mid-term target of two partnerships but has not reached the target yet as the partnerships have not been operational. Further work with at least three other institutions will be required to reach to end-of-project target of 5 established partnerships.

Annex Q of the Project Document provides a table for estimation of the total number of the project direct beneficiaries. The estimation is based on data from the National Statistic Agency (BPS). As three of the original project sites had been replaced by new sites, this estimate was updated based on the number of beneficiaries from the actually supported project sites.

The mid-term target for the number of direct beneficiaries with reduced risk of mercury exposure is based on a pro-rata calculation of the total number of inhabitants of the villages supported by the project. The value of the mid-term target is not related to the implementation progress and it does not have any meaning for tracking progress in implementation. Therefore, assessment of progress for the second Objective Indicator was not possible.

Issues to be addressed by the end of the project

The project theory of change is based on combination of three distinct approaches, namely education of ASGM stakeholders, formalization of the educated ASGM groups and transfer of the non-mercury ore processing technology to the formalized groups.

The most visible progress has been achieved on the education part through organization of series of training and awareness workshops as well as implementation of an awareness raising campaign specifically targeting audiences with the highest potential impact on reduction of mercury use in ore processing.

There has been some progress on formalization of ASGM and village groups but these efforts have been slowed down by lack of harmonization between different regulations and lack of

¹⁰ Perseroan Terbatas (PT), also known as a foreign investment limited liability company, is a business entity that allows foreign investors to conduct commercial activities in Indonesia.

clarity about authority to issue mining permits after the recent promulgation of the revised Mine Law.

The technology transfer part has been the least successful of the three approaches as the achievements by the MTR stage have been limited to development and official approval of prototype of the equipment for the cyanidation technology. Field testing of the equipment had to be postponed due to Covid-19 travel restrictions and was initialized around the end of the MTR data collection period.

It is the opinion of the MTR team that for the remaining period of the project, the implementation should increasingly focus on the technology transfer part and address a number of technical and economic issues that are discussed in the text below.

In the pre-MTR period, the project supported development of a prototype of a small-scale mobile ore processing equipment based on the cyanidation technology. The prototype has been officially approved by BPPT and released for field testing in a selected project location.

The estimated cost of the mobile processing equipment is 20 million IDR (about 1,400 US\$), including both capital and operational cost. Although a preliminary techno-economic analysis suggests a relatively fast return of the investment (about 3 months), it is expected that for acquisition of the equipment, miners will be able to pay only about 10% of the cost and will have to seek the remaining capital and operation cost from a loan facility. Given the slow progress of Component 2 of the project on access to finances, it is doubtful whether there is enough remaining time in the project to move the small-scale processing equipment beyond the initial demonstration stage into extensive roll out to the miner groups.

So far, the project has educated ASGM miners about negative health and environmental impacts of the mercury use and about potential non-mercury alternative cyanidation technology. This is not sufficient to convince miners for the technology switch. Additionally, miners will have to fully understand effectiveness and efficiency of the ore processing technologies as the economic factors are those that can convince miners to abandon mercury use from the ore processing. This will be done through various trainings scheduled for 2021-2022 under component 3.

Since miners do not have the capital and skills to operate their own processing facility, they take their ores to processing centres. In the surveys conducted in the 6 project locations, the respondents did not report any attempts on quantification of the concentration of gold in ore. Lack of analysis of ore grade means that miners are unaware of the real effectiveness and efficiency of the amalgamation processing technology.

The prevailing method of ore processing is the whole ore amalgamation (i.e. without pre-concentration). As a result, only a certain portion of the gold (usually up to 40%) is produced and collected by the miners while the owners of the processing centres keep the mercury-amalgamation tailings that contain the remaining sizeable portion of the original gold, for further processing by leaching with cyanide.

If analysis for gold content in the ore is performed before amalgamation and also in the amalgamation tailings, miners would be able to realize that there is a substantial leftover of gold in the amalgamation tailings that is acquired by owners of the ore processing centres. If

miners can learn how much more gold could be extracted from their ores by a more effective business model, economic losses from the inefficiency of the amalgamation could be the clear and convincing incentive towards wholesale abandonment of mercury and the desirable processing technology change.

There are only modest capital requirements to make an alternative business model fair and trustworthy. In order to get correct results of the ore assay, the sample of the ore for analysis has to be homogenous through crushing. The project could either support provision of small crushers to the ASGM groups that are already in receipt of micro-grants or provide the crusher to selected service providers in 1-2 of the project locations¹¹. One option is to have an independent intermediate entity, e.g. a service provider under BPPT that would provide the crushing and homogenization of the ore as well as the analytical services. Involvement of an independent entity in the scheme would build trust and confidence of the scheme participants. Based on the results of the ore assay, miners would sell the ore to the processing centres so processing of the ore would be done by a single entity. Because the processing centres use only leaching of the ore by cyanide, this scheme would bring large-scale elimination of mercury from the ore processing. Also, miners will receive more money in the same time as if they amalgamate the whole ore but without the negative health and environmental effects from using mercury.

The project should also make attempts to make more qualified estimates of actual amounts mercury avoided. This could be achieved through collection of information about number of ore extraction units per site, amounts and production of ore per extraction unit, the number of processing units per site and the typical throughput of each processing unit.

Project Implementation and Adaptive Management Arrangements

This section of the MTR report provides assessment of the seven components of the project implementation and adaptive management, namely management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation, management of risks, stakeholder engagement, as well as reporting and communications.

Management arrangements

The project was designed for implementation under the UNDP National Implementation Modality (NIM). The Government of Indonesia, not being signatory to a Standard Basic Assistance Agreement (SBAA) with UNDP, agreed that the Standard Supplemental Provisions to the Project Document apply to the assistance provided.

The GOLD-ISMIA project is implemented by the Ministry of Environment and Forestry (KLHK) that becomes the National Implementing Partner and executes the project on behalf of the GoI. The Director for Toxic and Hazardous Substances Management at KLHK was nominated as the National Project Director (NPD) while the Director of the Centre for Mineral Resources Development Technology at the Agency for the Assessment and Application of Technology (BPPT) was assigned the function of the Deputy National Project Director.

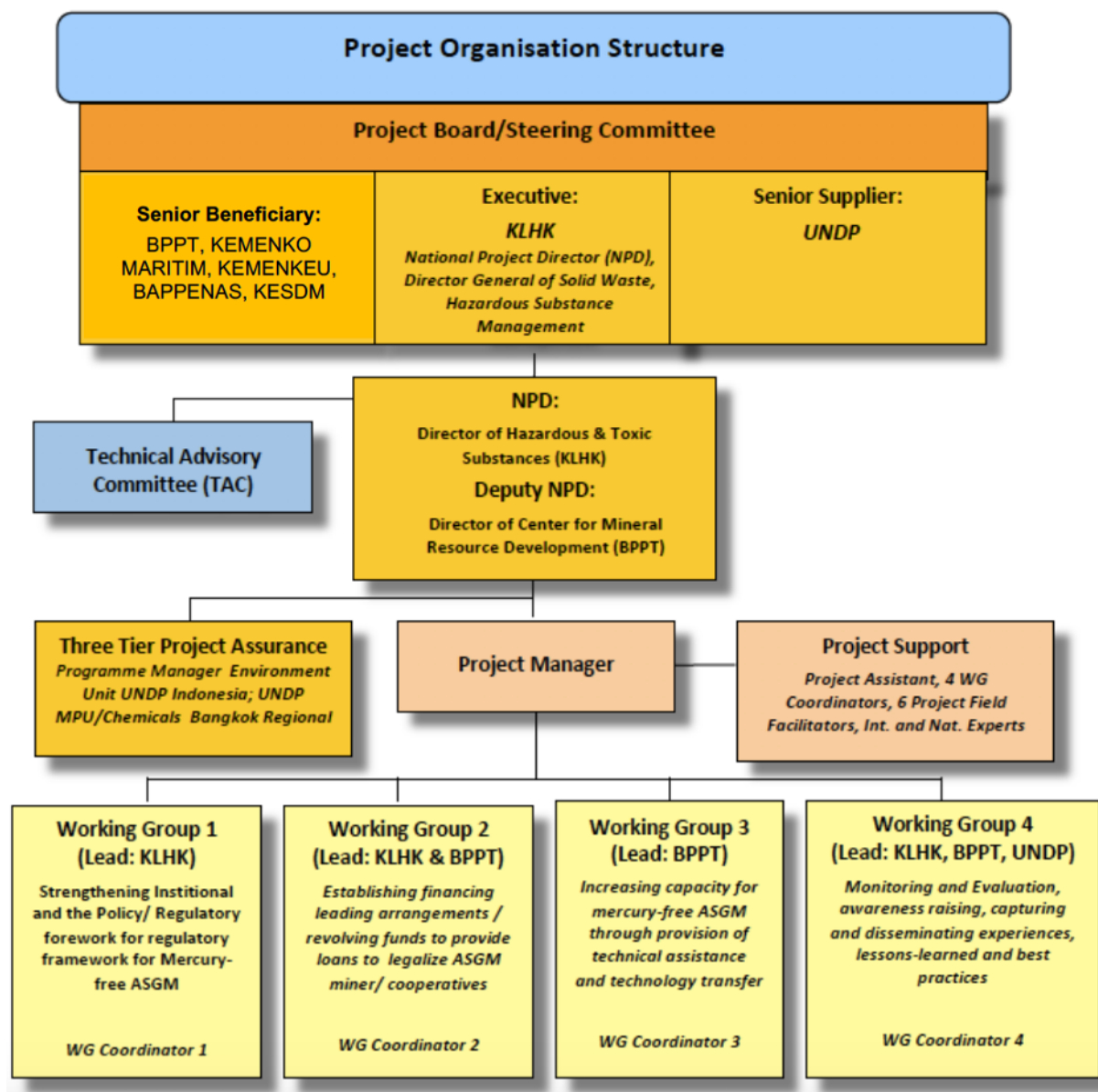
¹¹ Reportedly, a small jaw crusher would cost between 3,000 to 5,000 US\$.

On basis of a Standard Letter of Agreement for Provision of Support Services (Annex J of the Project Document), the UNDP CO may provide the following specific services to the project:

- identification and recruitment of project personnel and technical experts,
- identification and facilitation of training activities,
- procurement of goods and services, and
- any other type of activities/services per UNDP universal/local price list

The project organization structure defines several agencies of the GoI as the Senior Beneficiaries, while UNDP assumes the role of the Senior Supplier. Figure 1 below shows the key elements of the project organization structure.

Figure 1: Project Organization Structure



Project Board (PB) has been established to provide overall strategic direction and general oversight to the project implementation. The PB membership, established at the Inception Workshop, include the following individuals and organizations:

GEF Operational Focal Point (OFP)

Director of the Management of Toxic Hazardous Materials, KLHK

Director of the Center of Mineral Resources Development Technology, BPPT

Director of Multilateral Foreign Funding, Bappenas

Director of the Environment, Bappenas

Director of Loans and Grants, Ministry of Finance

Director of Engineering and Environmental Minerals and Coal, (MEMR)

Assistant Deputy for Infrastructure, Mining and Energy, Coordinating Ministry of Maritime Affairs

The actual PB membership is in line with the plans outlined in the Project Document. The overview of the Project Board meetings is in Table 9.

Table 9: List of PB meetings

Meeting Date	Remark
25 March 2019	Inception Workshop
26 June 2019	Physical meeting
4 February 2020	Physical meeting
3 February 2021	Physical meeting
July 2021	Tentative

According to the Project Document, the expected frequency of the PB meetings was 2 meetings/year. This plan was maintained throughout 2019 but only one PB meeting was organized in 2020 leaving interval of 16 months between the two consecutive PB meetings.

Based on the review of the minutes of PB meetings, the MTR team found that the PB duly executed its main functions through provision of senior level guidance to the project, review of the implementation progress, as well as authorization of the use of the project resources through approval of annual work and financial plans. Through its membership, the PB also ensured essential interactions and communication amongst the key project stakeholders.

Project Management Unit (PMU) has been established for day-to-day management and implementation of the project activities. PMU is led by the Project Manager (PM) appointed by the KLHK with prime responsibility for production of the results specified in the Project Document to the required standard of quality and within the specified constraints of time and cost. The PM is supported by coordinators of the Working Groups.

Four Working Groups (WGs) have been established to support implementation of the individual project Components. A matrix management system has been applied for sharing responsibility for technical lead of the WGs as shown in Table 10 below.

Table 10: Leadership and main focus of the WGs

WG	Lead Agencies	Main Focus
1.	KLHK	Policy, regulation and institutional setup for mercury phasing out action
2.	KLHK, BPPT	Training, public awareness and policy review on promoting nonmercury base investment, capacity building, training for setting up cooperatives/village-owned companies
3	BPPT	Capacity development and institutional arrangement for mercury-free gold processing, awareness raising on mercury impacts on human health, environment
4	KLHK, BPPT, UNDP	Monitoring, evaluation, knowledge management, reporting and communication

Inception Workshop (IW) was conducted on 26 March 2019. It was preceded by a preparatory meeting attended by representatives of the key Indonesian agencies (KLKH and BPPT), the UNDP CO and the Bangkok Regional Hub (BRH) as well as representatives of the GEF Secretariat, and the GOLD-ISMIA PMU. The workshop was attended by about 120 participants and was followed by a two-day field trip to one of the project sites, namely Kulon Progo regency in Yogyakarta special region in Central Java.

The IW was organized 6 months after the official start of the project (marked by the signature of the Project Document by the implementing partners). This is slightly longer than the required standard 3-month period for GEF projects. The delay was reportedly caused by the need to accommodate all required participants, in particular stakeholders from the selected project field locations and from abroad, such representatives of the GEF Secretariat (based in Washington) and the UNDP RTA based in the Bangkok Regional Hub.

The Inception Report prepared after the IW shows that the IW fulfilled its purpose and ensured to inform a broad range of stakeholders about the project as well as to facilitate discussion about their roles in the project and about salient technical issues.

The MTR team considers that the established project governance and management arrangements are adequate for the size and level of complexity of the project. Therefore, **the project management arrangement component is rated Satisfactory (S).**

Work planning

In consultation with the relevant stakeholders, the PMU prepares Annual Work Plans (AWP) as a basis for implementation of activities and utilization of the project resources. AWP were developed in line with the targets and time frames of the project results framework. The AWP uniform tabular format included the project Outputs, planned activities, quarterly timeframe, and responsible parties for their implementation, as well as related budgetary allocation. The draft AWP were presented to the Project Board meetings in the respective years and were duly reviewed and approved by the Project Board.

The MTR team reviewed the AWP for the years 2018, 2019, 2020 and 2021 and found them sufficiently detailed not only for the work planning but also for use as monitoring tools to track progress in the project implementation.

