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

GEF Project ID: 9707
UNDP PIMS ID: 5872
Country: Indonesia
Region: Asia
GEF Implementing Agency: United Nations Development Programme (UNDP)
Implementing Partner: Ministry of Environment and Forestry (MoEF or *KLHK)*
GEF Trust Fund: GEF-6
GEF Focal Area: Chemicals ad Waste
Terminal Evaluation Timeframe: 13 March - 31 May 2023
Date of Final TE Report: 31 May 2023

Prepared by Terminal Evaluation Team:

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The International Consultant is practically indebted to the National Consultant for his excellent assistance and cooperation in reviewing many documents/reports in local language, and in conducting many of the interviews due to language barrier of the International Consultant, and in explaining and clarifying many points and issues in response to his many queries during the interviews.

Terminal Evaluation Team member:
Ari W. Adipratomo (National Consultant) and
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DISCLAIMER

This Terminal Evaluation Report is the work of the two independent Evaluators and does not necessarily represent the views, or policies, or intentions of the United Nations Development Programme (UNDP) and/or of the Government of Indonesia.

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Acronyms and Abbreviations

AGC	Artisanal Gold Council
AIPE	Coordinating Ministry for Maritime Affairs
APRI	Asosiasi Penambang Rakyat Indonesia (Indonesian Artisanal Mining Association)
ASGM	Artisanal and Small-scale Gold Mining
AWP	Annual Work Plan
BAT/BEP	Best Available Techniques/Best Environmental Practices
BLH	*Badan Lingkungan Hidup* (District Environment Office)
BPPT	*Badan Pengkajian dan Penerapan Technology* (The Agency for Assessment and Implementation of Technology) – Now it called as BRIN
BL	*Bina Lingkungan* (a Bank Negara Indonesia (BNI) programme for environment support)
BLU	*Badan Layanan Umum* (Funding Agency at Ministry of Environment and Forestry)
BNI	*Bank Negara Indonesia* (a name of one of Indonesia's banks)
BRI	*Bank Rakyat Indonesia* (a name of one of Indonesia's banks)
BRIN	National Research and Innovation Agency
BUMDes	*Badan Usaha Milik Desa* (Village owned corporation)
CIRDI	Canadian International Resources and Development Institute
CSR	Corporate Social Responsibility
CTA	Chief Technical Advisor
DED	Detailed Engineering Design
DLH	*Dinas Lingkungan Hidup* (Province Environment Office)
ESMP	Environmental and Social Management Plant
FS	Feasibility Study
FSP	Full Sized Project
GBV	Gender Based Violence
GEF	Global Environment Facility
GEF OFP	GEF Operational Focal Point
GEF PIR	GEF Project Implementation Report
GEFSEC	Global Environment Facility Secretariat
GEWE	Gender equality and women empowerment
GHG	Green House Gases
GoI	Government of Indonesia
HACT	Harmonized Approach to Cash Transfer
Hg	Mercury
INCAM	Indonesia Center for Artisanal Mining
IPR	*Ijin Pertambangan Rakyat* (artisanal mining license)
ISMIA	Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining
KESDM	*Kementerian Energi dan Sumber Daya Mineral* (Ministry of Energy and Mineral Resources)

KLHK	*Kementerian Lingkungan Hidup dan Kehutanan* (Ministry of Environment and Forestry)
KUR	*Kredit Usaha Rakyat* (one of Bank Rakyat Indonesia's financial products)
LOA	Letter of Agreement
LKMD	*Lembaga Ketahanan Masyarakat Desa* (Village Community Resilience Agency)
M&E	Monitoring and Evaluation
MSP	Medium Sized Project
MTR	Mid-term Review
NAP	National Action Plan
NIM	National Implementation Modality
NGO/CSO	Non-Governmental Organization/Civil Society Organization
NPD	National Project Director
OECD	Organization for Economic Cooperation and Development
PERTAMA	Perempuan Tambang Mandiri (Independent Artisanal Women)
PIF	Project Identification Form
PIR	GEF Project Implementation Report
PM	Project Manager
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
PSC	Project Steering Committee (Project Board)
QARE Unit	Quality Assurance and Results Unit, UNDP Indonesia Country Office
RBM/PCM	*Results Based Management*/Project Cycle Management
SDG	Sustainable Development Goals
SESP	Social and Environmental Screening Procedure
STAP	GEF Scientific and Technical Advisory Panel
TA	Technical Assistance
TAC	Technical Advisory Committee
TE	Terminal Evaluation
UNDP ERC	UNDP Evaluation Resource Center
UNDP-GEF	UNDP Global Environmental Finance Unit
UNDP IEO	UNDP Independent Evaluation Office
UNEP	United Nations Environment Programme
WG	Working Group
WGC	Working Group Coordinator
WPR	Wilayah Pertambangan Rakyat (artisanal mining area)
YTS	Yayasan Tumbuak Shinta(Tumbuak Shinta Foundation)

EXECUTIVE SUMMARY

The objective of the United Nations Development Programme (UNDP)-supported, Global Environment Facility (GEF)-financed Project "*Integrated Sound Management of Mercury in the Artisanal and Small-scale Gold Mining (ISMIA)*" (*GEF project ID: 9707 and UNDP PIMS ID 5872*) is to protect human health and the environment by reducing or eliminating mercury releases from the Indonesian Artisanal and Small-scale Gold Mining (ASGM) sector in Indonesia. It was expected that through supporting the six (6) ASGM communities identified in the project, the Project would generate mercury use reduction by at least 5 metric tonnes/year from the preliminary baseline estimate of more than 13 metric tonnes per year of mercury use, starting in year three of the Project, a total mercury release reduction of at least 15 metric tonnes will be achieved during the last three years over the life span of the Project.

This Terminal Evaluation (TE) Report includes the Findings, Conclusions, Recommendations and Lessons-Learned of the Terminal Evaluation conducted for the five-year Project which started implementation in Indonesia on 5 September 2018 upon the full signature of the UNDP Project Document (ProDoc) by the Ministry of Environment and Forestry (MoEF) and UNDP. The Project is being implemented by the United Nations Development Programme (UNDP) as the GEF Implementing Agency (IA) and executed by the Ministry of Environment and Forestry (MoEF), the Implementing Partner (IP).

The TE Report has been prepared by two independent consultants, Mr. Ari Wijanarko Adipratomo, Senior Specialist, Terminal Evaluation Consultant (National) and Mr. Yiu Chiu William Kwan, Senior Specialist, Terminal Evaluation Consultant (International). The Terminal Evaluation was carried out during the period of 13 March to 31 May 2023. A TE mission was undertaken 3 to 14 April 2023 in Indonesia during which meetings were held to conduct discussions/interviews with project stakeholders and partners, as well as project beneficiaries. Field visits were made during the TE mission to two (2) project sites to conduct discussions and interviews with local government officials and project beneficiaries.

The TE has been conducted in accordance with the "UNDP Evaluation Guidelines, Revised June 2021"[1], the "UNDP Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects, 2020"[2], and the "GEF Monitoring and Evaluation Policy, 2006 revised in 2010".

Table 1: Project Information Table

Project Details		Project Milestones	
Project Title:	Integrated Sound Management of Mercury In Indonesia's Artisanal and Small-scale Gold Mining (ISMIA)	PIF Approval Date:	27 October 2016
UNDP Project ID (PIMS #):	5872	CEO Endorsement Date:	20 June 2018
GEF Project ID:	9707	ProDoc Signature Date:	5 September 2018
UNDP Atlas Business Unit, Award ID, Project ID:	Business Unit: IDN10 Award ID: 00106659 Atlas Output ID: 00107292	Date Project Manager hired:	1 February 2019
Country:	Indonesia	Inception Workshop Date:	26 March 2019
Region:	Asia	Mid-Term Review	January – April 2021

[1] http://web.undp.org/evaluation/guideline/documents/PDF/UNDP_Evaluation_Guidelines.pdf

[2] 20 http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf

		Completion Date:	
Focal Area:	Chemicals and Waste	Terminal Evaluation Completion Date:	31 May 2023
GEF Operational Programme or Strategic Priorities/Objectives:	CW-2 Program 4, Reduction of mercury use and releases to the environment from the Artisanal and Small-scale Gold Mining	Planned Operational Closure Date:	5 September 2023
Trust Fund:	GEF Trust Fund (GEF-6)		
Implementing Partner (GEF Executing Entity):	Ministry of Environment and Forestry, MoEF (*KLHK*)		
NGOs/CSOs involvement:	*Asosiasi Penambang Rakyat Indonesia* (APRI, Indonesia Artisanal Mining Association)		
Private Sector involvement:	Banks (BRI, BNI, Sulut GO) and PT. Pegadaian		
Geospatial coordinates of project sites:			
Financial Information			
PDF/PPG	at Approval (US$M)	at PDF/PPG completion (US$M)	
GEF PDF/PPG grants for project preparation	0.15 *(27 December 2016)*	0.15	
Co-financing for project preparation	0	0	
Project	at CEO Endorsement (US$M)	at TE (US$M)	
1. UNDP contribution:	0.11	0.12	
2. Government:	25.49	25.67	
3. Other (CSO)	3.00	3.78	
4. Private Sector:			
5. NGOs:			
6. Total co-financing (1+2+3+4+5):	28.60	29.57	
7. Total GEF funding:	6.72	5.72	
Total Project Funding (6+7):	35.32	36.29	

Brief Project Description

The objective of the *Integrated Sound Management of Mercury in the Artisanal an Small-scale Gold Mining (ISMIA)*" project was to protect human health and the environment by reducing or eliminating mercury releases from the Indonesian Artisanal and Small-scale Gold Mining (ASGM) sector by i) Strengthening institutions and the policy/regulatory framework for mercury-free ASGM; ii) Increasing the access of mining communities to finance to enable the procurement of mercury-free processing technologies; iii) Increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization; and, (iv) raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

6 (six) priority project sites, mining communities in Kuantan Singingi District (Riau), Kuon Progo District (Yogyakarta), Lombok Barat District (West Nusa Tenggara Province), Halmahera Selatan District (North Maluku Province), Minahasa Utara District (North Sulawesi Province), Gorontalo Utara District (Gorontalo Province) have been selected by the Government of Indonesia (GoI) at CEO Endorsement for project interventions. Mining communities in these districts would be supported by the Project in 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 produced gold to better paying markets. In parallel, the enabling environment for ASGM would be improved 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 enabling environment would not only benefit miners located in the project's priority sites, but ASGM miners located anywhere in Indonesia. Two more project sites (Bolaang Mongondow Timur District and Sumbawa Barat District) were added during project implementation with assistance provided to strengthen their capacities with no increase of the project costs to the GEF.

It was expected that through supporting these 6 (six) ASGM communities, the reduction of mercury from the preliminary baseline estimates of more than 13 metric tonnes per year, at the reduction rate of 50%, would be by at least 5 metric tonnes/year starting in year three of the Project, a mercury release reduction of at least 15 metric tonnes would be generated over the last three years' life span of the Project.

Evaluation Ratings Table

Through a set steps of evaluation approach and methodology, the TE Evaluation Consultants concluded a set of evaluation findings, conclusions, recommendation and lessons-learned. Based on the findings, the TE Team assigned the following Evaluation Ratings.

Table 2: Evaluation Ratings Table

Monitoring & Evaluation (M&E)	Rating
M&E design at entry	Satisfactory (S)
M&E Plan Implementation	Highly Satisfactory (HS)
Overall Quality of M&E	Highly Satisfactory (HS)
Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	**Rating**
Quality of UNDP Implementation/Oversight	Highly Satisfactory (HS)
Quality of Implementing Partner Execution	Highly Satisfactory (HS)
Overall quality of Implementation/Execution	Highly Satisfactory (HS)
Assessment of Outcomes	**Rating**
Relevance	Highly Satisfactory (HS)

Effectiveness	Highly Satisfactory (HS)
Efficiency	Highly Satisfactory (HS)
Overall Project Outcome Rating	Highly Satisfactory (HS)
Sustainability	**Rating**
Financial sustainability	Moderately Likely (ML)
Socio-political sustainability	Likely (L)
Institutional framework and governance sustainability	Moderately Likely (ML)
Environmental sustainability	Likely (L)
Overall Likelihood of Sustainability	Moderately Likely (ML)

Table 3: Terminal Evaluation Rating Scales

Ratings for Outcomes, Effectiveness, Efficiency, M&E, IA Implementation/Oversight, IP Execution, Relevance	Sustainability Ratings
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Summary of findings and conclusions

Based on the summary findings, the project design and formulation demonstrate alignment with national development priorities and the requirements of the Minamata Convention. The project objectives, outcomes, and outputs are clear and well-defined, supported by SMART indicators and a detailed Results Framework. The identification of risks and assumptions, along with mitigation measures, indicates a proactive approach to risk management. The project also showcases a strong commitment to stakeholder engagement, gender empowerment, and budgetary planning.

The project implementation has been efficient and effective, characterized by robust coordination and working relationships among various levels of government, key stakeholders, Implementing Partner, and the Project Team. The timely and proactive management actions taken by UNDP and the Implementing Partner have contributed to the successful achievement of project outputs and outcomes. The project demonstrated resilience and adaptability by swiftly adjusting its strategies and methodologies to comply with evolving health and safety guidelines in addressing the additional challenges that emerged due to the COVID-19 pandemic and the rapidly changing regulatory landscape. This flexibility allowed for the continuity of project activities and minimized disruptions to the

intended outcomes. The specific focus on gender empowerment, including policy assessment, training, and increased women's participation in mining groups, highlights the project's commitment to gender equality.

The UNDP Country Office (CO) played a crucial role in the implementation of the project, carrying out specific functions to ensure its success. Under the guidance of the Senior Programme Manager, the CO provided support and guidance to the Project Team, ensuring the smooth and timely execution of project activities. The UNDP CO also maintained a clear separation between its responsibilities for project implementation and oversight functions. This was achieved through the independent Project Assurance carried out by the Quality Assurance, Results and Evaluation (QARE) Unit within UNDP Indonesia CO. The QARE Unit provided objective and independent oversight and monitoring functions, supporting the Project Board and Project Management Unit. They ensured the completion of project management milestones and prepared annual Project Assurance Reports.

Furthermore, senior management of UNDP actively participated as members of the Project Board, providing strategic guidance and recommendations on the project's strategies and implementation directions. This collaborative approach fostered effective decision-making and enhanced the project's overall outcomes. Notably, significant progress has been achieved in reducing mercury use and promoting the adoption of mercury-free technologies, addressing environmental concerns and aligning with the Minamata Convention. The project's focus on establishing financial mechanisms for small and medium-sized enterprises and increasing women's participation in mining groups has contributed to income generation and the promotion of sustainable mining practices.

In summary, the UNDP CO, through its distinct functions in project implementation support and oversight, demonstrated its commitment to ensuring the project's success. The independent Project Assurance carried out by the QARE Unit and the active engagement of senior management in the Project Board were instrumental in achieving the project's objectives. The project's notable achievements in reducing mercury use, fostering sustainable mining practices, and aligning with international and national priorities further underscore its relevance and success in addressing environmental challenges.

The involvement and support of national stakeholders, cross-ministries, and the Project Steering Committee have played a crucial role in the project's design, formulation, and implementation. Their contributions have ensured effective coordination, collaboration, and the utilization of quality inputs. However, challenges remain in terms of financial sustainability for individual and women miners, as accessing formal channels of capital or loans without Community Mining Permit (Ijin Pertambangan Rakyat or IPR) approval is difficult. Inconsistent interpretation and application of regulatory measures, particularly regarding IPR requirements, also pose obstacles to progress. Improving coordination, uniform implementation, and streamlining the IPR approval process are necessary for overall sustainability.

Overall, the project has made remarkable strides in strengthening capacity, formalizing mining practices, empowering women miners, reducing mercury use, and introducing mercury-free technologies. Despite challenges, these achievements have had a significant impact on environmental sustainability and the well-being of mining communities.

Furthermore, the project's influence extends globally. It has successfully avoided 23 metric tonnes of mercury use and eliminated the use of 220 kilograms of mercury through mining operations with equipment provided by the Project. The benefits of mercury use/release reduction, and experience and knowledge gained from the project results have reached not only the seven countries in the planetGOLD programme but also generated global environmental benefits contributing to other nations grappling with artisanal and small-scale gold mining. By promoting awareness and reducing mercury use, the project has contributed to a broader trend of global mercury pollution reduction.

In conclusion, the project's dedication to excellence, environmental preservation, and community welfare has yielded impressive results. Its participation in the planetGOLD programme and substantial reductions in mercury demonstrate its transformative role in the global fight against mercury pollution.

Key Lessons learned

The project has yielded several key lessons that can inform future initiatives in the artisanal and small-scale gold mining (ASGM) sector. Firstly, the project demonstrated the critical importance of robust stakeholder engagement and clear delineation of roles and responsibilities. The active involvement of relevant stakeholders, including government agencies, Implementing Partner, project beneficiaries and local communities, fostered effective coordination and collaboration, facilitating the smooth and orderly implementation of project activities. Clear communication channels and regular consultations allowed for the identification and timely resolution of challenges and concerns, ensuring the project's success.

Secondly, the project highlighted the need for adaptability and resilience in the face of unforeseen challenges, such as the COVID-19 pandemic. The rapid spread of the virus necessitated swift adjustments to project activities, including the adoption of remote work arrangements, the implementation of health and safety protocols, and the deployment of innovative digital platforms for communication and training. The Project Team's ability to swiftly respond to these challenges and find creative solutions helped mitigate the pandemic's negative impacts on project implementation and ensured the continuation of essential support to mining communities.

Lastly, the project underscored the importance of staying abreast of rapidly changing regulations and policy frameworks. The ASGM sector is subject to evolving regulatory landscapes at the national and international levels. The Project Team demonstrated vigilance in monitoring and interpreting these regulatory changes, enabling them to promptly adjust project strategies and activities to ensure compliance and alignment with new requirements. Regular engagement with relevant government agencies and active participation in policy discussions proved instrumental in navigating these evolving regulatory environments and maintaining the project's effectiveness.

In summary, the project's experience highlights the significance of stakeholder engagement, adaptability in the face of unforeseen challenges like the COVID-19 pandemic, and vigilance in monitoring and responding to rapidly changing regulations. These lessons learned can serve as valuable guidance for future initiatives in the ASGM sector, fostering improved project design, implementation, and long-term sustainability.

Recommendation Summary Table

Table 4: Summary of Recommendations

Rec No.	TE Recommendation	Entity Responsible	Time frame
A	Category 1: Follow-up Actions		
A1	Uniformed and consistent understanding and application of regulations on the review and approval of mining licenses To address the current challenges in the consistent and transparent operationalization of Law 23/2014 by the Regional (Provincial) government to issue mining licensing, the evaluators recommends that UNDP suggests to the Government that relevant ministries (i.e., MoEF and MEMR) to facilitate a uniformed and consistent understanding by the provincial and regional government agencies of the regulations surrounding ASGM, in particular, the review and approval criteria and process on issuance of IPR/WPR. This can be achieved by improving internal coordination within the jurisdiction of each beneficiary ministries.	UNDP	June – September 2023 with continued project implementation

A2	Continue and improve communication To effectively utilize and improve the established communication channels between government agencies and mining cooperatives, both within and across provinces, to ensure successful attainment of project objectives. To facilitate this, the evaluators suggest that UNDP recommends that the communication responsibility be taken up the relevant government agencies and mining cooperatives, enabling them to take ownership of ongoing discussions, under the coordination of the Hazardous Substances Management Directorate of MoEF. This transfer of responsibility will help ensure specific targets, such as increased formalization rates and reduced mercury use, are achieved. To support this, it recommended that the project can handover its valuable results and publications to the Hazardous Substances Management Directorate of MoEF for distribution to the relevant stakeholders. These resources will serve as valuable references, promoting effective communication and cooperation between government agencies and mining cooperatives. Additionally, sharing these materials can facilitate the replication of successful approaches and practices in other regions, fostering sustainable development in the artisanal and small-scale gold mining sector.	UNDP	June – September 2023 with continued project implementation
A3	Foster partnerships with regional financial institutions Regional financial institution play a crucial role in supporting mining cooperatives with financial resources. The evaluators recommend that the project proposes to Government of Indonesia, through the Hazardous Substances Management Directorate of MoEF, to promote discussions between financial institutions and legal mining cooperatives (IPR holders). Financial institutions should be encouraged to consider specialized regulations tailored to the special situation of mining cooperatives for easier access to financial resources.	UNDP	June – September 2023 with continued project implementation
A4	Linkage with formal market It is recommended that the project advocates that the Hazardous Substances Management Directorate of MoEF to identify potential stakeholders to support promoting access to international markets for miners to obtain better prices for mercury-free produced gold.	UNDP	June – September 2023 with continued project implementation
A5	Promotes sustainable practices in ASGM Continued efforts to focus on promoting sustainable	UNDP	June – September

	practices in the artisanal and small-scale gold mining (ASGM) sector. This includes the promotion or replication of mercury-free technologies and the improvement of safety practices. Promote or replicate mercury-free technologies: The evaluators recommend that UNDP puts forward a proposition for the Hazardous Substances Management Directorate of MoEF in collaboration with BRIN to Promote the adoption of technologies like Gravitational, carbon-in-leach, and cyanidation, which reduce mercury use in ASGM. By actively encouraging their implementation and replication, the government can advance sustainable mining practices and minimize environmental impact, expanding beyond the eight (8) project locations of this project. Improve safety practices: The evaluators recommend that UNDP proposes to the Hazardous Substances Management Directorate of MoEF to promote comprehensive safety measures using Personal Protective Equipment Guideline developed by the project, including the implementation of the K3 framework, to protect miners and create a safer working environment. Prioritizing safety will contribute to the well-being of miners and reduce accidents.		2023 with continued project implementation
A6	Promote greater presentation and more responsible roles for women in ASGM To further empower women in the mining sector and ensure their increased representation and responsibilities in matters of safety measures, it is recommended that UNDP proposes that MoEF promotes women's active participation in collaboration with other related ministries. This can be achieved by implementing the circulated gender guidelines developed by the project and providing gender training to the Ministry of Environment and Forest (MoEF) and other relevant stakeholders. By fostering gender equality and promoting women's active involvement, the project can contribute to a safer and more inclusive mining environment.	UNDP	June – September 2023 with continued project implementation

1.0 INTRODUCTION

The Terminal Evaluation (TE) has been commissioned by the United Nations Development Programme (UNDP) Indonesia Country Office (CO) in accordance with UNDP-GEF Monitoring and Evaluation Guideline that all full- and medium-sized UNDP-supported, GEF-financed projects are required to undergo a Terminal Evaluation upon operational completion of project implementation. UNDP Indonesia CO engaged the National and International TE Consultants (TE Team) as per the Terms of Reference (TOR) to conduct the Terminal Evaluation for the UNDP-supported, GEF-financed project entitled "*Integrated Sound Management of Mercury In Indonesia's Artisanal and Small-scale Gold Mining (ISMIA)*".

This Terminal Evaluation Report has been prepared by two independent Terminal Evaluation Consultants, (Mr.) Ari W. Adipratomo, Senor Specialist, National Terminal Evaluation Consultant and (Mr.) Yiu Chiu William Kwan, Senior Specialist, International Terminal Evaluation Consultant. The Terminal Evaluation was carried out from March to May 2023. A Terminal Evaluation mission in Indonesia was undertaken from 3 to14 April 2023 during which meetings were held with project partners as well as project beneficiaries, and filed visits were made to two of the eight project sites due to travel distances and time limitation. Online or telephone Interviews were conducted with the remaining six project locations.

1.1 Purpose of Evaluation

The objectives of the Terminal Evaluation (TE) carried out by the two Independent National and International Consultants were to assess the achievements of the project results and objectives against what was expected to be achieved, to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The purposes of evaluation of the UNDP-supported, GEF-financed projects also include the following:

- To promote accountability and transparency and to assess and disclose the extent of project accomplishment;
- To synthesize lessons that can help to improve the selection, design and implementation of future GEF-financed UNDP activities and to improve the sustainability of benefits and aid in the overall enhancement of UNDP programming;
- To provide feedback on issues that are recurrent across the UNDP portfolio and need attention and on improvements regarding previously identified issues;
- To assess and document project results, and the contribution of these results towards achieving GEF strategic objectives aimed at Global Environmental Benefit; and
- To gauge the extent of project convergence with other priorities within UNDP country programme, including poverty alleviation, strengthening resilience to the impacts of climate change, reducing disaster risk and vulnerability, as well as cross-cutting issues such as gender equality, empowering women and supporting human rights.

This TE is thus to analyze the implementation of the project activities, assess the effectiveness and efficiency of project achievements to deliver the stated objectives and outcomes, and evaluate the project's contribution towards Indonesia's compliance with the Minamata Convention. It establishes the project's relevance, performance and success, including the sustainability of results. The evaluation also brings together and analyses best practices, specific lessons learned, and recommendations regarding strategies employed and the implementation arrangements, that may be relevant to or replicable by other projects in the country and/or countries in other parts of the world.

1.2 Scope of the Evaluation

In accordance with the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF) Monitoring and Evaluation Policies and Procedures, a Terminal Evaluation (TE) is required prior to operational completion of implementation of all UNDP-supported, GEF-financed Full-size Projects (FSPs). The UNDP Programme and Operations Policies and Procedures (POPP) states that "Project evaluation assesses the performance of a project

in achieving its intended results. It yields useful information on project implementation arrangements and the achievement of outputs. Project evaluation provides a basis for the evaluation of outcomes and programmes", and the GEF M&E Policy aims to "promote accountability for achievement of GEF objectives through the assessment of results, effectiveness, processes, and performance of the partners involved in GEF activities". It further states that "GEF results will be monitored and evaluated for their contribution to global benefits". The policy enunciates that the GEF partners, in addition to conducting various other evaluations, also evaluate projects" at the end of the intervention (terminal evaluation).

The scope of this Terminal Evaluation is divided into three parts in accordance with the TORs and the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A summary of the scope of this TE is presented below:

I. Project Design and Formulation:

- Review the problem addressed by the project and the underlying assumptions;
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results;
- Review the project's objectives and outcomes/components and how feasible they can be reached within the project's time frame;
- Undertake a critical analysis of the project's logframe indicators and targets;
- Review how the project addresses country priorities;
- Review country ownership;
- Review management arrangements and decision-making processes;
- Review the extent to which relevant gender issues were raised in the project design;
- Assess how gender aspects are integrated into the project design;
- Review UNDP comparative advantage;
- Review linkages between the project and other interventions within the sector.

II. Project Implementation

- Review how adaptive management was implemented during the implementation of the project;
- Review overall effectiveness of project management as outlined in the project document;
- Review the quality of execution of the Executing Agency/Implementing Partner(s);
- Review any delays in project start-up and implementation;
- Review how Results-Based Management is being implemented;
- Examine the use of the project's results framework/ logframe as a management tool;
- Consider the financial management of the project, including cost-effectiveness;
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions;
- Review the decision making processes to align financing priorities and annual work plans;
- Review the monitoring tools currently being used and the project progress reporting function as well as the feedback loop for adaptive management;
- Review project partnerships arrangements;
- Review stakeholder's participation and country-driven project implementation processes;
- Review project communications.

III. Project Results

- Review the progress made against the logframe indicators and the end-of-project targets;

- Assess the stakeholders' ownership of project achievements;
- Compare and analyse the GEF Tracking Tool at Baseline with the one completed at the time of TE;
- Identify remaining barriers to achieving the project objective;
- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date;
- Assess risks to sustainability in term of financial risks, socio-economic risks, institutional framework and governance risks, and environmental risks;
- Review and possibly identify ways in which the project can further expand its achievements.

1.3 Evaluation Approach and Methodology

The methodology applied to conduct the Terminal Evaluation is in compliance with international criteria and professional norms and standards; including the norms and standards adopted by the UN Evaluation Group.

The TE has been conducted in accordance with the "UNDP Evaluation Guidelines, Revised June 2021"[3], the "UNDP Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects, 2020"[4], and the "GEF Monitoring and Evaluation Policy, 2006 revised in 2010".

The TE has been conducted in-line with GEF Evaluation Principles, which are: *Independence, credibility, utility, Impartiality, Transparency, Disclosure, Ethical, participation, Competencies and Capacities*[5]. The TE has also considered the two GEF evaluation objectives at project level, namely (i) promote accountability for the achievement of GEF objectives; including the Global Environmental Benefits; and (ii) promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners.

The TE would provide evidence based information that is credible, reliable and useful. The TE has followed a collaborative and participatory approach ensuring close engagement with the Project Team, Government counterparts (including the GEF Operational Focal Point), the Implementing Partner and Responsible Parties, the UNDP Indonesia Country Office, the UNDP-Nature, Climate and Energy (NCE) Bangkok Regional Hub (BRH) Regional Technical Adviser, direct project beneficiaries and other key stakeholders. The evidence-based assessment relied on feedbacks from persons and entities that have been involved in the design, implementation, and supervision of the Project, and review of available documentations and findings made during the TE mission.

The TE mainly focused on verification and assessment of implementation and the achievement of project results and objectives, accountability, identification of project's successes in order to promote replicability, and to draw lessons that can both improve the sustainability of benefits from this Project, and aid in the overall enhancement of UNDP programming.

GEF evaluations address five major evaluation criteria. The evaluation terms of reference explain how the criteria would be analyzed in each case and this Terminal Evaluation has been conducted following these criteria with the findings structured in this fashion.

Relevance: The extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time.

Effectiveness: The extent to which an objective has been achieved or how likely it is to be achieved.

Efficiency: The extent to which results have been delivered with the least costly resources possible. Also called cost-effectiveness or efficacy.

Results: The positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short- to medium-term

[3] http://web.undp.org/evaluation/guideline/documents/PDF/UNDP_Evaluation_Guidelines.pdf

[4] 20 http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf

[5] http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf

outcomes, and longer-term impact including global environmental benefits, replication effects and other local effects.

Sustainability: The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable.

In carrying out this TE exercise, qualitative and quantitative data collection tools were applied for analyzing relevant data and information from the principles of results-based review (including relevance, ownership, efficiency and effectiveness, sustainability). The TE was carried out according to the UNDP/GEF Monitoring and Evaluation Policy and following the following steps.

(a) *Initial Briefing/Assessment Meeting* was held with the Project Team (Project Management Unit, PMU) to understand and clarify key objectives and issues that were relevant to the Terminal Evaluation, to have a more in-depth overview of the project so as to be familiar with the project, to obtain preliminary updates on the progress of project implementation, and to gather key achievements and specific obstacles/bottleneck/setbacks on project implementation, to understand the interactions/interventions conducted, and the key stakeholders and partnership arrangements. A comprehensive presentation on the progress and achievements of the project was provided to the TE Team by the Project Team at the meeting.

(b) *Document review and analysis, preparation of the TE mission*: In-depth review and analysis of all relevant source of information including documents prepared during the project preparation phase were conducted. The documentation analysis examined a comprehensive set of documents of the project as provided by the Project Team after the Initial Briefing/Assessment Meeting. Document review and analysis continued during the entire duration of the Terminal Evaluation exercise, as additional or supplementary documents became available or provided in response to requests from the TE Team.

(c) *Semi-structure interview with key stakeholders*:

- Development of evaluation questions around relevance, effectiveness, efficiency and sustainability and designed for the different stakeholders to be interviewed.
- As engagement of stakeholders is vital to a successful TE, stakeholder involvement has included interviews and focus group discussions with men and women, stakeholders who have project responsibilities, including but not limited to: UNDP Indonesia Country Office (CO), UNDP NCE Bangkok Regional Hub Regional Technical Advisor, senior officials of the Ministry of Environment and Forestry (MoEF or *KLHK*), National Research and Innovation Agency (BRIN), Agency for Assessment and Implementation of Technology (BPPT), Ministry of Energy and Mineral Resources (MEMR or *KESDM*) and Coordinating Ministry for Maritime Affairs (AIPE), the PMU's Project Working Group Coordinators, key experts and all consultants in the subject area who have been hired by the project, Project Board members, project stakeholders, academia, local government, CSOs and project beneficiaries, etc. The interviews and focus group discussions were carried out in person during the TE mission in Indonesia and, due to time and remote distance constraints, some interviews were conducted through virtual media or telephone, including when the relevant stakeholders are not available in person during the TE mission or are based outside the country.
- All interviews were conducted in full confidence and anonymity. The final TE report did not assign any specific comments to particular individuals.