Based on the above, the MTR team rates the project work planning **Satisfactory (S).**

Monitoring and evaluation

The Project Document states that the project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

The project performance monitoring and evaluation has been conducted at several levels in line with the UNDP Programme and Operations Policies and Procedures (POPP) and the UNDP and GEF Evaluation Policies.

Project Implementation Review (PIR): The GEF M&E policy requires the PIR to be compiled on annual basis for each GEF fiscal year and therefore cover the reporting period from July (previous year) to June (current year) for each year of the project implementation.

Until the MTR, only one PIR was prepared that covers the period from the start of implementation until June 2020. The contributions to the PIR were provided by the NPM, the UNDP CO Programme Officer, the national Implementing Partner and the UNDP RTA. There was no contribution to the PIR from the GEF OFP.

The MTR team found the PIR is in line with the standard GEF PIR format with adequate level of details in narrative descriptions of achievements during the reporting period, as well as justified ratings of progress in project implementation and of overall progress towards the project development objective. The reviewers also noted systematic compilation of progress data on the Output and Outcome Indicators as agreed in the project results framework. Apart from the reporting purpose, the PIR also served the purpose of an operational monitoring tool.

GEF Focal Area Tracking Tools (TT) were prepared by the project team at the project inception and at the MTR stage. The TT at MTR stage was prepared following a new format that contains information on two core indicators, namely quantity of mercury reduced and number of direct beneficiaries (disaggregated by gender) as a result of the project.

Mid-Term Review was planned to start after the 2nd PIR has been submitted to the GEF with planned submission of the MTR report to the GEF in the same year as the 3rd PIR. In reality, the MTR was initiated in 4Q of 2020, i.e. after submission of the 1st PIR. The delay was caused by the slow start of the project. The ToR, the MTR process and the required outline of the MTR report follow the standard templates and guidance for GEF-financed projects. The MTR team appointed by the commissioning unit is composed of one International Consultant and one National Consultant. Both consultants are independent from the organizations that had been involved in the design, execution or counselling on the project. The MTR report will be submitted in April 2021, i.e. before the submission deadline for the 2nd PIR. The MTR findings and recommendations will be incorporated for implementation in the remaining period of the project's duration.

Terminal Evaluation (TE) is planned to start three months before operational closure of the project upon completion of all major project activities. This arrangement will allow to conduct the data collection while the project team is still in place, yet ensuring the project is close enough to completion and will allow the TE team to collect information on the level of achievement of the planned results and reach conclusions on the project sustainability.

In regard to budgeting for M&E, there is inconsistency in the Project Document. While Table 3 in the ProDoc shows total indicative cost of M&E at 141,000 US\$ (with 89,500 US\$ planned from the GEF grant), Annex X figures the same at 40,000 US\$ only. It is the opinion of the MTR team that the latter figure in Annex X is underestimated as it could not cover costs of both MTR and TE. Consequently, the project had to propose additional budget for the TE.

Based on the above, the monitoring and evaluation of the project is rated **Satisfactory (S)**.

Identification and management of risks

Annex H of the Project Document contains a risk matrix with 8 risks identified during the preparatory phase of the project. The matrix is composed of the risk description and type, assessment of risk impacts and probability (both rated on the 5-point scales), related mitigation measures, as well as owners of each identified risk. The summary of the identified risks is in Table 11 below.

Table 11: Summary of identified risks

No.	Risk Description	Risk Type	Risk Rating*
1	Lack of coordination between relevant institutions/ministries as well as activities/programmes in the same areas as the project (ASGM)	Political	P = 1, I = 3
2	Miners have uneasy communication with government agencies and entities that may hamper the active participation of miners in the project	Political	P = 4, I = 2
3	Economic incentives perceived too low to adopt and replicate BEP/BAT practices resulting in continued polluting practices	Financial	P = 2, I = 3
4	Delay in the implementation of project activities due to the time it takes to obtain permits/licenses	Regulatory	P = 4, I = 2
5	Local conflict (e.g. organized crime) hampers sale of gold through legal channels	Other	P = 2, I = 3
6	Release of hazardous pollutants to the environment due to (non-) routine circumstances and the generation of hazardous waste with the potential for adverse local, regional, and/or transboundary impacts	Environmental	P = 5, I = 3
7	The Project could potentially cause adverse impacts to and/or involve changes to the use of habitats (e.g. modified, natural, and critical habitats) and/or ecosystems, ecosystem services and livelihoods	Environmental	P = 2, I = 2
8	Occupational health and safety risks and vulnerabilities due to physical and chemical hazards during project operation or support for employment/livelihoods that may fail to comply with national and international labour standards	Regulatory	P = 3, I = 2

* P – probability, I – impact

By virtue of standard procedures, critical risks (defined by concurrent high ratings of probability and impact) are recorded in the UNDP Atlas database and periodic re-assessment of risks and further management of critical risks is part of the annual PIRs.

The MTR team found the initial identification of risks and mitigation measures reasonable and sufficiently detailed. However, the reviewers consider the probability and impact of Risk #3, as well as the impact of Risk #4 underrated as the two risks should have been classified as critical risks and should have been further monitored and addressed during the project implementation. Two additional risks were identified in the 1st PIR and marked as critical, namely a risk of delays related to the COVID-19 pandemic outbreak and a risk of loss of institutional knowledge due to staff rotation in local governments.

The project team has already effectively mitigated the risk of delays due to the pandemic outbreak by several mitigation measures, such as conducting online meetings, hiring local facilitators and consultants in the project locations as well as optimizing use of online platforms for intense communication with the project beneficiaries and dissemination of information about progress in implementation.

For retention of the institutional knowledge, the project team plans to conduct follow-up trainings to ensure the local government staff have capacity and knowledge about ASGM and in particular about the proposed training materials.

Based on the above, the MTR team rates the identification and management of risks as **Moderately Satisfactory (MS)**.

Finance and co-finance

The tables below provide a summary of resources allocation for the project and of level of disbursement of the GEF grant funds as well as the estimated actual amount of co-finance up to MTR.

Table 7 below displays breakdown of the GEF project grant disbursements into the project components.

Table 12: Allocation and disbursement of GEF funds (as of 31 December 2020)

Component	Budget (US\$)	Expenditures (US\$)				Delivery
		2018	2019	2020	2018-2020	
Outcome 1	645,500	3,230.73	203,625.31	319,133.53	525,989.57	81.49%
Outcome 2	2,155,000	0	164,889.32	420,537.09	585,426.41	27.17%
Outcome 3	2,782,000	689.70	466,410.85	592,889.02	1,059,989.57	38.10%
Outcome 4	817,500	0	205,422.24	249,723.23	455,145.47	55.68%
Project Management	320,000	0	72,247.17	118,273.50	190,520.67	59.54%
Project Total	6,720,000	3,920.43	1,112,594.89	1,700,556.37	2,817,071.69	41.92%

The data in Table 12 shows that as of 31 December 2020 the total disbursement of GEF grant was 2,817,071.69 US\$ corresponding to the overall rate of the GEF grant implementation 41.92%. Given the fact that as of February 2021, the project stands half-way through the implementation period, the overall implementation progress is below the optimal 50%. The rate of delivery was negatively affected by imposition of countrywide regulations on social distancing related to the COVID-19 outbreak. Training and awareness activities in the project field locations had to be postponed while several meetings and group discussions had to be shifted to virtual communication platforms and contributed thus to lower than planned expenditures.

The rates of implementation for the individual project components reflect the achieved progress towards the project targets. The relatively higher implementation rates for Components 1 and 4 signpost the early achievement of some of the targets on institutional strengthening and public awareness raising (see Tables 4 and 7 and related text).

The budget allocation of 320,000 US\$ on Project Management is less than 5% of the total GEF grant. Although the planned project management structure was not completely in place since the project start and few positions were not filled for several months, the PM component shows relatively higher rate of implementation (60% at the project mid-point). This is probably result of underestimation of the costs for the relatively complex project personnel structure during the project preparation.

The project Combined Delivery Reports (CDRs) indicate strong control over the budget by UNDP and the annual workplans show that budget revisions are being made to best suit the project interests while aligning with the GEF and UNDP budgeting rules and regulations. The MTR team did not find any serious issues related to the financial management of the project and consider the current financial controls for disbursement of the GEF funds sufficient.

For parallel co-financing, the project team has established a monitoring system based on compilation of the expenditures from the state budget that the individual governmental agencies allocated for support of the project in line with the national priority programme on mercury reduction and elimination. The established monitoring system allows to track expenditures by purpose.

The data on parallel co-financing are summarized in Table 13 below.

Table 13: Allocation of co-financing for the project by funding source (as of December 2020)

Stakeholder	Co-financing (US\$)	
	At Inception	At MTR
UNDP	112,000	48,000
Ministry of Environment and Forestry	11,434,774	5,919,515
Agency for Assessment and Application of Technology	6,865,491	1,921,429
Ministry of Energy and Mineral Resources	160,235	134,999
Ministry for Maritime	451,128	131,359
Ministry of Health	6,574,527	4,845,961
Ministry of Communication and IT	2,725	2,000
Indonesian Artisanal Mining Association	3,000,000	2,352,500
Total Co-financing	28,600,880	15,355,762

Data displayed in Table 13 indicates that the total co-financing at the MTR stage stands at 15,355,762 US\$ that is 53.69 % of the co-financing that had been pledged at the project inception.

The relatively high co-financing commitment of the GoI made at the project inception (confirmed by means of official co-financing letters provided to UNDP) as well as good progress in actual co-financing at the MTR stage are considered an important indicator of strong ownership of the project by several key project stakeholders. The detailed monitoring of progress in actual co-financing expenditures shows good level of monitoring by the project team.

Based on the above, the rating for the finance and co-finance is **Highly Satisfactory (HS)**.

Stakeholder engagement

During the project preparatory phase, a simplified stakeholder analysis was conducted that provided an overview of the main project stakeholders, their interests in relation to the project itself, their influence on the project as well as importance for the success of the project. The Project Document presents results of this analysis as a table including the stakeholders' names and their respective roles. However, this list does not comprehend the differing positions of the identified stakeholders, namely the distinction between core (involved) and supporting or peripheral stakeholders.

The principal entry point for continuous engagement of core stakeholders has been establishment of the Project Board with membership of the two national Implementing Partners (KLHK and BPPT) and four other agencies of the GoI. Although the Indonesian Community Miners Association (APRI) due to its mandate to represent interests of small-scale miners was identified as the project stakeholder, it is not represented on the PB.

Due to intense engagement and cooperation of KLHK and BPPT, the national ownership of the GOLD-ISMIA project appears to be very strong. Notably the support for development of the Sub-National Action Plan on Mercury Reduction and Elimination led to increased coordination among the central government ministries and sub-national authorities and helped to ensure their commitment required for fulfilling the obligations under the Minamata Convention.

Furthermore, engagement of local stakeholders and project beneficiaries is established through involvement of the project Field Facilitators (FF) that ensure day-to-day follow-up on all aspects of the project at the project field location level and act as effective liaisons for interactions with local government entities (district & village level) and project beneficiaries in the 6 project priority sites.

Based on the above, the evaluators rate the stakeholder engagement in the project formulation and implementation as **Satisfactory (S)**.

Reporting and communication

Reporting during project implementation helps to identify potential issues that may endanger the project's capacity to achieve its development objectives. Reporting also helps to make informed decisions, offers valuable information for project evaluation, and provides lessons to be learnt for future projects. Effective and timely communication between the PMU and the core stakeholders is a key element in that respect.

In addition to the project-related reports that are discussed above, the project prepared three biannual Project Assurance Reports (PAR) in the standard UNDP template.

The project has used a number of channels for communication with its stakeholders that are listed above under Outcome 4. The progress in the project implementation is communicated to national stakeholders through the project website while communication to the international community is performed through the planetGOLD website. The outside communication becomes very important in relation to demonstration of early results of the ISMIA project and sharing of experience with other GEF programmes.

In addition to two respective videos informing about the GoI support for reducing or elimination of mercury from ASGM sector and on the GOLD-ISMIA implementation progress update, the project also supported production of a series of 3 comic books informing the youngest audiences about the adverse health impacts of mercury in ASGM.

The project also maintains a strong communication channel with the GEF project on development of Minamata Initial Assessment and National Action Plan for ASGM in Indonesia (NAP project). Such strong communication is possible due to the fact that KLHK is the Implementing Partner for both GOLD-ISMIA and NAP projects. The NAP project supports collection of sub-national data on the ASGM sector (such as number of people working in the sector, amounts of mercury used, estimates on gold produced) and development of a national strategy for reduction of mercury use. These data are valuable for the GOLD-ISMIA project conducting concrete activities on mercury reduction or even elimination. Strong communication channel between the two projects helps to minimize overlap and avoid duplication of activities.

Based on the above assessment of the 7 components above the overall rating Project Implementation & Adaptive Management rating is **Satisfactory (S)**.

Mainstreaming

Gender mainstreaming has been an essential element of the GOLD-ISMIA project as it aims at integrating gender equality concept into ASGM policies and promote equal and inclusive access to financial services and capacity building events.

Gender analysis was conducted during the project preparation phase of this project and the findings were integrated into the project strategy, theory of change and the project results framework.

The original plan to recruit a Gender Officer/Expert as defined in the Project Document was changed and activities on gender mainstreaming are coordinated by the Gender and Community Development Associate that was appointed in March 2020. The main activities completed by the MTR stage include the following:

- Mapping of gender condition in ASGMs in the 6 project locations,
- Compilation of a gender policy brief (Vol. 1) to build gender awareness in ASGM-related policies and regulations,
- Publication of several articles on women involvement in ASGM,
- Training on Gender Mainstreaming for central and regional government institutions,
- Establishment of a gender-responsive village in Kuantan Singingi regency

Gender mapping in ASGM in the 6 project areas was finalized in order to inform development of policies and assessment of several pillars for women's empowerment, including economic opportunities, political empowerment, educational attainment, as well as health, safety and environment. The result of gender mapping showed that women and men have distinct but complementary roles and tasks in the gold production and marketing while the benefits from these activities are controlled almost exclusively by men. The gender mapping study further established that due to gender discrimination in accessing financial services and technology,

women remain seriously under-recognized for their vital contributions to the ASGM value chains. The study concluded that gender focussed issues and practices in ASGM management can be contained in a wide variety of regulations, cultural norms and community practices.

Review of 13 policies and regulations conducted under the project revealed absence of laws and policies concerning gender mainstreaming in ASGM. To address this issue, the project has developed a policy brief on gender in ASGM with the aim to convince national policymakers and local government authorities of the importance of gender mainstreaming and of the urgent need to take action.

Total 30 staff from KLHK and BPPT, including 12 women, were trained on gender mainstreaming and gender-responsive budgeting. The participants were sensitised with tools and strategies available to ensure effective consideration of gender sensitivity in government programmes for development of mercury-free technology and management of ASGM.

The project has also developed a module for gender sensitization in ASGM that was used throughout the capacity building activities in order to enhance capacity of government entities in understanding a gender equality and equity principle and a concept for community development based on inclusive participation. This approach has resulted in consideration of gender issues in formulation of the Regional Action Plan on Mercury Reduction and Elimination in Gorontalo Province.

The project recruited consultants for elaboration of the concept of gender-responsive village based on the idea to encourage village authorities to promote gender balance in their institution and the community level. Based on the concept, a gender-responsive village was established in the Kuantan Singingi regency under cooperation with the Ministry of Women Empowerment and Child Protection and has been included as part of the programme for achievement of the rural SDGs.

The project's comprehensive approach for gender mainstreaming reflects the dedication and commitment for gender equality that the Indonesia UNDP CO adopted in all its operations, programming, communication, and reporting.

Sustainability

The sustainability is defined as continuation of benefits from an intervention after the development assistance has been completed. The important aspect here is the sustainability of results, not necessarily sustainability of the activities that had produced the results. The assessment of sustainability requires evaluation of risks that may affect the continuation of the results.

The Project Document stipulates that sustainability of the project results beyond the project duration will be ensured through implementation of the project *per se*, that is through strengthening the institutions and the policy and regulatory frameworks for the ASGM sector, through establishment of financial lending mechanisms for formalized ASGM miner groups, through provision of technical assistance, technology transfer and support for formalization, as well as through awareness raising and dissemination of lessons-learned and best practices resulting from monitoring and evaluation.

In general, the project interventions have the potential to ensure long-term sustainability of results. However, in order to fulfil this potential, due consideration should be given to the serious risks and challenges that are discussed in the text below.

Financial sustainability

At the mid-term stage of the project implementation, lack of access to financial resources remains one of the main barriers to reduction of mercury use in the ASGM sector. Apart from equipment procurement, financial resources are also needed in the process of application for IPR by the legally registered mining groups and/or village cooperatives. Last but not least, there is still persistence of limited capacity among the mining communities for development of bankable projects.

The project has made significant progress towards design and prototype construction of the small-scale gold processing equipment based on the cyanide technology. Since the construction of this equipment is based on locally available materials and a simple design not requiring sophisticated construction skills, the processing equipment can be self-made by the mining groups with relatively modest capital cost and simple maintenance. The project has also catalysed changes for simplification of regulations that modify the EIA part of the IPR application process into a simpler less demanding format that will be more affordable to ASGM mining communities.

Through technical trainings planned for the remaining implementation period, the project can further build capacities the mining groups for preparation of loan applications to financial institutions. Although several innovative financial mechanisms for ASGM financing the were developed and proposed, the poor ratio between financial risks and returns continues to stand as the greatest obstacle to extensive and scalable engagement of financial institutions with the ASGM communities.

It appears that one of the biggest challenges in attracting investment to ASGM in the selected project areas is lack of ability of the local financial partners to quantify and embed risk assessments into the proposed financial mechanisms. The Project Document envisaged partnering with banks, (micro) financial institutions and other lenders to make financing for the purchase of mercury-free processing equipment/investments available. Until the MTR stage, activities in this regard were limited to discussing partnership modalities (e.g. drafting MoUs) and participation of representatives of local financial partners in project trainings with wider scope than just financing topics. Apart from the support for development and improvement of financial products for the ASGM sector, the Project Document also envisaged strengthening capacities of financial entities to undertake financial risks characterization and assessment but not much has been done in this regard.

Another issue worth consideration is the type of co-operatives to be advocated and supported by the project. Anecdotal cases of village cooperatives in the project site locations able to receive small loans for agricultural production activities but not for ASGM prove that support for creation of mining cooperatives that are similar to co-ops in other sectors will probably not solve the problem.

As discussed under progress towards Outcomes (Component 2), progress towards availability lending for ASGM has been slow due to lack of guidelines from OJK. Although provision of such guidelines could be helpful, the problem will probably not be fully solved unless it is addressed through more targeted interventions with the financial partners at the local level as outlined above.

Based on the above, financial sustainability of the project results is rated **Moderately Likely (ML)**.

Institutional framework and governance sustainability

The existing institutional framework for ASGM policy making in Indonesia has been relatively strong as a result of continued international development assistance. Over the last decade, GoI has established conducive policies and regulatory frameworks. Interviews of the key project stakeholders confirmed that the ownership of the project at the institutional level is high and serve as evidence of the strong support to the project key institutional stakeholders, such as KLHK, BPPT, KESDM, Bappenas, in line with Indonesia's commitments to the Minamata Convention expressed in Law 11/2017.

Consequently, the project has made a tangible contribution to implementation of the ASGM-related policies and regulations at the national as well as provincial level, such as the support for development of the sub-national action plans for mercury reduction and assistance for improvement of the existing policy and regulatory frameworks on ASGM formalization and mercury phase-out through submission of substantive recommendations to relevant ministries.

The most important fact with regard to sustainability of institutional frameworks and governance is the prioritization of mercury reduction in ASGM on the agenda of the national as well as sub-national governments after ratification of the Minamata Convention. With the ratification, the attention to the mercury reduction increased as the country moved to fulfil the obligations outlined by the Convention. Ratification of the Minamata Convention shortly before the project approval also created a strong ownership of the project and its results by the GoI. The national commitment to mercury reduction has been further strengthened through the fact that Indonesia was selected to host the COP-4 of the Minamata Convention later in 2021.

The project has contributed to harmonization of the existing laws and regulatory frameworks in relation to ASGM. However, due to the relative complexity of the legislative approval procedures involved, it is a gradual and, therefore, time-consuming process that will continue beyond the project completion. The same stands for the formalization efforts in the ASGM sector. Early successes on formalization of the ASGM groups during the project will serve as examples to follow for replication in the project areas and elsewhere.

Until the recently promulgated Mining Law Revision (Law 3/2020), implementation and enforcement of the policies and regulations related to the ASGM sector vested in sub-national authorities. The above Law reassigned the power for issuance of all types of mining licences to the central government with a provision for delegation of community-based mining licences to the sub-national level.

There is no doubt that the improved institutional and governance frameworks developed under the project will be sustained for use in the post-project period. However, lack of harmonization between the central legal frameworks (such as Law 3/2020) and local laws and by-laws pose a risk to sustainability of the ASGM formalization strategies.

Based on the above, the institutional and governance sustainability of the project results is rated **Moderately Likely (L)**.

Socio-economic sustainability

While the training and awareness raising events focussed primarily on negative health effects of mercury use in ASGM and on introduction of BAT/BEP into ASGM practices, the awareness strategy developed for the project included also delivery of more specific messages related to economic costs of gold processing techniques using mercury and socio-economic benefits of the alternative cyanidation technique. Furthermore, the project also delivered trainings and awareness workshops covering socio-economic dimensions such as education on health protection and capacity building on financial literacy for ASGM groups and village cooperatives.

As a result of the awareness raising campaign, ASGM stakeholders in the project field sites have now a more detailed understanding of negative health and environmental impacts of mercury. The project, therefore, already contributed the level of awareness of the key actors and created a solid fundament for realization of the required changes. However, it remains to be seen whether the socio-economic stratification of the ASGM stakeholders in the project field communities will be supportive to the behavioural change. Since ASGM is an important source of livelihood, some ASGM actors are still reluctant to reduce or eliminate mercury and this makes the acceptance of the project interventions less likely.

The consultant implementing the awareness raising activities of the project identified several factors inhibiting desirable changes in ASGM communities' behavior related to the use of mercury in the ASGM communities that are summarized in Box 4.

Box 4: Livelihood factors affecting attitudes of ASGM communities towards use of mercury

Factor	Description
Fast processing time using mercury	Products from the amalgamation process can be sold on the same day allowing ASGM actors to get daily income. Other techniques are known to take longer processing time.
Low investment and operational costs	The dissolution or immersion method could require higher initial investment and operational costs because of use of more chemicals that could be available at unstable prices due to monopoly of the local supply
Availability of mercury	Mercury is readily available due to illicit mercury circulation or ability to produce it locally from cinnabar rocks in mining areas
Invisibility of negative effects of mercury	Long-term nature of negative health and environmental effects of mercury does not create a sense of urgency for mercury elimination
Temporary workforce in ASGM communities	Many ASGM workers are temporary and not native citizens of the ASGM villages. Weak links to the ASGM communities do not build sufficiently strong intention for improvements in environmental and community health status.
Sense of dependency on senior decision-makers	Mining workers leave decisions on mercury elimination to the local owners of capital or village governments and remind the owners of capital to switch to more environment and health friendly processing techniques

Although the substance of the ban on the use of mercury in mining is contained in the Minamata Convention as stipulated in Law No. 11 of 2017, and the prohibition on the use of mercury is further stipulated in the Government Circulars of 2017¹², the supervision of implementation of these regulations appears to be insufficient. Weak enforcement of the existing regulations paves way to illicit mercury circulation and prioritization of economic factors by some ASGM actors regardless of the undisputed health hazards and environmental damages. Prioritization of the above livelihood factors by some members of the ASGM communities, particularly by capital owners, have a strong potential to make the interventions for mercury elimination ineffective and creates thus risk to the socio-economic sustainability of the project results.

Based on the above, the socio-economic sustainability of the project results is rated **Likely (L)**.

Environmental sustainability

The ASGM process frequently leads to degradation and contamination of the general environment. These environmental hazards have implications for the health and well-being of miners, surrounding communities as well as for the global environment. The most commonly cited ASGM-associated environmental hazards include land degradation, mercury emissions/pollution, siltation, erosion and water contamination.

Land degradation, in the form of clearing of large areas of forest and vegetation for gold ore mining results in short- and long-term environmental and health effects. The creation and subsequent abandonment of pits and trenches leave surrounding communities susceptible to loss of arable land, loss of livestock, shortages of clean water, as well as creation of stagnant water with malaria-carrying mosquitos.

Environmental degradation can also have a major impact on availability of food particularly where it affects agriculture, fishing, hunting and gathering, or other subsistence activities carried out to produce or procure food.

The above outlined environmental effects are related to the ASGM mining irrespective of the technology for gold ore processing. Therefore, the project has a neutral effect on physical degradation of the environment.

Distinctive stages of the mercury processing technology, namely the amalgamation, tailings processing, and gold recovery from the amalgam result in substantial environmental pollution by toxic chemicals.

Tailings from whole ore amalgamation contain significant amounts of mercury and gold. Reprocessing tailings with cyanide is a common practice in ASGM for recovery of gold that remains in the tailings. Such reprocessing, often performed by ASGM operators, is different from the mercury users, greatly exacerbates mercury pollution by releasing mercury to the environment as dissolved mercury-cyanide compounds that are more easily dispersed in waters and make mercury more bio-available. Also, tailings and waste from the reprocessing create heavily contaminated sites that are very difficult to clean up. Such sites continue to emit

¹² Minister of Energy and Mineral Resources Circular Number 6E / 32 / MEM.B / 2017 concerning the Prohibition of Using Mercury in Gold Mining dated April 21, 2017 and Circular Menkopolhukam Number: B-20 / Menkopolhukam / De-V / KM / 04 / 7/2017 concerning Illegal Distribution and Use of Mercury in Mining Activities dated May 14, 2017.

mercury to the atmosphere and contaminate the hydrosphere and food chain over prolonged times.

Releases of tailings containing mercury threaten contamination of groundwater, rivers and lakes. Mercury contaminated water used for irrigation leads to contaminated food crops, in particular rice. Elimination of mercury from ASGM thus helps to prevent direct consumption of mercury and uptake in crops and aquatic life. Further environmental benefits from mercury elimination include avoided need for remediation of mercury-contaminated soil that constitute large-scale challenges in ASGM areas.

The main positive environmental effect of elimination of mercury use in ASGM will therefore be avoided adverse effects on wider ecosystems that compromise food chains and biodiversity. Apart from prevention of damage, mercury emissions on algal and fish growth, its elimination will also reduce mercury bio-accumulation in the food chain.

The replacement of amalgamation for the gold ore processing by the alternative cyanidation method poses some issues related to environmental impact of cyanides in the tailings. Cyanide is certainly a deadly poison when ingested, inhaled or contacted in a sufficiently high dose but this health danger can be kept under control through controlling the pH of the extraction slurry.

Apart from the known toxicity to human health, cyanide itself is not inherently toxic to the environment. It tends to degrade when exposed to air or other oxidants usually producing negligible environmental consequences. Unlike mercury, cyanide does not accumulate in the food chain and does not give rise to chronic health or environmental problems when present in low concentrations.

Misuse and poor management of cyanide in ASGM could lead to safety hazards and local pollution in case of an accidental spill from the mining operations. To avoid damage to aquatic life, mines using cyanide need to prevent accidental spills and mitigate environmental damage if a spill occurs.

Based on the above, environmental sustainability of the project is rated **Moderately Likely (ML)**.

Based on the assessment of the categories above, the MTR team assigns overall Sustainability rating **Moderately Satisfactory (MS)**.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the previous section of the fact findings, this section synthesizes and interprets the findings into conclusions that make judgments supported by one or more specific findings. Recommendations are then specific actions the MTR team proposes to be taken by various project stakeholders that are based on the findings and conclusions.

Conclusion 1: Insufficiencies in the project results framework, in particular, poorly defined indicators and their target values, are not conducive to operational monitoring of progress towards achievement of the Outcomes and Objectives.

Recommendation 1: *The Project Management Unit (PMU) should discuss with the Implementing Partners revision of the project results framework in order to have measurable indicators and achievable end-of-project target values. The revised logframe should be put for approval by the Project Board.*

Conclusion 2: The design of the GOLD-ISMIA project based on the integrated package of interventions on institutional strengthening, access to finance, technical support, and awareness raising has the potential to catalyse a paradigm shift in Indonesian ASGM operations. By the MTR stage, good progress has been observed under the respective project components on institutional strengthening and awareness raising. The activities on access to finance and technical support have been slowed down due to the COVID-19 restrictions.

Recommendation 2: *In the remaining time of the project. The PMU should accelerate activities under Components 2 and 3 as access to financing and technical support are critical for achievement of the planned reduction in mercury use.*

Conclusion 3: Exploration is one of the most difficult aspects of ASGM, and in most cases, it relies on trial-and-error approach. Planning how best to extract a deposit helps to maximize the resource, minimize land use, and improve gold production, which, in turn, makes reducing mercury use more affordable and sustainable. However, micro-miners currently do not have any capability to test ore grade and to model their resource. Engaging with small-scale miners at the exploration stage could be an effective step supporting efforts to reduce and eliminate mercury use.