(d) *Field Visits and on-stie validation of key tangible outputs and interventions:* Site visits were conducted during the TE mission in order to see physical areas where the project site interventions were being implemented to validate tangible outputs and interventions, as well as to liaise with the state-level and local-level government officials and project beneficiaries. However, due to time and distance constraints, the TE Team visited only two of the eight project locations. For the remaining six project locations, interviews were conducted either online or through telephone with key local government officials and project beneficiaries.

1.4 Data Collection and Analysis

With regard to specific methodologies to gather assessment information, the TE Team conducted in-depth review and analysis of all relevant documents of the project assembled and made available by the PMU. The documentation analysis examined during TE phase included, but not limited to, the following:

- PIF
- UNDP Initiation Plan
- UNDP Project Document (GOLD-ISMIA) with all annexes
- CEO Endorsement Request
- UNDP Social and Environmental Screening Procedures (SESP)
- Project Inception Workshop Report
- Midterm Review (MTR) Report and Management Responses to MTR recommendations
- Project Implementation Reports (PIRs)
- Annual Work Plan
- Annual Reports
- Project Portfolio Indicators
- Matrix of GEF-GOLD status
- Planet Gold Country Project Reporting
- Project Assessment Report (PAR)
- Quarterly progress report and work plans of the various implementation task teams
- Audit reports
- Finalized GEF Focal Area Tracking Tools/Core Indicators at CEO endorsement, midterm and terminal stage
- Minutes of meetings of the Project Board
- Minutes of Tripartite Meeting
- Minutes of Project Team meetings
- Oversight mission reports
- All monitoring reports prepared by the Project
- Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions
- Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
- Project Financial Reports/Combined Delivery Report (CDR)
- Copies of project outputs (booklets, manuals, technical reports, articles, etc.)
- Sample of project communications materials
- Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
- List of contracts and procurement items over ~US$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
- Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over the relevant time period, if available
- List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Team members, and other partners to be consulted
- Annual Operational Plans (AOPs/POAs)
- Local consultant's reports and products

- Memorandum of Agreements
- Contracts and Addendums
- Project operational guidelines, manuals and systems
- Financial and Administration guidelines used by Project Team
- Project site location maps
- UNDP Country Programme Document (CPD)
- Project deliverables that provide documentary evidence of achievement towards project outcomes

The TE reviewed the baseline, midterm and end-of-project GEF Focal Area Core Indicators and project indicators presented in the Project Results Framework and the GEF Tracking Tools submitted to the GEF at CEO endorsement.

The document review took place mainly at the onset of the evaluation process. Further documentations were made available or as requested throughout the evaluation process, in particular during the mission in Indonesia when document analysis was continued to seek additional information or clarifications. Furthermore, other documents, such as publications originating from the project (research and media publications, etc.) were also reviewed and analyzed. Media and other dissemination documents were also consulted.

Based on the document review, an important tool developed for the TE process was an Evaluation Criteria Matrix (Annex 2). This matrix guides the data collection process and, as the evaluation proceeds, the matrix was used to collect and display data obtained from various sources that relate to relevant evaluation criteria and questions. This tool was developed not only as a guide for systematizing the data collection process as well as in making the evaluation process transparent. The matrix contains Evaluative Criteria Questions, i.e. sets of questions and sub questions, detailing each review criteria, indicators; sources; and methodology.

1.5 Ethics

The Terminal Evaluation was conducted following the principles contained in the Ethical Guidelines for Evaluation by the United Nations Evaluation Group (UNEG). The National and International Consultants have signed the Code of Conduct for Evaluators, and are included as Annex 8.

1.6 Limitations to the Evaluation

Due to limited timeframe and remote distance constraints, field visits to all the eight (8) project locations (6 locations originally designated in the Project Document plus two additional locations added during project implementation, for which project interventions are limited to capacity building aspects) were not possible within the allocated duration of the TE mission in Indonesia. The TE Team visited only two of the eight locations while interviews/discussions with the remaining six project locations were arranged for online or telephone interview, all with strong support and participation of local government officials and project beneficiaries. The TE Team feels that such virtual discussions did not materially affect the effectiveness of frank and in-depth exchanges.

As some of the project's documents and reports were written in local language (Bahasa), and some of the government officials and many of the project beneficiaries (especially local miners) were more comfortable to speak local language, the National TE Consultant has provided excellent assistance and support when reviewing those documents and while conducting interviews with those government officials and project beneficiaries during the TE mission. The National TE Consultant has also provided excellent explanations and clarifications during discussions and interviews in response to inquiries raised by the International TE Consultant. Thus the language barrier did not present any negative impact on collection of, nor the correct understanding of the data and information.

1.7 Structure of the Terminal Evaluation Report

The TE Report is structured in line with UNDP's *Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects* and in accordance with the Terms of Reference (TORs) included as Annex 1 to this Report, and covers the following Sections:

Executive Summary provides basic information of the project, a brief description of the project and project results and impacts to-date, the Terminal Evaluation ratings, summary of conclusions, key lessons-learned, and summary of recommendations.

Section 1 INTRODUCTION gives the purpose, objectives, scope and methodology of the Terminal Evaluation.

Section 2 PROJECT DESCRIPTION includes project design/formulation, its rationale and development context, the problems the project sought to address, the project objectives, outcomes, outputs (planned activities) and expected results, baseline data, key stakeholders and implementation arrangements.

Section 3 FINDINGS presents the main findings of the Terminal Evaluation on all aspect including project's strategy, its progress towards results, the performance of its implementation, execution and efficiency of adaptive management as well as assessing the sustainability of the project outcomes.

Section 4 MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS & LESSONS LEARNED presents the Terminal Evaluation's conclusions, recommendations and main lesson-learned.

Section 5 ANNEXES contains all relevant supplementary data and information to illustrate and argument what was described in the main Terminal Evaluation Report.

1.8 Audit Trail

The final draft of the TE Report is to be accompanied by an "Audit Trail" comprising a compilation of comments received on the review of the draft Terminal Evaluation Report by the Commissioning Unit and the Implementing Partner, along with responses from the TE Team (on either the comments were accepted or not accepted and the reasons for not accepting such comments) as documented in an annex separate from the main report. The Audit Trail will be submitted as a separate document.

2.0 PROJECT DESCRIPTION

The objective of the project was to protect human health and the environment by reducing or eliminating mercury releases from the Indonesian Artisanal and Small-scale Gold Mining (ASGM) sector by i) Strengthening institutions and the policy/regulatory framework for mercury-free ASGM; ii) Increasing the access of mining communities to finance to enable the procurement of mercury-free processing technologies; iii) Increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization; and (iv) raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

Six (6) priority ASGM project sites (mining communities in Kuantan Singingi District, Kuon Progo District, Lombok Barat District, Halmahera Selatan District, Minahasa Utara District, Gorontalo Utara District) have been selected by the Government of Indonesia (GoI) at CEO Endorsement for project interventions. The Project would support mining communities in these districts in 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 markets. In parallel, the enabling environment for ASGM would be improved 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 enabling environment would not only benefit miners located in the project's priority sites, but ASGM miners located anywhere in Indonesia. Two more sites (Bolaang Mongondow Timur District, Sumbawa Barat District) have since been added during project implementation, with assistance provided to strengthen their capacities with no additional cost implications to the GEF.

It is expected that through supporting these ASGM communities, reduction of mercury use by at least 5 metric tonnes/year starting in year three of the Project, a mercury release reduction of at least 15 metric tonnes will be generated over the life span of the Project.

2.1 Project start and duration

The Project Identification Form (PIF) was approved on 27 October 2016 and was followed with a Project Preparation Grant (PPG) phase for the preparation of the full-sized project. This 5-year (60 months) project started implementation on 5 September 2018 upon signature of the UNDP Project Document by the Implementing Partner MoEF and UNDP, after the GEF CEO Endorsement approval on 20 June 2018. Key project milestone dates are indicated in Table 5 below.

Table 5: Project Milestone:

Milestone	Date
Project Duration	60 months
PIF approval	27 October 2016
CEO Endorsement	20 June 2018
Project Document signature (project start date)	5 September 2018
Project Manager Recruited	1 February 2019
First Disbursement	22 November 2018
Inception workshop	26 March 2019
First meetings of the Project Steering Committee	26 June 2019
Midterm Review	January-April 2021
Terminal evaluation (planned completion)	31 May 2023
Planned closing date	5 September 2023

2.2 Development context: environmental, socio-economic, institutional, and policy factors

In Indonesia, the ASGM sector poses a significant environmental challenge due to its contribution to mercury releases. An estimated 195 tonnes of mercury are released into the environment annually from the country's ASGM activities, accounting for approximately 57.5% of the total mercury releases. These releases are distributed across different media, with 60% emitted into the air, 20% into water bodies, and the remaining 20% deposited onto land. This makes Indonesia one of the top three global emitters of mercury, largely due to the prevalence of ASGM operations.

The expansion of gold mining in Indonesia has extended beyond the traditional areas of Sumatera, Sulawesi, and Kalimantan to include provinces like Java, West Nusa Tenggara, Maluku, and Papua. Unfortunately, the use of mercury in these regions has resulted in heightened levels of mercury within the ASGM communities, causing adverse health impacts. Extensive studies and surveys have indicated that the use of mercury in Indonesia's ASGM sector poses serious risks to local communities and has long-term consequences for the global environment and population.

Despite the environmental challenges, gold mining and processing play a crucial role in the socio-economic landscape of Indonesia, providing a significant source of income for an estimated 300,000 to 500,000 individuals. However, the majority of these miners operate within the informal sector, lacking formal registration and conducting operations in remote areas. For instance, on the island of Lombok alone, ASGM activities contribute to at least 22,000 direct jobs, resulting in a substantial boost of approximately US$22 million per year to the local economy. Nevertheless, the informal nature of the sector presents obstacles, limiting access to financing opportunities and cleaner technologies that could lead to transformative changes. Additionally, the informal status of ASGM operations deprives the government of potential royalties and tax revenues, which could otherwise support regulatory oversight, licensing and extension services, crucial for establishing a well-managed and responsible small-scale mining sector.

Recognizing the urgency to address mercury-related challenges in the ASGM sector, the Government of Indonesia has taken notable steps toward eliminating mercury use. These efforts include signing the Minamata Convention on Mercury in October 2013 and subsequently ratifying it through the issuance of Law No. 11/2017 on September 22, 2017. The ratification of the Convention led to the prohibition of mercury use (No. 74/2001) and mercury amalgamation in gold extraction (Ministerial Decree No. 1211.k/008/M.PE/1995). Furthermore, the Ministry of Environment issued Minister Decree No. 23/2008, providing technical guidance to prevent and minimize pollution and environmental damage caused by ASGM.

In line with promoting formalization and addressing the complex socio-economic, institutional, and policy factors within the ASGM sector, the Government of Indonesia has initiated the formalization process. The 2009 Minerals and Coal Mining Law (Law 4/2009) stipulates that mining activities are only permitted in areas designated as Mining Areas (*Wilayah Pertambangan*) by the central government in consultation with the national parliament and regional governments. Subsequently, the 2014 Regional Governance Law (Law 23/2014) empowered regional governments to issue mining licenses, known as *Ijin Pertambangan Rakyat* (IPR), for metal commodities, coal, non-metal minerals, and rocks within Artisanal Mining Areas (*Wilayah Pertambangan Rakyat*). This law superseded Law 4/2009 and granted districts the authority to issue artisanal mining licenses and oversee artisanal mining activities.

These socio-economic, institutional, and policy factors vividly highlight the imperative significance and direct relevance of the project's well-defined objective and comprehensive scope. By intricately aligning itself with both the national and local development priorities, the project stands poised to play a pivotal role in bolstering the government's determined endeavors to curtail the utilization of mercury and actively encourage the formalization process within the ASGM sector. Such a concerted effort not only seeks to alleviate and mitigate the looming environmental risks that pervade in this sector but also aims to effectuate a profound and positive transformation in the socio-economic landscape of Indonesia. By fostering responsible mining practices and introducing sustainable alternatives, the project aspires to usher in a paradigm shift, catalyzing a harmonious coexistence between the mining industry and the environment while simultaneously uplifting the socio-economic conditions of the communities involved in ASGM activities.

2.3 Problems that the project sought to address

Significant challenges remain with regards to the implementation of the laws mentioned above. The Mining Law and the Regional Governance law required harmonization in terms of responsibilities, regional (provincial) governments lack the capacity to administer these new responsibilities, while technical guidance from the national level on the implementation of these laws is pending. 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 were hampering formalization efforts.

On the side of the miners, the barriers to the development of a responsible ASGM sector that were most significant and pernicious were their formalization and access to finance. Weak, poorly administered, and undemocratic miners' cooperatives and organizations were often not up to the task of pooling capital and collectivizing the cost and effort of pursuing licenses and permits that could provide them with the legitimacy and bankability to access credit for transformative and mercury-free technologies. At the same time, finance entities (banks, microfinance institutions, and other lenders) did not commonly provide loans to the ASGM sector as the risks are often perceived 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. Those cooperatives and organizations that managed to properly engage in the formalization process face uncertainties and delays, and possibly corruption, in their interactions with regional and local bureaucracies that process their applications. With limited capacity and uncertainties in their new roles with respect to the issuing of permits and licenses, regional and local entities were not able to support ASGM formalization processes to the extent necessary.

Poor personal protection and safety practices also hindered ASGM miners' ability to demonstrate the level of stewardship required for getting environmental and water use licenses that are critical elements of the formalization process. While miners that sought to change their methods are further hamstrung by the 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.).

ASGM also had important gender impacts. Women working in ASGM rarely benefited from the positive impacts of the sector on their communities. Gender inequalities mean they were hard-hit by negative impacts of ASGM with particular regard to poor democratic participation, financial inclusion, economic empowerment and health[6]. Double work burden, gender-based violence (GBV) and prostitution[7] are common in ASGM communities.

This project aimed to protect 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 would support national and regional government capacity building to regulate and provide improved extension services to the ASGM sector, help miners to organize, formalize, and process ore more efficiently and responsibly. The project also sought to facilitate linking machinery manufacturers, equipment distribution networks and financial networks to miners in order to promote 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.

2.4 Immediate and Development Objectives

This transformative project held the utmost commitment to safeguarding human health and preserving the environment through the ambitious goal of reducing or completely eliminating mercury use in Indonesia's artisanal and small-scale mining (ASGM) sector. Recognizing the multifaceted challenges and barriers that need to be addressed, the project endeavours to extend unwavering support to national and regional government bodies in enhancing their capacity to regulate and provide improved extension services to the ASGM sector. Moreover, it aims to empower miners by facilitating their organization, formalization, and adoption of more efficient and responsible ore processing practices. The project also sought to establish vital connections between machinery manufacturers, equipment distribution networks, and financial networks, promoting innovative financing options for mercury-free technologies. Additionally, it will assist in creating viable market channels for mercury-free gold, thereby enhancing the income opportunities for ASGM miners.

[6] http://siteresources.worldbank.org/INTOGMC/Resources/336099-1163605893612/hintonrolereview.pdf

[7] Djufryhard, Muhammad, Interview National Gender Expert, PPG Assessment Interview, Gorontalo, September 14, 2017

With a steadfast commitment to the Sustainable Development Goals (SDGs), the project aligned closely with Indonesia's pursuit of national targets across various focus areas. Notably, it directly contributes to six of Indonesia's SDGs, reinforcing the country's commitment to: (i) eradicate poverty and reduce inequality by improving the income of marginalized communities dependent on ASGM and empowering women and vulnerable groups within the sector; (ii) ensure universal access to quality education, research, and development skills, fostering innovation through the introduction of ASGM curricula and comprehensive training for miners and project beneficiaries; (iii) ensure comprehensive and high-quality healthcare services, shielding local, regional, and global populations from the perils of mercury pollution; (iv) foster inclusive economic growth and provide decent work opportunities by enhancing the work environment for ASGM miners, particularly focusing on the health and safety of female and male miners; (v) conserve and sustainably utilize natural resources, biodiversity, and marine resources by mitigating environmental degradation and protecting water resources from the impacts of ASGM; and (vi) promote good governance and strengthen institutions by enhancing the capacity of relevant institutions to support miners' formalization efforts and the adoption of improved mining practices.

This visionary project went beyond the mere resolution of immediate challenges within the artisanal and small-scale mining (ASGM) sector. It embarked on a transformative journey that holds profound implications for Indonesia's overarching development agenda by fostering sustainable practices and forging resilient institutional frameworks. Through strategic partnerships with stakeholders, the project harnesses their invaluable expertise and unwavering commitment, thereby paving the way for an enduring and impactful positive change. With an unwavering focus on the future, the project laid a solid foundation for an ASGM sector in Indonesia that thrives and exemplifies responsibility and stewardship in its practices.

2.5 Description of the Project's Theory of Change

As the Terminal Evaluation Team for the GOLD ISMIA UNDP Project in Indonesia, the TE Team has carefully studied the project's documentation and engaged in consultations with project stakeholders to review the comprehensive Theory of Change contained in the Project Document. The Theory of Change encompassed the project's objective, outputs, outcomes, intermediate states, and intended long-term environmental impacts, as well as the causal pathways leading to these impacts. Additionally, it took into account both implicit and explicit assumptions inherent in the project design.

The project's overall objective was to promote responsible and sustainable artisanal and small-scale gold mining (ASGM) practices in Indonesia, with a specific focus on reducing mercury use and its associated environmental and health impacts. The project aimed to achieve this objective through various outputs and activities implemented at national, sub-national, and community levels.

The outputs of the project included the development and implementation of policies, regulations, and guidelines that support mercury reduction and elimination in ASGM. This involved revising and developing legal frameworks, establishing partnerships with key stakeholders, and creating awareness and capacity-building initiatives. The project also focused on facilitating access to finance and technical assistance for miners, promoting the use of mercury-free technologies, and supporting the formalization process of mining groups.

These outputs were expected to contribute to several intermediate states or outcomes. These outcomes included the increased awareness and knowledge among miners, government agencies, and other stakeholders regarding the risks and alternatives to mercury use. The project also aims to enhance the capacity of institutions and organizations to support sustainable and mercury-free interventions in the ASGM sector. Moreover, the project sought to improve the regulatory environment, increase the availability of and access to financial resources, and promote the adoption of mercury-free technologies among miners.

Ultimately, the project's Theory of Change identified the long-term environmental impacts it aims to achieve. These impacts include the significant reduction and eventual elimination of mercury use in the ASGM sector, leading to improved environmental quality, reduced health risks for miners and local communities, and the conservation of biodiversity and ecosystem services in mining areas.

The causal pathways for these long-term impacts involved a sequence of interconnected steps and activities. The project's interventions lead to increased awareness and knowledge, which then drive changes in behavior and

practices among miners and stakeholders. These changes, in turn, resulted in reduced mercury use, increased adoption of mercury-free technologies, and improved environmental practices in the ASGM sector.

Throughout the Theory of Change, various assumptions were made. These included assumptions regarding the availability of financial resources, the commitment and cooperation of government agencies and stakeholders, the effectiveness of capacity-building initiatives, and the willingness of miners to adopt mercury-free technologies and engage in the formalization process. The TE team has further validated these assumptions based on stakeholder consultations and additional analysis during the evaluation process.

In summary, the Theory of Change for the GOLD ISMIA UNDP Project in Indonesia outlines the project's objective, outputs, outcomes, intermediate states, and intended long-term environmental impacts. It identifies the causal pathways leading to these impacts and highlights the implicit and explicit assumptions underlying the project's design. During project implementation, periodic appraisal of the Project's Theory of Change was undertaken. While there existed in the Project Document some differences between the quantities reflected in the Theory of Change and the Outcome Indicators in the Results Framework, i.e. in the quantity of mercury use avoided and quantity of mercury-free gold produced; number of government entities with increased capacity; number of policies, regulations and standards revised and/or developed; number of new/improved financial products/mechanisms established; and number of cooperatives/associations trained etc., the was no change in the TOC and it remained valid to guide implementation of project interventions.

2.6 Expected Results

The project aimed to protect 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 would support national and regional government capacity building to regulate and provide improved extension services to the ASGM sector, help miners to organize, 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.

Six (6) priority project sites located in Kuantan Singingi District (Riau), Kuon Progo District (Yogyakarta), Lombok Barat District (West Nusa Tenggara Province), Halmahera Selatan District (North Maluku Province), Minahasa Utara District (North Sulawesi Province), and Gorontalo Utara District (Gorontalo Province) have been selected by the Government of Indonesia for the project to assist. Mining communities in these districts were supported by the project in 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 markets. In parallel, the enabling environment for ASGM were improved 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 enabling environment established will not only benefit miners located in the project's priority sites, but ASGM miners located anywhere in Indonesia.

Through implementation of the four (4) project components, the project was expected to achieve the following project results:

(i) Enhanced national, provincial, district and village level policies, plans, regulations, standards and measures through assessment of gaps and strengthening institutions and policy/regulatory frameworks for mercury-free ASGM;

(ii) Improved opportunities and access to financing to procure mercury-free processing equipment through support of development or establishment of financing mechanism;

(iii) Increased capacity of mining groups to achieve mercury-free ASGM through adoption of alternative processing methods in order to reduce/eliminate mercury use or release, including the major step to support the formalization processing of the mining groups; and

(iv) Raised awareness of the project stakeholders and beneficiaries on dangers of mercury to human health and environment, and knowledge shared on the project results, experiences, lessons-learned and best practices. The achievements are described in detail under Section 3.0, Evaluation Findings.

As one of the eight (8) global GEF GOLD programme, in addition to contributing to Global Environmental Benefits, this project has also shared with the other child project countries on the captured experience and lessons-learned so as to disseminate knowledge generated to a wider ASGM audience.

2.7 Total Resources

Total resources for the project at time of CEO Endorsement comprised of GEF grant in the amount of US$ 6,720,000 and co-financing commitments of US$28,600,088 for the total project cost of $35,320,880. At time of Terminal Evaluation, the total in-kind co-financing realized was calculated to amount to US$29,573,023 (*converted at exchange rate of INR14,000 = US$1*) as of end of first quarter 2023. Together with the GEF grant of US$6,720,000, the total project costs at time of Terminal Evaluation amounts to US$36,293,023.

Table 6: Project Financial information at time of CEO Endorsement and at time of Terminal Evaluation

Project Financial Information		
PDF/PPG	at Approval (US$M)	at PDF/PPG completion (US$M)
GEF PDF/PPG grants for project preparation	015 *(17 December 2016)*	0.15
Co-financing for project preparation	0	0
Project	at CEO Endorsement (US$)	at Terminal Evaluation (US$)
UNDP contribution:	0.11	0.12
Government:	25.49	25.67
Other (CSO)	3.00	3.78
Private Sector:		
NGOs:		
Total co-financing (1+2+3+4+5):	28.60	29.57
Total GEF funding:	6.72	6.72
Total Project Funding (6+7):	35.32	36.29

2.8 Summary of Main Stakeholder

Prior to developing a Stakeholder Engagement Plan, the project undertook a simplified Stakeholder Analysis and has identified the main project stakeholders. Table 7 below provides the list of key stakeholders, together with their interests, importance and influences on this GOLD-ISMIA project:

Table 7: Summary List of Main Stakeholders

	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)
1.	Ministry of Environment and Forestry (MoEF), (*KLHK)*	The project would 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	+	5	5

		development on Hg use in ASGM, among else.			
2.	Agency for Assessment and Application of Technology (BPPT) (Later transformed and become part of BRIN)	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
3.	Ministry of Energy and Natural Resources (MEMR), (*KESDM*)	The project would 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 focusing on ASGM formalization issues.	+	5	5
4.	Ministry of Health	The project would 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
5.	Ministry of Trade	The project would 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
6.	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
7.	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
8.	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

9.	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
10	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
11.	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
12.	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
13.	Universities (e.g. University of Mataram, University of Riau, University of Gajah Mada, University of Negeri Gorontalo, University of Khairun, University of Sam Ratulangi)	The project can have partnership, inform and influence research and education in the area of ASGM and mercury phase-out.	0	2	2
14.	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
15.	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
16.	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
17.	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
18.	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
19.	Private sector entities (e.g. small-, medium- and large- scale mining	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	0	2	3

	companies)	for partnerships between ASGM and small, medium and large scale processors.			

2.9 Key Partners Involved in The Project

The project works with a multitude of partners and initiatives to achieve the project's objective. In addition to listing them in Table 1 of the Project Document the key partners, the table also provided very detailed overview of the project's stakeholders and partner initiatives, what these stakeholders/initiatives were currently doing at that time to address the development challenge, what the role of the partner/initiative would be in the project's implementation, as well as the assumptions and expected results that would be achieved by the project's partners that are critical for the achievement of the project results. The list of partnership included:

Government entities: Ministry of Environment and Forestry (MoEF or *KLHK*), Agency for Assessment and Application of Technology (BPPT), Ministry of Energy and Natural Resources (MEMR or *KESDM*), Ministry of Health, Ministry of Trade, Ministry of Cooperative and SMEs, Ministry of Villages, Less Developed Regions and Transmigration, Ministry of Communications and Information Technology, Participating Provincial Governments, Participating District Governments.

Non-government entities: Banks and financial institutions, universities, analytical labs, geoscience consulting firms, NGOs and equipment suppliers/manufacturers would be key partners in enabling changes in formalization and ore processing methods during the project's implementation and were also key in replicating successful practices elsewhere after the project has ended, either nationally or for neighbouring countries with similar activities. Where possible, the project had established such partnerships with such entities to implement project interventions, to facilitate replication of project successes and support long-term continuation of changes made during the project.

UNDP: as the GEF Implementing Agency of the project, provides a three-tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance is totally independent of the Project Management function. The quality assurance role, being carried out by the QARE Unit in UNDP Indonesia CO, supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency, UNDP.

As one of the eight (8) child Gold projects of the GEF Global Gold Programme, close coordination, collaboration and interactions have been fostered with the Implementing Agency of the Global GOLD Project, UNEP, and the Project Team of the other child project countries, in particular, on the knowledge sharing and contributions to global environmental benefits under the GEF GOLD Global Dissemination Platform. Experience in engaging miners was also shared among the other countries' partners.

2.10 Context of Other Ongoing and Previous Evaluations

During the midpoint of the project implementation, an independent Midterm Review (MTR) was conducted from January to April 2021, showcasing the commitment and dedication of the stakeholders and the Project Team. The MTR Report provides valuable insights and recommendations, which have been warmly embraced and integrated into the project's ongoing efforts. The MTR Report highlighted the remarkable progress made at midpoint of project implementation, with the project successfully achieving the Mid-term Targets for all four outcomes of the project components, leading closer to the realization of the project objective. This noteworthy accomplishment is a testament to the collective efforts and expertise of all involved.

While recognizing the achievements, the MTR also emphasized the importance of maintaining financial and environmental sustainability for the long-term success of the project. The stakeholders and the Project Team have been diligent in addressing these concerns, actively working to strike a balance between financial risks and returns to encourage further engagement of financial institutions with the ASGM communities. Additionally, the Project Team has placed significant emphasis on responsible waste management practices, demonstrating their unwavering commitment to environmental stewardship and ensuring the preservation of precious natural resources.

The MTR presented a set of valuable recommendations. Each recommendation has been diligently acted upon by the Project Team. This commitment to continuous improvement showcases the proactive approach of the stakeholders and the Project Team, fostering an environment of learning and collaboration. Their tireless efforts and unwavering dedication have been instrumental in driving the project's success and shaping its positive impact on the ASGM sector in Indonesia.

Moving forward since then, the Project Team remains steadfast in their commitment to working closely with the stakeholders to further enhance the project's outcomes and address any challenges that may arise. By nurturing this collaborative spirit and building upon the achievements thus far, the Project Team has projected full confidence in taking adaptive management action since the MTR to continue making significant strides in protecting human health, preserving the environment, and promoting sustainable development in the Indonesian ASGM sector.

3.0 EVALUATION FINDINGS

This section presents the findings of this Terminal Evaluation adhering to the basic structure proposed in the TORs and as reflected in the UNDP project evaluation guidance

3.1 Project Design/Formulation

The TE Team undertook an analysis of the design of the project as outlined in the Project Document to identify whether the strategy is proving to be effective in reaching the desired results.

The project objective is to reduce/eliminate mercury use/release from the Indonesian Artisanal and Small-scale God Mining (ASGM) sector. The Project Document outlines the global situation of anthropogenic mercury releases into the environment from ASGM and the specific situation of mercury release from the ASGM sector in Indonesia. It is estimated that a total of 340 metric tonnes of mercury were released to the environment in Indonesia, of which 57.5% (~ 195 tonnes) originates from the ASGM sector, and Indonesia is among the top 3 global emitters of mercury because of ASGM.

The Government of Indonesia has undertaken significant steps towards the elimination of mercury in ASGM, including signing the Minamata Convention on Mercury in October 2013 and the ratification of the Convention on 22 September 2017 through the issuance of Law No. 11/2017. The use of mercury and the amalgamation of mercury to extract gold were prohibited (Presidential Decree number 21 year 2019) and the Ministry of Environment and Forestry (MoEF) has also issued Decree on technical guidance on how to prevent, minimize pollution and/or damage to the environment caused by ASGM. The Government has also started the formalization process of the ASGM sector. However, significant challenges remain with regards to the implementation of laws that require harmonization in terms of responsibilities and concomitant resources allocation. On the side of gold miners, the barriers to the development of a responsible ASGM sector that are most significant and pernicious are their formalization and access to finance.

The project was formulated in line with Indonesia's national priorities to expand actions that have been taken so far to address the barriers in order to reduction/elimination in mercury use/release in the ASGM sector for sound management of mercury and meeting the country's obligation under the Minamata Convention. The project was also consistent with the GEF's focal area strategy, as being one of the 8 child projects under the global programme, "*Global Opportunities for Long-term Development of ASGM Sector – GEF GOLD*" that will combine with the child projects of the other seven (7) participating countries (Burkina Faso, Colombia, Guyana, Kenya, Mongolia, Peru and Philippines) to jointly contribute to the reduction of the use of mercury in the ASGM sector.

The management arrangement of the GOLD ISMIA Project in Indonesia is commendable and reflects a strong commitment to effective project implementation. The project's management team has demonstrated exemplary leadership, ensuring efficient coordination and collaboration among various stakeholders. Their proactive approach and ability to address emerging challenges have been instrumental in overcoming obstacles and keeping the project on track. The project's governance structure, including the Project Board (Project Steering Committee), has played a vital role in providing strategic direction and oversight. The active participation of key stakeholders from government agencies, Implementing Partner, and technical entities has fostered a culture of shared responsibility and ownership. Regular meetings and effective communication channels have facilitated timely decision-making, allowing for swift adaptation to changing circumstances.

Furthermore, the project management team's expertise and experience have been pivotal in guiding the implementation of project activities. Their diligent monitoring and evaluation efforts have ensured that progress is tracked against set indicators and targets, enabling timely adjustments and course corrections as needed. This attention to detail and rigorous project management approach has contributed to the project's overall success and effectiveness in achieving its objectives. Overall, the management arrangement of the GOLD ISMIA Project in Indonesia has been exemplary. The TE Team recognizes and appreciates the dedication, competence, and collaborative spirit demonstrated by the project management team. Their ability to navigate complex socio-economic, institutional, and policy landscapes while staying focused on the project's objectives is commendable. The effective management of resources, engagement of stakeholders, and transparent decision-making processes have set a high standard for project management in the development sector. The TE Team has full confidence in the

project's management arrangement and believes it will continue to drive successful outcomes until project completion.