Recommendation 3: *The project Implementation Partners should consider cooperation with the Geological Agency of Indonesia for establishment of ore testing facilities in the project field locations for determination of concentration of gold in the ore.*

Conclusion 4: Profit is an important incentive for creating sustainable change in any ASGM operation. Evidence of mercury pollution and intoxication is not sufficient for convincing miners and processing centres to adopt cleaner mercury-free techniques to process gold ores. Interventions for mercury-free ore processing techniques produce the desired effect only if accompanied with opportunities for increased profits. An effective way to convince miners to switch to mercury-free techniques is to demonstrate economic consequences of the inefficiency of the whole ore amalgamation process.

Recommendation 4: *The PMU should ensure that trainings of the ASGM operators include practical demonstration of low efficiency of the whole ore amalgamation process and its consequences on profitability of the micro-miners' operations.*

Conclusion 5: Under the commonly employed business model based on whole ore amalgamation, the amalgamation tailings with sizeable concentration of mercury are left with the processing centres for further leaching with cyanide. Artisanal miners show limited understanding of the gold concentration of tailings. Amalgamation tailings is either 'thrown away' or sold, with cyanidation tailings discharged wherever possible. This is potentially leading to large losses of gold in waste material and is environmentally destructive as this process contributes to formation of mercury-cyanide complexes and thus exacerbates the level of environmental pollution through discharges of final tailings into the local drainages.

Recommendation 5: *The PMU should ensure training of the ASGM operators includes education about reprocessing of amalgamation tailings.*

Conclusion 6: There remains a major gap in understanding by ASGM communities about responsible small-scale cyanidation. Field testing of the prototype mobile mercury-free processing plant was delayed due to COVID-19 restrictions. This delay coupled with the continued lack of access to financing for ASGM groups poses a risk to wide roll out of the mobile processing plant. Failure to successfully deploy the mobile cyanide plant in the ASGM communities would hamper achievement of the target of reduction of mercury use before the end of the project.

Recommendation 6: *The PMU should intensify activities related to small-scale cyanidation in order to provide clear and customized guidance to the ASGM communities. In particular, the field testing and demonstration of the mobile cyanidation plant should be accelerated and should include collection and sharing the experience from the demonstration and early use of the mobile processing plant.*

Conclusion 7: Micro-miners have insufficient knowledge and skills in mineral prospecting. Financing for operations leading to access to new sources of gold (i.e. exploration and mine shaft development phase) is a high priority for ASGM groups. Without knowledge about new sources of gold, ASGM operators have little or no incentive for taking out loans for ASGM operations. Information about new sources of gold is also a critical requirement for development of compelling business plans with a clear value proposition and revenue model to attract financial institutions to roll out loan schemes to ASGM groups.

Recommendation 7: *The PMU should consider provision of support for specific capacity building on mineral prospecting including facilitation of access to relevant services and equipment, in cooperation with the Geological Agency of Indonesia.*

Conclusion 8: Some ASGM co-operatives established in the project field locations do not offer any management or assistance services directly related to ASGM operations to its members (as can be seen in co-operatives in other sectors such as agriculture). They mostly provide association and representation services, including a system for making tax payments for gold

production. Therefore, support to formation of cooperatives similar to co-ops in other sectors is not likely to be an effective for mercury reduction and elimination strategies.

Recommendation 8: *The PMU should intensify consultations with the project ASGM communities about ownership and structure of miner co-operatives for distribution of loans for ASGM operations. Such consultations should include owners of ASGM operations and local investors, if possible, the project should also consider support for personal or small-business loans to individuals who are legal ASGM operators.*

Conclusion 9: Emission of mercury vapour to the air is a serious public health problem as available reports prove very high mercury levels in the air in populated areas around processing centres and gold shops.

Recommendation 9: *The PMU should consider targeted awareness raising events about mercury pollution from burning amalgams including methods for preventing this pollution.*

Conclusion 10: Although the stakeholder engagement plan in the Project Document envisaged involvement of the Indonesian Artisanal Miners Association (APRI) in the project, in reality, there has been no visible engagement of APRI. The GOLD-ISMIA Project Board is constituted on exclusive participation of several line ministries and other agencies of the Government. Involvement of APRI could bridge the gap between the GoI and the target beneficiaries.

Recommendation 10: *The PMU, in cooperation with the GoI, should consider inclusion of APRI in the project activities including presence on the Project Board.*

Conclusion 11: Protracted deficiencies in the legislation could negatively affect effective implementation of efforts on mercury reduction beyond the duration of the current project. The Project Board should be considered as an interim body for coordination and oversight of mercury reduction efforts until an effective alternative will have been created and institutionalized to assume this responsibility.

Recommendation 11: *The Implementing Partners from the GoI in cooperation with UNDP should consider continued inter-ministerial coordination of activities on mercury reduction in ASGM under the National Action Plan on Mercury Reduction and Elimination (RAN – PPM), including consideration of temporary institutionalization of the ISMIA Project Board until official establishment of a permanent coordination body.*

Conclusion 12: The complexity of the issue of mercury reduction in ASGM operations proves to be very complex and therefore requiring intervention over a longer time than duration of the current GOLD-ISMIA project.

Recommendation 12: *The PMU, in cooperation with UNDP and the GoI Implementing Partners, should develop an exit strategy for the project to encourage strong commitment to sustainability. The exit strategy should include discussion with key GoI stakeholders for possibility of preparation of a follow-up project under funding from GEF-8.*

Conclusion 13: The gender indicators included in the project results framework measure only participation of women in different project activities but do not provide for measurement of effectiveness of the contribution to gender equality.

***Recommendation 13:** The PMU in cooperation with the UNDP CO should consider initiating a pilot assessment of the ways the ISMIA project interventions contribute to gender equality e.g. through monitoring the changes under the concrete case of establishment of the gender-responsive village. The results of the pilot assessment would serve as a basis for development of gender impact indicators for future programming.*

Lessons learned and best practices

The establishment of Field Facilitators (FF) proves to be a good example of a bridge between the central level of the project and its field site locations. The work of FFs helps to attract interest and commitment of local authorities for organization of training and awareness raising events. The FFs also serve as an effective and efficient tool for conveying the project support to mining groups in their formalization efforts, gaining access to financing and establishment of mercury-free processing plants.

Activities related to preparation and implementation of the gender-responsive village is a good practice for achievement of concrete results on promotion of gender balance in their institution and the community level. Cooperation with the Ministry of Women Empowerment and Child Protection increases visibility of the GOLD-ISMIA project as part of the programme for achievement of the rural SDGs.

Preparation of an awareness raising strategy for the project was based on results of the situation analysis, communication objectives, approaches, target audiences, key messages, and campaign implementation plans. The awareness raising campaign itself was then developed in line with an innovation adoption model that divided the target audiences based on their capacity to absorb information and translate it into action.

The campaign focussed on drum operators and level I gold collectors that are considered as the primary target audience. This division maximizes impact of the awareness raising as it focuses on ASGM operators that have important roles in selection of the method of whole ore processing and in conducting amalgamation and burning processes for production of gold of certain purity. Focusing on the primary audience with the highest risk of mercury exposure maximizes the impact of the awareness raising activities.

Provision of personal protective equipment (gloves to ASGM operators) complements the introduction of alternative technologies and awareness of the dangers of mercury also with awareness raising about personal safety through using PPE.

The reality of implementation of this project prove that the results' targets should be reviewed at the mid-term stage to account for actual realities on the ground and change of external conditions to make these more realistic and achievable. Indicators and targets for which the achievement is outside the control of the project, such as adoption of laws and policies and allocation of resources by external financial partners, carry high risk of non-achievement due to lack of contribution from external partners. Through provision of micro-grants to ASGM

cooperatives, the project made a provision for mitigation of the lack of contribution from external partners, but such indicators and targets should be avoided to the extent possible.

Monitoring the quantities of ore, processed at the project sites, is the key to calculating the amounts of mercury that can be avoided. Such monitoring should be done in a systematic way in order to allow for estimation of the mercury avoided from the mercury-free processing units within the project locations through collecting the site-specific data from the owners of processing units on a regular basis.

Annex 1: UNDP-GEF Midterm Review Terms of Reference

BACKGROUND

A. Project Title

Global Opportunities for Long-term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA).

B. Project Description

This is the Terms of Reference for the UNDP-GEF Midterm Review (MTR) of the full-sized project titled Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (ISMIA) (PIMS#5872) implemented through the Executing Agency/Implementing Partner. The project started on 5 September 2018 and is in its third year of implementation. This ToR sets out the expectations for this MTR. The MTR process must follow the guidance outlined in the document *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* (http://web.undp.org/evaluation/documents/guidance/GEF/mid-term/Guidance_Midterm%20Review%20_EN_2014.pdf).

Worldwide Artisanal and Small-scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment (35%).² Mercury can travel long distances, contributing to global mercury pollution and contaminating the world's ecosystems and fisheries. Exposure to mercury may cause serious health problems and is a particular threat to the development of the child in utero and early in life.³ Phasing-out mercury from the ASGM sector is therefore of the utmost importance, however ASGM is a very important source of jobs and livelihoods. ASGM accounts for about 17-20% of the world's annual gold production⁴ with 15 million people directly participating in ASGM activities⁵ and another 100 million depending on ASGM for their livelihoods.

The main objective of the GOLD-ISMIA Project is to reduce/eliminate mercury releases from the Indonesian ASGM sector through four (4) components, namely:

- Component 1: Strengthening institutions and the policy/regulatory framework for mercury-free ASGM;
- Component 2: Establishing financing lending arrangements to provide loans for mercury-free processing equipment;
- Component 3: Increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization; and,
- Component 4: Raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

The Project has been supporting 6 (six) ASGM communities in Indonesia to reduce mercury use by 5 metric tonnes/year starting in year 3 (three) of the project implementation. Over the project cycle period, the project is expected to strengthen the efforts of Indonesia to reduce 15 tonnes of Mercury.

¹ <https://jobs.undp.org/>

² UNEP Global Mercury Assessment (2013)

³ WHO Fact Sheet No. 361 (2013)

⁴ Estelle Levin Limited (2014)

⁵ UNEP (2013) The Negotiating Process:
<http://www.unep.org/hazardoussubstances/Mercury/Negotiations/tabid/3320/Default.aspx>

The 6 ASGM communities are as follows:

1. Kalirejo and Hargorejo Villages, Kulon Progo District, Daerah Istimewa Yogyakarta Province;
2. Buwun Mas Village, West Lombok District, Nusa Tenggara Barat Province;
3. Hulawa Village, North Gorontalo District, Gorontalo Province
4. Tatelu and Talawaan Villages, North Minahasa District, North Sulawesi Province;
5. Logas Hulu and Logas Hilir Villages, Kuantan Singingi District, Riau Province
6. Anggai Village, South Halmahera District, North Maluku Province

The project is planning to deliver these following financing plan in order to assure its performance as stipulated in the ProDoc:

FINANCING PLAN	
GEF Trust Fund	6,720,000 USD
(1) Total Budget administered by UNDP	6,720,000 USD
PARALLEL CO-FINANCING	
UNDP	112,000 USD
Government:	
Ministry of Environment and Forestry	11,434,774 USD
The Agency for Assessment and Application of Technology	6,865,491 USD
Ministry of Energy and Mineral Resources	160,235 USD
Coordinating Ministry for Maritime	451,128 USD
Ministry of Health	6,574,527 USD
Ministry of Communication and Information Technology	2,725 USD
APRI (Indonesian Artisanal Mining Association)	3,000,000 USD
(2) Total co-financing	28,600,880 USD
(3) Grand-Total Project Financing (1) + (2)	35,320,880 USD

During its implementation in 2020, the global Covid-19 Outbreak has been seriously affecting the project implementation. As of 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic as the new coronavirus rapidly spread to all regions of the world. Travel to the country has been restricted since 16 March 2020 and travel in the country is also restricted. If it is not possible to travel to or within the country for the MTR mission then the MTR team should develop a methodology that takes this into account the conduct of the MTR virtually and remotely, including the use of remote interview methods and extended desk reviews, data analysis, surveys and evaluation questionnaires. This should be detailed in the MTR Inception Report and agreed with the Commissioning Unit.

As of 14 September 2020, the Government of Indonesia has announced 221,523 confirmed cases of COVID-19 across all provinces of the country, with 8,841 deaths. The Government has also announced that 158,405 people have recovered from the illness. The Government also recorded 98,842 suspected cases.

The Indonesian Doctors Association recorded, as of September 13, a total of 194 deaths of health workers due to COVID- 19, consisting of 115 general practitioners and specialists, 9 dentists and 70 nurses. The

Central Bureau of Statistics registered a total of 81,011 doctors in Indonesia in 2019, with the largest numbers in DKI Jakarta (with 11,365 doctors), East Java (10,802 doctors), Central Java (9,747 doctors), and West Java (8,771 doctors).

Large-scale Social distancing policy (PSBB) and travel restriction that have been implemented in Indonesia affected the implementation of the project especially at project sites. Some planned activities of each project components were postponed as follows:

Component 1: Strengthening institutions and the policy/regulatory framework for mercury-free ASGM

1. National training targeting 100 staff of relevant ministries which is expected to be held in April 2020 was canceled.
2. Coaching clinic for 15 provinces and 9 districts to draft the sub-national action plan on mercury reduction and elimination
3. FGD on policy recommendations to be participated by relevant ministries

Component 2 Establishing financing lending arrangements to provide loans for mercury-free processing equipment:

1. Establishment of new/redesign the lending/loan scheme or mechanism for ASGM to enable procuring the new technology of mercury free gold processing equipment.
2. Delays on the project's facilitation to ASGM and ASGM Cooperatives in the field to increase their capacity to apply for loans for mercury-free processing equipment.

Component 3: Increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization:

1. Data collection and socioeconomic interview with the local communities' miners, collect ore sampling, preparing and conduct training for the proposed techniques of processing and others.
2. Visit the BLU Tekmira laboratories to view on the proposed technique of Hg separation from amalgamation tailing.
3. Technical training on mercury-free processing technique and formalization for 20 miners in Sekotong.

Component 4: Raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

1. Awareness raising field activities in Kulonprogo, Kuantan Singingi, Obi and North Gorontalo;
 2. Festival of West Lomb
 3. Introduction of storytelling technique to basic schools teachers in six project locations.
- Component gender:

The impact of the COVID 19 outbreak is also affecting to the progress of the implementation of gender action plan under Gold- ISMIA project particularly on implementing workshops/awareness raising events to increase mining communities' awareness (including women miner groups) on the availability of various incentives and financial access that meet their needs as well as introducing new technology that will be equally accessed by women and men.

However, initiating alternative strategy, the project is taking advantage of the increasing use of online meetings with government entities and other stakeholders during the pandemic. The project has also expanded the communication with beneficiaries in project sites by hiring local facilitators and by using several online platforms such as WhatsApp Group (WAG) and social media including Instagram, twitter, YouTube. Project created one WAG for each project site that involves the village leader, mining leader, owner, miners and project's field facilitators.