3.1.1 Analysis of Results Framework: Project Logic and Strategy, Indicators

The project is designed with four (4) project components to achieve the project objective by i) Strengthening institutions and the policy/regulatory framework for mercury-free ASGM; ii) Increasing the access of mining communities to finance to enable the procurement of mercury-free processing technologies; iii) Increasing the capacity of mining communities for mercury-free ASGM through the provision of technical assistance, technology transfer and support for formalization; and (iv) raising awareness and disseminating best practices and lessons-learned on mercury phase-out in the ASGM sector.

The Project Results Framework is presented in Section VI of the UNDP Project Document. The Project Results Framework contains twelve (12) Objective and Outcome Indicators covering the project objective and the four (4) project components. Ten (10) Outcomes were identified together with a very extensive list of Outputs (78 in total) that would contribute to achieving the planned Outcomes.

As pointed out in the Midterm Review (MTR) Report, the descriptions inputted in the Project Documents under the "Objective and Outcome Indicators column *are a mere repetitions of the end-of-project targets, the 10 Outcome Indicators are formulated as Project Output and the numerous Outputs listed are in fact Activities".* In response to the MTR recommendation, the description of the Objective and Outcome Indicators has been revised. The revised description of the Objective ad Outcome Indicators is reflected in *Table 16: Analytical assessment of the Indicators identified for Project Objective and Project Outcomes* in Section 3.5 below.

The Indicators as revised represent a good selection of well-balanced and logical measurement of achievements. For each indicator, mid-term targets and end-of-project targets are defined, with Data Collection Method indicated to facilitate evidence-based verification. The midterm and end-of-project targets of the indicators, as revised, are assessed if they are aligned with GEF SMART (*Specific, Measurable, Achievable, Relevant, Time-bound*) definition. With the exception of two indicators (Outcomes 3.1 and 3.3) for which the degree and certainty of "measurable" may not be easily established, all the remaining indicators are judged as meeting the SMART definition. Critical assumptions are listed in the Project Results Framework as how the risks identified against each indicator would be addressed or mitigated. The listed assumptions are determined to be reasonable and sound. The risks registered in the Risk Log are considered reasonable with adequate corresponding proposed risk management measures

3.1.2 Assumptions and Risks

The Project Document contains the project's Risk and corresponding Countermeasures/Management Response identified at CEO Endorsement and included as the UNDP Risk Log annex, are reproduced below.

Table 8: Description of Project Risks and Corresponding Countermeasures/Management Response

Description	Type	I & P	Countermeasures / Management Response
Lack of coordination between relevant institutions/ministries as well as activities/programmes in the same areas as the project (ASGM). *(Non-SESP)*	Political	P = 1 I = 3	Coordination among the project's various stakeholders will be ensured by involving them in the Project Board, the Project Technical Advisor Committee (TAC) and/or one or more of the four (4) Working Groups (see also Section VIII Governance and Management Arrangements): WG 1: Strengthening institutions and the policy regulatory framework for Mercury-free ASGM (Lead: KLHK); WG 2: Establishing financing lending arrangements to provide loans to legalized ASGM miners/ cooperatives (Lead: KLHK & BPPT); WG 3: Increasing capacity for mercury-free ASGM through provision of technical assistance and technology transfer (Lead: BPPT); and WG 4: Monitoring and Evaluation, awareness raising, capturing and disseminating experiences, lessons learned and best practices (Lead: KLHK, BPPT & UNDP). In addition to improving coordination between institutions and government agencies, these working groups will allow for better coordination among on-going projects/programmes (and their funding entities) that are focusing on similar topic areas.
Miners have uneasy communication with government agencies and entities that may hamper the active participation of miners in the project. *(Non-SESP)*	Political	P = 4 I = 2	It has not been easy for the miners and in particular informal ASG miners to have formal discussion with government institutions and their affiliates that are aiming to formalize the ASGM sector, improve working conditions and reduce pollution. Miners are afraid that their property or right to the land on which they are mining might be taken away.

			Mistrust has significantly increased since the Government enacted a mercury ban in ASGM which has pushed artisanal miners further into informality. It will therefore be extremely important to build trust among the miners and the mining community, otherwise it will be challenging to implement any project activities. Therefore, the project envisages working closely with the leadership of the municipalities, existing cooperatives/mining groups and mining/processing associations that have worked with ASGM communities and international development agencies in the past. The project will focus on building a trust relationship with the mining community before it will start implementation of project activities. The project will also select miners and moderators from the mining communities, and train them as trainers, to build trust.
Economic incentives perceived too low to adopt and replicate BEP/BAT practices resulting in continued polluting practices. *(Non-SESP)*	Financial	P = 2 I = 3	It is unlikely for ASGM miners supported by the project to change their environmental and safety practices and processes if there are no clear financial incentives to do so. It is even more unlikely for informal mining communities that are not directly benefitting from the project to replicate the practices demonstrated by the project if there is no clear understanding of potential financial gains; there are no clear financial incentives, they are not easily accessible and information on how to gain access to these incentives is not easily available. The project will therefore support at least 4 financial entity to (re)develop a financial product that serves the ASGM sector; Train miners and mining communities in developing a loan/investment application (incl. undertaking technical and financial feasibility studies); and, Establish at least one (1) partnership/agreement with a legal gold buyer that buys responsibly produced gold at a higher price. All these project experiences will be captured in case study reports and disseminated to support future replication.
Delay in the implementation of project activities due to the time it takes to obtain permits/licenses. *(Non-SESP)*	Regulatory Operational	P = 4 I = 2	Implementation of certain project activities might depend on the granting of the right permits/licenses. Whether or not such permits/licenses are required, and the pace at which these licences/permits can be granted can impact the pace of project implementation significantly. Implementation of the following activities might be subject to delays if permits/licenses are required and the application/granting process is lengthy: Temporary installation of a demonstration gold processing plant for training purposes; Disposal of mining tailings produced by project related demonstration activities; and Permits/licenses for the establishment of new ore processing plants. The project will do its utmost to work within the scope of existing permits/licenses (e.g. installing the demonstration or new processing plants on the premises of processing centers that have overcapacity). However, if these avenues proof not to be feasible, the project team will embark on the process of applying for the right permits/licenses as early as possible during the project's implementation.
Local conflict (e.g. organized crime) hampers sale of gold through legal channels. *(Non-SESP)*	Other	P = 2 I = 3	The project aims to shorten the gold supply chain, by supporting miners and mining groups in their formalization processes, increasing their yields and connecting miners to legal buyers who are able to purchase their responsibly produced gold for a higher price. However, middlemen who currently make a margin on this gold, may resist this change, some of whom may be linked to organized crime. Similarly, ore processing centers (which try keep gold recovery yields as low as possible and reprocess gold containing mining tailing for extra profit) might also oppose more effective ore processing plants encouraged by the project. Therefore, the project aims to empower artisanal miners and mining groups by supporting their formalization. Together they stand stronger and will receive more support from the Government considering they are paying taxes, resulting in less harassment.
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. *(SESP Risks 7, 8 and 9)*	Environmental	P = 5 I = 3	The project's components and interventions aim to reduce the use and release of mercury. As a result of the project, it is expected that releases of mercury will be reduced significantly (by 15 tonnes). However, releases of mercury will continue to occur and will not be fully eliminated as a result of the project. Exploration for gold through ASGM leads to the generation of waste, most specifically mining tailings. Because of the nature of ASGM, mining tailing will continue to be generated. The project will work closely with the project's training plant as well as ore processing plants receiving project support, to improve the management of mining tailings, and reduce the generation of hazardous (mercury containing) tailing wastes. Even though with project support releases of mercury will be reduced significantly (by 15 tonnes) and the management of mining tailing will be improved, releases of mercury will continue to occur and will not be fully eliminated.
The Project could potentially cause adverse impacts to and/or involve changes to the use of habitats (e.g.	Environmental	I = 2 P = 2	Generally, ASGM is intrinsically damaging to habitats, ecosystems and ecosystem services. The project will support ASGM miners in phasing-out the use of ~ 15 tons of mercury over the project's duration, and support miners in introducing best

modified, natural, and critical habitats) and/or ecosystems, ecosystem services and livelihoods. *(SESP Risks 1 and 2)*			environmental practices and improving processing practices (focusing on mercury-free ore processing, improved management of solid and liquid waste and air emissions generated by gold/ore processing plants (e.g. mine tailings management), mine closure and rehabilitation, ecosystems management and protection). Furthermore, the project will train miners in ore analysis, increasing the gold recovery rate (full exploration of mining sites), legislation, formalization, improving access to finance, and establishing the route to market for mercury-free gold. It is expected that by the end of the project, practices of processing centers and mining groups supported by the project will have significantly improved as compared to the start of the project. However, damage to habitats/ecosystems will continue to be caused by ASGM as this is intrinsic to mining in general. This is beyond the project's control.
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 labor standards. *(SESP Risks 3 and 4)*	Regulatory	I = 2 P = 3	ASGM is often undertaken under unsafe and unhealthy conditions as a result of the rudimentary practices, processes and chemicals being applied (use of mercury, (too) deep unsafe shafts, release of toxic gases from the mine, mining in areas prone to landslides, etc.) Focus of the project will be on improving the processing of ore and eliminating the use of mercury in extracting gold. Additional support will include supporting mining groups in their formalization processes, reducing health and safety risks and increasing miners' income, thus improving general work conditions. These interventions are expected to reduce risks and vulnerabilities related to occupational health and safety and bring the livelihoods and jobs of ASGM miners closer to national and international labor standards and reduce the However, because of the nature of the ASGM sector, it is unlikely that all miners and mining communities supported by the project will be able to comply with all national and international labor standards. This is beyond the project's control.

The risks identified, based on general project management aspects and those identified in the SESP conducted, are well-defined, based on situation analysis and fact-based. Throughout project implementation, these risk identified are registered in the UNDP ATLAS database. These risks have been adequately properly assessed, closely monitored, timely updated and managed by the Project Team with proactive countermeasure actions to facilitate and encourage close cross-entities, promote vertical and horizontal interactions, thus rendering minimal negative impacts to the project. Thus risks identified have been proven to be foresighted and realistic.

Towards the completion of the project, three risks were considered as still prevalent thus risking not meeting the project's targets: (i) delay in approval of mining permit/license (IPR) for ASGM miners because of internal government agencies mechanism and processes, even though the support from the project has been extensive and effective, (ii) mining groups cannot obtain necessary permit/license (IPR) due to change of regulatory framework, and (iii) the selling by mining groups of mercury-free produced gold directly to formal market has not been as planned as the scheme for direct sale has not been established. The first two situations complicate the formalization process as designed by the project and will need closer interventions and improved coordination mechanisms of the responsible government agencies.

3.1.3 Lessons from other relevant projects incorporated into project design

The Indonesia GOLD-ISMIA is one of the eight child GOLD project being implemented and is the first child project to be nearing project completion among the GEF GOLD programme, there was no relevant experience that could be incorporated into the project design/formulation. However, experience and the many features/requirements of GEF funded projects, especially from the UNDP-supported, GEF-financed projects were taken into account and incorporated into the project design/formulation.

3.1.4 Planned Stakeholder Participation

Main stakeholders, groups or individuals, identified in Table 7 above, and outlining with their interests and their relationship to the project, have actively participated in the PIF and PPG phases through extensive consultations and active engagement, contributed to the project design/formulation. These stakeholders continued to actively participate in project implementation with the guidance of the developed Simplified Stakeholder Engagement Plan,

diligently executing their roles and responsibilities, thus contributing significantly to smooth and orderly project implementation and achievement of project results.

3.1.5 Linkages Between Project and Other Interventions Within the Sector

Use of mercury in Indonesian ASGM sector has presented serious and long-term risks for local communities as well as the global environment and population that has drawn attention and actions from the government.

The Government of Indonesia has undertaken significant steps toward the elimination of mercury in ASGM, including signing the Minamata Convention on Mercury in October 2013 and the ratification of the Convention on 22 September 2017. The use of mercury and the amalgamation of mercury to extract gold were prohibited and a Decree was issued on technical guidance on how to prevent, minimize pollution and/or damage to the environment caused by ASGM.

The Government of Indonesia has also started the formalization process of the ASGM sector. Under Law 4/2009 (Minerals and Coal Mining), mining is only permitted in areas that have been designated as Mining Areas (*Wilayah Pertambangan*) by the central government after consultation with the Indonesia parliament and regional governments. In 2014, the government issued Law 23/2014 on Regional Governance. Under this law the Regional (Province) government now has the authority to issue mining licenses or *Ijin Pertambangan Rakyat* (IPR) for commodities of metal as mineral, coal, non-metal mineral and rocks in Artisanal Mining Areas (*Wilayah Pertambangan Rakyat,* WPR). Law 23/2014 superseded the mining and coal mining law (4/2009) which stipulates that districts have the authority to (a) Issue artisanal mining licenses (article 8.1 of the Law 4/2009) for areas between 1 ha to 10 ha; (b) Decide the people's mining areas (Wilayah Pertambangan Rakyat, WPR) for small scale mining (Law 22/2010); and (c) Supervise and enforce artisanal mining activities (Law 55/2010).

All these initiatives formed the foundation for designing the project interventions to promote responsible and sustainable ASGM practices in Indonesia, with the specific focus on reducing mercury use and its associated environmental and health impacts.

3.1.6 Gender Responsiveness of Project Design

The project has prominently integrated gender dimensions into the project design where every project component and outcome encompass gender-sensitive frameworks and gender-transformative outputs/activities with the potential to advance equitable economic empowerment, reduce health and safety risks to both women and men, and support women's group to improve democratic participation.

A gender analysis in ASGM sector was conducted at the PPG phase where the role of women in the ASGM sector and the gender division of labour were studied which identified that men do most of the digging and ore collection while women work at ore crushing and washing. It further concluded that: women have little access to gaining good employment because of gender-based segregated occupational roles; women's participation in the formal economy is lower than that of men due to constraints in term of time, financial resources etc.; and women work many more hours than men on household chores.

Based on the analysis, a Gender Action Plan (GAP) has been developed to address different gender inequalities, and practical and strategic needs related to the Indonesian ASGM sector focusing on the project's components. The GAP has since served as an important tool utilized by the Project Team to ensure that gender outputs and activities were well-integrated into the annual work plan and budget. The implementation of the GAP has been effective resulting in many of the gender related indicators and targets having exceeded the midterm and endo-of-project targets.

3.1.7 Social and Environmental Safeguards

The GOLD ISMIA Project in Indonesia is committed to upholding the principles of Leave No One Behind (LNOB) to reduce inequalities, end discrimination, to ensure the well-being of local communities, including the disabled community. Social and environmental safeguards are integral to the project, as it strives to prioritize the welfare of all stakeholders and project beneficiaries associated with the mining communities and protect the environment. To safeguard social aspects, the project has implemented a comprehensive approach that includes stakeholder engagement, gender analysis, and the establishment of a Gender Action Plan. These measures aim to promote inclusive development and improve the livelihoods of individuals, including potentially benefiting disabled

community members. By actively involving stakeholders and recognizing the importance of gender empowerment, the project seeks to create opportunities for all community members to participate in and benefit from the mining sector. Through awareness-raising activities, financial access training, and formalization support, the project aims to empower individuals and promote their active participation in mining groups and cooperatives.

Regarding environmental safeguards, the project places a strong emphasis on reducing mercury use and promoting mercury-free mining technologies. By introducing alternative methods that minimize or eliminate mercury, the project aims to mitigate the environmental impact of artisanal and small-scale gold mining (ASGM) and protect water resources from contamination. Additionally, responsible waste management and tailings reprocessing are prioritized to prevent land degradation and minimize the release of harmful substances into the environment.

The GOLD ISMIA Project in Indonesia exemplifies a commitment to social and environmental safeguards. By integrating these measures into project design and implementation, the project strives to achieve a balance between sustainable development and the protection of communities and ecosystems. The project's interventions have the potential to benefit various stakeholders, including the disabled community, by creating a model for responsible and environmentally friendly ASGM practices. Through these efforts, the project seeks to contribute to the well-being of Indonesia's mining sector and its surrounding communities, ensuring that no one is left behind in the pursuit of sustainable development.

3.2 Project Implementation

The evaluation findings of the GOLD ISMIA Project's implementation highlight several key strengths and achievements, demonstrating the project's effectiveness in addressing the challenges and priorities of the ASGM sector in Indonesia.

One notable achievement is the project's strong project management and coordination. The Project Team exhibited a high level of expertise and commitment, effectively overseeing and coordinating project activities. Their ability to mobilize resources, engage stakeholders, and navigate the complexities of the ASGM sector contributed to the successful implementation of the project. Through regular communication and collaboration, the Project Team ensured that all stakeholders were aligned and working towards a common goal, fostering a sense of ownership and commitment among the partners involved.

A significant accomplishment of the project lies in its focus on capacity building. The project recognized the importance of empowering ASGM miners, local communities, and government officials with the necessary skills and knowledge to improve mining practices and enhance regulatory oversight. Through targeted training initiatives, technical support, and knowledge sharing platforms, the project successfully enhanced the capacity of stakeholders in various aspects, including safe mining techniques, environmental management, and gender-responsive approaches. This capacity development approach not only contributed to improved mining practices and compliance with regulations but also empowered marginalized groups, such as women, to actively participate in the ASGM sector and improve their economic opportunities.

The project's commitment to social and environmental safeguards is another key achievement. By implementing robust safeguard measures, such as land reclamation, waste management strategies, and the promotion of mercury-free technologies, the project effectively mitigated environmental risks associated with ASGM activities. The adoption of responsible mining practices and the reduction of mercury pollution had significant positive impacts on local ecosystems and the health of surrounding communities. Furthermore, the project prioritized the well-being and safety of workers, promoting occupational health and safety standards, and providing support for the adoption of safer mining practices. These efforts resulted in improved working conditions, reduced health risks, and enhanced protection for miners.

Overall, the GOLD ISMIA Project's implementation has demonstrated remarkable achievements in project management, capacity building, and social and environmental safeguards. The project's strong coordination, commitment to stakeholder engagement, and focus on empowering marginalized groups have contributed to its success. The positive outcomes achieved through the project's implementation have paved the way for responsible and sustainable ASGM practices in Indonesia, ensuring the protection of the environment, the well-being of mining communities, and the long-term viability of the ASGM sector.

3.2.1 Adaptive Management

Adaptive management has played a crucial role in the GOLD ISMIA Project, particularly in navigating the challenges presented by the COVID-19 pandemic and the rapidly changing regulations in the ASGM sector. The Project Team demonstrated a high level of adaptability and agility, adjusting their strategies and activities to respond to the evolving circumstances and ensure continued progress towards project objectives.

Amid the COVID-19 pandemic, the project quickly recognized the need to prioritize the health and safety of project staff, stakeholders, and ASGM communities. Strict health protocols were implemented, including remote work arrangements, virtual meetings, and the provision of personal protective equipment. The project also acknowledged the economic impact of the pandemic on ASGM miners and communities, leading to the identification of additional support measures to address their immediate needs, such as providing relief packages, facilitating access to healthcare services, and exploring alternative income-generating opportunities. By adapting swiftly to the challenges posed by the pandemic, the project demonstrated resilience and a commitment to safeguarding the well-being of its beneficiaries.

The rapidly changing regulations in the ASGM sector presented both challenges and opportunities for the project's implementation. The Project Team closely monitored and assessed new regulatory frameworks, policies, and guidelines introduced by the government, ensuring that project activities remained aligned with the evolving legal landscape. This adaptive approach enabled the project to proactively engage with relevant authorities, provide technical inputs, and contribute to the formulation of effective and practical regulations. The project's ability to navigate these regulatory changes and maintain a strong working relationship with the government resulted in improved compliance, enhanced collaboration, and increased support for the project's objectives.

Adaptive management also enabled the project to capitalize on emerging opportunities and integrate new approaches and technologies. For example, as digital platforms and remote learning became essential during the pandemic, the project leveraged technology to deliver virtual training programs, knowledge-sharing sessions, and capacity-building initiatives. This adaptive use of technology not only ensured the continuity of project activities but also expanded the reach and accessibility of training programs to a wider audience. By embracing innovation and adapting to the changing landscape, the project effectively utilized available resources and tools to maximize its impact and achieve its objectives in an ever-evolving context.

In summary, the GOLD ISMIA Project's adaptive management approach has been instrumental in successfully addressing the challenges posed by the COVID-19 pandemic and the rapidly changing regulations in the ASGM sector. The project's ability to adapt its strategies, prioritize the well-being of stakeholders, and respond to emerging opportunities has been essential in maintaining project momentum and achieving positive outcomes. Through adaptive management, the project has demonstrated its resilience, agility, and commitment to effectively contribute to sustainable development in the ASGM sector amidst challenging circumstances.

3.2.2 Actual stakeholder participation and partnership arrangements

The project has actively engaged the following institutions during project implementation:

1) Central Governments:

- Ministry of Environment and Forestry (MoEF): Implementing Partner and the lead for regulations, pilot projects demonstrating alternative technologies, licensing, database development on mercury use in ASGM, among others.
- Agency for Assessment and Application of Technology (BPPT) which later transformed and be part of BRIN: responsible for the implementation of national policy on technology (including mercury phase-out in ASGM).
- Ministry of Energy and Mineral Resources (MEMR or *KESDM*): responsible for reviewing existing regulations to support mercury phase out and prohibition in ASGM, disseminate information on alternative technologies, issue mining permits, ASGM conflict resolution and formalization of ASGM at local level.
- Coordinating Ministry for Maritime and Investments Affairs (KemenkoMarves)
- Ministry of Finance

- Ministry of Health: responsible for developing norms and standards, monitoring environment health quality, measure mercury exposure levels.
- Ministry of Cooperatives and Small-Scale and Medium Enterprises: 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.

2) Provincial and District Governments:

(Dinas Lingkungan Hidup, Dinas ESDM, BAPPEDA, SEKDA, Dinas PUPR): responsibility to provide oversight for planning, implementation, licensing, and monitoring ASGM operations and mercury distribution within their province (through the Provincial Sectoral Agency).

3) International and National NGOs:

Participate, influence or become project implementing/executing partner to ensure greater impacts of on-going and future ASGM projects.

- AGC (Artisanal Gold Council)
- YTS (Yayasan Tambuhak Shinta)
- PACT Institute
- Kiroyan Partners
- Yayasan Emas Indonesia (YEI)
- Blacksmith/Pure Earth

4) Local Universities in 6 project sites:

- Universitas Riau
- Universitas Mataram
- Universitas Sam Ratulangi
- Universitas Gajah Mada
- Universitas Khairun
- Universitas Negeri Gorontalo

5) Banking and Financial Institutions:

Support the opportunities for ASGM miners (communities, cooperatives, village-owned companies, etc.) to borrow money to make investment in mercury-free processing equipment.

- LPDB (Lembaga Pendanaan Dana Bergulir/ Revolving Fund Funding Institution)
- PT Pegadaian
- PIP (Pusat Investasi Pemerintah/ Government Investment Center)
- Bank Sulut-Go of Airmadidi Regency
- Bank Sulut-Go of Kwandang Regency
- BNI
- BRI
- BRI Airmadidi
- BRI Teluk Kuantan

6) Private sector: PT. ANTAM, PT. Antam Resource Indo, Garden of the Sun

7) Association: APRI (Asosiasi Penambang Rakyat Indonesia)

Stakeholder engagement has been conducted as envisioned in the Stakeholder Engagement Plan and all key stakeholders have been actively engaged in an open and transparent manner at the national and sub-national levels.

The project has successfully built a good working relation with the stakeholders, supported and fostered communication and coordination amongst key institutions. The project provided regular coordination meetings inviting concerned ministries and updating them with progress of the project, challenges faced during implementation, and soliciting inputs to improve project implementation. Support to the Project Board has also facilitated strong coordination of relevant ministries that has led to strengthening the engagement with key stakeholders that enhanced the efficiency and effectiveness of project implementation.

3.2.3 Project Finance and Co-finance

The TE Team reviewed the Project's annual expenditures against the annual project budget, utilizing the UNDP quarterly and annual Combined Delivery Reports (CDRs) which recorded the actual disbursements in the UNDP ATLAS financial system.

The project budget allocation approved at CEO Endorsement was revised upon project implementation as the CEO Endorsement was approved on 20 June 2018 while the UNDP Project Document was fully signed on 5 September 2018 when project implementation could start. In this case, the full Year 1 project budget would not have been fully utilized to implement activities for the four-month duration remaining in 2018. In years that follow, budget allocation not fully utilized in a particular year was rephased to subsequent year(s) taking into account planned implementation activities and corresponding subjects, upon approval of the Annual Workplans (AWPs).

The CDRs of 2018, 2019, 2020, 2021 and 2022that recorded the annual disbursements were reviewed together with the preliminary project delivery figures for the first quarter of 2023 (CDR for Quarter 1 of 2023 will only be available sometime towards the end of May 2023), the total expenditure was compiled and are reflected in Table 9 below. Total cumulative project expenditures of US$ 6,643,629 were recorded as of first quarter of 2023 (end March 2023), showing strong project delivery of 99% against the total GEF grant of US$6,720,000. The breakdowns of the project expenditures also provide a comparison of the budget allocations and the actual expenditures for each of the four project components and the Project Management Costs (PMC). It is noted that the actual expenditure on Project Management Costs is within the allocated budget (thus in compliance with the 5% threshold), while the actual expenditures against project components 1 to 4 show variants against the original project budget allocations t CEO Endorsement.

Table 9: Project Delivery vs. Budget Allocation (in US$)

Description/Project Year	Year 1 (2018)	Year 2 (2019)	Year 3 (2020)	Year 4 (2021)	Year 5 (2022)	Year 6 (2023)	Total
Budget Allocation at CEO Endorsement	625,000	1,851,000	3,171,833	780,334	291,833		6,720000
Component 1	118,000	235,000	292,500	0	0		645,500
Component 2	110,000	555,000	1,393,333	48,334	48,333		2,155,000
Component 3	110,000	885,000	1,231,000	556,000	0		2,782,000
Component 4	223,000	112,000	191,000	112,000	179,500		817,500
Project Management	64,000	64,000	64,000	64,000	64,000		320,000
Actual Expenditure at Terminal Evaluation	3,920	1,112,757	1,700,556	2,129,800	1,255,197	441,399	6,643,629
Component 1	3,230	203,625	319,134	160,076	13,460	0	699,525
Component 2	0	164,889	420,537	542,537	233,828	6,690	1,368,481
Component 3	690	466,411	592,889	991,937	620,111	322,681	2,994,719
Component 4	0	205,422	249,723	324,510	371,925	110,071	1,261,651

Project Management	0	72,410	118,273	110,740	15,873	1,957	319,253
Percentage of actual project delivery at Terminal Evaluation against budget allocation at CEO Endorsement							99%
Variance of Actual Expenditure vs Original Allocation – Component 1							+ 8.4%
Variance of Actual Expenditure vs Original Allocation – Component 2							- 36.5%
Variance of Actual Expenditure vs Original Allocation – Component 3							+ 7.6%
Variance of Actual Expenditure vs Original Allocation – Component 4							+ 54.4%
Variance of Actual Expenditure vs Original Allocation – Project Management Costs							- 0.2%

Note: 2023 expenditures show preliminary figures as of end of 1st quarter 2023 (March 2023)

The variants show that utilization of project budgets have been shifted, with some portions of the budget from project component 2 being shifted to support project activities under project components 3 and 4 The actual expenditure of project component 2 is lower by about 36.5% as compared to the original budget allocation at CEO Endorsement. This difference arose due to challenges faced by the mining groups in obtaining *Ijin Pertambangan Rakyat*, or-IPR (Artisanal Mining License) despite of extensive support and assistance by the project, which in turn hindered the process of providing loans and financial support to gold mining cooperatives. As IPR has not been issued, project budget allocated for financial loans to those mining cooperatives could not proceed. Upon approval of the Project Board, the unutilized loan funds were redirected towards financing project component 4, which encompasses training materials and training activities, technical assistance, publication, dissemination and communication materials for knowledge sharing that contribute to achieving project results and impacts under project components 1, 2 and 3. Consequently, the actual expenditure recorded in component 4 surpassed the initial budget allocation stated in the Project Document at CEO Endorsement.

It is noted that, despite the shifting of project budget amongst project components, a better coordination of the budgets under the different components has facilitated an effective project implementation and achieving the expected project results.

With regard to the project's co-financing contributions, the actual co-financing realized at Terminal Evaluation as compared to the original co-financing committed at CEO Endorsement are indicated in the table below.

Table 10: Summary of Planned and Actual Co-financing (in US$ m)

Co-financing (type/source)	UNDP		Government		Partner Agency		Total	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
In-kind	0.112	0.120	25.489	25.669	3.000	3.784	28.601	29.573

Table 11 below shows in detail the confirmed sources and actual in-kind co-financing contributions realized at the time of Terminal Evaluation, as verified by the Terminal Evaluation Team.

Table 11: Detailed Breakdown of Planned and Actual Co-financing (in US$)

Sources of Co-Financing	Name of Co-financier	Type of Co-financing	Investment Mobilized/Recurrent expenditures	Amount Committed at CEO Endorsement	Amount Realized at TE
Recipient Country Government	Ministry of Environment and Forestry (MoEF)	In-kind	Recurrent expenditures	11,434,774	11,617,201
Recipient Country Government	The Agency for Assessment and Application of Technology (BPPT)	In-kind	Recurrent expenditures	6,865,491	7,164,548
Recipient Country	Ministry of Energy and Mineral	In-kind	Recurrent expenditures	160,235	160,570

Government	Resources (MEMR) or (*KESDM*)				
Recipient Country Government	Coordinating Ministry of Maritime Affairs (*AIPE*)	In-kind	Recurrent expenditures	451,128	450,172
Recipient Country Government	Ministry of Health	In-kind	Recurrent expenditures	6,574,527	6,274,532
Recipient Country Government	Ministry of Communication and Information Technology	In-kind	Recurrent expenditures	2,725	2,000
Civil Society Organization	Asosiasi Penambang Rakyat Indonesia (APRI, Indonesian Artisanal Mining Association))	In-kind	Recurrent expenditures	3,000,000	3,784,000
GEF Agency	United Nations Development Programme (UNDP)	In-kind	Recurrent expenditures	112,000	120,000
Total				28,600,880	29,573,023

Source: Project Appraisal Report (PAR) of UNDP as of Quarter 1 of 2023. Converted at Exchange Rate: IDR14,000 = US$1

3.2.4 Monitoring & Evaluation: design at entry

The Monitoring & Evaluation Plan and Budget presented in the Project Document follows the typical well-thought-out M&E model for a UNDP-supported, GEF-financed project. The TE Team considers the scope of the M&E to be sound and provides good guidance as solid foundation for tracking project progress of project activities implementation and evaluating achievement of results. The M&E Plan outlined a detailed set of activities that meet the UNDP and GEF's M&E requirements. The Plan also defined the timeframe and specified the primary parties responsible for carrying out M&E activities contained in the Plan. The budget allocated to carry out the M&E Plan in the amount of $333,500 falls within the 5% allocation threshold for M&E activities against the GEF project grant of $6,720,000. An amount of US$971,000 co-financing contribution was also allocated to support the many activities of the M&E Plan. Sufficient budget is also allocated to recruit independent international and national consultants to conduct Midterm Review at mid-point of project implementation and Terminal Evaluation to take place prior to operational completion of the project, as required by the UNDP and GEF M&E policies. The TE Team considers that the M&E design at entry can be rated as Satisfactory (S).