C. MTR Purpose

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy and its risks to sustainability.

MTRs are primarily a monitoring tool to identify challenges and outline corrective actions to ensure that a project is on track to achieve maximum results by its completion. The primary output/deliverable of a MTR process is the MTR report.

The MTR report will be submitted to GEF as a mandatory requirement for all GEF-financed full-sized projects (FSP). The MTR report must be completed and submitted to GEF secretariate with the 2nd Project Implementation Report (PIR) in 2021.

DUTIES AND RESPONSIBILITIES

D. MTR Approach & Methodology

The MTR report must provide evidence-based information that is credible, reliable and useful. The MTR team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Social and Environmental Screening Procedure (SESP)), the Project Document, project reports including PIRs, PAR, Annual Work Plans and relevant revisions, national strategy and priorities, and any other relevant materials considered useful for this evidence-based review. The MTR team will review the baseline GEF focal area Core Indicators/Tracking Tools submitted to the GEF at CEO endorsement, and the midterm GEF focal area Core Indicators/Tracking Tools that must be completed before the MTR field mission begins.

The MTR team is expected to follow a collaborative and participatory approach⁶ ensuring close engagement with the Project Team, government counterparts (including GEF Operational Focal Point), UNDP Country Office, UNDP BRH/Regional Technical Advisor, direct beneficiaries, and other key stakeholders. Engagement of stakeholders is vital to a successful MTR.⁷ Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Ministry of Environment and Forestry, Agency for Technology Assessment and Application (BPPT), Ministry of Energy and Mineral Resources, Sub-national agencies, Small-scale gold miners association, miner communities, senior officials and task team/ component leaders, key experts and consultants in the subject area, experts/academia, CSOs, etc. Additionally, the MTR team is expected to conduct field missions to Jakarta, Indonesia, including the following project sites in North Minahasa, Kuantan Singingi and Kulonprogo.

Due to Covid-19 Outbreak, all or parts of the MTR will potentially be carried out virtually. It will then consider the stakeholders' availability, ability or willingness to be interviewed remotely. In addition, their accessibility to the internet/computer may be an issue as many government and national counterparts may be working from home. These limitations must be reflected in the final MTR report.

If a data collection/field mission is not possible, then remote interviews may be undertaken through telephone or online (skype, zoom etc.). International consultants can work remotely with national evaluator support in the field if it is safe for them to operate and travel. No stakeholders, consultants or UNDP staff should be put in harm's way and safety is the key priority.

A short validation mission may be considered if it is confirmed to be safe for staff, consultants, stakeholders and if such a mission is possible within the MTR schedule. Equally, qualified and independent national consultants can be hired to undertake the MTR and interviews in country as long as it is safe to do so.

⁶ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

⁷ For more stakeholder engagement in the M&E process, see the [UNDP Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 3, pg. 93.

The final methodological approach including interview schedule, field visits and data to be used in the MTR should be clearly outlined in the Inception Report and be fully discussed and agreed between UNDP, stakeholders and the MTR team.

The final MTR report must describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

E. Detailed Scope of the MTR

The MTR team will assess the following four categories of project progress. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

1. Project Strategy

Project Design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)?
- Review decision-making processes: 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 during project design processes?
- Review the extent to which relevant gender issues were raised in the project design. See Annex 9 of *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.
 - Were relevant gender issues (e.g. the impact of the project on gender equality in the programme country, involvement of women's groups, engaging women in project activities) raised in the Project Document?
- If there are major areas of concern, recommend areas for improvement

Results Framework/Logframe:

- Undertake a critical analysis of the project's logframe indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

2. Progress Towards Results

- Review the logframe indicators against progress made towards the end-of-project targets; populate the Progress Towards Results Matrix, as described in the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for the project objective and each outcome; make recommendations from the areas marked as "not on target to be achieved" (red).
- Compare and analyse the GEF Tracking Tool/Core Indicators at the Baseline with the one completed right before the Midterm Review.

- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

3. Project Implementation and Adaptive Management

Management Arrangements

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner? Recommend areas for improvement.
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.
- Do the Executing Agency/Implementing Partner and/or UNDP and other partners have the capacity to deliver benefits to or involve women? If yes, how?
- What is the gender balance of project staff? What steps have been taken to ensure gender balance in project staff?
- What is the gender balance of the Project Board? What steps have been taken to ensure gender balance in the Project Board?

Work Planning

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/ logframe as a management tool and review any changes made to it since project start.
- Examine the impacts of COVID-19 to the project implementation.
- Review any delays caused by COVID-19 situation.

Finance and co-finance

- α) Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
 - β) Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
 - χ) Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
 - δ) Informed by the co-financing monitoring table to be filled out by the Commissioning Unit and project team, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?
- Include the separate GEF Co-Financing template (filled out by the Commissioning Unit and project team) which categorizes co-financing amounts by source as 'investment mobilized' or 'recurrent expenditures'. (This template will be annexed as a separate file).

Sources of Co-financing	Name of Co-financer	Type of Co-financing	Co-financing amount confirmed at CEO Endorsement (US\$)	Actual Amount Contributed at stage of Midterm Review (US\$)	Actual % of Expected Amount

Project-level monitoring and evaluation systems

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive?
- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?
- Review the extent to which relevant gender issues were incorporated in monitoring systems. See Annex 9 of *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.

Stakeholder Engagement

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
- How does the project engage women and girls? Is the project likely to have the same positive and/or negative effects on women and men, girls and boys? Identify, if possible, legal, cultural, or religious constraints on women's participation in the project. What can the project do to enhance its gender benefits?

Social and Environmental Standards (Safeguards)

- Validate the risks identified in the project's most current SESP, and those risks' ratings; are any revisions needed?
- Summarize and assess the revisions made since CEO Endorsement/Approval (if any) to:
 - The project's overall safeguards risk categorization.
 - The identified types of risks* (in the SESP).
 - The individual risk ratings (in the SESP) .
- Describe and assess progress made in the implementation of the project's social and environmental management measures as outlined in the SESP submitted at CEO Endorsement/Approval (and prepared during implementation, if any), including any revisions to those measures. Such management measures might include Environmental and Social Management Plans (ESMPs) or

other management plans, though can also include aspects of a project's design; refer to Question 6 in the SESP template for a summary of the identified management measures.

A given project should be assessed against the version of UNDP's safeguards policy that was in effect at the time of the project's approval.

Reporting

- Assess how adaptive management changes have been reported by the project management and shared with the Project board.
- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

Communications & Knowledge Management

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.
- List knowledge activities/products developed (based on knowledge management approach approved at CEO Endorsement/Approval).

⁸ Risks are to be labeled with both the UNDP SES Principles and Standards, and the GEF's "types of risks and potential impacts": Climate Change and Disaster; Disadvantaged or Vulnerable Individuals or Groups; Disability Inclusion; Adverse Gender-Related impact, including Gender-based Violence and Sexual Exploitation; Biodiversity Conservation and the Sustainable Management of Living Natural Resources; Restrictions on Land Use and Involuntary Resettlement; Indigenous Peoples; Cultural Heritage; Resource Efficiency and Pollution Prevention; Labor and Working Conditions; Community Health, Safety and Security.

4. Sustainability

- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Register are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

- What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- 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 the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

Conclusions & Recommendations

The MTR consultant/team will include a section in the MTR report for evidence-based **conclusions**, in light of the findings.

Additionally, the MTR consultant/team is expected to make **recommendations** to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. The MTR consultant/team should make no more than 15 recommendations total.

Ratings

The MTR team will include its ratings of the project's results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See the TOR Annexes for the Rating Table and ratings scales.

F. Expected Outputs and Deliverables

The MTR team shall prepare and submit:

- MTR Inception Report: MTR team clarifies objectives and methods of the Midterm Review no later than 2 weeks before the MTR mission or virtual MTR data collection. To be sent to the Commissioning Unit and project management. Completion date: (January 2021)
- Presentation: MTR team presents initial findings to project management and the Commissioning Unit at the end of the MTR mission. Completion date: (March 2021)
- Draft MTR Report: MTR team submits the draft full report with annexes within 3 weeks of the MTR mission. Completion date: (March 2021)
- Final Report*: MTR team submits the revised report with annexed and completed Audit Trail detailing how all received comments have (and have not) been addressed in the final MTR report. To be sent to the Commissioning Unit within 1 week of receiving UNDP comments on draft. Completion date: (April 2021)

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

G. Institutional Arrangements

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is UNDP Indonesia Country Office. The Commissioning Unit will contract the consultants and ensure the timely provision of per diems and travel arrangements within the country (if needed) for the MTR team. The Project Team will be responsible for liaising with the MTR team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

If a data collection/field mission is not possible, then remote interviews may be undertaken. The Commissioning Unit and Project Team will support the implementation of remote/ virtual meetings. An updated stakeholder list with contact details (phone and email) will be provided by the Commissioning Unit to the MTR team.

H. Duration of the Work

The total duration of the MTR will be approximately (49 of days) over a period of (16 weeks / 4 months) starting (4 January 2021), and shall not exceed five months from when the consultant(s) are hired. The tentative MTR timeframe is as follows:

Timeline di TOR:

- 09 November 2020: Application closes
- November 2020: Selection of MTR Team
- January 2021 1 day: Prep the MTR Team (handover of project documents)
- January 2021 4 days: (Document review and preparing MTR Inception Report
- January 2021 5 days: Finalization and Validation of MTR Inception Report- latest start of MTR mission
- March 2021 15 days: MTR mission: stakeholder meetings, interviews, field visits
- March 2021 1 day: Mission wrap-up meeting & presentation of initial findings- earliest end of MTR mission
- March 2021 7 days: Preparing draft report
- April 2021 7 days: Incorporating audit trail on draft report/Finalization of MTR report
- April 2021 5 days: Preparation & Issue of Management Response
- April 2021 1 day (optional): Concluding Stakeholder Workshop (not mandatory for MTR team)
- April 2021 3 days: Expected date of full MTR completion

The date start of contract is 4 January 2021.

I. Duty Station

- a) The contractor's duty station will be **home-based** with possibility of travel to Jakarta in Indonesia, Kulonprogo, North Minahasa and Kuantan Singingi during the MTR mission, those are subject to the approval from RR or The Head of Unit.
- b) The consultant is working on the output-based, thus no necessity to report or present regularly.

Travel:

- If the travel is allowed, international travel will be required to Jakarta in Indonesia, Kulonprogo, North Minahasa and Kuantan Singingi during the MTR mission; The selection of project sites is based on accessibility and ore differentiation. Kulonprogo and North Minahasa have primary ore and Kuantan Singingi has alluvial ore.
- The BSAFE training course must be successfully completed prior to commencement of travel; Herewith is the link to access this training: <https://training.dss.un.org/courses/login/index.php>. These training modules at this secure internet site is accessible to Consultants, which allows for registration with private email.
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under <https://dss.un.org/dssweb/>
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents (travel expense will be facilitated by GOLD-ISMIA project).

No	Indicative Location	Frequency	Number of Travel Days
1	Jakarta	1	4
2	Kulonprogo – Yogyakarta Province	1	4
3	North Minahasa – North Sulawesi Province	1	4
4	Kuantan Singingi – Riau Province	1	4

- The International Consultant will work with a National Consultant and/or if the International Consultant is to operate remotely. Include a provision for experience in implementing evaluations remotely.

REQUIRED SKILLS AND EXPERIENCE

J. Qualifications of the Successful Applicants

A team of two independent consultants will conduct the MTR - one team leader / International Consultant (with experience and exposure to projects and evaluations in other regions globally) and one team expert / National Consultant, usually from Indonesia. The International Consultant will work with a National Consultant and/or if the International Consultant is to operate remotely. Include a provision for experience in implementing evaluations remotely.

The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

The selection of consultants will be aimed at maximizing the overall "team" qualities in the following areas:

Education

- A Master's degree in Environmental Science, Environmental Engineering, Chemical Engineering, Natural Science, Natural Resource Management, Business Administration, Social-science or other relevant studies

Experience

Language

- Fluency in written and spoken English.

K. Ethics

The MTR team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This MTR will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The MTR team must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The MTR team must also ensure security of collected information before and after the MTR and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information, knowledge and data gathered in the MTR process must also be solely used for the MTR and not for other uses without the express authorization of UNDP and partners.

L. Schedule of Payments

- 20% payment upon satisfactory delivery of the final MTR Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft MTR report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final MTR report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%

- The final MTR report includes all requirements outlined in the MTR TOR and is in accordance with the MTR guidance.
- The final MTR report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other MTR reports).
- The Audit Trail includes responses to and justification for each comment listed.

In line with the UNDP's financial regulations, when determined by the Commissioning Unit and/or the consultant that a deliverable or service cannot be satisfactorily completed due to the impact of COVID-19 and limitations to the MTR, that deliverable or service will not be paid.

Due to the current COVID-19 situation and its implications, a partial payment may be considered if the consultant invested time towards the deliverable but was unable to complete to circumstances beyond his/her control.

APPLICATION PROCESS

M. Recommended Presentation of Offer

- a) **Letter of Confirmation of Interest and Availability** using the [template](#)⁹ provided by UNDP;
- b) **CV** and a **Personal History Form** ([P11 form](#))¹⁰;
- c) **Brief description of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)
- d) **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc), supported by a breakdown of costs, as per template attached to the [Letter of Confirmation of Interest template](#). If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

All application materials should be submitted to the address **United Nations Development Programme, Menara Thamrin 8-9th Floor. Jl. MH Thamrin Kav.3 Jakarta 10250, Indonesia**; in a sealed envelope indicating the following reference **"International Consultant for GOLD-ISMIA Mid-term Review"** or by email at the following address ONLY: bids.id@undp.org by **19:00 PM GMT +7 on 09 November 2020**. Incomplete applications will be excluded from further consideration.

⁹<https://intranet.undp.org/unit/bom/pso/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx>

¹⁰ http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

N. Criteria for Selection of the Best Offer

Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

- Responsive/compliant/acceptable, and
- Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight; 70%

* Financial Criteria weight; 30%

Only candidates obtaining a minimum of 70 point would be considered for the Financial Evaluation

Criteria	Weight	Maximum Point
Technical Criteria	70%	100
Criteria A: qualification requirements as per ToR:		80
A Master's degree in Environmental Science, Environmental Engineering, Chemical Engineering, Natural Science, Natural Resource Management, Business Administration, Social-science or other relevant studies		5
Minimum 15 years of experience working in relevant technical areas including experience on project monitoring and evaluation;		10
Experience applying SMART indicators and reconstructing or validating baseline scenarios;		10
Experience working with the GEF or GEF-evaluations;		10
Experience with result-based management evaluation methodologies;		10
Experience working in Asia-Pacific Countries;		5
Experience with implementing evaluations remotely will be considered an asset;		5
Project evaluation/review experiences within United Nations system will be considered an asset;		5
Competence in adaptive management, especially on Artisanal Small-scale Gold Mining (ASGM) and hazardous chemicals such as mercury		10
Demonstrated understanding of issues related to gender and <i>hazardous chemicals</i> ; experience in gender sensitive evaluation and analysis;		5
Demonstrable analytical skills and excellent communication skills;		5

Criteria B: Brief Description of Approach to Assignment:		20
-Understand the task and applies a methodology appropriate for the task as well as strategy in a coherent manner. -Important aspects of the task addressed clearly in sufficient detail. -Logical and realistic planning for efficient project implementation		20
Financial Criteria	30 % 30%	

Annex 2: Evaluation Matrix

Evaluation Criteria	Evaluation Questions	Indicators	Data Sources	Data Collection Methods
Project Strategy	<p>Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?</p> <p>Does the progress so far indicate that the project could in the future catalyse beneficial development effects that could be included in the project results framework and monitored on an annual basis?</p> <p>Are broader development and gender aspects of the project being monitored effectively?</p> <p>Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits</p> <p>How relevant is the project strategy to address the country priorities? Is the project in line with the national sector development priorities and plans?</p> <p>To what extent were perspectives of those affected by project decisions and of those who could affect the outcomes, taken into account during project design processes?</p> <p>Does the project strategy provide an effective route towards expected/intended results?</p> <p>To what extent were lessons learned from other relevant projects incorporated into the project design?</p> <p>Are the underlying assumptions for the problem addressed by the project still valid?</p>	<p>Project activities in line with the country development and sectoral priorities and plans</p> <p>Activities produce outputs according to the project logframe</p> <p>Lessons learned from previous projects taken into account for implementation</p> <p>Assumptions and risks identified are effectively managed</p>	<p>UNDP programme/project documents</p> <p>UNDP programme/project Annual Work Plans</p> <p>Programmes/projects/ thematic areas evaluation reports</p> <p>Government's national planning documents</p> <p>Human Development Reports</p> <p>MDG progress reports Government partners</p> <p>progress reports</p> <p>Interviews with beneficiaries</p> <p>UNDP staff</p> <p>Development partners (UN agencies, bilateral development agencies)</p> <p>Government partners involved in specific results/thematic areas</p> <p>Concerned civil society partners</p> <p>Concerned associations and federations</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners</p> <p>Interviews with NGOs partners/service providers</p> <p>Interviews with funding agencies and other UNCT</p> <p>Interviews with UNDP staff, development partners and government partners, civil society partners, associations, and federations</p>
Progress Towards Results	<p>Which are the aspects of the project that have already been successful and how the project can further expand these benefits?</p> <p>How does the GEF Tracking Tool at the Baseline compare with the GEF TT completed before the Midterm Review?</p> <p>How far has the regional context been taken into consideration while selecting the project/ programme?</p> <p>Was there any partnership strategy in place for implementation of the project and if so how effective was it?</p>	<p>GEF TT used as project management instrument</p> <p>The project has partnership strategy and actions taken to promote cooperation between partners</p>	<p>Project/programme/thematic areas evaluation reports</p> <p>Progress reports on projects UNDP staff</p> <p>Development partners Government partners</p> <p>Beneficiaries</p> <p>Progress reports on projects</p> <p>Programme documents</p> <p>Annual Work Plans/Progress Reports</p> <p>Evaluation reports</p> <p>MDG/Human Development Reports</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners, development partners, UNDP staff, civil society partners, associations, and federations</p>

Evaluation Criteria	Evaluation Questions	Indicators	Data Sources	Data Collection Methods
Project Implementation & Adaptive Management	<p>Has the project or programme been implemented within the original timeframe and budget?</p> <p>To what extent the work-planning processes are results-based?</p> <p>To what extent has the project's results framework/logframe been used as a management tool and were there any changes to it since the project start?</p> <p>Have UNDP and the PMU taken prompt actions to solve implementation issues?</p> <p>Have there been any delays in project start-up and implementation and if so what were the causes and how they have been solved?</p> <p>What mechanisms does UNDP have in place to monitor implementation? Are these effective?</p> <p>Have there been any outside factors (e.g. political instability) affecting on implementation effectiveness?</p>	<p>Project implementation within the original timeframe and budget</p> <p>Annual workplans elaborated according to the logframe</p> <p>Implementation issues solved by PMU/UNDP</p> <p>Implementation monitoring tools in place and effectively used</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>
	<p>To what extent financial controls have been established that allow the project management to make informed decisions regarding the budget at any time and allow for the timely flow of funds?</p> <p>Has there been over-expenditure or under-expenditure on the project?</p> <p>Were the resources focused on the set of activities that were expected to produce significant results?</p> <p>Were the project resources concentrated on the most important initiatives or were they scattered/spread thinly across initiatives?</p>	<p>Financial controls established and used to provide feedback on implementation</p> <p>Activities prioritized for achievement of significant results</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>
	<p>Have changes been made and are they effective?</p> <p>Are the existing responsibilities and reporting lines clear?</p> <p>To what extent is decision-making in the project transparent and undertaken in a timely manner?</p>	<p>Decision-making on implementation transparent and timely</p> <p>Implementation of components with multiple responsible partners clear and timely</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>

Evaluation Criteria	Evaluation Questions	Indicators	Data Sources	Data Collection Methods
Project Implementation & Adaptive Management (continued)	<p>Has the project developed and leveraged partnerships with direct and tangential stakeholders?</p> <p>Do the stakeholders have roles in project decision-making that support efficient and effective project implementation?</p> <p>To which extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives and are there any limitations to stakeholder awareness of project outcomes/ participation in project activities?</p>	<p>Mechanisms for involvement of other stakeholders in place</p> <p>Other stakeholders aware of the project and involved in implementation</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p>	<p>Desk reviews of secondary data</p>
	<p>How the Project Team and partners undertake and fulfill the GEF reporting requirements?</p> <p>To what extent have lessons derived from the adaptive management process been documented, shared with and internalized by key partners and incorporated into project implementation?</p> <p>Have the PIRs been shared with the Project Board and other key stakeholders?</p>	<p>Quality reporting according to GEF reporting requirements</p> <p>Lessons for adaptive management documented and taken into account for implementation</p>	<p>Evaluation reports</p> <p>Progress reports</p> <p>UNDP programme staff</p>	<p>Desk reviews of secondary data</p> <p>Interview UNDP programme staff</p>
	<p>How regular and effective has been the internal project communication with project stakeholders?</p> <p>Are there any ways of external communication established to inform about the project progress the public?</p> <p>Are there any aspects of the project that might yield excellent communications material as additional project output?</p>	<p>Quality and effectiveness of internal communication</p> <p>Possibilities for additional communication material identified</p>	<p>Evaluation reports</p> <p>Progress reports</p> <p>UNDP programme staff</p>	<p>Desk reviews of secondary data</p> <p>Interview UNDP programme staff</p>

Evaluation Criteria	Evaluation Questions	Indicators	Data Sources	Data Collection Methods
Sustainability	<p>What is the likelihood of financial and economic resources not being available once the GEF assistance ends?</p> <p>To what extent financial and economic instruments and mechanisms have been established or will be established to ensure the ongoing flow of benefits once the GEF assistance ends?</p> <p>What additional factors are needed to create an enabling environment for continued financing?</p>	<p>Existence of counterpart/stakeholder funding for the project outcomes</p> <p>Additional factors for continued financing identified</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>
	<p>Has the project put in place frameworks, policies, governance structures and processes that will create mechanisms for institutional and technical knowledge transfer after the project's closure?</p> <p>To what extent has the project been developing institutional capacity (systems, structures, staff, expertise, etc.) that will be self-sufficient after the project closure date?</p> <p>Has the project achieved stakeholders' consensus regarding courses of action after the project's closure?</p>	<p>Institutional frameworks for continuation of activities established</p> <p>Level of self-sufficiency of the established institutional frameworks</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>
	<p>Are there any social or political risks that may jeopardize sustainability of project outcomes?</p> <p>Are there any environmental factors that could undermine and reverse the project's outcomes, including factors that have been identified by project stakeholders?</p> <p>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?</p> <p>Is there sufficient public/ stakeholder awareness in support of the objectives of the project?</p>	<p>Social, political and environmental risks identified and taken into account</p> <p>Level of stakeholder awareness and ownership of the project results</p>	<p>Programme documents</p> <p>Annual Work Plans</p> <p>Annual Progress Reports</p> <p>Evaluation reports</p> <p>Government partners Development partners</p> <p>UNDP staff (Programme Implementation Support Unit)</p>	<p>Desk reviews of secondary data</p> <p>Interviews with government partners and development partners</p>

SAMPLE QUESTIONS RELATING TO THE PROMOTION OF UN VALUES FROM A HUMAN DEVELOPMENT PERSPECTIVE				
Evaluation Criteria	Evaluation Questions	Indicators	Data Sources	Data Collection Methods
Supporting policy dialogue on human development issues	To what extent does the initiative support the government in monitoring achievement of MDGs? What assistance has the initiative provided supported the government in promoting human development approach and monitoring MDGs? Comment on how effective this support has been.	Level of contribution of the project to the achievement of MDGs	Project documents Evaluation reports HDR reports MDG reports National Planning Commission Ministry of Finance	Desk review of secondary data Interviews with government partners
Contribution to gender equality	To what extent was the UNDP initiative designed to appropriately incorporate in each outcome area contributions to attainment of gender equality? To what extent did UNDP support positive changes in terms of gender equality and were there any unintended effects? Provide example(s) of how the initiative contributes to gender equality. Can results of the programme be disaggregated by sex?	Level of monitoring of gender related issues	Project documents Evaluation reports UNDP staff Government partners Beneficiaries	Desk review of secondary data Interviews with UNDP staff and government partners Observations from field visits
Addressing equity issues (social inclusion)	To what extent does the project take into account the needs of vulnerable and disadvantaged to promote social equity, for example, women, youth, disabled persons? Provide example(s) of how the initiative takes into account the needs of vulnerable and dis- advantaged groups, for example, women, youth, disabled persons. How has UNDP programmed social inclusion into the initiative?	Level of monitoring of social inclusion related issues	Project documents Evaluation reports UNDP staff Government partners Beneficiaries	Desk review of secondary data Interviews with UNDP staff and government partners Observations from field visits

Annex 3: Interview guides

1. In which role you have been involvement in the project?
2. What were the major challenges you have faced so far in the project? Can they be addressed by adjusting the project design and/or implementation strategy?
3. Have you received training or technical assistance from the project? If so, how useful was it for you in relation to your job? Please explain.
4. How do you assess the cooperation on the project with UNDP as the GEF Implementing Agency?
5. How do you assess adequacy of management arrangements and technical support to the project?
6. How do you assess the coordination and communication aspects of the project?
7. Is the gender strategy of the project sufficiently defined and implemented?
8. Have there been any planned activities that have been difficult to complete according to the schedule? If so, have the delays affected progress toward expected results?
9. What have been the main lessons learned from the project so far?
10. What are the main challenges for the remaining period of implementation of the project?
11. Are the goals and results of the project clear, practical and achievable over the course of the project?
12. Are the broader developmental and gender aspects of the project being effectively monitored?
13. Develop and recommend SMART “development” indicators, including sex-disaggregated indicators and indicators that reflect development benefits
14. How relevant is the project strategy to addressing country priorities? Is the project in line with the priorities and development plans of the national sector?
15. To what extent were the views of those affected by the design decisions and those who could influence the results taken into account during the design process?
16. Does the project strategy provide an efficient path to the expected / expected results?
17. To what extent have lessons learned from other relevant projects been incorporated into the design of the project?
18. To what extent are work planning processes based on results?
19. To what extent have the results framework / project logframe been used as a management tool and have there been any changes since the beginning of the project?
20. Did UNDP and PMU take prompt action to address implementation issues?
21. Were there any delays in the launch and implementation of the project, and if so, what were the reasons and how were they resolved?
22. What mechanisms does UNDP have to monitor implementation? Is it effective?
23. Were there any external factors (such as political instability) affecting the effectiveness of implementation?
24. To what extent has financial control been established that allows project management to make informed budget decisions at all times and ensures that funds are received on time?
25. Have there been excessive or insufficient project costs?
26. Were resources focused on a set of activities that were expected to produce significant results?

27. Were the project resources focused on the most important initiatives or were they scattered / allocated among the initiatives?
28. Have changes been made and are they effective?
29. Are the existing responsibilities and reporting lines clear?
30. To what extent is project decision making in a transparent and timely manner?
31. Has the project developed and used partnerships with direct and indirect stakeholders?
32. Do stakeholders have design decision-making roles that support effective and efficient project implementation?
33. To what extent has stakeholder participation and public awareness contributed to the progress towards achieving project objectives, and are there any constraints on stakeholder awareness of project outcomes / participation in project activities?
34. To what extent are lessons learned from the adaptive management process documented, disseminated and learned by key partners and incorporated into project implementation?
35. How regular and effective was the internal communication of the project with the project stakeholders?
36. Are there any means of external communication to inform the public about the progress of the project?
37. Are there any aspects of the project that can provide excellent communication material as a complementary project outcome?
38. What aspects of the project have already been successful and how can the project extend these benefits?
39. Was there any partnership strategy for the project, and if so, how effective was it?
40. What is the likelihood that financial and economic resources will not be available after the end of GEF assistance?
41. To what extent have financial and economic instruments and mechanisms been or will be created to ensure a continuous flow of benefits after the end of GEF assistance?
42. What additional factors are needed to create an enabling environment for continued funding?
43. Has the project put in place a framework, policy, governance structures and processes that will establish mechanisms for the transfer of institutional and technical knowledge after project completion?
44. To what extent does the project develop institutional capacities (systems, structures, personnel, experience, etc.) that will be self-sufficient after the closing date of the project?
45. Has the project reached a stakeholder consensus on the direction of activities after the closure of the project?
46. Are there any social or political risks that could jeopardize the sustainability of the project results?
47. Are there any environmental factors that could undermine and reverse the results of the project, including factors that have been identified by the project stakeholders?
48. What is the risk that the level of stakeholder interest (including ownership by governments and other key stakeholders) will be insufficient to ensure the sustainability of project results / benefits?
49. Is there sufficient public / stakeholder awareness to support the objectives of the project?