3.2.5 M&E Plan Implementation

The Monitoring & Evaluation (M&E) Plan as contained in the Project Document and its implementation demonstrate a well-structured approach that aligns with the standards of a UNDP-supported, GEF-financed project. The TE Team acknowledges the comprehensive scope of the M&E Plan, which has served as a reliable framework for monitoring project progress and assessing the attainment of desired outcomes. The Plan encompassed a detailed set of activities that fulfill the M&E requirements of both UNDP and GEF.

Working Group 4 of the PMU was entrusted with the M&E responsibilities. Working Group 4, together with the Project Team and UNDP CO have diligently undertaken close monitoring of the progress of the project activities, and taken proactive actions in ensuring they are implemented in compliant with UNDP Programme and Operations Policies and Procedures (POPP) and UNDP and GEF Evaluation Policies, in a timely and effective manner to avoid slippage and delay. All of the UNDP and GEF required reports, including the annual PIR, APR, PAR and periodic progress reports, have been well prepared, with extensive details and submitted in a timely manner. Effective monitoring tools (PIR, GEF Focal Area Tracking Tools etc.) were effectively utilized in performing the M&E functions.

UNDP as project quality assurance, has ensured the coordination among project's stakeholders runs smoothly and effectively. UNDP also actively monitored the project activities being implemented in a timely manner using accountable monitoring and evaluation guidance to conduct Annual Project Quality Assurance and issued annual Project Assurance Reports (PARs). The TE Team rated M&E implementation as Highly Satisfactory (HS).

3.2.6 Overall assessment of M&E

Based on the review and evaluation of the project's Monitoring and Evaluation design at entry and its subsequent implementation, the TE Team rated the Overall Quality of M&E as Highly Satisfactory (HS).

Table 12: Monitoring & Evaluation Ratings Table	
Monitoring & Evaluation (M&E)	Rating
M&E design at entry	Satisfactory (S)
M&E Plan Implementation	Highly Satisfactory (HS)
Overall Quality of M&E	Highly Satisfactory (HS)

Table 13: Monitoring & Evaluation Rating Scale

Raging	Description
6 = Highly Satisfactory (HS)	There were no shortcomings; quality of M&E design/implementation exceeded expectations
5 = Satisfactory (S)	There were minor shortcomings; quality of M&E design/implementation met expectations
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of M&E design/implementation more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of M&E design/implementation was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of M&E design/implementation was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in M&E design/implementation
Unable to Assess (UA)	The available information does not allow an assessment of the quality of M&E design/implementation

3.2.7 UNDP Implementation/Oversight, Implementing Partner Execution and Overall Assessment of Implementation / Oversight and Execution

The UNDP's remarkable performance in implementing and overseeing the project can be attributed to its meticulous execution of specific functions that ensured its success. Despite the unprecedented challenges posed by the COVID-19 pandemic and the dynamic regulatory landscape, UNDP effectively monitored and evaluated the project's progress, guided its implementation, and ensured compliance with GEF and UNDP policies and procedures. The Monitoring & Evaluation (M&E) Plan and Budget, outlined in the Project Document, exemplify the UNDP's meticulous approach to tracking project activities and evaluating results. This comprehensive plan, aligned with both UNDP and GEF M&E requirements, served as a robust foundation for monitoring project implementation and ensuring accountability.

Recognizing the need for adaptability in the face of the pandemic and evolving regulations, the UNDP's M&E Plan demonstrated a proactive response. It accounted for the impact of COVID-19 and the rapidly changing regulatory environment, incorporating flexibility and adaptability into the monitoring and evaluation strategies. This dynamic approach showcased the UNDP's commitment to addressing unforeseen challenges and ensuring the project's seamless implementation.

Furthermore, the UNDP conscientiously maintained a clear demarcation between its responsibilities for project implementation and oversight functions. The QARE Unit, operating within the UNDP Indonesia Country Office,

played a pivotal role in project quality assurance. This specialized unit, dedicated to objective and independent oversight and monitoring, supported the Project Board and Project Management Unit. It diligently ensured the completion of project management milestones and prepared comprehensive annual Project Assurance Reports, providing a transparent and rigorous assessment of the project's progress.

A key aspect of the UNDP CO's responsibilities was to establish a clear separation between project implementation and oversight functions. This was achieved through the establishment of the Quality Assurance, Results and Evaluation (QARE) Unit within the UNDP Indonesia CO. The QARE Unit played a crucial role in ensuring independent project oversight and monitoring functions, providing objective assessments of the project's progress.

The QARE Unit, staffed with experienced professionals, conducted comprehensive project quality assurance activities. This included rigorous monitoring and evaluation of project milestones, reviewing the adherence to project plans and targets, assessing risk management strategies, and evaluating the effectiveness of project interventions. By undertaking these tasks, the QARE Unit helped ensure that project implementation adhered to the highest standards of quality and accountability.

Furthermore, the QARE Unit supported the Project Board and Project Management Unit by offering objective insights and recommendations. They provided expert advice on project strategies, implementation approaches, and decision-making processes. Their independent perspective enhanced the project's overall governance structure and contributed to effective decision-making.

The QARE Unit also prepared annual Project Assurance Reports, which provided detailed assessments of project performance, achievements, challenges, and recommendations. These reports served as valuable resources for project stakeholders, allowing them to understand the project's progress and identify areas for improvement

In parallel, the Senior Programme Manager of the UNDP CO provided expert guidance and support for project implementation. Working closely and collaboratively with the Project Team, the Senior Programme Manager offered invaluable insights and ensured a smooth and orderly execution of project activities. The harmonious coordination between the UNDP CO, the QARE Unit, and the Project Team underpinned the highly satisfactory rating given by the Terminal Evaluation (TE) Team for the UNDP's implementation efforts.

The Ministry of Environment and Forestry (MoEF) led the implementation of the GOLD ISMIA Project, with a National Project Director (NPD) at the helm and support from the National Research and Innovation Agency (BRIN) as the Deputy National Project Director (DNPD). The active involvement of these entities, alongside other relevant national ministries and sub-national governmental agencies, played an instrumental role in driving the successful execution of project activities. The collaborative efforts and support from these stakeholders fostered efficient working relationships at various levels of government, enabling the smooth execution of the project.

While commendable overall, minor challenges arose due to the need for coordination among agencies at different administrative levels. Interpretations and execution of regulations related to the formalization process of mining groups varied across geographic locations, affecting the efficiency of the supported formalization process. Nonetheless, stakeholders demonstrated a strong commitment to addressing these challenges promptly, ensuring that the project remained on track.

The TE Team's highly satisfactory (HS) rating for the execution function carried out by the implementing partner highlights their dedication and competence, supported by relevant government agencies and the Project Team. The TE also recognizes the collaborative efforts of the MoEF, BRIN, and other stakeholders in supporting and monitoring the project's implementation, particularly in promoting and encouraging the adoption of environmentally-friendly alternative technologies. These efforts have significantly contributed to the project's remarkable achievements.

Table 14: Implementation/Oversight and Execution Ratings Table	
Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	Rating
Quality of UNDP Implementation/Oversight	Highly Satisfactory (HS)
Quality of Implementing Partner Execution	Highly Satisfactory (HS)
Overall quality of Implementation/Execution	Highly Satisfactory (HS)

Table 15: Implementation/Oversight and Execution Rating Scale

Raging	Description
6 = Highly Satisfactory (HS)	There were no shortcomings; quality of implementation/execution exceeded expectations
5 = Satisfactory (S)	There were no or minor shortcomings; quality of implementation/execution met expectations
4 = Moderately Satisfactory (MS)	There were some shortcomings; quality of implementation/execution more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of implementation/execution was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of implementation/execution was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in quality of implementation/execution
Unable to Assess (UA)	The available information does not allow an assessment of the quality of implementation and execution

3.2.8 Risk Management

The risk management aspect of the project has played a crucial role in addressing various challenges, including those presented by the COVID-19 pandemic and the rapidly changing regulatory environment. The project's success can be attributed to its effective risk management strategies, which have contributed to increasing awareness of the negative impacts of using mercury in the intervened area, enhancing mining safety practices, and improving the social status of women and groups of women miners.

Firstly, the project's risk management approach demonstrated adaptability and resilience in the face of the COVID-19 pandemic. The unprecedented health crisis posed significant challenges to project implementation, including restrictions on movement, disrupted supply chains, and limited access to resources. By proactively identifying and assessing risks associated with the pandemic, the Project Team was able to swiftly implement mitigation measures. These measures included implementing remote work arrangements, providing necessary personal protective equipment (PPE), and adhering to strict health and safety protocols. The effective management of the identified risks ensured the project's continuity, allowing it to continue achieving its objectives despite the challenging circumstances.

Secondly, the project's risk management efforts were instrumental in navigating the rapidly changing regulatory landscape. The mining industry is subject to evolving regulations and standards, which can impact operations and project outcomes. The Project Team demonstrated a proactive approach by closely monitoring and anticipating regulatory changes. By doing so, they were able to adapt their strategies and ensure compliance with new requirements. This proactive stance enabled the project to maintain its momentum and avoid potential delays or setbacks caused by non-compliance.

Thirdly, to addressing external challenges, the project's risk management approach also focused on mitigating internal risks associated with its objectives. The successful increase in awareness of the negative effects of mercury

usage in the intervened area was achieved through targeted communication and educational campaigns. By identifying potential barriers to effective communication and understanding, such as language or cultural differences, the Project Team was able to develop tailored strategies to overcome these challenges. This risk-aware approach ensured that the project's messages reached the intended audience, resulting in the desired behavior change.

Moreover, the project's risk management efforts contributed to enhancing mining safety practices and improving the social status of women and groups of women miners. By conducting comprehensive risk assessments of mining activities, potential hazards were identified and appropriate mitigation measures were implemented. This approach led to improved safety protocols, increased knowledge and capacity among miners, and a reduction in occupational risks. Simultaneously, the project's focus on empowering women in mining resulted in enhanced social and economic opportunities, leading to a positive transformation of their social status.

Overall, the project's risk management strategies have played a pivotal role in its success, particularly in light of the challenges posed by COVID-19 and the dynamic regulatory environment. By adopting an adaptive and proactive approach, the Project Team effectively addressed external and internal risks, ensuring the continuity of operations and the achievement of its objectives. The increased awareness of the negative impacts of mercury usage, improved mining safety practices, and enhanced social status of women and groups of women miners are tangible outcomes of the project's robust risk management framework.

3.2.9 Social and Environmental Standards

The evaluation of the project's Social and Environmental Standards reveals an overall commendable implementation, oversight, and execution, considering the challenging circumstances posed by the COVID-19 pandemic and the rapid changes in regulations. The project has made significant strides in achieving its objectives, notably by successfully increasing awareness within the intervened area regarding the cessation of mercury usage in mining practices.

One of the notable achievements of the project lies in the enhanced capacity of the local society to conduct mining operations with a heightened focus on safety practices. By providing relevant training, resources, and guidance, the project has empowered the community to adopt responsible mining techniques, mitigating the risks associated with hazardous substances like mercury. This outcome not only contributes to the well-being of the local workforce but also ensures the preservation of the environment in and around the mining areas.

Furthermore, the project has played a vital role in alleviating the social status of women, particularly among the group of women miners. By addressing gender inequalities prevalent in the mining sector, the project has championed the rights and empowerment of women, enabling them to participate meaningfully and equitably in mining activities. Through various interventions, such as skill-building programs, mentorship initiatives, and the creation of supportive networks, the project has fostered an inclusive and gender-responsive mining community, paving the way for sustainable social development.

It is important to acknowledge the additional challenges that emerged due to the COVID-19 pandemic and the rapidly changing regulatory landscape. The project demonstrated resilience and adaptability by swiftly adjusting its strategies and methodologies to comply with evolving health and safety guidelines. This flexibility allowed for the continuity of project activities and minimized disruptions to the intended outcomes.

The SESP conducted at PPG phase identified eight (8) risks all of which were rated as Low risks and the project was rated as Low Risk. During project implementation, the risks registered in the Risk Log, as well as risks identified in the SESP were periodically monitored and assessed, and any potential additional risks were identified. While there were no additional risks identified except the risk impacted by COVID-19 which the Project Team was able to successfully managed and adapted to changing health and operational situations, towards the end of project implementation, however, two risks were considered as prevalent: 1) the project’s inability to achieve a target for the 60 mining groups to successfully obtain the mining permits; and 2) the mining group cannot sell their mercury-free gold directly to the formal market. Both of these situations were caused by structural and systemic constraints for which the TE Team has made recommendations.

Overall, the successful implementation, oversight, and execution of the project's Social and Environmental Standards

have yielded commendable results. The project's efforts have not only raised awareness about the dangers of mercury but also equipped the local community with the necessary tools to ensure mining practices align with safety standards. Moreover, the project's focus on empowering women miners has contributed to their social advancement and fostered a more inclusive mining sector. Despite the challenges posed by COVID-19 and regulatory changes, the project has showcased resilience and adaptability, further enhancing its impact.

3.3 Project Results and Impacts

The TE Team conducted a detailed review and assessment of the project's progress and results achieved against the project's objective and expected outcomes, as well as the Objective and Outcome Indicators outlined in the Project Results Framework. Based on the results of the assessment on the achievements or lack of it, the TE Team then evaluated the relevance, effectiveness, efficiency, sustainability, gender equality and other aspects of the project, and provided ratings in compliance with the UNDP Guidance on Terminal Evaluations.

3.3.1 Progress Towards Objective and Expected Outcomes

The Terminal Evaluation Team conducted a comprehensive assessment of the project's objectives and outcomes, meticulously examining the indicators outlined in the Project Results Framework to evaluate the extent to which the end-of-project targets were met. The TE team carefully analyzed the main results and progress achieved, providing clear justifications for the assigned ratings. These valuable insights are succinctly presented in a detailed table, which not only highlights the accomplishments but also evaluates the extent to which the indicators align with the GEF's SMART (Specific, Measurable, Achievable, Relevant, Time-bound) definition. This systematic approach ensures a thorough evaluation of the project's performance and serves as a reliable basis for determining the effectiveness and impact of the undertaken initiatives. For rating the achievement of the indicators, Green represents the target has been achieved, yellow indicates progressing satisfactorily and is expected to be achieved with slight delay, and red as not on target to be achieved.

Table 16 below shows that, with the exception of two Outcome Indicators (Outcome indicators 3.3 and 4.2) being evaluated as "Progressing Satisfactorily", all the Objective and Outcome Indicators (as revised in response to the MTR recommendation) have been assessed as being Achieved or Exceeded the end-of-project targets.

Table 16: Analytical Assessment of the Indicators identified for Project Objective and Project Outcomes

(Revised) Objective and Outcome Indicator	Baseline	Midterm Target	End-of-Project Target	S	M	A	R	T		Cumulative progress at TE since project started and Evidence-based Justification
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										
Number of new partnership mechanisms for access to funding for gender friendly sustainable management solutions in the ASGM sector	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.							Achieved 5 partnership structures with funding set up at national and sub-national levels for gender responsive and sustainable management solution of mercury. Legal miners in project locations now have access to financial facilities, allowing them to buy and reproduce mercury-free machinery
Number of direct project beneficiaries for which the risk of mercury exposure has been reduced	0 direct project beneficiaries.	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.							Exceeded A total of 459,893 direct beneficiaries were assisted in reducing exposure to mercury through various initiatives. Specifically, among the 459,893, there was a total of 217,317 direct project beneficiaries (97,277 female, i.e. 45%, and 120,040 male) had their risk of mercury exposure reduced through awareness-raising and introduction of mercury-free technology by this Project. The project also successfully reached 51,164 indirect project beneficiaries who are now aware of the risks of mercury exposure
Project Component 1/Outcome[8] 1: Strengthening institutions and the policy/ regulatory framework for Mercury-free ASGM.										
Outcome Indicator 1.1: Number of government entities that increased their	The devolution of ASGM responsibilities and the administration	Capacity of 11 government entities increased to improve their capacity to	Capacity of 23 government entities increased to improve their capacity to							Exceeded Capacity of 39 government entities at national and sub-national levels increased

[8] Outcomes are short to medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	of mining 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.	assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.							with 344 government officials (47% female) trained through seven (7) 2-day training sessions conducted
Outcome Indicator 1.2: 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	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.							Exceeded 36 regulations and guidelines developed at national and sub-national levels to improve enabling environment for ASGM and mercury phase-out in the ASGM sector
Project Component 2/ Outcome 2: Establishing financing lending arrangements to provide loans for mercury free processing equipment.										
Outcome Indicator 2.1: Number of new/improved financial products or	4 financial mechanisms available, which have not been tailored to be	2 new/improved financial products/mechanisms (including women friendly	4 new/improved financial products/mechanisms (including women friendly							Exceeded 6 financial mechanisms established (Bank Negara Indonesia - BNI, Bank Rakyat

mechanisms (including women friendly financial products) established for the ASGM sector	able to serve the ASGM sector. These include: Village fund (BUMDes Dana Desa = 61,500 USD/year/village. However, 0 BUMDes mechanisms have been applied for ASGM to date. BLU = 1.5 million USD/year. However, 0 BLU mechanisms have been applied for ASGM to date. BRI KUR = 15,400 USD/year/project. However, 0 KUR from BRI mechanisms have been applied for ASGM to date. BNI 46 = 10.8 million USD/year. However, 0 BNI environmental grants and/or loans have been allocated to ASGM to date. For 6 villages baseline potential access to funding is: 12.7 million US$	financial products) established for the ASGM sector. US$ 35 million9 (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms. US$ 2.8 million (Total amount of funding) allocated to the ASGM sector through approved loans.	financial products) established for the ASGM sector. US$ 57.3 million10 (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms. US$ 4.6 million (Total amount of funding) allocated to the ASGM sector through approved loans.							Indonesia - BRI and Low Value Grant Agreement - LVGA) and have been accessed by ASGM miners to expand the mining activities by procuring and replicating mercury-free equipment along with waste treatment introduced by the project. BNI and BRI confirmed that an estimated US$ 13 billion of commercial loans are available to all SME business including the ASGM sector US$ 4.6 million in approved loans were awarded to miners
Outcome Indicator 2.2:. Number of miner groups (with % of women membership) trained in developing a	In the 6 selected project areas, none of the ASGM miners have been trained on how to access financing.	5 miner groups (of which 20% of the miners are women) are trained in developing a loan/investment	10 miner groups (of which 20% of the miners are women) are trained in developing a loan/investment							Exceeded Through six (6) 2-day training workshops, 22 miner groups with 303 members (35% are female) were trained on capacity development on loan applications for

[9] 35 million US$ has been calculated as follows: (61,538*6 villages * 3 years = 1,107,692.3) + 1,538,462 + (15,385*3 years = 46,155) + (10,769,231*3 = 32,307,693) = 35,000,000 US$

[10] 57.3 million US$ has been calculated as follows: (61,538*6 villages * 5 years = 1,846,154) + 1,538,462 + (15,385*5 years = 76,923) + (10,769,231*5 = 53,846,154) = 57,307,692 US$

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)	 0 ASGM loan applications developed. 0 ASGM loan applications approved.	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.	application (incl. undertaking technical and financial feasibility studies). 10 loan applications developed (with technical support of the project). 60% of loan applications (developed with technical support of the project) approved.							procurement of mercury-free processing equipment 38 loan applications to financial entities were developed, 100% of the applications were approved 100% loan application approved
Project Component 3/ Outcome 3: Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization.										
Outcome Indicator 3.1: Amount (tonnes/year) of mercury-use/releases from ASGM avoided	Preliminary estimates from research and PPG field work suggest cumulative emissions among all 6 target communities could exceed 13 tonnes of mercury per year: 1. Bole Bolange District, Gorontalo Province – 1.15 tonnes Hg/yr 2. Sekotong-West Lombok District, West Nusa Tenggara Province – 2.79 tonnes Hg/yr 3. Banyumas District, Central Java Province – 6.81 tonnes Hg/yr 4. South Halmahera District, North Maluku Province – 1.45 tonnes Hg/yr	Mercury use/releases from ASGM avoided by 5 tonnes/year. 150 kg of gold produced per year without mercury.	Total mercury use/releases from ASGM avoided by 15 tonnes. 450 kg of gold produced without mercury.							Exceeded From the 6 project locations: 23 metric tonnes of mercury avoided and 220 kg. from project equipment. 3.34 tonnes of mercury-free gold produced resulted from project activities intervention and 15.51 kg from operation of equipment provided by the Project (It is noted that the secrecy in the ASGM sector may render difficulty in obtaining the true quantity of mercury use/release avoided, and the quantity of gold produced without mercury not truly "measurable", thus the remarks on "Measurable" not being fully aligned with the SMART classification)

	5. Pacitan District, East Java Province 0.18 tonnes Hg/yr 6. Tetelu District, North Sulawesi Province – 1.01 tonnes Hg/yr									
Outcome Indicator 3.2. Number of mining groups (with % of the miners are women) supported in their formalization processes	In the 6 selected project areas, most of the ASGM miners have to date received training on formalization processes. 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.	At least 30 mining groups (of which 20% of the miners are women) supported in their formalization processes.	At least 60 mining groups (of which 20% of the miners are women) supported in their formalization processes.							Achieved 60 mining groups with 1,274 miners (305 or 24% were women cooperative members) in the 6 project locations supported for formalization
Outcome Indicator 3.3: 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 the general gold price, even miners outside of Java get 50%	100 kg of mercury-free gold sold to the formal market.	350 kg of mercury-free gold sold to the formal market.							Progressing Satisfactorily and is expected to be achieved with slight delay Out of an estimated 2,840 kg of mercury-free gold produced by the miners in the 6 project locations, it is estimated that 192 kg (55% of end-of-project target) of gold produced without mercury has been sold to official buyers. However, it is noted that the secrecy in the ASGM sector may render obtaining the true quantity of mercury-free produced gold

	of the gold price for the gold they sell.									being sold to the formal market may not be easily accessible Thus the remark on "Measurable" being not fully meeting the SMART classification It is also noted that there is 100 kg. of mercury-free produced gold will be potentially sold to PT Pegadaian (a state-owned pawnbroker), this has not been validated by the TE Team
Project Component 4/ Outcome 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices										
Outcome Indicator 4.1:. Number of people (gender disaggregated with increased awareness 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.							Exceeded 20,308 people (47% are women) were informed about dangers of mercury and impact on human health and the environment
Outcome Indicator 4.2: Number of adaptive management responses applied in response to MTR and TE recommendations	0 GEF M&E requirements met by the project.	15 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings.	34 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings.							Progressing Satisfactorily (79%) and is expected to be achieved with slight delay 27 GEF M&E requirements were met (*Note: some of the requirements remains to be acted on and to be completed in the last year of project implementation – i.e. towards later part of 2023)*
Outcome Indicator 4.3: 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	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	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							Achieved GEF GOLD ISMIA country project webpage established Participated in 10 global ASGM forums, 4 Annual Programme Conferences, 15 regular programme/project calls with GEF Planet GOLD and other GEF GOLD countries' project managers Participated quarterly on GEF GOLD Global communication group coordinated by UNEP

		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.	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 progress submitted to GEF GOLD

The Project Document includes a very detailed list of 78 Outputs that would contribute to the achievements of Outcomes under each of the four project components, that would ultimately lead to the achievement of the Project objective. As was pointed out in the Midterm Review Report, the list of outputs is in fact the descriptions of project activities (and thus will be referred to as "activities" henceforth). The list of activities presents an extensive and comprehensive set of project interventions to generate the expected Outcomes. As indicated in the analysis table (Table 16) in Section 3.3.1 above, it concluded the status of achievements for each of the project indicator at Terminal Evaluation. The tables below analyze the status of progress/achievement of each activity (Output) listed in the Project Document. Overall, it can be concluded that, with the exception of three (3) activities being evaluated as "Progressing Satisfactorily" and are expected to be achieved at time of project completion (Outputs 3.1.24, 3.3.4,and 4.2.5), all the remaining 75 activities have already been fully Achieved or Exceeded the end-of-project targets.

The following sections detail the assessment of project results against each Project Component and Expected Outcome Indicators.

Project Component 1, Outcome 1 is dedicated to advancing the capacity of national and sub-national institutions, government agencies, private sector partners, NGOs, and CSOs to develop robust systems capable of assessing, planning, supporting,, implementing, and monitoring sustainable and mercury-free interventions within the ASGM sector. This outcome encompasses two key achievements that were pursued diligently.

Outcome Indicator 1.1 focuses on ensuring that national systems possess the necessary capabilities to assess, plan, and execute sustainable and mercury-free interventions in the ASGM sector. Notably, all three activities (Outputs 1.1.1, 1.1.2, and 1.1.3) have been successfully completed. The project undertook thorough assessments of the capacities of government entities and other stakeholders involved in ASGM management, as well as those responsible for delivering ASGM extension services at the project's six priority sites. Furthermore, a series of seven (7) two-day training sessions were conducted, which yielded promising results. Assessments following the training sessions demonstrated a notable increase in knowledge among the participants, validating the effectiveness of the training.

These comprehensive training sessions equipped participants with the skills needed to monitor ongoing ASGM practices, promote the adoption of mercury-free best practices, enhance the enforcement of local regulations and standards, facilitate ASGM formalization, improve cross-sectoral coordination, and integrate gender dimensions into all ASGM-related initiatives. The success of these trainings is reflected in the project's ability to surpass its end-of-project targets. Specifically, the capacity of 344 government officials from 39 national and sub-national government entities has been significantly enhanced, exceeding initial expectations. Detailed information on this achievement can be found in the accompanying table, which further highlights the project's successful efforts in bolstering the capabilities of key stakeholders within the ASGM sector. The assessment of Outcome Indicator 1.1 is thus rated Highly Satisfactory (HS).

Table 17: Status of achievement of Outputs for Project Component 1, Outcome Indicator 1.1

Output	Description	End of Project Targets Achievement at TE
Project Component 1/Outcome[11] 1: Strengthening institutions and the policy/ regulatory framework for Mercury-free ASGM		
Outcome Indicator 1.1: National[12] systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.		
1.1.1	Capacity of 23 government entities increased to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.	
Output 1.1.1	Assessment conducted of the capacity of government entities	Achieved.

[11] Outcomes are short to medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

[12] Depending on the country's situation, instead of national systems, a child project could also refer (instead or in addition) to regional/district/local systems.

	(national, provincial, district and local level) as well as other stakeholders involved in the management of ASGM and/or responsible for providing ASGM extension services to the project's priority ASGM sites.	In-depth capacity assessment of provincial and local government
Output 1.1.2	Capacity building plans developed and implemented for 23[13] institutions.	Exceeded capacity increased at 39 government entities at national and sub-national levels
Output 1.1.3	Trainings provided, including gender sensitization training, to ~ 340 government staff members.	Exceeded 344 government officials trained

Outcome Indicator 1.2 aims to establish an enabling environment by strengthening national policies and regulatory frameworks at the national, provincial, and local levels. The goal is to simplify, clarify, and make the formalization process easily accessible, more affordable, ensuring that well-functioning ASGM cooperatives can access local concessions, environmental licenses, and other permits within a reasonable time frame and at a reasonable cost. The implementation of the three designated activities (Outputs 1.2.1, 1.2.2, and 1.2.3) has surpassed the project's end-of-project targets, resulting in substantial improvements in the enabling environment for ASGM and mercury phase-out.

Remarkably, a total of 36 regulations and guidelines have been either revised or developed at both national and sub-national levels, with a strong emphasis on incorporating gender dimensions. This achievement signifies a significant step forward in improving the overall landscape for ASGM operations. The revised/developed regulations and guidelines encompass various aspects of the ASGM sector and can be summarized as follows; fourteen (14) Regional Action Plans of Mercury Reduction and Elimination; one(1) Guideline of Good Mining Practices (GMP) for Primary Ore of Small-scale Gold Mining Sector; thirteen (13) Regulations in district and village levels; one(1) Guideline of Responsible Village for ASGM Sector; one(1) Guideline of Gender Mainstreaming in ASGM Sector; one(1) set of Hand Book on the Status of Mercury in Indonesia published which consists of four (4) book series (Policy Framework for Mercury Reduction and Elimination in Indonesia, The Use of Mercury in Artisanal and Small-scale Gold Mining Sector, The Mercury Impacts to Human Health and Environment, and Technology Solution for ASGM Sector in Indonesia).

As evidenced in the table below, The assessment of Outcome Indicator 1.2 is thus rated Highly Satisfactory (HS).

Table 18: Status of achievement of Outputs for Project Component 1, Outcome Indicator 1.2

Output	Description	End of Project Targets Achievement at TE
Project Component 1/Outcome[14] 1: Strengthening institutions and the policy/ regulatory framework for Mercury-free ASGM		
Outcome Indicator 1.2: Enabling environment created through improved national policies and regulatory frameworks for ASGM and mercury phase-out in the ASGM sector.		
1.2.1	15 policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector	
Output 1.2.1	Assessment conducted in light of gender dimensions of the existing policy and regulatory frameworks, their implementation and monitoring relevant for the 6 project priority sites in order to identify gaps that would need to be addressed to further advance the formalization of the ASGM sector and phase-out the use of	Achieved

[13] National Level: BPPT, KLHK, KESDM, Ministry of Village; ASGM Forum, Indonesia Centre for Artisanal Mining (INCAM); Provincial Level: 6 project provinces; District Level: 6 project districts; Village Level: 6 project villages.

[14] Outcomes are short to medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

	mercury for ASGM gold processing	
Output 1.2.2	Recommendations to address policy and regulatory needs and gaps, overlaps, lack of clarity and needs for gender mainstreaming prepared and agreed upon during focus groups	Achieved
Output 1.2.3	15 policies, regulations and guidelines[15] revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector	Exceeded 36 regulations and guidelines developed at national and sub-national levels

Project Component 2 focuses on two primary objectives: i) establishing partnerships with finance entities and enhancing their capacity to develop tailored financial products for the ASGM sector and assess loan applications from miners, and ii) collaborating with miners' cooperatives and organizations to strengthen their capacity in developing loan/investment applications for mercury-free processing equipment and facilitating the application process.

Outcome Indicator 2.1 encompasses ten activities (Outputs 2.1.1 to 2.1.10) aimed at forging partnerships with financial entities, analyzing their existing products, providing training to financial institutions, supporting the redesign of improved financial mechanisms that address the specific needs of women and men in mining groups. The ultimate goal is to make an adequate amount of financing available to the ASGM sector.

The assessment conducted, as outlined in the accompanying table, reveals that all activities under Outcome Indicator 2.1 have been successfully implemented, with the project surpassing its end-of-project targets. Notably, six (6) financial mechanisms have been assessed by miners, enabling them to expand their mining activities through the acquisition and replication of mercury-free equipment and the implementation of waste treatment methods introduced by the project. These measures have made significant contributions towards reducing and eliminating the use of mercury in the ASGM sector.

Importantly, the assessment has revealed that an estimated amount of US$13 billion in commercial loans is available for all types of Small and Medium Enterprises (SMEs), including the ASGM sector. As a result of the project's efforts, a total of US$4.6 million in approved loans have been awarded to miners, providing crucial financial support to drive the adoption of mercury-free practices and promote sustainable mining operations.

This achievement highlights the successful collaboration between the project and financial institutions, paving the way for improved access to finance and facilitating the transition to environmentally-friendly technologies within the ASGM sector. The provision of these loans not only supports the miners in their endeavors but also contributes to the overall goal of sustainable development and responsible mining practices. The assessment of Outcome Indicator 2.1 is thus rated Highly Satisfactory (HS).

Table 19: Status of achievement of Outputs for Project Component 2, Outcome Indicator 2.1

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 2/OUTCOME 2: ESTABLISHING FINANCING LENDING ARRANGEMENTS TO PROVIDE LOANS FOR MERCURY FREE PROCESSING EQUIPMENT.		
Outcome Indicator 2.1: Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.		