Annex 4: List of Persons Interviewed

Name	Position	Organization
Sophie Kemkhadze	Deputy Resident Representative	UNDP CO Indonesia
Anton Probiyantono	Senior Programme Manager	UNDP CO Indonesia
Agus Prabowo	Head of Environment Unit	UNDP CO Indonesia
Anderson Alves	UNDP Regional Bureau for Asia and the Pacific (RBAP)	UNDP Bangkok Regional Hub
Yun Insiani	National Project Director / Director of Management of Toxic Hazardous Materials	MoEF
Rudi Nugroho	Deputy National Project Director / Director of the Center for Environmental Technology	BPPT
Laksmi Dewanthi	GEF Operational Focal Point	GEF
Christopher Anderson	Former Chief Technical Advisor	Massey University, New Zealand
Lana Saria	Director of Technical and Environmental at the Directorate General of Mineral and Coal	MEMR
Sri	Head of BRI Unit Pripik Kulon Progo	BRI Bank
Baiq Dewi	National Project Manager	GOLD-ISMIA
Erik	Miners from Gorontalo Utara	Cooperative
Mawardi	Miners from Lombok Barat	Cooperative
Fenny Kompo	Miners from Minahasa Utara	Cooperative
Alpiyandri	Miners from Kuantan Singingi	Cooperative of Logas Village
Herawan	Head of Logas Village, Kuantan Singingi	Logas Village Government
Marni B. Koni	Head of Hulawa Village, Gorontalo Utara	Hulawa Village Government
M.Thamrin Sirajuddin	Project Beneficiary	Environment Office Gorontalo Utara
Budi Darmajaya	Project Beneficiary	Environment Office Lombok Barat
Dzul Afifah Arifin	Gender Coordinator	GOLD-ISMIA
Yusrin Afandi	Field Facilitator Lombok Barat	GOLD-ISMIA
Anggit Priatmodjo	Field Facilitator Gorontalo Utara	GOLD-ISMIA
Stephanie Mapaliey	Field Facilitator Minahasa Utara	GOLD-ISMIA
Ria Camelina	Field Facilitator Kulon Progo	GOLD-ISMIA
Teuku Yunansyah	Field Facilitator Kuantan Singingi	GOLD-ISMIA
Muslim Nur Widodo	Field Facilitator Halmahera Selatan	GOLD-ISMIA
Harti Ningsih	Coordinator Working Group 4	GOLD-ISMIA
Singgih Seno Aji	Coordinator Working Group 2	GOLD-ISMIA
Jatu Arum Sari	Coordinator Working Groups 1&3	GOLD-ISMIA

Annex 5: List of Documents Consulted

1. Guidance for Conducting Midterm Reviews of UNDP-supported, GEF-financed Projects UNDP-GEF, 2014
2. The GEF Monitoring and Evaluation Policy, GEF Evaluation Office, 2010
3. UNDP Evaluation Guidelines, UNDP, 2019
4. Outcome-Level Evaluations, A Companion Guide, UNDP, 2011
5. Glossary of Key Terms in Evaluation and Results Based Management, OECD, 2010
6. Ethical Guidelines for Evaluations, UNEG, 2008
7. Integrating Human Rights and Gender Equality in Evaluations, UNEG, 2014
8. Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (ISMIA), Project Document, UNDP/GEF, 2018
9. 1st Project Implementation Review (PIR) on GEF GOLD Indonesia, UNDP/GEF, 2020
10. Annual Report for the GOLD ISMIA Project, UNDP, 2020
11. Minutes of the first meeting of the Steering Committee, GOLD-ISMIA, 2019
12. Minutes of the second meeting of the Steering Committee, GOLD-ISMIA, 2020
13. Capacity Building for Government Institutions in ASGM Sector, GOLD-ISMIA, 2020
14. Results from Capacity Development Workshops, and Final Recommendations, GOLD-ISMIA, 2020
15. Review of 13 Policies and Regulations and Field Report, GOLD-ISMIA, 2020
16. ASGM Assessments and Financial Products, GOLD-ISMIA, 2020
17. Review of Existing Regulation in ASGM Sector, GOLD-ISMIA, 2020
18. Detailed Engineering Design and Prototype of Small Mobile Mercury-Free Processing Plant, GOLD-ISMIA, 2020
19. Reviewing Reports of Feasibility Study of Reprocessing Mercury-containing Amalgamation Tailing, GOLD-ISMIA, 2020
20. Introduction of BAT/BEP and Socially and Environmentally Sound ASGM Practices: Desk Study, GOLD-ISMIA, 2020
21. Training for Best Practice of Mercury-Free Processing in ASGM Operation, GOLD-ISMIA, 2020
22. Final Report on Awareness Raising Campaign on Mercury Hazard and Ways to Reduce Its Use in ASGM in 6 Regions, GOLD-ISMIA, 2021
23. Report on Communication Materials Including Website and Social Media Content, GOLD-ISMIA, 2020
24. Combined Delivery Reports 2018-2020, UNDP
25. Chief Technical Advisor (CTA) reports 1-6, GOLD-ISMIA, 2019-2020
26. Minutes of Inception Workshops with Sub-National Stakeholders in 6 Project Sites, GOLD-ISMIA, 2019
27. Indonesia Country Report-Annual Progress Report, planetGOLD, 2020
28. Project Assurance Report of GOLD-ISMIA, UNDP, 2020
29. A Critical Review of Suitable Methods to Eliminate Mercury in Indonesia's ASGM: Report to UNDP, Marcello M. Veiga, 2020
30. Minutes of Online Coordination Meeting with PT. ANTAM, GOLD-ISMIA, 2020
31. Improving Access to Formal Finance in ASGM: Issue Brief, planetGOLD, 2020
32. Estimating Mercury Use and Documenting Practices in ASGM: Methods and Tools, UN Environment, 2017
33. The Mercury Problem in Artisanal and Small-Scale Gold Mining, L.J. Esdaile and J. M. Chalker, Chem. Eur. J. 24 (2018)
34. Environmental and Occupational Health Hazards Associated with ASGM, WHO, 2016
35. Country Programme Document for Indonesia 2016-2020, UNDP, 2015
36. Country Programme Document for Indonesia 2021-2025, UNDP, 2020

Annex 6: Project Results Matrix

This project will contribute to the following Sustainable Development Goal (s): SDGs 1, 2, 3, 6, 7, 8, 9, 11, 12, 13, 14 and 15.					
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: UNPDF 2016-2020. Outcome #3: By 2020, Indonesia is sustainably managing its natural resources on land and sea, with an increased resilience to the effects of Climate Change, disasters and other shocks.					
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.					
	Objective and Outcome Indicators	Baseline	Mid - term Target	End of Project Target	Data Collection Methods and Risks/Assumptions
Project Objective: To reduce/eliminate the use of mercury in the Indonesian ASGM mining sector through provision of technical assistance, technology transfer, establishment of public private partnerships and facilitating access to financing for the purchase of Mercury-free processing equipment.	5 new partnership mechanisms with funding for gender friendly and sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national level.	No partnership mechanisms exist that provide access to funding for gender friendly sustainable management solutions in the ASGM sector.	2 new partnership mechanisms with funding for gender friendly and sustainable management solutions of chemicals and waste established at national and/or subnational level.	5 new partnership mechanisms with funding for gender friendly and sustainable management solutions of chemicals and waste established at national and/or subnational level.	<i>Data Collection Method:</i> The project will conduct a yearly assessment on the total amount of funding available to the ASGM sector, and the total amount of funding allocated to the ASGM sector, through existing/new financial mechanisms. <i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector too risky. <i>Assumptions:</i> Existing financial mechanisms (BNI, BRI KUR, BLU, Dana Desa) would be interested in adapting their financial products to make them accessible to the ASGM sector.
	200,970 direct project beneficiaries (80,390 females and 120,580 males) for which the risk of mercury exposure has been reduced.	project beneficiaries0 direct.	120,585 direct project beneficiaries (48,234 female and 72,351 male) for which the risk of mercury exposure has been reduced.	200,970 direct project beneficiaries (80,390 female and 120,580 male) for which the risk of mercury exposure has been reduced.	<i>Data Collection Method:</i> Direct project beneficiaries are those that will experience a reduction in mercury releases to their living, working and school environment (200,976 inhabitants in the 6 project areas) + which include miners trained by the project (1,200) + Gov. Staff trained by the project (340) + those reached by the awareness raising campaign (20,000). Once mercury reductions are being achieved by the project in a certain district, the most recent census can provide the number of inhabitants in the project area benefiting from the mercury reduction. Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on the number of people trained as well as the number of people that have been reached by the awareness raising campaign. <i>Assumptions:</i> Mercury reductions will start to occur in year 2/3 of the project.
Component/Outcome 1: Strengthening institutions and the policy/ regulatory	National systems have the capacity to assess, plan, and implement sustainable	The devolution of ASGM responsibilities and the administration of mining	Capacity of 11 government entities increased to improve their	Capacity of 23 government entities increased to improve their	Data Collection Method: <ul style="list-style-type: none"> Assessment report on the capacity of government entities.

framework for Mercury-free ASGM.	and mercury-free interventions in the ASGM sector.	regulations from the national level to the provinces/districts without concomitant increases in funding, staffing, or capacity building in those regional offices is currently hampering formalization efforts.	capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	<ul style="list-style-type: none"> • 23 capacity building plans prepared by the project. • Trainings provided to ~ 340 government staff – training/workshop attendance lists will provide the total number of people trained. • Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on the number of entities assessed, plans developed and implemented and staff trained. <p><i>Risks:</i> Responsibilities with respect to the issuing of artisanal mining licenses might remain unclear.</p> <p><i>Assumptions:</i> The project will succeed in developing a Ministerial Agreement (MA) on the harmonization of implementation of Law 4/2009 (Mineral and Coal Mining Law), Law 23/2014 (Regional Governance), Law 11/2017 (Minamata ratification) and Law 6/2014 (Village Law) that will clarify responsibilities.</p>
	Enabling environment created through improved national policies and regulatory frameworks for ASGM and mercury phase-out in the ASGM sector.	Harmonization between Law 4/2009 (Mineral and Coal Mining Law), Law 23/2014 (Regional Governance), Law 11/2017 (Minamata ratification) and Law 6/2014 (Village Law) is needed to ensure that responsibilities of entities with respect to ASGM are clear and do not conflict or overlap. Districts and provinces currently lack regulations (and guidance documents on implementation) that are harmonized with the Mining Law and the new Regional Governance Law. This is hampering ASGM formalization efforts.	8 policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.	15 policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> • Assessment report on the needs and gaps for policies, plans, regulations, standards and • measures to support formalization and mercury phase-out in the ASGM sector. • Copies of the policies, regulations, Ministerial Agreements and guidance documents. • Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on the number regulatory measures drafted and approved. <p><i>Risks:</i> The approval and/or adoption of regulatory measures and guidance documents developed by the project is delayed during the project and will hamper the implementation of project activities, in particular formalization efforts.</p>
Component/ Outcome 2: Establishing financing lending arrangements to provide loans for mercury free processing equipment.	Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.	4 financial mechanisms available, which have not been tailored to be able to serve the ASGM sector. These include: Village fund (BUMDes Dana Desa = 61,500 USD/year/village. However, 0 BUMDes	2 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector. US\$ 35 million ⁴⁶ (Total amount of funding)	4 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector.	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> • The project will conduct a yearly assessment on the total amount of funding available to the ASGM sector, and the total amount of funding allocated to the ASGM sector, through existing/new financial mechanisms. • Records of BUMDes Dana Desa, BLU, BRI KUR and BNI 46 to obtain an overview of loans/grants allocated to the ASGM sector.

		<p>mechanisms have been applied for ASGM to date.</p> <p>BLU = 1.5 million USD/year. However, 0 BLU mechanisms have been applied for ASGM to date.</p> <p>BRI KUR = 15,400 USD/year/project. However, 0 KUR from BRI mechanisms have been applied for ASGM to date.</p> <p>BNI 46 = 10.8 million USD/year. However, 0 BNI environmental grants and/or loans have been allocated to ASGM to date.</p> <p>For 6 villages baseline potential access to funding is: 12.7 million US\$</p>	<p>available to the ASGM sector through existing/new financial mechanisms.</p> <p>US\$ 2.8 million (Total amount of funding) allocated to the ASGM sector through approved loans.</p>	<p>US\$ 57.3 million⁴⁷ (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms.</p> <p>US\$ 4.6 million (Total amount of funding) allocated to the ASGM sector through approved loans.</p>	<p><i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector too risky.</p> <p><i>Assumptions:</i> Existing financial mechanisms (BNI, BRI KUR, BLU, Dana Desa) would be interested in adapting their financial products to make them accessible to the ASGM sector.</p>
	<p>10 ASGM groups (of which 20% of the miners are women) are capacitated to apply for loans for mercury-free processing equipment/investments.</p>	<p>In the 6 selected project areas, none of the ASGM miners have been trained on how to access financing.</p> <p>0 ASGM loan applications developed.</p> <p>0 ASGM loan applications approved.</p>	<p>5 miner groups (of which 20% of the miners are women) are trained in developing a loan/investment application (incl. undertaking technical and financial feasibility studies).</p> <p>10 loan applications developed (with technical support of the project).</p> <p>50% of loan applications (developed with technical support of the project) approved.</p>	<p>10 miner groups (of which 20% of the miners are women) are trained in developing a loan/investment application (incl. undertaking technical and financial feasibility studies).</p> <p>10 loan applications developed (with technical support of the project).</p> <p>60% of loan applications (developed with technical support of the project) approved.</p>	<p><i>Data Collection Method:</i> Training/workshop attendance lists, in combination with training reports will provide the total number of people trained. § Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on the total number of miners trained.</p> <p><i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector risky.</p> <p><i>Assumptions:</i> Existing financial mechanisms (BNI, BRI KUR, BLU, Dana Desa) would be interested in adapting their financial products to make them accessible to the ASGM sector.</p> <p>If 10 ASGM mining groups are trained in developing loan applications, it is assumed only 60% of those would be approved, leaving 6 mining groups to work with to establish mercury-free processing plants.</p>
<p>Component/ Outcome 3: Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization.</p>	<p>15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices.</p>	<p>Preliminary estimates from research and PPG field work suggest cumulative emissions among all 6 target communities could exceed 13 tonnes of mercury per year:</p> <p>1. North Gorontalo District, Gorontalo Province – 1.15 tonnes Hg/yr</p>	<p>Mercury use/releases from ASGM avoided by 5 tonnes/year.</p> <p>150 kg of gold produced per year without mercury.</p>	<p>Total mercury use/releases from ASGM avoided by 15 tonnes.</p> <p>450 kg of gold produced Without mercury.</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> • Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance (using the UNEP mercury inventory methods) conducted for each of the six (6) priority project sites and reports prepared. • Training/workshop attendance lists, in combination with training reports will report on the total number of miners trained. • Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on

		<p>2. Sekotong-West Lombok District, West Nusa Tenggara Province – 2.79 tonnes Hg/yr</p> <p>3. Kulonprogo District, Yogyakarta – 6.81 tonnes Hg/yr</p> <p>4. South Halmahera District, North Maluku Province – 1.45 tonnes Hg/yr</p> <p>5. Kuantan Sangingi District, Riau Province 0.18 tonnes Hg/yr</p> <p>6. North Minahasa District, North Sulawesi Province – 1.01 tonnes Hg/yr</p>			<p>the total number of miners trained, number of Hg-free processing plants established, Hg reduction achieved, gold produced without mercury.</p>
	<p>60 ASGM groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions.</p>	<p>In the 6 selected project areas, most of the ASGM miners have to date received training on formalization processes.</p> <p>The Banyumas miners have received information on the formalization process from the Ministry of Energy and Mineral Resources as well as from the Ministry of Environment and Forestry. Information on formalization is disseminated by the government as part of the process to obtain a permit.</p>	<p>At least 30 mining groups (of which 20% of the miners are women) supported in their formalization processes.</p>	<p>At least 60 mining groups (of which 20% of the miners are women) supported in their formalization processes.</p>	<p><i>Risks:</i> less than 60% of the loans will be approved, resulting in less than 6 mercury-free processing plants, and lower Hg reduction targets.</p> <p><i>Assumptions:</i></p> <ul style="list-style-type: none"> • Hg use to gold production is 20:1. Therefore, the amount of Hg reduced should be divided by 20 to obtain the amount of gold produced without mercury. • Miners involved in the project are willing to report to the project on their gold production. • At least 1 mining group in each project site will be able to obtain a loan, apply the loan to purchase mercury-free processing equipment and is able (with project support), to obtain the right permits/licenses for the plant. <p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> • BUMDes records (to obtain an overview of how many ASGM miners have established Village Based Cooperations since the project's start) • Registry of mining licenses or Ijin Pertambangan Rakyat (IPR) at district and provincial level (to have an overview of how many ASGM miners have obtained licenses since the project's start). § Kadaster (to have an overview of the number of ASGM miners who obtained legal subsurface rights). • Training/workshop attendance lists, in combination with training reports will provide the total number of miners trained. § Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information o the total number of miners trained, no. of IPRs granted, no. of BUMDes established, no. of subsurface rights obtained, etc. <p><i>Risks:</i> Some of the miners might not originally come from the area in which the project is being implemented or are mining outside WPRs, and might not be interested in formalization as they can't access BUMDes funding or processes.</p> <p><i>Assumptions:</i> Project can only support miners that work in WPRs (WPR = government decided location for ASGM).</p>

	Route to market for mercury-free gold improved/established.	None of the gold produced in the project's priority areas is currently produced mercury free. Gold is being sold to local buyers. Most ASGM miners currently get less than general gold price, even miners outside of Java get 50% of the gold price for the gold they sell.	100 kg of mercury-free gold sold to the formal market.	350 kg of mercury-free gold sold	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> Records of mining groups. Interviews with mining groups. Records of formal buyers. Quarterly reports sent to the GEF GOLD global component will provide information on the amount of Hg free gold sold to the formal market. <p><i>Risks:</i> Even though miners might be producing Hg-free gold with project support, there is a high likelihood that many of them will continue (especially in the beginning) selling to their original buyers.</p> <p><i>Assumptions:</i> The project will be able to establish partnerships with formal buyers (e.g local banks, holding agents, international refiners, etc.) possibly with support of the GEF GOLD global component who will pay >95% of the gold price.</p>
<p>Component/ Outcome 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.</p>	20,000 people (8,000 females and 12,000 males) of whom awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.	To date none of the miners and inhabitants of the 6 project priority sites have been made aware of the dangers of mercury and ways to reduce its use in ASGM.	Awareness raised of 12,000 people (5,000 female and 7,000 male) on the dangers of mercury and ways to reduce its use in ASGM.	Awareness raised of 20,000 people (8,000 female and 12,000 male) on the dangers of mercury and ways to reduce its use in ASGM.	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> Training/workshop attendance lists, in combination with training reports will provide the total number of people trained. Interviews with mining groups/priority site inhabitants. Reports provided by the entity implementing the awareness raising campaign will provide the total number of people reached by the project's awareness raising campaign. Quarterly progress reports (QPRs) sent to the GEF GOLD global component will provide information on the total number of miners trained and the number of people of whom awareness has been raised. <p><i>Assumptions:</i> Number of miners trained: 1,200; No. of Gov. officials trained: 340. It is assumed that all people trained by the project in turn raise awareness of their immediate families which on average consist of 4 people (awareness raised of total of ~ 6,000 people). In addition, the project will raise awareness of an additional 3,500 miners/gov. staff/inhabitants through the implementation of the awareness raising campaign. Of each person of whom awareness has been raised it is assumed that they in turn will raise awareness of their immediate families that on average consist of 4 people (so the total would be ~ 14,000 people). The project aims to raise the awareness of a total of 20,000 people.</p>
	M&E and adaptive management applied in response to needs and Mid-Term Evaluation findings.	0 GEF M&E requirements met by the project.	15 of GEF M&E requirements met and adaptive management applied in response to	34 of GEF M&E requirements met and adaptive management applied in response to	<p><i>Data Collection Method:</i> 1 National Inception Workshop + Report; 6 District Level Inception Workshops + Reports; 5 PIRs (1 per year); 5 audits (average 1 per year); 10 project board meetings (2 per year); 5 Monitoring missions + Back-to-Office Report</p>

			needs and Mid-term Evaluation (MTE) findings.	needs and Mid-term Evaluation (MTE) findings.	(BTOR) (1 per year); 1 mid-term GEF tracking tool updated; 1 Gender assessment completed (as part of MTE); 1 MTR conducted; 1 GEF Secretariat oversight mission conducted + BTOR; 1 TE GEF Tracking Tool updated; 1 TE conducted.
					<i>Assumptions:</i> The project team and UNDP CO can meet all the GEF M&E requirements and within the time planned
	Project results experiences, lessons-learned and best practices are captured, published, and taken up by the GEF GOLD Global Dissemination Platform for national and global dissemination, using report templates provided by the GEF GOLD global component where appropriate.	0 project results, experiences, lessons learned or best practices are captured, published, and taken up by the GEF GOLD Global Dissemination Platform.	1 GEF GOLD country project webpage maintained. Country project participated in 1 Global ASGM Forum, 1 Annual Programme Conference, and 12 monthly programme/project calls on a yearly basis. Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration with the GEF GOLD global component. On a quarterly basis, information on project progress (using agreed metrics and templates provided by the GEF GOLD global component where appropriate) is submitted to the GEF GOLD global component.	1 GEF GOLD country project webpage maintained. Country project participated in 1 Global ASGM Forum, 1 Annual Programme Conference, and 12 monthly programme/project calls on a yearly basis. Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration with the GEF GOLD global component. On a quarterly basis, information on project progress (using agreed metrics and templates provided by the GEF GOLD global component where appropriate) is submitted to the GEF GOLD global component.	<i>Data Collection Method:</i> <ul style="list-style-type: none"> • 1 GEF GOLD website developed and quarterly updated. • Back-to-Office-Reports from yearly Global ASGM Forum and yearly Annual Programme Conference • Meeting minutes from monthly project calls • Quarterly progress reports (QPRs) in GEF GOLD global component format. • Articles published on websites, papers, etc. and on TV. • Indonesia GEF GOLD project reports and publications or reports/publications in which the Indonesia GEF GOLD project figures. <i>Assumptions:</i> The project team can meet all reporting and communication requirements on time.

Annex 7: Map of project stakeholders (as in the Project Document)

Stakeholder	Interests at stake in relation to project	Effect of project on interest (+ 0 -)	Importance (scale 1 to 5,5 = highest)	Influence (scale 1 to 5,5=highest)
Ministry of Environment and Forestry	The project will contribute to the implementation of the Indonesia National Action Plan (NAP) for mercury phase out (2014-2018). Under the NAP the Ministry is the lead for regulations, pilot projects demonstrating alternative technologies, licensing, database development on Hg use in ASGM, among else.	+	5	5
Agency for Assessment and Application of Technology (BPPT)	BPPT is responsible for the implementation of the national policy on technology (including Hg phase-out from ASGM). Project demonstration interventions can help advance BPPT's mandate with respect to the introduction of mercury-free alternative technologies and the transfer of technology and knowledge.	+	5	5
Ministry of Energy and Natural Resources (KESDM)	The project will contribute to the implementation of the Indonesia National Action Plan (NAP) for mercury phase out (2014-2018). Under the NAP, the Ministry is responsible for reviewing existing regulations to support Hg phase out and prohibition at ASGM, disseminate information on alternative technologies, issue mining permits, ASGM conflict resolution and formalization of ASGM at local level. As project partner, KESDM will be focussing on ASGM formalization issues.	+	5	5
Ministry of Health	The project will contribute to the implementation of the Indonesia National Action Plan (NAP) for mercury phase out (2014-2018). Under the NAP the Ministry is responsible for developing norms and standards, monitoring environment health quality, measure Hg exposure levels. As a project partner, the Ministry will be focusing on raising people's awareness on mercury use risks.	+	4	3
Ministry of Trade	The project will contribute to the implementation of the Indonesia National Action Plan (NAP) for mercury phase out (2014-2018). Under the NAP the Ministry is responsible for controlling and monitoring the distribution/trade of mercury in the country. As project partner, the Ministry will be focusing on developing regulations and monitoring procedures (as well as their implementation) pertaining to the trade/distribution of mercury. Note: In the project itself no. activities have been included related to trade/distribution of mercury, however the project will liaise closely with the ministry on project results that might be beneficial for the Ministry's work.	+	3	3

Stakeholder	Interests at stake in relation to project	Effect of project on interest (+ 0 -)	Importance(scale 1 to 5,5 = highest)	Influence (scale 1 to 5,5=highest)
Ministry of Cooperatives and Small-Scale and Medium Enterprises	The Ministry is responsible for the facilitation, encouragement, enhancement and promotion of commercial life and activities in Indonesia by providing services and a support structure for the domestic and international commercial and trading sector. As a project partner, the Ministry will be focusing on strengthening established cooperatives and community and government institutions located in the pilot sites. It will also support the development of an enabling framework for a vibrant and productive ASGM sector.	+	3	3
Ministry of Villages, Less Developed Regions and Transmigration	The Ministry is responsible for the facilitation, encouragement, enhancement and empowerment of village development. As a project partner, the Ministry will be focusing on strengthening village institutions and their capacity to support village development, including the mining sector and the development of small-scale enterprises at village level (implementation of village law). In the project, village owned enterprises might be used as a tool to support the formalization of miners.	+	3	3
Ministry of Communication and Information Technology	The Ministry is responsible for facilitating communication and information dissemination to the public. As a project partner, the Ministry will be involved in the development and implementation of the Awareness Raising Campaign.	+	2	2
Provincial Governments	Provincial governments have the responsibility to provide oversight for planning, implementation, licensing, and monitoring ASGM operations and mercury distribution within their province (through the Provincial Sectoral Agency). The project will contribute towards building the capacity of the provincial governments to enable them to better implement their responsibilities related to ASGM.	+	2	5
District Governments	The district governments have the responsibility to provide oversight for planning, implementation, licensing, and monitoring ASGM operations and mercury distribution within their district (through the District Sectoral Agency). The project will contribute towards building the capacity of the district governments to enable them to better implement their responsibilities related to ASGM.	+	2	5
International NGOs (e.g. AGC, CIRDI, etc.)	The project can bring opportunities to partners, participate, influence or become a project implementing/executing partner to ensure greater impacts of on-going and future ASGM projects.	+	3	2
National NGOs (e.g. BaliFokus, APRI, YTS)	The project can bring opportunities to partners, participate, influence or become a project implementing/executing partner to ensure greater impacts of on-going and future ASGM projects.	+	3	2
Universities (e.g. University of Mataram, University of Lambung Mangkurat, University of Pontianak, University of Palangkaraya, University of Tadulako, University of Pattimura)	The project can inform and influence research and education in the area of ASGM and mercury phase-out.	0	2	2
ASGM mining cooperatives / village-owned companies	The project will increase efficiency of ore processing techniques/technologies (increase gold yields), increase gold price (mercury-free gold) by shortening the gold supply chain/route to market, reduce costs for inputs (energy, mercury, water), reduce negative health and safety impacts.	+	5	5

Stakeholder	Interests at stake in relation to project	Effect of project on interest (+ 0 -)	Importance(scale 1 to 5,5 = highest)	Influence (scale 1 to 5,5=highest)
Individual miners/mining communities	The project will increase efficiency of ore processing techniques/technologies (increase gold yields), increase gold price (mercury-free gold) by shortening the gold supply chain/route to market, reduce costs for inputs (energy, mercury, water), reduce negative health and safety impacts, reduce corruption, violence and insecurity through formalization.	+	5	5
Banks, (micro) financial institutions, lenders, etc.	Project will increase opportunities (and thus income from loans) to lend money to potential profitable groups, companies, cooperatives, etc. that are less risky than more traditional operations in ASGM.	+	3	3
Community Based Organizations (CBOs)	Project might improve the rights of citizens; increase fairness; increase livelihood opportunities for community members; safeguard community member's health and safety.	+	4	3
Women's organizations	Project might improve the rights of women; increase fairness; increase livelihood opportunities for women; safeguard women's health and safety.	+	4	3
Private sector entities (e.g. small-, medium- and large- scale mining companies)	The project might lead to a reduction in conflict and violence in and around mining concessions; improve the public image of the mining sector; create opportunities for partnerships between ASGM and small, medium and large scale processors.	0	2	3

Annex 8: MTR Rating Scales

Ratings for Progress Towards Results: (one rating for each outcome and for the objective)		
6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as “good practice”.
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (MU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	The objective/outcome has failed to achieve its midterm targets and is not expected to achieve any of its end-of-project targets.
Ratings for Project Implementation & Adaptive Management: (one overall rating)		
6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as “good practice”.
5	Satisfactory (S)	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.
Ratings for Sustainability: (one overall rating)		
4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project’s closure and expected to continue into the foreseeable future
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review
2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained

Annex 9: Consultants' Agreement Forms

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Dalibor Kysela

Name of Consultancy Organization (where relevant): _____ N.A.

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Vienna on

Signature: _____



Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
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6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Hendra Michael Aquan

Name of Consultancy Organization (where relevant): _____ N.A _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Yogyakarta on 29 December 2020



Signature: _____

Annex 10: Audit Trail

In accordance with the procedures, Audit Trail is being submitted as a separate file.

Annex 11: Evaluation Report Clearance Form

Midterm Review Report Reviewed and Cleared By:	
Commissioning Unit	
Name: <u>Teuku Rahmatsyah, ARR Programme, UNDP Indonesia</u>	
Signature: <u></u>	Date: <u>21-Jul-2021</u>
UNDP-GEF Regional Technical Advisor	
Name: <u>Anderson Alves, Regional Technical Specialist, UNDP-NCE-BRH</u>	
Signature: <u></u>	Date: <u>21-Jul-2021</u>