[15] 1) BUMDes business policy on mercury-free ASGM; 2) Draft Village regulation on mercury-free ASGM/economic activities; 3) Draft District regulation on mercury-free ASGM/economic activities; 4) Draft Province Regulation (Governor Decree) on mercury-free ASGM; 5) Development of 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); Development of guidance document/field guide on: 6) Implementation of the Ministerial Agreement (MA); 7) Formalization process for ASGM; 8) Obtaining permit for ASGM operation; 9) Access to finance for BUMDes and Village cooperatives; 10) Allowable use of mercury contaminated land; 11) Tailings management; 12) monitoring and reporting on mercury use at ASGM sites; 13) accelerate phase out mercury use at ASGM.

2.1.1	4 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector.	
Output 2.1.1	4 finance entities selected that the project will partner with	Exceeded 6 financial mechanisms established. Partnership with Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI), Bank Perkreditan Rakyat (BPR), Micro-loans provided by mining cooperatives to their members, Indonesian state-owned pawnbroker, PT Pegadaian, and individual investors (gold buyer)
Output 2.1.2	Memoranda of Understanding (MoU) signed with each of the finance entities the project is going to partner with	Achieved
Output 2.1.3	Existing financial products of partner entities assessed in terms of accessibility and suitability for women and men mining groups and recommendations for their improvement and redesign prepared	Achieved
Output 2.1.4	Staff of the financial entity(ies) trained in the (re)design of these financial products for the ASGM sector	Achieved
Output 2.1.5	Staff of the financial entity(ies) trained in the assessment of ASGM records (such as gold sales records, records of ore production, etc.) as well as the evaluation of loan guarantees to evaluate the economic case for loans and leases	Achieved
Output 2.1.6	4 new finance mechanisms/products redesigned/launched that meet the needs of women and men mining groups	Exceeded 6 new financial mechanisms developed
Output 2.1.7	Workshops/awareness raising events conducted to increase mining communities' awareness (including women miners) on the availability of various loan facilities, as well as Sharia and private sector financing possibilities	Achieved Trainings for miner groups on record keeping, financial reporting and development of loan applications to enhance miners' capacity to access the financial products at financial entities, e.g. cooperatives, banks and non-bank institutions
Output 2.1.8	Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established	Achieved
2.1.2	12.4 million USD[16] (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms	
2.1.3	4.6 million USD (Total amount of funding) allocated to the ASGM sector through approved loans	
Output 2.1.9	Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implemention of project Outcome 2.1	Achieved Assessment and contacts with state-owned banks of Indonesia and individual investors to establish funding availability

16 Badan Usaha Milik Desa - BUMDes (Village owned corporation) manages Dana Desa (The village Fund) of: 61,538 USD/year/village (this amount – which is a grant - is allocated per village per year); Badan Layanan Umum - BLU (Funding Agency at Ministry of Environment and Forestry): 1,538,462 USD/year (soft loan); Bank Rakyat Indonesia Kredit Usaha Rakyat – People's Credit Facility (BRI KUR): 15,385 USD/year/loan (maximum soft loan allocated per proposal); Bank Negara Indonesia 46: 10,769,231 USD/year.

Output 2.1.10	Assessment conducted of 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 on a yearly basis	Achieved US$13 billion commercial loans available to SMEs including the ASGM sector US$4.6 million in approved loans awarded to the miners

Outcome Indicator 2.2 encompasses three vital activities (Output 2.2.1, 2.2.2, and 2.2.3) aimed at collaborating with formally organized miners' cooperatives and organizations holding legal concessions. The objective is to enhance their capacity in developing loan/investment applications and enable access to financial products specifically tailored for mercury-free processing equipment and investments.

The project has successfully conducted six (6) comprehensive two-day training sessions, benefiting a total of twenty-two (22) miner groups comprising 303 members, with a commendable representation of 35% being female participants. These trainings have significantly strengthened the capacities of these miner groups in developing loan applications for the procurement of mercury-free processing equipment. During the training sessions, the miner groups were equipped with valuable knowledge and skills in record-keeping, financial reporting, and business development, all aimed at improving their ability to access financial products.

As a direct outcome of these trainings, a remarkable total of 38 loan applications were developed by the miner groups. The positive outcome continues as all of the loan applications were successfully approved, underscoring the effectiveness of the capacity-building efforts and the strong collaboration between the project and financial institutions.

This accomplishment highlights the tangible impacts of the project in empowering miner groups to navigate the loan application process, enabling them to acquire the necessary financing for mercury-free processing equipment. The approved loans provide these miner groups with the vital resources needed to transition towards sustainable mining practices, contributing to the reduction of mercury usage in the ASGM sector.

The project's commitment to enhancing the financial capabilities of these miner groups and fostering access to tailored financial products demonstrates its dedication to promoting responsible mining practices and facilitating the adoption of environmentally-friendly technologies. This achievement not only benefits the miners directly but also contributes to the overall goal of fostering a sustainable and responsible ASGM sector.. As detailed in the table below, the assessment of Outcome Indicator 2.2 is thus rated Highly Satisfactory (HS).

Table 20: Status of achievement of Outputs for Project Component 2, Outcome Indicator 2.2

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 2/OUTCOME 2: ESTABLISHING FINANCING LENDING ARRANGEMENTS TO PROVIDE LOANS FOR MERCURY FREE PROCESSING EQUIPMENT.		
Outcome Indicator 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.		
2.2.1	Ten (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).	
Output 2.2.1	120 miners and managers of mining groups (BUMDes and/or Cooperatives)[17] trained (of which 20% of the miners are women) on record keeping and reporting	Exceeded 303 miners trained, 35% are female
2.2.2	Ten (10) loan applications developed	
Output 2.2.2	Ten (10) loan applications developed with project support	Exceeded

17 Training on loan application is for the managers of the miners group (BUMDes and/or Cooperatives) not for all miners.

		38 loan applications developed with all applications approved
2.2.3	60% of loan applications (developed with technical support of the project) approved	
Output 2.2.3	Assessment conducted on a yearly basis of the number of approved loan applications	Exceeded 38 loan applications developed, all approved (100%)

Project component 3 is to eliminate the release and use of mercury in participating ASGM groups by supporting ASGM mining communities in the adoption of alternative gold ore processing methods that utilize less or preferably no mercury. This is done by building the capacity of ASGM mining communities in the use of mercury-free alternative technologies as well as the application of socially and environmentally sound ASGM practices (e.g. sound management of mining tailings).

With the exception of one activity (Output 3.1.24), implementation of the other 28 activities under Outcome Indicator 3.1 were all achieved or exceeded. The project was successful in reducing mercury use in the ASGM sector and promoting mercury-free gold processing, leading to 23 metric tonnes of mercury use avoided and 220 kg from project equipment. A total of 3.34 tonnes of mercury-free gold were produced and 15.51 kg from project equipment. It is noted that, due to business secrecy involved in the ASGM sector, data on the true quantity of gold produced is not readily available. However, the project estimated that about 2,840 kg of mercury-free gold was produced from the six project sites between July 2019 and June 2022, according to the amount of ore processed utilizing mercury-free technology.

Even though one activity (Output 3.1.24) was evaluated as "Progressing Satisfactorily" at the time of Terminal Evaluation as it reached only 87.3% of end-of-project target on number of miners trained. However, it is no doubt that it will reach full achievement at the end of the project. In view of the minor percentage in missing the end-of-project target, and taking into account the success in the quantity of mercury-use reduction and quantity of gold produced without mercury exceeding the end-of-project targets, the assessment of Outcome Indicator 3.1 is rated as Highly Satisfactory (HS). Details of assessment are indicated in the table below.

Table 21: Status of achievement of Outputs for Project Component 3, Outcome Indicator 3.1

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 3/OUTCOME 3: INCREASING CAPACITY FOR MERCURY-FREE ASGM THROUGH PROVISION OF TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER AND SUPPORT FOR FORMALIZATION		
Outcome Indicator 3.1: 15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices		
3.1.1	Total mercury use/releases from ASGM avoided by 15 tonnes	
3.1.2	450 kg of gold produced without mercury	
Output 3.1.1	Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance inventories conducted for each of the six (6) priority project sites	Achieved
Output 3.1.2	Accumulated data (including amount of gold produced and amount of mercury used/released) presented to the relevant government agencies in a report	Achieved
Output 3.1.3	Most formalized, organized and committed mining groups (containing 20% women) selected for project participation	Achieved 60 mining groups (of which 24% members are female) selected to support their formalization process Facilitated avoidance of mercury

		use/release from ASGM by 23 metric tonnes and 220 kg from project equipment, as well as production of 3.34 tonnes of mercury-free gold and 15.51 kg from project equipment
Output 3.1.4	Mining sites used by project mining groups (supported by the project) assessed in terms of ore and production means, and outstanding (technology) needs	Achieved 60 Mining groups supported and their needs assessed
Output 3.1.5	Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the six (6) project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers).	Achieved Assessment of 63 mining groups and 60 selected to support their formalization process
Output 3.1.6	Identified ASGM service providers trained in providing better and needed services to mining groups to support them in their formalization processes (consulting companies - obtaining legal subsurface rights and operating permits, geologists - conducting surveys, local environmental specialists - undertaking environmental impact assessments).	Achieved Reports prepared
Output 3.1.7	Ore assays (from the selected mining groups) conducted in accredited metallurgy labs	Achieved Reports prepared
Output 3.1.8	Partnerships established with training centers that already provide or could provide in the future, training on sound ASGM practices (e.g. BPPT, APRI, INCAM).	Achieved
Output 3.1.9	The availability of training materials and resources globally (GEF GOLD, etc.) and in Indonesia, assessed (in partnership with training centers) and identified which training resources can be used by the project, and which new ones should be developed with project support	Achieved Training materials and training reports prepared. Two-way exchange/shared with planetGOLD established
Output 3.1.10	Training plan developed that takes into consideration the training of project miners as well as non-project miners located in the same (or close-by) communities	Achieved Training plan, training materials and training reports prepared
Output 3.1.11	Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project	Achieved Training materials and training reports prepared
Output 3.1.12	Comprehensive ASGM training curriculum (comprised of existing and newly developed training materials) and containing a module on gender in ASGM integrated as an ASGM training curriculum in project partner training centers to strengthen their capacity	Achieved Training materials and training reports prepared
Output 3.1.13	30 Trainers (selected from project partners, mining communities and training centers) trained in the application of training resources (existing and new) and the use of equipment at ore processing plants and laboratory installations	Achieved Training materials and training reports prepared
Output 3.1.14	300 miners trained[18] by trainers at existing plants and laboratory installations using existing and newly developed training materials and resources (incl. the use of practical on-site liberation tests to	Achieve 300 miners were trained in existing plants in the following locations:

18 Approximately 300 miners will be trained at existing processing plants and the BPPT laboratory. In addition 200 miners will be trained at the full scale training plant and 1,000 at the 5 mobile plants.

	give miners the opportunity to observe results first hand and learn how to obtain such results themselves).	1. MoEF's plant in Anggai Village – Halmahera Selatan District 2. MoEF's plant in Pelangan Village – Lombok Barat District 3. MoEF's plant in Pulau Aro – Kuantan Singingi District 4. BRIN's plant in Kulon Progo District 5. AGC's plant in Boltim – Minahasa Utara District 6. AGC's plant in Tatelu Village – Minahasa Utara District
Output 3.1.15	Processing strategies and economic models (making economic calculations and comparisons of mercury versus non-mercury processing methods) to convert to mercury free practice designed for all project selected mining groups	Achieved Reports prepared including on BAT/BEP
Output 3.1.16	Locations where 1 mercury-free ore processing training plant and 5 small mobile plants can be installed/showcased identified	Exceeded 22 mercury-free gold processing plants established a) 1 mobile plant and 2 units shaking table in Kuantan Singingi District b) 2 units of fixed-plant in Kulon Progo District c) 6 units of micro-leaching tanks in Gorontalo Utara District d) 3 units of fixed-plant in Minahasa Utara District e) 4 units of micro-leaching tanks in Lombok Barat District f) 2 units of fixed-plant and 2 units of micro-leaching tanks in Halmahera Selantan District
Output 3.1.17	Permitting requirements for long-term installation of the 1 mercury-free ore processing training plant and 5 small mobile plants addressed and permits obtained	Achieved Refers to Output 3.1.16
Output 3.1.18	Memoranda of Understanding (MoU) drawn up and signed by mobile plant host(s) *(if required)*.	Achieved Refers to Output 3.1.16
Output 3.1.19	Technical specifications for the 1 mercury-free ore processing training plant and 5 small mobile plants prepared	Achieved Refers to Output 3.1.16
Output 3.1.20	Equipment and spare parts for 5 small mobile plants and 1 mercury-free ore processing training plant procured	Achieved Refers to Output 3.1.16
Output 3.1.21	One (1) mercury-free ore processing training plant in 1 project location established	Exceeded One mercury-free ore processing training plant in 1 project location and 5 small mobile plants in 5 project locations
Output 3.1.22	200 miners and trainers trained at the project's mercury-free processing training plant in hands-on mineral processing experiments with their own ore, determination of the gravity recoverable gold yields of their ore, and deciding on methods for the different ores produced by the mine cooperative members	Achieved

Output 3.1.23	5 small mobile plants in 5 project locations established	Achieved Refers to Output 3.1.16
Output 3.1.24	1,000 miners trained by trainers at 5 mobile processing plants in artisanal grade control and exploration (assess ore grade, prove presence of gold in exploration samples from prospective mine locations, and determine optimal grain size of milled ore for maximal gold liberation).	Progressing Satisfactorily and is expected to be achieved with slight delay 873 miners were trained (87.3%). Target expects be achieved at end of project
Output 3.1.25	At least 5 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but with funding allocated through one of the 5 financing mechanisms	Exceeded Through project grants (LVGA), 8 mining groups established mercury-free processing plants: Kulon Progo (2 mining groups), Minahasa Utara (3 groups), Kuantan Singingi (2 groups), Halmahera Selatan (1 group)
Output 3.1.26	Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies	Achieved Feasibility study conducted and reports prepared
Output 3.1.27	(Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings	Achieved Signing of MoU between Mining Cooperative Batu Api and PT. Pegadaian (a state-owned pawnbroker)
Output 3.1.28	1 pilot fine mercury and gold recovery centrifuge plant established to study the feasibility, economics, and Hg remobilization risk of site decontamination.	Achieved Feasibility Study conducted and reports prepared
Output 3.1.29	Report prepared at the time of the Mid-Term Review (MTR) and at the time of the Terminal Evaluation (TE) on the amount of mercury-free gold produced and the reduction in mercury use/releases achieved by the project	Achieved Data provided to Evaluators

Outcome Indicator 3.2 aimed to provide comprehensive support to mining groups throughout the formalization process, recognizing its significance in enabling access to financing for the acquisition of cleaner technologies. The project designed five activities to facilitate this process, including supporting mining groups in securing subsurface rights, negotiating with mineral title holders, addressing loopholes in concessions, and overcoming obstacles hindering formalization in the ASGM sector. The formalization process not only establishes mining groups as legal entities but also plays a crucial role in reducing and eliminating mercury use.

Remarkably, the project has successfully supported 60 mining groups, comprising a total of 1,274 miners (including 24% female members of cooperatives) in their formalization journey. This support encompassed the establishment of mining cooperatives, obtaining the necessary permits such as the *Wilayah Pertambangan Rakyat* (WPR) for mining areas, environmental permits, and gold processing permits (*Ijin Pertambangan Rakyat* or IPR).

While the project has provided extensive support and guidance, reaching the target of supporting 60 mining groups in their formalization process and surpassing the targets for mercury reduction/elimination (see Outputs in Table 21 above), the Terminal Evaluation Team has recognized that the approval of IPR/WPR for the formalization of these 60 mining groups has faced challenges.

Among the 60 mining groups supported, the acquisition of the *Ijin Pertambangan Rakyat* (IPR) is a significant requirement in the formalization process, as it paves the way for more sustainable income opportunities and safer

working conditions. However, as depicted in the accompanying table below, it is evident that only a limited number of 9 mining groups have successfully obtained their IPR, while 51 mining groups are still awaiting approval. This situation arises due to varying understandings and interpretations of the new legislation, as well as insufficient coordination between national and regency-level agencies. To address this challenge, it is crucial to strengthen coordination mechanisms and foster a shared understanding of the regulation to expedite the IPR approval process for the remaining mining groups.

Similarly, the issuance of *Wilayah Pertambangan Rakyat* (WPR) is essential for designating an area for gold mining activities. The project achieved success in assisting mining groups to obtain WPR for four areas within one block. However, efforts to secure WPR for other areas in two blocks encountered challenges and were not ultimately successful.

While the project's commendable support has made significant strides in advancing the formalization process for the mining groups, it is essential to acknowledge the complexities and coordination challenges that exist at the policy and administrative levels. To overcome these obstacles and ensure the successful formalization of mining groups, continuous collaboration and improved coordination among relevant agencies are paramount. Such efforts will contribute to fostering responsible and sustainable mining practices in the ASGM sector. However, it is important to note that despite the project's extensive support, the desired outcomes in obtaining IPR and WPR approvals have not been fully realized. Unfortunately, this poses a hindrance to the foundational formalization process, as the absence of IPR/WPR approval leaves mining activities vulnerable to being deemed illegal. Therefore, resolving these approval challenges is crucial to enable the mining groups to operate within the legal framework and pursue sustainable livelihoods. Therefore, the TE Team has recommended the concerned government entities to improve cross coordination and strengthen their understanding and optimal application of the new regulation.

Table 22: Status of IPR/WPR Approval at 60 Mining Groups Supported for Formalization

Project sites	Type of supporting in Formalization	Number of mining groups	Time requires for the process	Issuance of WPR/IPR	Challenges
Kuantan Singingi	EIA Document (AMDAL Kawasan) and replaced with KLHS	3	30 months (Contractual service) • Contract signed for period of 27 July 2020 – 30 October 2021 (15 months) • Contract extended 31 October – 31 March 2022 (5 months) • Contract extended 01 April 2022 – 31 January 2023 (10 months)	Failed (No IPR)	• Change of regulation for the obtainment of ASGM permits which not well informed to all government entities at sub-national level. • The perspective of local government for adopting the new legislation varies from national to provincial to regency level, which impedes the document development process.
West Lombok	WPR	2 blocks	29 months Still in process - continued by the local government	Failed (No WPR)	• Overlap coordinate with concession area • WPR is not approved
	Environmental Document type KLHS	31	10 months Conducted by the local government from April 2022 to January 2023	No IPR	• Change of regulation for the obtainment of ASGM permits which not well informed to all government entities at sub-national level.

					• The perspective of local government for adopting the new legislation varies from national to provincial to regency level, which impedes the document development process.
North Gorontalo	WPR	4 under 1 block	24 months Issued mid-2022	WPR issued	Completed
	Environmental Document type UKL-UPL	4	5 months From October 2022 to February 2023	IPR is in progress	• Lack of coordination among the main agencies at the provincial and regency levels for drafting environmental documentation. • Required additional government agencies to be involved in reviewing the IPR application through online system who are not familiar with the ASGM sector.
Yogyakarta	Environmental Document type UKL-UPL	7	7 months From September 2022 to April 2023	Failed (No IPR)	• Lack of coordination among the main agencies at the provincial and regency levels for drafting environmental documentation. • Required additional government agencies to be involved in reviewing the IPR application through online system who are not familiar with the ASGM sector.
North Minahasa	Environmental Document type UKL-UPL	5	4 months From January 2022 to April 2023	In progress	• Lack of coordination among the main agencies at the provincial and regency levels for drafting environmental documentation. • Required additional government agencies to be involved in reviewing the IPR application through online system who are

					not familiar with the ASGM sector.
South Halmahera	Environmental Document type UKL-UPL	10	4 months From November 2022 – February 2023	Failed (No. IPR)	• Lack of coordination among the main agencies at the provincial and regency levels for drafting environmental documentation. • Required additional government agencies to be involved in reviewing the IPR application through online system who are not familiar with the ASGM sector.

In view of the above situation, the TE Team rated the Outcome Indicator 3.2 as Satisfactory (S). This rating does not negate the good results of implementing Outputs 3.2.1 to 3.2.5, as outlined in Table 23 below, but more with regard to the fact that improvements are recommended in government level system, processing and approval timeframe to facilitate the reviewing, processing and approval of IPR/WPR. This is critical as the legal status of the miners and mining groups is the prerequisite for formalization. There is little incentive to formalization by the mining groups if the current obstacles persist, if the process of applying and obtaining IPR/WPR is not made more accessible, the review and approval process more consistent, more transparent and more expedited.

Table 23: Status of achievement of Outputs for Project Component 3, Outcome Indicator 3.2

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 3/OUTCOME 3: INCREASING CAPACITY FOR MERCURY-FREE ASGM THROUGH PROVISION OF TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER AND SUPPORT FOR FORMALIZATION		
Outcome Indicator 3.2: 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		
3.2.1	At least 60 mining groups[19] (of which 20% of the miners are women) supported in their formalization processes	
Output 3.2.1	60 mining groups trained on how to establish a village owned cooperation (i.e. BUMDes).	Achieved 60 mining groups supported for formalization
Output 3.2.2	10 mining groups (of which 20% of the miners are women) have received leadership training.	Exceeded 40 mining groups from the six (6) project locations were trained on leadership. Training reports submitted
Output 3.2.3	60 project mining groups (in which 20% of the miners are women) supported in obtaining legal subsurface rights (e.g. through negotiations with mineral title holders; by applying for open mineral titles or by reviewing loopholes/non-compliant concessions).	Achieved 60 mining groups supported for formalization, of which 24% of the members are female

[19] In each pilot location, 10 mining groups would be supported in their formalization efforts.

Output 3.2.4	60 project mining groups supported in obtaining a license/permit for ASGM or to establish/operate a processing plant	Achieved 60 mining groups supported for formalization (even though some of their IPR applications are still pending approval as a result of government procedures delay)
Output 3.2.5	60 project mining groups supported in designing processing and waste management plans (incl. tailings storage plans) that comply with national laws and environmental standards	Achieved 60 mining groups supported for formalization

Formalization would lead to better/additional income for the miners through better access to formal markets for clean gold and tailings, in addition to being able to access formal financing. Outcome Indicator 3.3 contains four (4) activities (Outputs) for the project to broker uptake arrangements with international refiners, with local banks as intermediate gold custodians, and with fund transfer/holding agents for miners to safely accumulate enough gold for export to international refiners, to get a much higher value for their gold.

In spite of several project interventions including supporting the establishment of a certification system for mercury-free gold, connecting the mining groups to gold refineries and introducing formal market requirements to mining groups, out of an estimated 2,840 kg of mercury-free gold produced, only 192 kg was estimated as sold to formal market. However, it is noted that, due to the secrecy in the ASGM sector, the true quantity may not be easily accessible.

Through the training and support provided to the mining groups, they now have a very good understanding of the formal gold market system. However, there is still a significant gap in term of the formal gold market players adapting their buying practices when dealing with ASGM miners. For example, the biggest obstacle faced by the formal market players is that they cannot compete with the informal cash and carry system, which is preferred by the mining groups due to its simplicity and quick payment.

Based on evaluation of the activities undertaken as shown in the table below, even though achievement of mercury-free produced gold sold to formal market reaches only the 55% mark, the assessment of Outcome Indicator 3.3 is rated by the TE Team as Satisfactory (S), taking into consideration that true quantity of mercury-free produced gold sold to formal market may not be easily accessible.

Table 24: Status of achievement of Outputs for Project Component 3, Outcome Indicator 3.3

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 3/OUTCOME 3: INCREASING CAPACITY FOR MERCURY-FREE ASGM THROUGH PROVISION OF TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER AND SUPPORT FOR FORMALIZATION		
Outcome Indicator 3.3: Route to market for mercury-free gold improved/established		
3.3.1	350 kg[20] of mercury-free gold sold to the formal market	
Output 3.3.1	At least 1 partnership established with an international refiner	Achieved One new partnership with an international refiner and/or buyer
Output 3.3.2	At least 1 partnership established with a local bank (possibly in combination with Outcome 2.1).	Achieved One partnership established with BRI
Output 3.3.3	At least 1 partnership established with a fund transfer/holding agent	Achieved One MoU signed between Mining

[20] It is assumed that 60% of the Hg free gold gets sold to formal market.

		Cooperative Batu Api and PT. Pegadaian (state-owned pawnbroker)
Output 3.3.4	Establish a partnership with a gold certification organization to assess top performing project mining groups for possible certification	Progressing Satisfactorily 55% of end-of-project target achieved (192 kg out of 350 kg) on mercury-free produced gold was sold to the formal market. However, it is noted that the secrecy in the ASGM sector may render obtaining the true quantity of mercury-free produced gold being sold to the formal market not being easily accessible

Project Component 4 is to raise awareness of project stakeholders and beneficiaries on the dangers of mercury and ways to reduce its use in ASGM, with M&E Plan effectively implemented to meet GEF and UNDP requirements, documented project results, experiences, alternative technologies, best practices and lessons-learned, published and disseminated to share.

Through various awareness-raising events, media campaigns, massaging, and with posters, videos, comic books, songs and merchandise on information of dangers of mercury to human health and environment have resulted in behavioral changes. In total, 42 awareness raising events have been conducted at the 6 project locations, with 20,308 people participated, of which 47% were female. As the end-of-project target has been reached, a rating of Highly Satisfactory (HS) for Outcome Indicator 4.1 has been assessed by the TE Team.

Table 25: Status of achievement of Outputs for Project Component 4, Outcome Indicator 4.1

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 4/OUTCOME 4: MONITORING AND EVALUATION, AWARENESS RAISING, CAPTURING AND DISSEMINATING EXPERIENCES, LESSONS-LEARNED AND BEST PRACTICES		
Outcome Indicator 4.1: 20,000 people[21] (8,000 females and 12,000 males) whose awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.		
4.1.1	Awareness raised of 20,000 people (8,000 females and 12,000 males) on the dangers of mercury and ways to reduce its use in ASGM	
Output 4.1.1	Initial assessment carried out on awareness raising strategies and mechanisms	Achieved Assessments conducted to identify needs
Output 4.1.2	Awareness raising plan (incl. Stakeholder Engagement Plan & Gender Action Plan) developed	Achieved
Output 4.1.3	Awareness raising plan (incl. Stakeholder Engagement Plan & Gender Action Plan) implemented	Exceeded 42 awareness raising events conducted at 6 project sites. 20,308 people (47% are female) were informed about the danger of mercury

[21] Number of miners trained: 1,200; Number of people impacted indirectly from project support provided to 1,200 miners: 12,000 (The International Labour Organization (ILO) estimates that each person directly involved with ASGM generates income for a further 10 people (ILO, 1999)); number of people of whom awareness has been raised by the awareness raising campaign: 6,898.

Outcome Indicator 4.2 includes 12 activities to meet the M&E requirements of GEF and UNDP, apply adaptive management in response to MTR recommendations. Overall, the project has completed 24 out of the 34 GEF and UNDP M&E requirements, with some indicated in the assessment table below. The TE Team rated Outcome Indicator 4.2 as Satisfactory (S).

Table 26: Status of achievement of Outputs for Project Component 4, Outcome Indicator 4.2

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 4/OUTCOME 4: MONITORING AND EVALUATION, AWARENESS RAISING, CAPTURING AND DISSEMINATING EXPERIENCES, LESSONS-LEARNED AND BEST PRACTICES		
Outcome Indicator 4.2: M&E and adaptive management applied in response to needs and Mid-Term Evaluation findings.		
4.1.2	34 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings	
Output 4.2.1	1 National Inception Workshop conducted and report issued	Achieved
Output 4.2.2	6 District Level Inception Workshops organized and reports issued	Achieved
Output 4.2.3	5 PIRs completed/submitted (one for each year the project has been operational)	Achieved While the UNDP ProDoc was signed in September 2018, Project Manager was recruited February 2019 and Inception Meeting took place March 2019, project activities implementation actually started only since March 2019. As such, no PIR was required for 2019, therefore only 3 PIRs (2020, 2021 and 2022) were prepared and submitted so far. The 2023 PIR will be prepared and submitted prior to project closure
Output 4.2.4	1 audit completed (*frequency as per UNDP Audit policies – on average 1 per year*)	Achieved
Output 4.2.5	10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational)	Progressing Satisfactorily 6 Project Board Meetings held and reported issued (June 2019, February 220, February 2021, July 2021, March 2022 and April 2023 In addition, all Project Board members attended the National Inception Workshop in March 2019)
Output 4.2.6	5 Monitoring and supervision missions conducted	Achieved 5 monitoring and supervision missions conducted
Output 4.2.7	1 Mid-Term GEF Tracking Tool updated	Achieved
Output 4.2.8	1 Gender Assessment of project impact completed (as *part of MTE*)	Achieved "Evaluation of Gender Mainstreaming Activities under GOLD ISMIA Project" prepared
Output 4.2.9	1 Independent Mid-term Review (MTR) conducted (*translated into English*) and management responses submitted	Achieved MTR conducted and reported submitted

Output 4.2.10	1 GEF Secretariat oversight missions conducted	Achieved
Output 4.2.11	1 Terminal GEF Tracking Tool updated	Progressing Satisfactory Update to be carried out with Terminal Evaluation being conducted
Output 4.2.12	1 Independent Terminal Evaluation conducted (*translated into English*) and management responses submitted	Achieved Terminal Evolution being conducted March-May 2023

The GOLD-ISMIA project holds a pivotal position among the eight county-level projects, contributing its remarkable project results, valuable experiences, insightful lessons learned, and best practices to be shared and disseminated through the esteemed Global GEF GOLD programme. Embracing the GEF GOLD Global Dissemination Platform for national and global dissemination, the project has proactively engaged in numerous national and global conferences and webinars. Through these platforms, the project has effectively shared its wealth of experiences and invaluable lessons learned with other projects, fostering knowledge exchange, collaboration, and continuous improvement in the field of responsible and sustainable mining practices. The project's active participation in these initiatives signifies its commitment to enhancing collective understanding and promoting effective solutions within the mining community at both national and global levels. Based on assessments indicated in the table below, the TE Team rated the Outcome Indicator 4.3 Satisfactory (S).

Table 27: Status of achievement of Outputs for Project Component 4, Outcome Indicator 4.3

Output	Description	End of Project Targets Achievement at TE
PROJECT COMPONENT 4/OUTCOME 4: MONITORING AND EVALUATION, AWARENESS RAISING, CAPTURING AND DISSEMINATING EXPERIENCES, LESSONS-LEARNED AND BEST PRACTICES		
Outcome Indicator 4.3: 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		
Output 4.3.1	1 GEF GOLD country project webpage developed and updated on a quarterly basis	Achieved Country project website developed and regularly maintained
Output 4.3.2	Country project participated in 1 Global ASGM Forum, 1 Annual Programme Conference, and 12 monthly programme/project calls on a yearly basis	Exceeded Participated in 10 global ASGM forums, 4 Annual Programme Conferences, 15 regular programme/project calls with GEF Planet GOLD and GEF-GOLD country's project managers
Output 4.3.3	Opportunities for communication of project activity results identified on a quarterly basis in collaboration with the GEF GOLD global component	Achieved Participated quarterly on GEF GOLD Global Communication Group coordinated by UNEP
Output 4.3.4	Information on project progress, containing gender specific results (using agreed metrics and templates provided by the *GEF GOLD global component* where appropriate) submitted to the *GEF GOLD global component* on a quarterly basis	Achieved On quarterly basis, information on project progress submitted to GEF-GOLD global component
Output 4.3.5	Reports and publications prepared and disseminated at national, regional and global level using templates provided by the GEF GOLD global component summarizing project results, lessons-	Achieved Project results, publications and articles regularly disseminated,

	learned, best practices and experiences	including utilizing online social media platforms
Output 4.3.6	Reports and publications adapted and translated into local languages to facilitate dissemination at local, district, provincial and national needs	Achieved Publications have been circulated to national and sub-national levels through dissemination events Media coverages from national and sub-national journalists were published

3.3.2 Relevance

The relevance of the Indonesia GOLD ISMIA project is undeniable, as it aligns closely with both the objectives of the Global GEF GOLD Programme and Indonesia's commitments under the Minamata Convention on Mercury. As the first project nearing operational completion among the eight child projects of the GEF GOLD Programme, it stands as a testament to the project's adherence to international obligations and national priorities. By focusing on the elimination of mercury in the ASGM sector, the project aims to achieve a responsible and sustainable ASGM sector that contributes to improved environmental quality, safer working conditions, reduced health risks, and enhanced income prospects for miners.

In addition to its alignment with international and national priorities, the project's objectives also resonate with UNDP's Development Plan. The establishment of 22 mercury-free processing plants, which were derived from local practices as alternative technology solutions, is a significant achievement that directly contributes to CPD Output 4.3, Innovative technology solutions adopted for improved public service delivery for CPD Indicator 4.3.3 the number of technology solutions used for management of harmful chemicals. Furthermore, the project has successfully achieved CPD Target 6 by making mercury-free alternative technologies available to ASGM miners across the six project locations. These outcomes demonstrate the project's commitment to driving tangible development impacts while meeting broader developmental objectives outlined by UNDP.

The project's results have fostered active participation from all relevant stakeholders, yielding significant global environmental benefits through the reduction or elimination of mercury use and release. By bringing together various actors, including government agencies, technical entities, and mining communities, the project has effectively mobilized collective efforts towards sustainable and responsible ASGM practices. These efforts have contributed to the project's overarching goal of promoting environmental stewardship, protecting human health, and ensuring the well-being of affected communities.

Overall, the Indonesia GOLD ISMIA project's relevance is evident in its alignment with international commitments, national priorities, and development objectives. The project's focus on alternative technologies, active stakeholder engagement, and the generation of environmental benefits highlight its capacity to address critical challenges in the ASGM sector while fostering sustainable development and creating lasting positive impacts for all stakeholders involved. The TE Team thus rated the relevance of the project as Highly Satisfactory (HS).

3.3.3 Effectiveness

The Indonesia GOLD ISMIA Project has effectively achieved its objective of reducing mercury use and release in the ASGM sector through the adoption of alternative technologies. The project's support to miners and mining groups in creating safer and healthier working environments has yielded positive results. Notably, the project has strengthened their capacity to secure loans from financial institutions for mercury-free equipment and investments by assisting in the development of loan applications and identifying available financial mechanisms. While the attainment of IPR/WPR for miners' formalization has not reached the desired level of success, the project's overall effectiveness in reducing mercury use and promoting safer practices remains commendable.

The project's outcomes have exceeded many of the end-of-project targets for outcome indicators, including significant reductions in the quantities of mercury used and released. These positive results demonstrate the project's impact in meeting or surpassing its goals and objectives. Furthermore, the project's achievements align

with the country's obligation under the Minamata Convention, contributing to CPD Output 4.3 and successfully achieving the CPD Target 6. These accomplishments highlight the project's ability to contribute to Indonesia's commitment to international conventions and frameworks.

Importantly, the GOLD ISMIA Project's outcomes have broader implications, as they align with multiple Sustainable Development Goals (SDGs). The project's contributions extend to SDG Goals 1, 2, 3, 6, 7, 8, 9, 11, 12, 13, 14, and 15, addressing a wide range of social, economic, and environmental objectives. By integrating these SDGs into its activities, the project has demonstrated its comprehensive approach and commitment to fostering sustainable development and responsible mining practices in Indonesia.

In summary, the GOLD ISMIA Project has effectively achieved its objectives by significantly reducing mercury use and release in the ASGM sector. The project's outcomes have surpassed many of its midterm and end-of-project targets, resulting in safer working environments and promoting sustainable practices. Additionally, the project's alignment with international conventions, fulfillment of national targets, and contributions to global environmental benefits and numerous SDG goals underline its strong performance and positive impact on Indonesia's development priorities. The TE Team thus rate the project’s effectiveness as Highly Satisfactory (HS).

3.3.4 Efficiency

The GOLD ISMIA Project has demonstrated a remarkable level of efficiency in the implementation of its activities. The project's smooth and orderly execution can be attributed to the active participation and strong collaboration among stakeholders, including national and sub-national government agencies and technical entities. Their valuable inputs and enhanced collaboration have contributed to the project's success and generated substantial impacts, particularly benefiting the direct beneficiaries, such as miners and mining groups.

A noteworthy aspect of the project's efficiency is its unwavering commitment to gender equality and women's empowerment. By prioritizing the inclusion and empowerment of women in the ASGM sector, the project has yielded significant benefits for women miners and women-led mining groups. This focused approach has not only contributed to greater gender equality but has also enhanced the overall effectiveness and efficiency of the project's outcomes.

It is worth highlighting that these impressive achievements have been realized within the established funding level. The project has efficiently utilized its resources, maximized their impact and delivered tangible results. This demonstrates the project's prudent financial management and its ability to achieve its objectives effectively without compromising on quality or scope.

Overall, the GOLD ISMIA Project's efficiency is evident in its well-organized implementation of activities, strong stakeholder collaboration, and the remarkable benefits it has brought to the mining community, particularly women miners. This efficiency has been achieved while staying within the allocated funding, showcasing the project's effective resource utilization and dedication to delivering meaningful and sustainable outcomes. The TE Team rated the efficiency of the project as Highly Satisfactory (HS).

3.3.5 Overall Project Outcome

Overall, the Indonesia GOLD ISMIA project has demonstrated exceptional outcomes, underscoring its remarkable relevance, effectiveness, and efficiency in achieving its objectives and expected outcomes. Through the prudent utilization of the GEF grant fund, the project has successfully avoided and reduced mercury use and release, while promoting the widespread adoption of alternative technologies for mercury-free processing. This accomplishment alone has made a significant positive impact in the ASGM sector, contributing to safer and healthier working conditions and environmental protection.

Another notable achievement of the project is the increased participation in the formalization process, particularly among women miners and cooperatives. This outcome highlights the project's commitment to gender equality and women's empowerment, providing them with enhanced opportunities for economic advancement and democratic participation. Such outcomes signify the project's positive influence in transforming the ASGM sector, creating a more inclusive and sustainable environment for all stakeholders involved.

The overall success of the project can be attributed to the efficient implementation of project activities, which were

facilitated by the collaborative efforts of various stakeholders and project beneficiaries. This effective management of resources has ensured that the project's objectives were met in a timely and streamlined manner. By fostering strong partnerships and leveraging the expertise and commitment of all involved parties, the project has achieved remarkable outcomes while maximizing the impact of available resources.

In conclusion, the Indonesia GOLD ISMIA project has demonstrated outstanding overall project outcomes. The project's exceptional achievements, particularly in terms of avoiding mercury use and release, promoting alternative technologies, and empowering women in the ASGM sector, underscore its relevance, effectiveness, and efficiency. Through its successful implementation and collaborative approach, the project has set a benchmark for responsible and sustainable practices in the ASGM sector, leaving a lasting positive legacy for stakeholders and future endeavors in Indonesia..The TE Team rated the Overall Project Outcome as Highly satisfactory (HS).

Table 28: Assessment of Outcomes Ratings Table

Assessment of Outcomes	Rating
Relevance	Highly Satisfactory (HS)
Effectiveness	Highly Satisfactory (HS)
Efficiency	Highly Satisfactory (HS)
Overall Project Outcome Rating	Highly Satisfactory (HS)

Table 29: Outcome Rating Scale – Relevance, Effectiveness, Efficiency

Raging	Description
6 = Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings
5 = Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor shortcomings
4 = Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate shortcomings
3 = Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings
2 = Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major shortcomings
1 = Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were severe shortcomings
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements

3.3.6 Sustainability: Financial, Socio-Political, Institutional Framework and Governance, Environmental, Overall Likelihood Of Sustainability

The TE Team assessed sustainability of the project in four aspects; financial, socio-political, institutional framework and governance, environmental.

Financial Sustainability

In terms of financial sustainability, it is noted that the project has established 6 financial mechanisms with financial institutions and identified that $13 billion funds are available for SMEs business, including the ASGM sector, supported the development of 38 loan applications, with 100% of the loan applications being approved, and

succeeded in the approval of US$4.6 million in loan for the mining groups. There still exists challenges for the mining groups to secure loan for mercury-free equipment or for investments.

Despite training provided to the miners and the staff of financial institutions, the capacity of miners and mining groups in developing loan application and providing relevant supporting records, and for the financial institutions in truly understand the particular situation of miners and tailor their review and approval criteria accordingly, thus, obtaining financial resources still present difficulties for the miners.

Furthermore, the inconsistent understanding and interpretation of the regulation, and lack of transparency in implementing the regulation in the review and approval process of IPR/WPR, present particularly challenging for the miners to become legal miners, thus the inability for the miners to obtain financing. The TE Team thus rated the Financial Sustainability of the project as Moderately Likely (ML).

Socio-political Sustainability

The TE Team conducted an assessment of the socio-political sustainability impact of the project and recognized the project has made significant strides in addressing socio-political challenges in the ASGM sector, fostering positive social and political changes in the project areas.

One notable achievement is the project's efforts to empower and support mining groups and miners, particularly in the formalization process. By providing training and guidance, the project has helped these groups navigate the complex regulatory landscape and improve their legal status. This has not only enhanced their access to financing but has also contributed to the overall socio-political stability of the ASGM sector.

The project's emphasis on gender equality and women's empowerment has also had a profound socio-political impact. By promoting women's participation and economic empowerment in the ASGM sector, the project has challenged traditional gender norms and created a more inclusive and equitable environment. This has not only improved the socio-economic well-being of women miners but has also fostered a sense of social cohesion and harmony within the mining communities.

Furthermore, the project's collaborative approach and engagement with relevant stakeholders, including national and sub-national government agencies, have strengthened social ties and fostered a sense of ownership and collective responsibility. The project's inclusive and participatory processes have facilitated open dialogue and constructive engagement, leading to improved coordination and cooperation among stakeholders. This collaborative approach has resulted in the development of effective strategies and policies that address socio-political challenges in the ASGM sector.

Overall, the project's socio-political sustainability impact has been significant, contributing to positive social and political changes in the ASGM sector. By empowering mining groups, promoting gender equality, and fostering collaborative partnerships, the project has created an enabling environment for responsible and sustainable mining practices. The TE Team's rating reflects the project's strong potential to continue generating socio-political benefits and leave a lasting positive impact in the ASGM sector and the communities involved. The TE Team thus rated the Socio-political Sustainability of the project as Likely (L).

Institutional framework and governance sustainability

The TE Team assessed the institutional framework and governance sustainability of the project and acknowledges the project has made notable progress in strengthening the institutional framework and improving governance structures within the ASGM sector.

One key achievement is the project's support in developing and implementing regulations and policies that govern the ASGM sector. By collaborating with relevant government agencies and stakeholders, the project has contributed to the establishment of robust institutional frameworks that aim to regulate and formalize the sector. This has led to improved governance structures, enhanced transparency, and better enforcement of regulations.

Additionally, the project has played a crucial role in capacity building and knowledge transfer to relevant institutions. Through training programmes and technical assistance, the project has enhanced the capacity of government agencies, mining cooperatives, and other stakeholders to effectively manage and regulate the ASGM sector. This has resulted in improved coordination, streamlined processes, and more effective governance practices.

Despite these achievements, challenges remain in ensuring consistent interpretation and implementation of regulations across different geographic locations. In some instances, there have been inconsistencies and a lack of transparency in the review and approval process for mining permits, which can hinder the formalization process for mining groups. These challenges present ongoing obstacles to the institutional framework and governance sustainability of the project.

However, it is important to note that the project has taken proactive measures to address these challenges. By engaging in continuous dialogue with relevant stakeholders and advocating for improved governance practices, the project has shown a commitment to addressing these issues and strengthening the institutional framework.

Overall, there have been significant achievements in enhancing the institutional framework and governance within the ASGM sector, the rating of "Moderately Likely" reflects the remaining challenges that need to be addressed. Continued efforts to address inconsistencies, promote transparency, and strengthen governance structures will be essential to ensure the long-term sustainability of the institutional framework and governance of the ASGM sector. The TE Team thus rated the Institutional framework and governance sustainability of the project as Moderately Likely (ML).

Environmental sustainability

The project has made significant efforts to address environmental concerns and promote sustainable practices within the ASGM sector.

One of the key achievements of the project is the successful reduction and avoidance of mercury use and release. Through the adoption of alternative technologies and the establishment of mercury-free processing plants, the project has contributed to a substantial decrease in mercury pollution, thus not only minimizing the environmental impact on local ecosystems and communities, but contributes to global environmental benefits.

Furthermore, the project has focused on promoting responsible mining practices and environmental conservation. By providing technical assistance, training, and capacity building to miners and mining groups, the project has encouraged the adoption of sustainable mining techniques, such as proper waste management and reclamation of mining sites. These efforts have helped to mitigate environmental degradation and preserve natural resources.

While recognizing these achievements, challenges still exist in ensuring long-term environmental sustainability within the ASGM sector. The TE Team identified the need for continued monitoring and enforcement of environmental regulations, as well as the promotion of best practices among miners. Additionally, the rapid changes in regulations and the evolving landscape of the ASGM sector, including the impact of the COVID-19 pandemic, have posed additional challenges to maintaining environmental sustainability.

To address these challenges, the project has demonstrated adaptability and flexibility in its approach. By collaborating with relevant government agencies, NGOs, and local communities, the project has worked towards developing comprehensive strategies that promote environmental sustainability and resilience within the ASGM sector.

Overall, the project has achieved notable progress in promoting environmental sustainability, the rating of "Likely" reflects the mitigating efforts implemented by the project to address ongoing challenges to ensure sound waste management and the long-term sustainability of the ASGM sector. Continued monitoring, enforcement of regulations, and promotion of sustainable mining practices will be essential to maintaining the environmental gains achieved by the project. The TE Team thus assessed the environmental sustainability of the project and rated it as "Likely" (L).

Overall Likelihood of Sustainability

The TE Team conducted a comprehensive assessment of the project's overall likelihood of sustainability and assigned a rating of "Moderately Likely" (ML). The project has showcased remarkable achievements and commendable impacts across various dimensions, including financial, socio-political factors, institutional framework and governance, and environmental sustainability. The collaborative efforts between the government, UNDP, and other stakeholders have played a crucial role in driving these positive outcomes.

In terms of financial sustainability, the project has made significant strides by establishing innovative financial mechanisms and identifying substantial funds for SMEs, including the ASGM sector. The government, along with the UNDP team, has been actively involved in supporting mining groups in their loan applications, resulting in a high approval rate. Despite these achievements, challenges persist in ensuring easy access to finance for mercury-free equipment and investments. The government and UNDP team's continued commitment to strengthening the capacity of miners and financial institutions will help address these challenges and further enhance financial sustainability.

The socio-political impact of the project has been highly commendable. The collaborative approach fostered among stakeholders, facilitated by the government and the dedicated UNDP team, has yielded tangible benefits for miners and mining groups. Notably, the project's emphasis on gender equality and women's empowerment has generated significant positive changes, creating a more inclusive and equitable ASGM sector. Nonetheless, additional efforts are needed to overcome gender-based occupational roles and support mining groups in their formalization process. The government and UNDP team's ongoing dedication to addressing these issues will contribute to the sustained socio-political sustainability of the project.

The institutional framework and governance aspects of the project have been marked by effective coordination and collaboration among national and sub-national government agencies, as well as technical entities. The unwavering support and guidance from the government and the dedicated UNDP team have played a pivotal role in establishing a robust institutional framework. However, challenges related to inconsistent interpretation and execution of regulations, particularly in the IPR/WPR review and approval process, have surfaced. To ensure the long-term sustainability of institutional framework and governance, the government and UNDP team are committed to promoting coordination, transparency, and adherence to regulations.

Regarding environmental sustainability, the project has achieved noteworthy progress in reducing mercury use and release, promoting responsible mining practices, and adopting environmentally-friendly alternative technologies. The government, in close collaboration with the UNDP team, has been at the forefront of implementing these environmental safeguards. Nevertheless, continuous monitoring, effective enforcement of regulations, and the promotion of best practices will still be imperative for long-term environmental sustainability within the ASGM sector. The government and UNDP team's collective efforts will further fortify the project's commitment to environmental stewardship.

Overall, the "Moderately Likely (ML)" rating reflects the project's significant accomplishments and acknowledges the government's and UNDP team's proactive engagement in ensuring project sustainability. By building upon these achievements and continue to address the identified challenges, the government and UNDP team can further elevate the project's overall likelihood of sustainability, leading to a responsible and sustainable ASGM sector in Indonesia.

Table 30: Sustainability Ratings Table

Sustainability	Rating
Financial sustainability	Moderately Likely (ML)
Socio-political sustainability	Likely (L)
Institutional framework and governance sustainability	Moderately Likely (ML)
Environmental sustainability	Likely (L)
Overall Likelihood of Sustainability	Moderately Likely (ML)

Table 31: Sustainability Rating Scale

Raging	Description
4 = Likely (L)	There are little or no risks to sustainability
3 = Moderately Likely (ML)	There are moderate risks to sustainability
2 = Moderately Unlikely (MU)	There are significant risks to sustainability
1 = Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

3.3.7 Country ownership

The project design was built on the many initiatives already started by the Government of Indonesia in its effort to reduce and eliminate mercury use/release in the ASGM sector, and is consistent with the country's priorities in fulfilling its obligations under the Minamata Convention on Mercury. The project involved close engagement with national and sub-national stakeholders, from governmental as well as non-governmental sectors. Thus there is strong support and participation and provision of technical and management support from various levels of key stakeholders and cross-ministries officials. The active participation and constant support demonstrate solid ownership to achieving the objective of the project, for a responsible and sustainable ASGM sector to operate in the country.

Overall, the close involvement and extensive support from national stakeholders and cross-ministries were crucial in realizing the excellent achievements with the proactive implementation of the project's interventions. Participation of senior officials in the Project Steering Committee (Project Board) also suggests effective coordination and collaboration among various stakeholders. All these aspects demonstrate a strong country ownership, and the eagerness to see the country's effort in reducing and eliminating mercury use/release in the ASGM sector.

3.3.8 Gender equality and women's empowerment

New set of gender mainstreaming guidelines in ASGM sector has been published by the project that will help national and local governments, and other relevant parties to better address the needs of women and men miners by integrating gender mainstreaming in all internal programmatic decision-making. The guidance notes, being a living document, will be assessed and updated according to evolving government regulations particularly in ASGM governance and gender mainstreaming.

Series of awareness raising events were carried out for the mining communities informing on the availability of various loan facilities, including Islamic banking and private sector financial institutions to support possible ASGM financing. Through training to financial institution staff, they are now more aware of the inequity issues for women miners in ASGM sector and are now more equipped to design financial products, marketing and consumer education strategy, and run various models that are more suitable for women miners.

Through continuous and close cooperation with mining cooperatives, the project carried out gender equality awareness training in ASGM groups, using models developed by the Project aiming at strengthening the capacity of the mining communities regarding gender equality and eliminating the gaps around this aspect. The training was successful in instilling an understanding of the conceptual foundations of gender equality, especially in the ASGM sector. Particularly, there is increased awareness of the gender issues by the village authorities in which they were now equipped with simple gender analysis skills. Through this activity, the participation of women miners in capacity building and productive activities has increased.

With the introduction of the gender mainstreaming approach, it has facilitated the inclusion of gender strategy in the Regional Action Plan for Mercury Reduction and Elimination.

Overall, the TE Team noted the specific focus on gender issues, including assessment of policies and regulations on gender dimensions, training on financial access for women mining groups, formalization training for women miners,

and awareness raising on mercury impacts for women miners have been a tremendous success in promoting gender issues that has led to increase participation of women in mining groups, as well as increase in women mining groups. The achievement can be further evidenced by the fact that many of the gender dimension indicators and targets have been exceeded.

3.3.9 Cross-cutting Issues

Cross-cutting issues (including gender equality, rights-based approach, capacity development, poverty-environment nexus, crisis prevention and recovery, disaster risk reduction, climate change mitigation and adaptation, as relevant) were evaluated, considered and analyzed throughout the Terminal Evaluation as to how the project interventions and expected results have been related to and/or impacted by the achievements of project results.

While the objective of the project is to reduce/eliminate mercury use/release in the ASGM sector to promote responsible and sustainable ASGM, strengthened capacity and support to the mining communities groups have helped them to develop loan applications and facilitated their approval of available loans from financial institutions, thus enabling them to a safer and healthy working environment. Such financial support has provided the miners with increased income generation and improved social status, and perhaps resulting in poverty alleviation as well.

This situation is particularly true for women miners as evidenced at interviews during field visits where women were no longer afraid to speak up to express their point of view, and in some case, became senior management members in the cooperatives and a major party in decision-making. The assessment also witnessed increased number of women cooperative being established.

Another area is the health and occupational safety aspects. Through awareness raising events and trainings, miners are more aware of the danger of mercury. Many of them are now more conscious of their health status, their own as well as family members', and are more inclined to seek health care support. Subsequent to training, miners also are increasingly paying more attention to safety issues at mining sites.

In addition to the aforementioned interventions, the GOLD ISMIA Project has produced specific documents aimed at improving waste management practices in the artisanal and small-scale gold mining (ASGM) sector. These documents include the "Pedoman Praktik Pertambangan yang Baik untuk Sektor Pertambangan Emas Primer Skala Kecil" (Guidelines for Good Mining Practices for the Artisanal and Small-Scale Primary Gold Mining Sector), the "Laporan Karakterisasi Optimasi dan Rekomendasi Pengolahan Bebas Merkuri Bijih Sekunder Kuantan Singingi" (Characterization, Optimization, and Recommendations for Mercury-Free Processing of Secondary Gold Ore in Kuantan Singingi), and the book on "Penggunaan Merkuri dan Dampaknya Terhadap Lingkungan, serta Sebaran Lokasi Pertambangan Emas Skala Kecil" (Mercury Use and its Environmental Impact, and the Distribution of Small-Scale Gold Mining Locations).

These documents serve as valuable resources, providing guidance, insights, and recommendations on improving waste management practices in the ASGM sector. By addressing cross-cutting issues such as gender equality, capacity development, and environmental sustainability, the project ensures that waste management practices benefit various stakeholders. The guidelines for good mining practices promote gender equality by enabling women miners to have equal access to training, resources, and decision-making processes related to waste management. Furthermore, the documents contribute to capacity development by providing miners with knowledge and skills necessary for effective waste management. They outline best practices, techniques, and technologies for minimizing waste generation, proper waste handling, and environmentally responsible disposal methods. Additionally, the emphasis on environmental sustainability in the documents supports the reduction of mercury pollution and encourages the adoption of safer practices in order to protect ecosystems and preserve natural resources.

The production of these specific documents highlights the GOLD ISMIA Project's commitment to integrating cross-cutting issues into waste management practices. By disseminating this knowledge, the project promotes gender equality, enhances capacity development, and contributes to environmental sustainability in the ASGM sector. The availability of these resources empowers stakeholders with practical guidance, fostering responsible waste management practices and paving the way for a more sustainable and inclusive ASGM sector in Indonesia.

3.3.10 GEF Additionality

GEF Additionality is a key aspect of the project that was assessed during the terminal evaluation, following the

guidelines provided by UNDP. The evaluation aimed to determine whether the project had achieved GEF Additionality, which refers to the extent to which the project has generated environmental benefits beyond what would have been achieved in the absence of GEF support.

The TE Team found that the project demonstrated a clear case of GEF Additionality. The GEF funding provided crucial financial resources that enabled the project to implement activities that would not have been possible otherwise. The project design and implementation showcased innovative approaches, technologies, and best practices in the ASGM sector, which contributed to the reduction of mercury use and release, improved environmental quality, and enhanced working conditions.

The GEF support played a pivotal role in leveraging additional financial resources from various stakeholders, including financial institutions, to support the miners and mining groups in their transition towards mercury-free technologies. These additional resources would not have been available without the GEF funding, demonstrating the GEF's unique value in mobilizing finance for sustainable development.

Furthermore, the GEF support enhanced the project's capacity to engage relevant stakeholders, such as government agencies, technical entities, and local communities, in collaborative efforts to address the environmental challenges of the ASGM sector. The project's success in generating multi-stakeholder partnerships and facilitating knowledge exchange was directly attributable to the GEF's catalytic role in mobilizing support and fostering cooperation.

In conclusion, the terminal evaluation confirmed that the project achieved GEF Additionality by going beyond business-as-usual practices and delivering environmental benefits that would not have been realized without GEF support. The project's innovative approaches, enhanced financial resources, and collaborative partnerships demonstrated the GEF's value in promoting sustainable development and driving positive change in the ASGM sector.

3.3.11 Catalytic/Replication Effect

The terminal evaluation of the project also assessed its catalytic and replication effects, in line with the guidelines provided by UNDP. The evaluation aimed to determine the extent to which the project had catalyzed transformative changes and demonstrated potential for replication beyond the project's scope.

The TE Team found that the project had a significant catalytic effect on the ASGM sector in Indonesia. By implementing innovative technologies, promoting sustainable practices, and supporting the formalization of mining groups, the project served as a catalyst for change. It demonstrated the feasibility and viability of mercury-free alternatives and sustainable mining practices, inspiring other stakeholders to adopt similar approaches.

The project's success in mobilizing financial resources and leveraging partnerships with financial institutions showcased its catalytic effect in facilitating access to finance for miners and mining groups. This not only supported the adoption of mercury-free technologies but also opened doors for broader financial inclusion and economic empowerment in the ASGM sector.

Moreover, the project's collaborative approach and knowledge-sharing activities contributed to its replication effect. By engaging with stakeholders at various levels, including government agencies, technical entities, and local communities, the project created opportunities for learning, knowledge exchange, and replication of best practices. Lessons learned and successful experiences from the project were shared widely, both within Indonesia and internationally, fostering replication in other ASGM contexts.

The TE Team concluded that the project's catalytic and replication effects were significant and promising. The project's innovative approaches, financial mobilization, and knowledge dissemination demonstrated its potential to inspire and replicate positive changes in the ASGM sector beyond the project's duration. The project's achievements serve as a valuable resource for future initiatives, contributing to the broader goal of responsible and sustainable ASGM practices.

3.3.12 Progress to Implementation

With the outstanding achievements of the project results, it will lead to significant long-term impacts on:

1) Enhanced regulatory framework and strengthened capacity will deliver improved governance and oversight in the ASGM sector. The project's efforts in supporting national and regional government capacity building have already resulted in notable progress. By working closely with relevant stakeholders, the project has contributed to the development and implementation of policies and regulations that promote responsible and sustainable mining practices. The strengthened regulatory framework will help ensure the enforcement of environmental and social safeguards, leading to a safer and more environmentally friendly ASGM sector.
2) Increased adoption of alternative technologies and practices will drive sustainable development in the ASGM sector. Through the project's support and promotion of mercury-free processing technologies, miners and mining groups have been able to reduce or eliminate mercury use and release. This not only protects human health and the environment but also improves the overall productivity and efficiency of the sector. The successful implementation and replication of these alternative technologies will pave the way for a more sustainable and economically viable ASGM industry in Indonesia.
3) Empowerment of women and vulnerable groups in the ASGM sector will foster inclusive and equitable development. The project's focus on gender sensitivity and women's empowerment has yielded significant results. Women miners and women-led mining groups have been provided with training, support, and resources to enhance their participation in the sector. By addressing the gender disparities and promoting equal opportunities, the project has contributed to reducing gender-based occupational roles, increasing women's access to formal employment, and improving their overall socio-economic well-being.
4) Increased awareness and knowledge-sharing will promote responsible mining practices and environmental conservation. The project's extensive knowledge-sharing activities, capacity building programmes, and engagement with local communities have raised awareness about the environmental and health risks associated with mercury use in the ASGM sector. Through information dissemination, training, and workshops, the project has empowered stakeholders to adopt sustainable mining practices and contribute to environmental conservation efforts. This heightened awareness will have long-lasting effects on the behavior and practices of miners, contributing to the overall sustainability of the ASGM sector in Indonesia.

Overall, the project's progress in implementation has laid a strong foundation for long-term impacts and positive change in the ASGM sector. The achievements in enhancing the regulatory framework, promoting alternative technologies, empowering women, and raising awareness demonstrate the project's commitment to sustainable development and its potential to create lasting benefits for the environment, local communities, and stakeholders involved in the ASGM sector.

4.0 MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS & LESSONS

4.1 Main Findings

In the evaluation of the project, several key findings emerged, highlighting the strengths and areas for improvement. The project design was found to be comprehensive and well-aligned with national priorities, international conventions, and the GEF strategic objectives. The incorporation of gender-sensitive frameworks and transformative outputs demonstrated a strong commitment to promoting gender equality and women's empowerment in the ASGM sector. Additionally, the project management and implementation were efficient, with proactive actions taken by the Implementing Partner, MoEF, and effective collaboration among stakeholders at various levels of government. The project's outcomes and impacts were evident through the successful reduction of mercury use and release, adoption of alternative technologies, and improved working conditions for miners, particularly women miners. However, challenges were identified in securing financial resources and inconsistent interpretation of regulations, which affected the formalization process of mining groups.

4.2 Conclusions

4.2.1 Project Design

The project design was robust and well-conceived, addressing the key challenges and priorities of the ASGM sector in Indonesia. The integration of gender dimensions and the focus on sustainable practices reflected the project's responsiveness to the needs of stakeholders. The inclusion of gender-sensitive frameworks and activities underscored the commitment to promoting equitable economic empowerment and reducing health and safety risks

for both women and men in the ASGM sector. The project's design was aligned with national priorities, international conventions, and the GEF objectives, positioning it as a strategic intervention in advancing responsible and sustainable ASGM practices in Indonesia.

4.2.2 Project Management and Implementation

The project's management and implementation demonstrated efficiency and effectiveness. The proactive actions taken by the Implementing Partner MoEF, the GEF Implementing Agency UNDP, and the collaboration among various stakeholders contributed to the smooth execution of project activities. Strong partnerships and engagement with national and sub-national government agencies, technical entities, and project beneficiaries were instrumental in achieving the desired outcomes. The capacity building efforts, knowledge-sharing activities, and extensive collaboration showcased the Project Team's ability to effectively manage resources and foster an enabling environment for sustainable ASGM practices.

4.2.3 Project Outcome and Impacts

The project's outcomes and impacts were significant and far-reaching. The successful adoption of alternative technologies and the reduction of mercury use and release in the ASGM sector highlighted the project's effectiveness in achieving its objectives. The improved working conditions, increased participation in the formalization process, and the empowerment of women miners were key accomplishments that contributed to sustainable development and social inclusivity. The project's outcomes aligned with national priorities, international conventions, and UNDP's development plan, making substantial contributions to environmental conservation, health and safety, and economic growth.

4.3 Recommendations

Table 32: Summary of Recommendations

Rec No.	TE Recommendation	Entity Responsible	Time frame
A	Category 1: Follow-up Actions		
A1	Uniformed and consistent understanding and application of regulations on the review and approval of mining licenses To address the current challenges in the consistent and transparent operationalization of Law 23/2014 by the Regional (Provincial) government to issue mining licensing, the evaluators recommends that UNDP suggests to the Government that relevant ministries (i.e., MoEF and MEMR) to facilitate a uniformed and consistent understanding by the provincial and regional government agencies of the regulations surrounding ASGM, in particular, the review and approval criteria and process on issuance of IPR/WPR. This can be achieved by improving internal coordination within the jurisdiction of each beneficiary ministries.	UNDP	June – September 2023 with continued project implementation
A2	Continue and improve communication To effectively utilize and improve the established communication channels between government agencies and mining cooperatives, both within and across provinces, to ensure successful attainment of project objectives.	UNDP	June – September 2023 with continued project implementation

	To facilitate this, the evaluators suggest that UNDP recommends that the communication responsibility be taken up the relevant government agencies and mining cooperatives, enabling them to take ownership of ongoing discussions, under the coordination of the Hazardous Substances Management Directorate of MoEF. This transfer of responsibility will help ensure specific targets, such as increased formalization rates and reduced mercury use, are achieved. To support this, it recommended that the project can handover its valuable results and publications to the Hazardous Substances Management Directorate of MoEF for distribution to the relevant stakeholders. These resources will serve as valuable references, promoting effective communication and cooperation between government agencies and mining cooperatives. Additionally, sharing these materials can facilitate the replication of successful approaches and practices in other regions, fostering sustainable development in the artisanal and small-scale gold mining sector.		
A3	Foster partnerships with regional financial institutions Regional financial institution play a crucial role in supporting mining cooperatives with financial resources. The evaluators recommend that the project proposes to Government of Indonesia, through the Hazardous Substances Management Directorate of MoEF, to promote discussions between financial institutions and legal mining cooperatives (IPR holders). Financial institutions should be encouraged to consider specialized regulations tailored to the special situation of mining cooperatives for easier access to financial resources.	UNDP	June – September 2023 with continued project implementation
A4	Linkage with formal market It is recommended that the project advocates that the Hazardous Substances Management Directorate of MoEF to identify potential stakeholders to support promoting access to international markets for miners to obtain better prices for mercury-free produced gold.	UNDP	June – September 2023 with continued project implementation
A5	Promotes sustainable practices in ASGM Continued efforts to focus on promoting sustainable practices in the artisanal and small-scale gold mining (ASGM) sector. This includes the promotion or replication of mercury-free technologies and the improvement of safety practices. Promote or replicate mercury-free technologies: The evaluators recommend that UNDP puts forward a	UNDP	June – September 2023 with continued project implementation

	proposition for the Hazardous Substances Management Directorate of MoEF in collaboration with BRIN to Promote the adoption of technologies like Gravitational, carbon-in-leach, and cyanidation, which reduce mercury use in ASGM. By actively encouraging their implementation and replication, the government can advance sustainable mining practices and minimize environmental impact, expanding beyond the eight (8) project locations of this project. Improve safety practices: The evaluators recommend that UNDP proposes to the Hazardous Substances Management Directorate of MoEF to promote comprehensive safety measures using Personal Protective Equipment Guideline developed by the project, including the implementation of the K3 framework, to protect miners and create a safer working environment. Prioritizing safety will contribute to the well-being of miners and reduce accidents.		
A6	Promote greater presentation and more responsible roles for women in ASGM To further empower women in the mining sector and ensure their increased representation and responsibilities in matters of safety measures, it is recommended that UNDP proposes that MoEF promotes women's active participation in collaboration with other related ministries. This can be achieved by implementing the circulated gender guidelines developed by the project and providing gender training to the Ministry of Environment and Forest (MoEF) and other relevant stakeholders. By fostering gender equality and promoting women's active involvement, the project can contribute to a safer and more inclusive mining environment.	UNDP	June – September 2023 with continued project implementation

4.4 Lessons Learned

Lesson Learned:

1. Uniformed and Consistent Understanding of Regulations: The project has demonstrated the significance of ensuring a uniformed and consistent understanding of regulations within the ASGM sector. Despite the challenges faced during these difficult times, stakeholders have shown remarkable achievement in fostering coordination and communication among provincial and regional government agencies. This has resulted in a clearer review and approval process for IPR/WPR, paving the way for more streamlined and consistent implementation of regulations.
2. Continued and Improved Communication: Stakeholders have exhibited exceptional commitment to effective communication amidst the challenges encountered. Despite the obstacles faced, stakeholders have diligently organized regular meetings and workshops, fostering an environment of collaboration and cooperation. Through these efforts, stakeholders have not only shared valuable experiences, lessons learned, and best practices, but also demonstrated their resilience in replicating successful approaches across various areas. Such proactive communication has greatly contributed to the achievement of project goals.

3. Partnerships with Regional Financial Institutions: Stakeholders have displayed commendable dedication in nurturing partnerships with regional financial institutions. Despite the difficult circumstances, stakeholders have successfully facilitated discussions between financial authorities and mining cooperatives. This has led to the development of specialized regulations tailored to the unique needs of cooperatives, thereby easing access to financial resources. Stakeholders' relentless efforts in promoting dialogue and understanding between financial institutions and miners have enabled the sustainable growth of the ASGM sector and improved the economic prospects of mining cooperatives.
4. Linkage with formal Markets: Stakeholders have persevered in their pursuit of formal market linkages, even amidst the challenging times. Through their dedication and resourcefulness, stakeholders have ensured that miners have access to formal markets, enabling them to obtain better prices for their mercury-free produced gold. By embracing this opportunity, stakeholders have showcased their commitment to empowering miners and promoting economic sustainability within the ASGM sector.
5. Promotion of Mercury-Free Alternative Technology: Despite the adversities faced, stakeholders have continued to champion the promotion and replication of mercury-free alternative technologies within the ASGM sector. By leveraging their expertise and resources, stakeholders have successfully expanded the adoption of technologies such as gravitational, carbon-in-leach, and cyanidation in multiple mining areas. Their efforts have not only contributed to reducing mercury usage but also fostered environmental sustainability and enhanced the economic viability of mining operations, contributing to global environmental benefits.
6. Promotion of Better Safety Practices: Stakeholders have demonstrated unwavering commitment to promoting better safety practices in gold mining. Despite the challenges posed by the current circumstances, stakeholders have implemented additional training programs, increased inspection frequency, and strengthened the enforcement of safety regulations. Their dedication to ensuring the safety and well-being of miners is evident, as they strive to create safer working conditions, reduce occupational hazards, and commitment to mercury-free operation within the ASGM sector.
7. Empowerment of Women in ASGM: Stakeholders have embraced the imperative of promoting greater representation and empowerment of women within the ASGM sector. Amidst the difficult times, stakeholders have invested in training programmes, capacity strengthening initiatives, and resource support, enabling women to take on more responsible roles in matters of safety measures, decision-making processes, and overall participation. By recognizing the valuable contributions of women in the sector, stakeholders have exhibited a commitment to gender equality, social inclusion, and the overall sustainability of the ASGM sector.

These invaluable lessons learned highlight the remarkable achievements of stakeholders, who have displayed resilience, dedication, and innovation amid difficult circumstances. Their unwavering commitment to responsible and sustainable practices in the ASGM sector is commendable, and their efforts will undoubtedly pave the way for further advancements in the future.

5.0 ANNEXES

Annex 1. Terminal Evaluation Terms of Reference (National and International Terminal Evaluation Consultants)

Annex 2. Evaluation Criteria Matrix

Annex 3. Project Locations

Annex 4: TE Mission Schedule and Itinerary

Annex 5. List of persons consulted/interviewed during TE mission (In-person or online)

Annex 6: List of documents reviewed/consulted

Annex 7: Terminal Evaluation Rating Scales Tables

Annex 8. Signed UNEG Code of Conduct for Evaluators

Annex 1. Terminal Evaluation Terms of Reference

United Nations Development Programme

TERMS OF REFERENCE
TERMINAL EVALUATION

Global Opportunities for Long-term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA) Project
AWARD ID: 00106659

Duty station	: Home based (with possible travel to 2 project locations in Indonesia)
Application Deadline	: 28 February 2023
Type of Contract	: Individual Contract
Post Level	: Senior Specialist – Terminal Evaluation Consultant (International)
Languages Required	: English
Starting Date	: 1 March 2023
Duration of Initial Contract	: 1 March – 31 May 2023
Expected Duration of Assignment	: 30 working days

Introduction

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the *full -sized* project titled Global Opportunities for Long-term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA) – PIMS #5872 implemented by the Ministry of Environment and Forestry (Directorate General of Toxic and Hazardous Waste Management) in coordination with the National Research and Innovation Agency (BRIN) as the Responsible Parties. The project started on September 5, 2018 and expected to complete on September 5, 2023. The TE process must follow the guidance outlined in the document 'Guidance For Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects' (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf).

Project Background and Context

Worldwide Artisanal and Small-scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment (35%)[22]. 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[23]. 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 production[24] with 15 million people directly participating in ASGM activities[25] and another 100 million depending on ASGM for their livelihoods.

In Indonesia, total mercury releases to the environment are estimated at 340 metric tonnes per year, of which 57.5% (~195 tonnes) originates from the country's Artisanal and Small-scale Gold Mining (ASGM) sector. Of these 195 tonnes, 60% is being emitted to air, 20% to water, and the remaining 20% to land[26]. Indonesia is among the top 3 global emitters of mercury

[22] UNEP Global Mercury Assessment (2013)

[23] WHO Fact Sheet No. 361 (2013)

[24] Estelle Levin Limited (2014)

[25] UNEP (2013) The Negotiating Process: http://www.unep.org/hazardoussubstances/Mercury/Negotiations/tabid/3320/Default.aspx

[26] Dewi, Kania and Yuyun Ismawati. 2012. Inventory of Mercury Releases in Indonesia. BaliFokus Foundation.

because of ASGM[27]. The Government of Indonesia (GoI) has undertaken significant steps toward the elimination of mercury in ASGM, including signing the Minamata Convention on Mercury in October 2013 and the ratification of the Convention on 22 September 2017 through the issuance of Law No. 11/2017. In 2019, The GoI continue the efforts to eliminate mercury by issuing the Presidential Decree Number 21 Year 2019 regarding the National Action Plan for mercury reduction and elimination and set the target to eliminate 100% the use of mercury in ASGM sector by 2025.

In the above context, UNDP and the Government of Indonesia are in a five-year partnership to address the issues of ASGM in Indonesia through the implementation of Global Environment Facility – Global Opportunities for Long-term Development of Artisanal and Small-scale Gold Mining Sector (GEF-GOLD): Integrated Sound Management of Mercury in Indonesia's ASGM (hereinafter referred to as "GOLD-ISMIA") Project. The GOLD-ISMIA Project Document (Pro-Doc) was signed on 5 September 2018.

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 implementation. Over the project cycle period, the project is expected to strengthen the efforts of Indonesia to reduce 15 tonnes of Mercury. 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

Significant challenges remain with regards to the implementation of these laws. The Mining Law and the Regional Governance law require harmonization in terms of responsibilities, regional (provincial) governments lack the capacity to administer these new responsibilities, while technical guidance from the national level on the implementation of these laws is pending. 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 is currently hampering formalization efforts.

On the side of the miners, the barriers to the development of a responsible ASGM sector that are most significant and pernicious are their formalization and access to finance. Weak, poorly administered, and undemocratic miners' cooperatives and organizations are often not up to the task of pooling capital and collectivizing the cost and effort of pursuing licenses and permits that could provide them with the legitimacy and bankability to access credit for transformative and mercury-free technologies. At the same time, finance entities (banks, microfinance institutions, and other lenders) do not commonly provide loans to the ASGM sector as the risks are often perceived 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. Those cooperatives and organizations that manage to properly engage in the formalization process face uncertainties and delays, and possibly corruption, in their interactions with regional and local bureaucracies that process their applications. With limited capacity and uncertainties in their new roles with respect to the issuing of permits and licenses, regional and local entities are not able to support ASGM formalization processes to the extent necessary.

Furthermore, the environmentally unfriendly practices applied by the ASGM sector, not to mention poor personal protection

27 http://www.mercurywatch.org/

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. While miners that seek to change their methods are further hamstrung by the 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.).
ASGM also has important gender impacts. Women working in ASGM rarely see the positive impacts of the sector on their communities. Gender inequalities mean they are hard-hit by negative impacts of ASGM with particular regard to poor democratic participation, financial inclusion, economic empowerment and health.
Double work burden, gender-based violence (GBV) and prostitution[2] are common in ASGM communities. However, ASGM is already providing thousands of women with opportunities to contribute to the economies and development of their local communities. By strategically partnering with women in ASGM communities, and promoting gender-sensitive frameworks, and gender-transformative outputs, ASGM activities have the potential to advance equitable economic empowerment, reduce health and safety risks to both women and men, and support women's groups to improve democratic participation.

This project aims to protect 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 organize, 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 following table informs the total amount of project budget including the co-financing budget as stipulated in the project document.

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 Affairs (AIPE)	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

Basic project information can also be included in table format as follows:

PROJECT/OUTCOME INFORMATION	
Project/Outcome title:	Global Opportunities for Long-term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA) Project
Atlas ID (formerly Award ID):	00106659

Corporate outcome and output:	Outcome: to reduce mercury use by at least 5 metric tonnes/year starting in year three of the project, which over the life-span of the project will result in a mercury release reduction of at least 15 tonnes. Output 1: Strengthening institutions and the policy/ regulatory framework for Mercury-free ASGM. Output 2: Establishing financing lending arrangements to provide loans for mercury free processing equipment. Output 3: Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization. Output 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.	
Country	Indonesia	
Region	Asia Pacific	
Date project document signed	5 September 2018	
Project dates	Start	Planned end
	5 September 2018	5 September 2023
Project budget	USD 6,720,000	
Project expenditure at the time of evaluation	USD 5,093,424.42	
Funding source	GEF	
Implementing Partner	Ministry of Environment and Forestry	

On 30 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. As of 2 January 2023, the Government of Indonesia recorded 6,7 million confirmed Covid-19 cases across all provinces of the country with 161,000 deaths. The Government has also announced that 6,5 million people have recovered from the illness.

As of 2 January 2023, a total of 172 million people has been vaccinated (around 64.4 % population). Within 2020 - 2022, Indonesia government applied Community Activities Restriction Enforcement (CARE/PPKM) with different level as way to anticipate spread of COVID-19 virus. On 30 December 2022, the government lifted the CARE restrictions in all regions in the country.

Recently, Indonesia has implemented a third vaccine (booster) policy for Overseas Travelers and Domestic Travelers. All travelers who may enter the territory of the Republic of Indonesia should have carried out a third vaccine (booster) in their country of origin and installed the PeduliLindungi application which will be checked by transportation operators (airlines) before traveling to Indonesia.

Furthermore, the COVID pandemic has affected project activities. Online method, limited travel and meeting activities have been conducted by the project in accordance with CARE level regulation and COVID protocol. It caused lengthy process for coordination and collaboration process and impact effectiveness of the meetings.

1. TE PURPOSE

The TE report will assess the achievement of project results against what was expected to be achieved and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The TE report promotes accountability and transparency and assesses the extent of project accomplishments.

The specific objectives of the evaluation are:

1. to provide an independent assessment of the progress and performance of the project towards the expected outputs and outcomes set forth in the results framework of the project, incorporating findings from reviews and assessments carried out prior to the TE;
2. to draw key lessons from past and current cooperation and provide a set of clear and forward-looking options leading to strategic and actionable recommendations for the next programming;
3. to assess UNDP's comparative advantage in the four programme areas in both development to provide an analysis of how the project has positioned itself within the development community and national partners with a view to adding value to the country development results; and
4. to draw key lessons from past and current cooperation and provide a set of clear and forward looking options leading to strategic and actionable recommendations.

The evaluation will cover the time period from 1 March 2023 to 31 May 2023; and will include all activities planned and/or implemented at a national level and in selected target districts during this period within each project component. Besides the assessment of the intended effects of the project, the evaluation also will identify unintended effects.

The main audience and primary users of the evaluation are Ministry of Environment and Forestry (MoEF), National Research and Innovation (BRIN), UNDP and Project Management Unit. The results of TE will be used by the Project Management Unit, Implementing Partner, Responsible Parties, and UNDP to review the performance and compliance of the project to the GEF standards.

2. TE APPROACH & METHODOLOGY

The Terminal Evaluation (TE) could use an overall approach and method for conducting the evaluation, as well as datasources and tools that will likely yield the most reliable and valid answers to the evaluation questions within the limits of resources. However, final decisions about the specific design and methods for the evaluation should emerge from consultations with the programme unit, the evaluators and key stakeholders about what is appropriate and feasible to meet the evaluation purpose and objectives and answer the evaluation questions, given limitations of budget, time and data.

Evaluation should employ a combination of qualitative and quantitative evaluation methods and instruments. The evaluator is expected to follow a participatory and consultative approach that ensures close engagement with the evaluation managers, implementing partners and male and female direct beneficiaries. Suggested methodological tools and approaches may include:

- Document review. This would include a review of all relevant documentation, inter alia
  - GOLD-ISMIA Project Document
  - MTR Report
  - Project Inception Report
  - Project Implementation Reports (PIR's) and the attachments
  - Project Portfolio Indicators
  - Annual Work Plan
  - Minutes of the GOLD-ISMIA Project Board Meeting
  - Matrix of GEF-GOLD status
  - Planet Gold Country Project Reporting
  - Project Assessment Report (PAR)
  - Project Annual Report
  - Project Publications: factsheets/brief reports/assessment reports and
  - Financial and Administration guidelines used by Project Team
  - Project Financial Report / Combined Delivery Report (CDR)
  - PIF
- Interviews and meetings with key stakeholders (men and women) such as key government counterparts, donor community

members, representatives of key civil society organizations, United Nations country team (UNCT) members and implementing partners:

- Semi-structured interviews, based on questions designed for different stakeholders based on evaluation questions around relevance, coherence, effectiveness, efficiency,and sustainability.
- Key informant and focus group discussions with men and women, beneficiaries and stakeholders.
- All interviews with men and women should be undertaken in full confidence and anonymity. The final evaluation report should not assign specific comments to individuals.

- Surveys and questionnaires including male and female participants in development programmes, UNCT members and/or surveys and questionnaires to other stakeholders at strategic and programmatic levels.
- Field visits and on-site validation of key tangible outputs and interventions.
- Other methods such as outcome mapping, observational visits, group discussions, etc.
- Data review and analysis of monitoring and other data sources and methods. To ensure maximum validity, reliability of data (quality) and promote use, the evaluation team will ensure triangulation of the various data sources.
- Gender and human rights lens. All evaluation products need to address gender, disability, andhuman right issues.

The final methodological approach including interview schedule, field visits and data to be used in theevaluation should be clearly outlined in the inception report and fully discussed and agreed betweenUNDP, key stakeholders and the evaluators.

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. If it is not possible to travel to or within the country for the TE mission then the TE team should develop a methodology that takes this into account the conduct of the TE 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 TE Inception Report and agreed with the Commissioning Unit.

If all or part of the TE is to be carried out virtually then consideration should be taken for stakeholder 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 TE 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 TE schedule. Equally, qualified and independent national consultants can be hired to undertake the TE and interviews in country as long as it is safe to do so.

Limitations to the methodology and constraints to the data collection process

Certain constraints have been identified that may have implications on methodological approach and data collection process during the evaluation. These include:

- Given the complex nature of the programming and time constraints for the data collection by the evaluation team, selection of stakeholders will be undertaken, and the results will be based on interpreting the responses obtained from the selection concerned. The evaluation team will need to ensure sufficient level of representation of the diversity of stakeholders and implementation areas concerned; and
- Unavailability of key government officials and other stakeholders during data collection.

The evaluation team will assess the limitations and conclude with a clear description of mitigating measures such as triangulation and validation in the design report.

3. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in the Guidance for TEs of UNDP-supported GEF-financed Projects (http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf). The Findings section of the TE report will cover the topics listed below.

A full outline of the TE report's content is provided in ToR Annex C.
The asterisk "(*)" indicates criteria for which a rating is required.

Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Safeguards
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks

Lessons from other relevant projects (e.g., same focal area) incorporated into project design
Planned stakeholder participation
Linkages between project and other interventions within the sector
Management arrangements

Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (*), implementation (*), and overall assessment of M&E (*)
- Implementing Agency (UNDP) (*) and Implementing Partner (*), overall project oversight/implementation and execution (*)
- Risk Management, including Social and Environmental Standards

Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project outcome (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), overall likelihood of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE team will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.

- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best and worst practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE team should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to include results related to gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

ToR Table 2: Evaluation Ratings Table for
Global Opportunities for Long-term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA) Project
AWARD ID: 00106659

Monitoring & Evaluation (M&E)	Rating[28]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementation & Execution	**Rating**
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	**Rating**
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	**Rating**
Financial resources	
Socio-political/economic	
Institutional framework and governance	
Environmental	
Overall Likelihood of Sustainability	

4. TIMEFRAME

The total duration of the TE will be approximately 30 working days over a time period of 3 months starting on 1 March 2023 to 31 May 2023. The tentative TE timeframe is as follows:

[28] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

Timeframe	Activity
28 February - 3 March 2023	Selection of TE team, contract issuance
6 March 2023	Preparation period for TE team (handover of project documents)
6 March – 15 March 2023 (4 days)	Document review and preparation of TE Inception Report *Note: Options for site visits should be provided in the TE Inception Report.*
20 March 2023 (1 day)	Finalization and submission of TE Inception Report including methodology and workplans
2 – 13 April 2023 (12 days)	TE mission: stakeholder meetings, interviews, field visits, etc.
14 April 2023 (1 day)	Mission wrap-up meeting & presentation of initial findings; earliest end of TE mission
17 April – 5 May 2023 (9 days)	Preparation of draft TE report
8 - 19 May 2023	Circulation of draft TE report for comments
22 - 26 May 2023 (3 days)	Incorporation of comments on draft TE report, TE audit trail & finalization of TE report
29 - 30 May 2023	Preparation and Issuance of Management Response by implementing partner, concluding Stakeholder Workshop/PBM.
31 May 2023	Expected date of full TE completion

5. TE DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	TE Inception Report	TE team clarifies objectives, methodology and timing of the TE	No later than 2 weeks before the TE mission: *20 March 2023*	TE team submits Inception Report to Commissioning Unit and project management
2	Presentation	Initial Findings	End of TE mission: 14 April 2023	TE team presents to Commissioning Unit and project management
3	Draft TE Report	Full draft report *(using guidelines on report content in ToR Annex C)* with annexes	Within 3 weeks of end of TE mission: *5 May 2023*	TE team submits to Commissioning Unit; reviewed by BPPS-GEF RTA, Project Coordinating Unit, GEF OFP
4	Final TE Report* + Audit Trail	Revised final report and TE Audit trail in which the TE details how all received comments have (and have not) been addressed in the final TE report (*See template in ToR Annex H)*	Within 1 week of receiving comments on draft report: *31 May 2023*	TE team submits both documents to the Commissioning Unit

*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.[29]

[29] Access at: http://web.undp.org/evaluation/guideline/section-6.shtml

6. TE ARRANGEMENTS

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is UNDP Country Office, represented by Head of Quality Assurance and Results Unit (QARE) and Head of Environment Unit UNDP. The consultant submit the deliverables to the Project. Deliverables will be reviewed by Project Manager, Implementing Partner and UNDP Country Office.
The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the TE team. The Project Team will be responsible for liaising with the TE team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

7. DUTY STATION

Travel:

- *If possible*, travel will be required to Jakarta, Indonesia; and to 2 out of 6 project locations (Kuantan Singingi District, Kulon Progo District, Lombok Barat District, Gorontalo Utara District, Minahasa Utara District and Halmahera Selatan District) for 6 days during the TE mission;
- The BSAFE course must be successfully completed prior to commencement of travel. Here is the link to access this training: https://training.dss.un.org/course/category/6;
- 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.

No	Indicative Location	Frequency	Number of Travel Days
1	West Lombok – West Nusa Tenggara	1	2 days (8 – 10 April 2023)
2	Minahasa Utara – North Sulawesi Province	1	2 days (11 – 13 April 2023)
3	Jakarta	1	8 days (2 – 7 April & 14 April 2023)

8. TE TEAM COMPOSITION

A team of *two independent evaluators* will conduct the TE – one International Consultant as team leader (with experience and exposure to projects and evaluations in other regions) and one National Consultant as team expert, from the country of the project.

The Team Leader (International Consultant) will be responsible for:

1) Providing overall leadership on the independent evaluation based on inputs and insights from the other consultants in the evaluation team;
2) Covering at least one component (Coordination) of the TE
3) Supervising and coordinating the work of evaluation team members and responsible for the quality assurance of all evaluation deliverables;
4) Developing the design report including the evaluation matrix and the work plan;
5) Collecting information, conducting desk reviews of relevant documents and interviews with key stakeholders;
6) Drafting the first comprehensive draft of the evaluation report with inputs from team members, addressing the comments from UNDP and IP to produce the 2nd draft and final evaluation report in line with UNDP evaluation quality standards; and
7) Ensuring that all the evaluation team members selected to work under his/her supervision are fully briefed about the whole evaluation process, objectives, methodology framework, evaluation tools, ethical standards, and key milestones/deliverables.

Team member (National Consultant):

1) Assessing emerging trends with respect to regulatory frameworks, budget allocations, capacity building
2) Working with the Project Team in developing the TE itinerary, field visit with Project Team and direct interview with stakeholders.
3) Collecting information, conducting desk reviews of relevant documents and interviews with key stakeholders; and
4) Drafting the first comprehensive draft of the evaluation report with inputs from team members, addressing the comments from UNDP and IP to produce the 2nd draft and final evaluation report in line with UNDP evaluation quality standards.

The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

The selection of evaluators will be aimed at maximizing the overall "team" qualities in the following areas. All of requirements are applicable for both International and National consultants, except for Level of Education and Years of Experience, which is specific for each of Consultant.

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

- Minimum 15 years of experience working in relevant technical areas including experience on project monitoring and evaluation;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Experience working with the GEF or GEF-evaluations;
- Experience with result-based management evaluation methodologies;
- Experience working in Asia-Pacific Countries;
- Experience with implementing evaluations remotely will be considered an asset.
- Project evaluation/review experiences within United Nations system will be considered an asset;
- Competence in adaptive management, especially on Artisanal Small-scale Gold Mining (ASGM) and hazardous chemicals such as mercury;
- Demonstrated understanding of issues related to gender and *hazardous chemicals*; experience in gender sensitive evaluation and analysis;
- Demonstrable analytical skills;
- Excellent communication skills;

Language

Fluency in written English.

Approach of Assignment

- Understands the task and applies a methodology appropriate for the task
- Important aspects of the task addressed clearly and in sufficient detail
- Planning is logical, realistic for efficient project implementation

9. EVALUATOR ETHICS

The TE team will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator 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 evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

10. PAYMENT SCHEDULE

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and Regional Technical Advisor (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 TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
  - The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE 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 TE, 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.

PAYMENT METHOD

Consultant shall quote an all-inclusive fixed total contract price in IDR for National Consultant, supported by a breakdown of costs, as per template provided for the entire assignment. The term "all-inclusive" implies that all costs (professional fees, communications, consumables, etc.) that could be incurred by the IC in completing the assignment are already factored into the proposed fee submitted in the proposal. The contract price will be fixed output-based price regardless of extension of the herein specified duration. Payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in instalments or upon completion of the entire contract).

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 TE, 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.

11. APPLICATION PROCESS[30]

Financial Proposal:

- Financial proposals must be "all inclusive" and expressed in a lump-sum for the total duration of the contract. The term "all inclusive" implies all cost (professional fees, travel costs, living allowances etc.);
- All living allowances required to perform the demands of the ToR must be incorporated in the financial proposal, whether the fees are expressed as daily fees or lump sum amount.)

[30] Engagement of evaluators should be done in line with guidelines for hiring consultants in the POPP https://popp.undp.org/SitePages/POPPRoot.aspx

- The lump sum is fixed regardless of changes in the cost components.

Recommended Presentation of Proposal:

a) Letter of Confirmation of Interest and Availability using the template[31] provided by UNDP;
b) CV and a Personal History Form (P11 form[32]);
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 by email at the following address ONLY: bids.id@undp.org by 13 January 2023 at 17:00 Jakarta time. Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: 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 the weighted scoring method, the award of the contract will 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 set of weighted combine technical evaluation of desk review and interview (70%), and financial criteria (30%). Financial score shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal received by UNDP for the assignment.

Criteria	Weight	Maximum Point
Technical Criteria	70%	100
1. A Master's degree in Environmental Science, Environmental Engineering, Chemical Engineering, Natural Science, Natural Resource Management, Business Administration, Social-science or other relevant studies.		10
2. Minimum 15 years of experience working in relevant technical areas including experience on project monitoring and evaluation;		10
3. Experience applying SMART indicators and reconstructing or validating baseline scenarios;		5
4. Experience working with the GEF or GEF-evaluations;		10
5. Experience with result-based management evaluation methodologies;		10

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

[32] http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

6. Experience working in Asia-Pacific Countries;		10
7. Experience with implementing evaluations remotely will be considered an asset.		10
8. Project evaluation/review experiences within United Nations system will be considered an asset;		5
9. Competence in adaptive management, especially on Artisanal Small-scale Gold Mining (ASGM) and hazardous chemicals such as mercury;		5
10. Demonstrated understanding of issues related to gender and *hazardous chemicals*; experience in gender sensitive evaluation and analysis;		5
11. Fluency in written English.		10
Criteria B: Brief Description of Approach to Assignment		10
Understands the task and applies a methodology appropriate for the task?		
Important aspects of the task addressed clearly and in sufficient detail?		
Is planning logical, realistic for efficient project implementation?		
Financial Criteria	30%	

12. TOR ANNEXES

- ToR Annex A: Project Logical/Results Framework
- ToR Annex B: Project Information Package to be reviewed by TE team
- ToR Annex C: Content of the TE report
- ToR Annex D: Evaluation Criteria Matrix template
- ToR Annex E: UNEG Code of Conduct for Evaluators
- ToR Annex F: TE Rating Scales
- ToR Annex G: TE Report Clearance Form
- ToR Annex H: TE Audit Trail

Annex 2. Evaluation Criteria Matrix

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
Relevance: How does the project relate to the main objectives of the GEF focal area (Persistent Organic Pollutants, POPs), and to the environment and development priorities at the local, regional and national levels?			
• How does the Project support the objectives of the Minamata Convention on Mercury? Other relevant MEAs? • How does the Project support the related strategic priorities of the GEF?	• Existence of a clear relationship between project objectives and GEF focal area	• Project documents • GEF focal area strategies and documents	• Document analysis • GEF website • Interview with government, Project Team, UNDP and other project partners
• How does the Project support the development objectives and priorities of the Country, local government and local communities? • Does the Project adequately take into account the national realities, both in terms of institutional framework and programming, in its design and its implementation? • To what extent were national partners involved in the design and implementation of the Project? • Were the capacities of executing institutions and counterparts properly considered when the project was designed? • How country-driven is the Project?	• Degree of coherence between project objectives and national development priorities, policies and strategies • Level of involvement of government officials and other partners in project design and implementation • Coherence between needs expressed by national stakeholders and UNDP-GEF criteria	• Project documents • National Priority and Implementation Plan • Key project partners	• Document analysis • Interview with government officials and project partners
• Did the project concept originate from local or national stakeholders, and/or were relevant stakeholders sufficiently involved in project development?	• Level of involvement of local and national stakeholders in project origination and development (number of meetings held, project development processes incorporating stakeholder input, etc.	• Project staff • Local and national stakeholders • Project document	• Field visit interviews • Document analysis

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
• How does the Project link with the priorities and strategies UNDP for the Country in this sector?	• Consistency between project objectives and UNDP strategies and development objectives (UNDAF, CPD)	• Project document • UNDP strategies priorities documents	• Document analyses • Interviews with government, UNDP, other partners
• How does the Project support the needs of target beneficiaries? • Is the implementation of the Project been inclusive of all relevant Stakeholders? • Are local beneficiaries and stakeholders adequately involved in project design and implementation?	• Strength of the link between expected project results from the project and the needs of relevant stakeholders • Degree of involvement and inclusiveness of stakeholders and beneficiaries in project design and implementation	• Project partners and stakeholders • Needs assessment studies • Project documents	• Document analysis • Interviews with relevant stakeholders
• Are there logical linkage between expected results of the project (log frame) and the project design (in terms of Project components, choice of partners, structure, delivery mechanism, scope, budget, use of resources etc.)? • Is the length of the project sufficient to achieve project outcomes?	• Level of coherence between expected project results and project design internal logic • Level of coherence between project design and implementation approach	• Program and project documents • Key project stakeholders	• Document analysis • Key interviews
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
• Has the project been effective in achieving its expected outcomes? o Capacity, institutional arrangement, policy enabling environment established or strengthened; o Effective M&E activities implemented; o National replication options explored, project experience documented and disseminated; o Effective project management carried out and	• Indicators in project document results framework and logframe	• Project documents • Project Team and relevant stakeholders • Data reported in project annual and quarterly reports	• Document analysis • Interviews with Project Team • Interviews with relevant stakeholders

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
national capacity established and strengthened.			
• Are some outcomes more advanced than others in their implementation? • What is causing delays in implementation in particular outputs for the project? • Where are the implementation 'bottlenecks'? • Are the demonstrations being developed according to schedule? • How can these issues be solved? • What changes need to be implemented?	• Discrepancies between expected outputs/outcome by the time of mid-term and actual achievements	• Project document • Project Team and relevant stakeholders • Data reported by demonstration entities and Technical Specialist	• Document analysis • Minutes of meetings • Site visits observation • Stakeholder interviews
• What lessons have been learned from the project regarding achievement of outcomes? • What changes could have been made (if any) to the design of the project in order to improve the achievement of the project's expected results?		• Data collected through evaluation	• Data analysis
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
• Was adaptive management used or needed thus far to ensure efficient resource use? How did these modifications to the project continue to achieve the objective • Did the project logical framework and work plans and any changes made to them use as management tools during implementation • Were the accounting and financial systems in place adequate for project management and producing accurate and timely financial information? • Were progress reports produced accurately, timely and responded to reporting requirements including adaptive management change?	• Availability and quality of financial and progress reports • Timeliness and adequacy of reporting provided • Planned vs. actual funds leveraged • Occurrence of change in project design / implementation approach (i.e. restructuring when needed to improve project efficiency)	• Project documents and evaluations • UNDP • Project Team	• Document analysis • Key interviews

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
• Did the leveraging of funds (co-financing) happen as planned? • Was procurement carried out in a manner making efficient use of project resources?			
• To what extent partnerships/linkages between institutions / organizations were encourage and supported • What partnerships/linkages were facilitated? Which ones can be considered sustainable? • What was the level of efficiency of cooperation and collaboration arrangements?	• Specific activities conducted to support the development of cooperative arrangements between partners • Examples of supported partnership? • Evidence that particular partnership/linkages will be sustained • Types/quality of partnership cooperation methods utilized	• Project documents and evaluations • Project partners and relevant stakeholders	• Document analysis • Interviews
• Did the project take into account local capacity in design and implementation of the project? • Was there an effective collaboration between institutions responsible for implementing the project?	• National expertise utilized • Number/quality of analysis done to assess local capacity potential and absorptive capacity	• Project documents and evaluations • UNDP • Beneficiaries	• Document analysis • Interviews
• What lessons can be learned from the project regarding efficiency? • How could the project have more efficiently carried out implementation (in terms of arrangement structures and procedures, partnership arrangements etc.)? • What change could have been made (if any) to the project in order to improve its efficiency)?		• Data collected throughout evaluation	• Data analysis
• How and to what extent have project implementation process, coordination with participating stakeholders and important aspects affected the timely project	• Relationship and coordination mechanism of project partners	• Project documents • Project Team and relevant stakeholders	• Document analysis • Key interviews

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
start-up, implementation and closure?	• Timeliness of project activities implemented		
• Do the outcomes developed during the project formulation still represent the best project strategy for achieving the project objectives?	• Extent of relevance of project outcomes and objectives to changing circumstances	• Project documents • Project Team and relevant stakeholders	• Document analysis • Key interviews
• Does the project consult and make use of skills, experience and knowledge of the appropriate government entities, CSO/NGOs, community groups, private sector, local governments and academic institutions in the implementation and evaluation of project activities?	• National capacities utilized • Number/type of partnership formed	• Project documents • Project Team and relevant stakeholders	• Document analysis • Key interviews
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
• Was project sustainability strategy developed during the project design? • How relevant was the project sustainability strategy	• Evidence/quality of sustainability strategy • Evidence/quality of steps taken to address sustainability	• Project documents • Project Team and relevant stakeholders • Beneficiaries	• Document analysis • Key interviews
• Are there any social or political risks that may jeopardize sustenance of project outcomes? What is the risk that the level of stakeholder ownership will be insufficient to allow for the project outcomes/benefits be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there a sufficient public/ stakeholder awareness in support of the long term objectives of the project?	• Social and political risk assessment data to support sustainability of project outcomes	• Project Team and relevant stakeholders • Project partners • Beneficiaries	• Document and data analysis • Key interviews
• Are there any financial risks that may jeopardize sustenance of project outcomes? What is the likelihood of financial and economic resources not being available once the GEF assistance ends (resources can be from multiple sources, such as the public	• Financial resources available after project completion to support and sustain project outcomes	• Project Team and relevant stakeholders • Project partners • Beneficiaries	• Document and data analysis • Key interviews

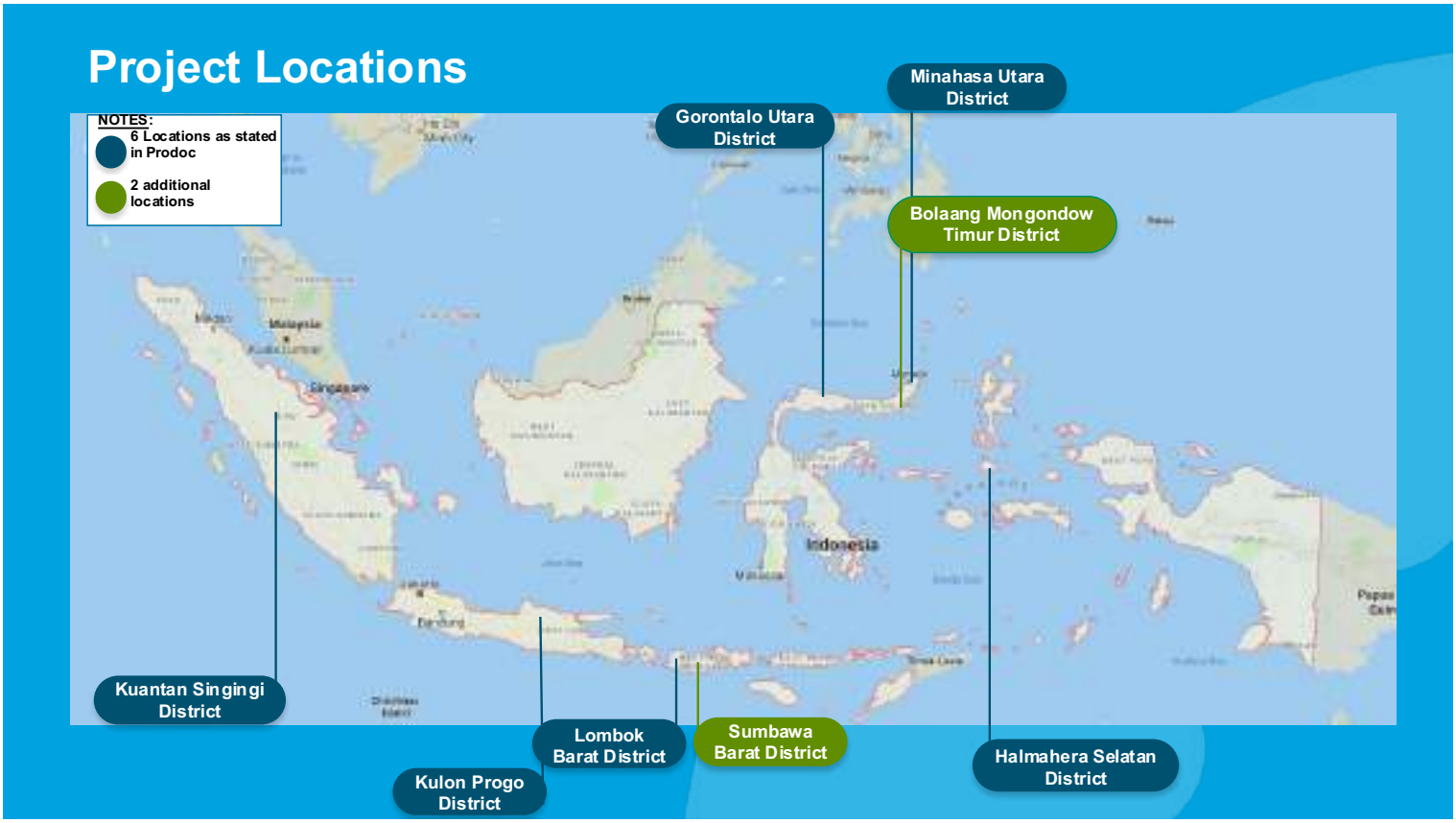
Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
and private sectors, income generating activities, and trends that may indicate that it is likely that in future there will be adequate financial resources for sustaining project's outcomes)?			
• Which of the project's aspects deserve to be replicated in future initiatives? • How is the upscaling to the entire country is expected to be carried out? • What specific tools are being developed for replicability and upscaling?	• Evidence that particular practices will be sustained, upscaled and replicated in other communities and localities.	• Project Team and relevant stakeholders • Project partners • Beneficiaries	• Document and data analysis • Key interviews
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status			
• What are the main positive and negative impacts of the project?	• Project impacts (e.g. capacity, policy enabling framework, etc.)	• Project documents • GEF focal area tracking tools	• Document analysis • Key Interviews
• How has the project contributed to global environmental benefits or reductions in stress to ecological systems, or is there evidence that the project has put in place processes that will lead to such impact?	• Levels of reduction of POPs release • Systems, structures and capacities that contribute to changes in POPs release	• Project documents • GEF focal area tracking tools	• Document analysis • Key Interviews
Gender and Cross-cutting Issues			
• Was the project designed with a gender perspective in mind? How was gender taken into account in the design of the project? • What specific gender equality and women's empowerment indicators were included in the project's monitoring and evaluation framework? Were they effectively measured and reported on? • How did the project address gender-based barriers that women may face in accessing project benefits or participating in project activities?	• Level of progress of gender action plan and gender indicators in results framework • Existence of logical linkages between gender results and project outcomes and impacts	• Project documents • Project staff • Project stakeholders	• Desk review, interviews, field visits

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
• What actions were taken to ensure the participation of women in decision-making processes related to natural resource management? • Were there any unintended negative impacts on gender equality or women's empowerment as a result of the project? If so, what measures were taken to address and mitigate these impacts? • How would you assess the project's overall effectiveness in promoting gender equity and women's empowerment? • In your opinion, has the project been efficient in its approach to promoting gender equality and women's empowerment? If not, what improvements could be made? • ow has the project contributed to closing gender gaps in access to and control over resources? Can you provide specific examples of results achieved in this area? • In what ways has the project improved the participation and decision-making of women in natural resource governance? What specific actions were taken to achieve this? • How has the project targeted socio-economic benefits and services for women? What results were achieved in this area? • How effective was the project in contributing to gender equality and women's empowerment? What evidence do you have to support this assessment? • Describe the short-term and long-term gender results achieved by the project. • In what ways did gender results contribute to the project's			

Evaluative Criteria Questions	Indicators	Sources	Data Collection Method
environment, climate, and/or resilience outcomes? • What further actions can be taken to ensure that gender equality and women's empowerment are fully integrated into future projects? • How do the project's gender results align with the principles of relevance, effectiveness, efficiency, country ownership, sustainability, and impact? Are there any areas for improvement?			
• How were effects on local populations considered in project design and implementation	• Positive or negative effects of the project on local populations	• Project document, project reports, monitoring reports	• Desk review, interviews, field visits

Annex 3: Project Locations

The map show the locations of the original xix (6) project sites at CEO Endorsement and two (2) project sites added during project implementation.



Annex 4: TE Mission Schedule and Itinerary

Date	Time	Details	Location	Participants/Contacts
Sunday, 2 April 2023		International Consultant arrival	Sari Pacific Hotel, Jakarta	
Monday, 3 April 2023	09:00 – 09.15 09:15 – 10:45 10:45 – 11:30 11:30 – 14.00	Kick-off Meeting/Presentation Discussions/interview with UNDP CO, and Project Staff (update on project activities, achievements, bottlenecks etc.) Discussion with RTA & Program Manager Discussion with QARE Unit on Quality Assurance (QA) Break Discussion with Project Team	Lombok-1 and Lombok-2 Rooms at UNDP CO in Menara Thamrin Building	UNDP CO, Project Team Mr. Anderson Alves (Regional Technical Advisor UNDP-NCE/C&W BRH) Mr. Anton Sri Probiyantono (Senior Programme Manager, UNDP CO) Mr. John Kimani Kirari (QARE Unit, UNDP CO) Project Team: National Project Manager: Ms. Baiq Dewi Krisnayanti Working Group Coordinators: Jatu Arum Sari,(WGC ! & 3) Singgih Seno Aji (WGC 2) Ms. Harti Ningsih (WGC 4) Finance and Administration: Witari Astriani Procurement: Ms. Agneta Remy Silvia Data and Documentation: Ms. Irma Widiastari Gender: Ms. Dzul Afifah Arifin Field Facilitator: Mr. HMuslim Nur Widodo, South Halmahera/ North Minahasa Districts (Halmahera Selatan/Minahasa Utara Districts)
Tuesday, 4 April 2023	08.30 – 10.30 10.50 – 11.30	Meeting with National Project Director (NPD) and Deputy National Project Director (DNPD) Meeting/interview with National Stakeholders (Ministry of Energy and Mineral Resources, MEMR. (KESDM)	Sari Pacific Hotel	Mr. Anggoro Tri Mursito, Head of BRIN Mr. Dadan Moh. Nurjaman, DNPD, BRIN Mr. Adji Kawigraha, BRIN Ms. Yulia Suryanti, NPD. MoEF Ms. Upik Aslia, MoEF Mr. Antonius Agung Etijawan Mr. Hernandi Ad Mr. Heri Wibowo

Wednesday, 5 April 2023	08:00 - 08:45	Meeting/interview with Local Stakeholders: Halmahera Selatan District	TE Consultants at UNDP CO, Lombok-2 meeting room, 9th floor. (Online)	Ms. Munira Abbas, Environmental Agency, South Halmahera Regency (DLH Kab. Halmahera Selatan) Mr. Rais Ismail (Environmental Agency, North Maluku Province (DLH Prov. Maluku Utara) Mr. Rahman, Agency of Development of North Maluku (Bappedalithang Maluku Utara) Mr. Iskal Sudin, Head of Permata Obi Raya Mining Cooperative Mr. Muslim Nur Widodo, Field Facilitator, South Halmahera/ North Minahera Districts (Halmahera Selatan/Minahera Utara)
	09:00 – 09:45	Bolaang Mongondow Timur District:	Phone call	Ms. Ganitji Mamonto, Chairperson of Bulawan Sejahtera Mandiri Cooperative
	10:00 - 10:45	Sumbawa District:	Online	Mr Arian, Staff of Sumbawa Regency Environmental Agency (DLH Kab. Sumbawa) Mr. Syafruddin Nur, Head of Sumbawa Environmental Agency (Dinas LH Kab. Sumbawa)
	11:00 – 11:45	Kuantan Singingi District	Online	Ms. Marlinda, Staff of Environmental Agency, Kuantan Singingi District (DLH Kab. Kuantan Singingi District) Mr. Rustam, Head of Women Empowerment and Child Protection, former Head of Environmental Agency (Kadis KPPPA Kab. Kuantan Singingi) Mr. Abdillah Efendi, Produsen Tambang Sejahter Lohil Cooperative Mr. Alpiyandri, Produksi Tombang Mining Cooperative Ms. Sugiyanti, Secretary, Amanah Duo Tompat Cooperative Ms. Enda, Head of Amanah Duo Tompat Cooperative
	13:00 – 11:45	Gorontalo Utara District:	Online	Mr. Nasruddin, Head of Environmental Assessment and Management, Gorontalo Province Environmental agency (Kepala Bidang Pengkajian dan Penataan

				Lingkungan – DLH Provinsi Gorontalo) Mr. Abd. Rakhmat Dangkua, Head of Mineral Resources Division – Investment, ESDM and Transmigration Office of GorontaloPLrovince (Kepala Bidang Sumber Daya Mineral – Dinas Penanaman Modal, ESDM dan Transmigrasi Provinsi Gorontalo) Mr. M. Tamrin Sirajuddin, Secretary, Environmental Agency of North Gorontalo (Sekretaris Dinas – DLH Kabupaten Gorontalo Utara) Ms. Marni B Koni, Village Head of Hulawa (Kepala Desa Hulawa) Mr. Rahmat Olii, Miner (Penambang)
	14:00 – 14:45	Kulon Progo District:	Online	Mr. Sumarsana, Head of Environmental Agency, Kulon Progo Regency (Kadis LH Kabupaten Kulon Progo) Mr. Gusman Yusuf, Staff of Energy and Mineral Resources Agency (Analis Pertambangan – Dinas PUPR dan ESDM Provinsi DIY) Mr. Eko Susanto, Staff Agency for Development (Kepala Bidang Infrastruktur dan Pengembangan Wilayah – Bappeda Kulon Progo) Ms. Amin Setda Adiyarti, Staff of the Sectariat of Government of Julon Progo Regency (Kepala Sub Bagian Lingkungan Hidup, Perhubungan dan Pariwisata Bagian Administrasi Pembangunan – Sekda Kabupaten Kulon Progo) Mr. Tri Prasetyo, Chairperson of Hargo Selo Kemcono Mining Cooperative (Head of Mining Co-Op – Hargo Selo Kencono)
Thursday, 6 April 2023	10:00 – 11:00	Discussion with National Stakeholders (PT Pegadaian)	TE Consultants at UNDP CO, Lombok-1 meeting room, 9th floor	Mr. Elvi Rofiqotul Hidayah, Director of Marketing and Product Development (Direktur Pemasaran dan Pengembangan Preduk) Kadek Eva Saputra (Head of Gold Products Division)
	11:00 – 12:00	Discussion with National Stakeholders (Ministry of Finance)	Online	Mr. Purnoto, Director of Loan and Grants
	13:00 – 14:00	Discussion with National Stakeholders (Operational Focal Point, OFP)	Online	Ms. Laksmi Dewanthi, MoEF Mr. Eko, Official

Friday, 7 April 2023		Off Day		
Saturday, 8 April 2023	11:00 – 14:00 16:00 – 17:00 18:30 – 19:00 19:00 – 20:30	Fly Jakarta/Lombok Garuda GA-0430 Meeting with Local Universities (Mataram University) Iftar (break fasting) and Dinner Meeting with local governments	Jakarta Prime Park Hotel, Mataram	 Mr. Agus Purbatin Hadi Mr. Mukhtascam 1. Mr. Firman, Focal Point from Province - Environmental Agency of NTB Province (Specializing on Waste management) 2. Mr. Nurhedi Diding S (Staff Energy and Mineral Resources Agency of NTB Province) 3. Mr. Hermansyah, Head of Environmental Agency West Lombok 4. Mr. Muhammad Puspaidi Putra (Environmental Agency West Lombok) 5. Mr. Lalu Ahmad GIfany Akbar (Environmental Agency NTB Province) 6. Ms. Upik Siti Askai , Ministry of Environmental and Forestry 7. Mr. Yusran Afandi, former field facilitator.
Sunday, 9 April 2023	08:30 – 17:00 10:00 – 11:30 13:00 – 17:00	Visit 2 villages: Buwun Mas and Pelangan Meeting with miners in Buwun Mas Village Meeting with Miners in Pelangan Village	West Lombok. West Nusa Tenggara	Local Stakeholders in Buwun Mas: a. Imam Haeru (Ketua Koperasi Syariah Gema Sarlina Buana) b. Dedi Irawan (Penambang/Kadus Dusun Sepi) c. H. Safarwadi (Penambang) d. Srimawati (Ketua Koperasi Wanita Cahaya Emas) e. Fitri Hamdayani (Ketua Koperasi Barokah Cair Sejahtera) Local stakeholders in Pelangan Village: 1. Kepala Desa Pelangan 2. Hamdani (Koperasi Tibu Hatu) 3. Zulhaedi (Koperasi Cakrawala Tambang)

				4. Suherman Pranata (Kop Bina Maju Sejahtera) 5. Andi Irawan (Kop Jokar Suasa) 6. Saepul Haq (Kop Pelangan Maju Bersama)
Monday, 10 April 2023	13:00-13:55	Fly from Lombok/Jakarta Batik Air ID-6659	West Lombok. West Nusa Tenggara	
Tuesday, 11 April 2023	09:20 – 13:45 19:00 – 21:00	Fly Jakarta/Manado, Garuda GA-0600 Meeting with local governments and Sulut GO Bank	Novotel Hotel in Manado	RRRA MPD, TTBS, MEEI Local stakeholders: 1. Sulut Go Bank 2. Sam Ratulangi University 3. Head of North Minahasa District LH Service 4. GOLD ISMIA Focal Point of North Sulawesi Provincial Environmental Service 5. GOLD ISMIA Focal Point of the Department of Energy and Mineral Resources of North Sulawesi Province 6. GOLD ISMIA Focal Point of the North Minahasa Regency Environmental Service
Wednesday, 12 April 2023	09.00 – 10.30 10.30 - 12.00 13.00 – 15.00	Meeting and discussion with Mining Coop Batu Api Meeting and discussion with Mining Coop Batu Emas and visit mining site Visit mercury-free facility in Mining Co-Op Matuari	Minahasa Utara, North Sulawesi Province	Local stakeholders: 1. Mining Cooperative Batu Api 2. Mining Cooperative Batu Emas 3. Mining Cooperative Matuari
Thursday, 13 April 2023	10:00 – 12:00 14:30 – 16:40	Visit to training plant Fly Manado/Jakarta Garuda GA-0601	Minahasa Utara, North Sulawesi Province	UNDP and DLH Kabupaten Minahasa Utara
Friday, 14 April 2023	09:00 – 12:00	Presentation of Initial Findings	offline in Jakarta	UNDP, Project Team, KLHK, BRIN, KESDM, KEMENKEU, GEF-OFP, Pegadaian.
Saturday, 15 April 2023		International Consultant departure		

Annex 5: List of persons consulted/interviewed during TE mission (In-person or online)

Name	Position	Male/Female
Ministry of Environment and Forest (MoEF). (Kementerian Lingkungan Hidup dan Kehutanan, KLHK)		
Ms.Laksmi Dewanthi	Director General, Operational Focal Point	Female
Ms. Yulia Suryanti	National Project Director (NPD)	Female
Ms. Upik Aslia	Project Official	Female
National Research and Innovation Agency (BRIN)		
Mr. Dadan Moh. Nurjaman	Deputy National Project Director (DNPD)	Male
Mr. Anggoro Tri Mursito	Head of OR	Male
Mr. Adji Kawigraha	Official	Male
Ministry of Energy and Mineral Resources (MEMR) (*Kementerian Energi dan Sumber Daya Mineral, KESDM*)		
Mr. Antonius	Official	Male
Mr. Hernandi	Official	Male
Ministry of Finance (oline)		
Mr. Purnoto	Director of Loan and Grants, Project Board member	Male
UNDP Indonesia Country Office (CO)		
Mr. Anton Sri Probiyantono	Senior Programme Manager	Male
Mr. John Kimani Kirari	QARE Unit	Male
UNDP Nature, Climate and Energy (NCE), Bangkok Regional Hub (BRH) (online)		
Mr. Anderson Alves	Regional Technical Advisor	Male
Project Management Unit (Project Team)		
Ms. Baiq Dewi Krisnayanti	National Project Manager	Female
Ms.Jatu Arum Sari	Working Group Coordinator 1&3	Female
Mr. Singgih Seno Aji	Working Group Coordinator 2	Male
Ms.Harti Ningsih	Working Group Coordinator 4	Female
Mr. Khairul Amri	Project Procurement Associate	Male
Ms. Irma Widiastari	Project Clerk for Data and Documentation	Female
Ms. Dzul Afifah Arifin	Project Gender Associate	Female
Ms.Agneta Reny Silvia	Procurement Assistant	Female
Ms. Witari Astriani	Project Clerk for Finance and Administration	Female
Mr. Muslim Nur Widodo	Field facilitator, Halmahera South (Selatan)/Minahasa North (Utara) Districtss	Male
Mr. Yusin Affandi	Field Facilitator, Lombok Barat	Male

Project Locations (8)		
Halmahera Selatan District (online)		
Ms. Munira Abbas	Environmental Agency, South Halmahera Regency (DLH Kab. Halmahera Selatan)	Female
Mr. Rais Ismail	(Environmental Agency, North Maluku Province	Male
Mr. Rahman Bappalitbanda	Agency of Development of North Maluku	Male
Mr. Iskal Sudin	Head of Permata Obi Raya Mining Cooperative	Male
Mr. Muslim Nur Widodo	Field Facilitator, South Halmahera/ North Minahera Districts (Halmahera Selatan/Minahera Utara)	Male
Bolaang Mongondow Timur District (telephone)		
Ms. Granitji Mamonto	Ketua Koperasi Bulawan Sejahtera Mandin (Head of Bulawan Sejahtera Mandi Cooperative	Female
Sumbawa District (online)		
Mr. Ar Arian	Staff of Sumbawa Regency Environmental Agency (DLH Kab. Sumbawa)	Male
Mr. Syafruddin Nur	Head of Sumbawa Environmental Agency	Male
Kuanstan Singsingi District (online)		
Ms. Marlinda	Staff of Environmental Agency, Kuantan Singingi District (Focal Point, Provincial Environment Office)	Female
Mr. Rustam	Head of Women Empowerment and Child Protection, former Head of Environmental Agency	Male
Mr. Abdillah Efendi	Head of Produsen Tambang Sejahter Lohil Cooperative	Male
Mr. Alpiyandri	Head of Produsen Tambang Sejahter Lohil Cooperative	Male
Ms. Enda	Head of Amanah Duo Tompat Cooperative	Female
Ms. Sugiyanti	Secretary of Amanah Duo Tompat Cooperative	Female
Gorontalo Utara District (online)		
Mr. Nasruddin	Head of Environmental Assessment and Management, Gorontalo Province Environmental agency	Male
Mr. Abd. Rakhmat Dangkua	Head of Mineral Resources Division – Investment, ESDM and Transmigration Office of GorontaloPLrovince	Male
Ms. Marni B Koni	Village Head of Hulawa	Female

Mr. M. Tamrin Sirajuddin	Secretary, Environmental Agency of North Gorontalo	Male
Mr. Rahmat Olii	Head of Penambang Cooperative	Male
Kulon Progo District (online)		
Mr. Sumarsana	Head of Environmental Agency, Kulon Progo Regency	Male
Mr. Gusman Yusuf	Staff of Energy and Mineral Resources Agency	Male
Mr. Eko Susanto	Staff Agency for Development	Male
Ms. Amin Setda Adiyarti	Staff of the Sectariat of Government of Julon Progo Regency	Female
Mr. Tri Prasetyo	Chairperson of Hargo Selo Kencono (mining cooperative)	Male
PT Pegadaian (State-owed financial Institution)		
Mr. Elvi Rofiqotul Hidayah	Director of Marketing and Product Development (Direktur Pemasaran dan Pengembangan Preduk	Male
Mr. Kadek Eva Saputran	Head of Gold Products Division	Male
Mataram University		
Mr. Aqus Purbathin	Lecturer	Male
Mr. Mukasam	Lecturer	Male
Stakeholders in Village of Buwun Mas (West Lombok)		
Mr. Imam Haeru	Head of Cooperative Syariah Gema Sarlina Buana	Male
Mr. Dedi Irawan	Miner/Head of Sub Villlage Dusun Sepi	Male
H. Safarwadi	Miner -Religious leader	Male
Ms. Srimawati	Chairperson of Women Cooperative Cahaya Emas	Female
Ms. Fitri Hamdayani	Chairperson of Women Cooperative Barokah Cair Sejahtera	Female
Stakeholders in Pelangan Village, West Lombok		
Mr. Hamdani	Head of Cooperative Tibu Hatu	Male
Mr. Zulhaedi	Head of Cooperative Cakrawala Tambang	Male
Mr. Suherman Pranata	Head of Cooperative Bina Maju Sejahtera)	Male
Mr.Andi Irawan	Head of Cooperative Jokar Sausa	Male
Mr. Saepul Haq	Head of Cooperative Pelangan Maju Bersama	Male
Mr. Akhmad Zainul Hafiz	Head of Pelangan Village	Male

Annex 6: List of Document reviewed/Consulted

- PIF
- UNDP Initiation Plan
- UNDP Project Document (GOLD-ISMIA) with all annexes
- CEO Endorsement Request
- UNDP Social and Environmental Screening Procedures (SESP)
- Project Inception Workshop Report
- Midterm Review (MTR) Report and Management Responses to MTR recommendations
- Project Implementation Reports (PIR's)
- Annual Work Plan
- Annual Reports
- Project Portfolio Indicators
- Matrix of GEF-GOLD status
- Planet Gold Country Project Reporting
- Project Assessment Report (PAR)
- Quarterly progress report and work plans of the various implementation task teams
- Audit reports
- Finalized GEF Focal Area Tracking Tools/Core Indicators at CEO endorsement, midterm and terminal stage
- Minutes of meetings of the Project Board
- Minutes of Tripartite Meeting
- Minutes of Project Team meetings
- Oversight mission reports
- All monitoring reports prepared by the Project
- Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions
- Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures
- Project Financial Reports/Combined Delivery Report (CDR)
- Copies of project outputs (booklets, manuals, technical reports, articles, etc.)
- Sample of project communications materials
- Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants
- List of contracts and procurement items over ~US$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)
- Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available
- List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Team members, and other partners to be consulted
- Annual Operational Plans (AOPs/POAs)
- Local consultant's reports and products
- Memorandum of Agreements
- Contracts and Addendums
- Project operational guidelines, manuals and systems

- Financial and Administration guidelines used by Project Team
- Project site location maps
- UNDP Country Programme Document (CPD)
- Project deliverables that provide documentary evidence of achievement towards project outcomes

Annex 7: Evaluation Ratings Table and TE Rating Scales

Table x: Evaluation Ratings Table	
Monitoring & Evaluation (M&E)	Rating[33]
M&E design at entry	
M&E Plan Implementation	
Overall Quality of M&E	
Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	Rating
Quality of UNDP Implementation/Oversight	
Quality of Implementing Partner Execution	
Overall quality of Implementation/Execution	
Assessment of Outcomes	Rating
Relevance	
Effectiveness	
Efficiency	
Overall Project Outcome Rating	
Sustainability	Rating
Financial sustainability	
Socio-political sustainability	
Institutional framework and governance sustainability	
Environmental sustainability	
Overall Likelihood of Sustainability	

[33] Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

Table x: TE Rating Scales	
Ratings for Outcomes, Effectiveness, Efficiency, M&E, IA Implementation/Oversight, IP Execution, Relevance	Sustainability ratings:
6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings 5 = Satisfactory (S): meets expectations and/or no or minor shortcomings 4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings 3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings 2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings 1 = Highly Unsatisfactory (HU): severe shortcomings Unable to Assess (U/A): available information does not allow an assessment	4 = Likely (L): negligible risks to sustainability 3 = Moderately Likely (ML): moderate risks to sustainability 2 = Moderately Unlikely (MU): significant risks to sustainability 1 = Unlikely (U): severe risks to sustainability Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability

Monitoring & Evaluation Rating Scale

Raging	Description
6 = Highly Satisfactory (HS)	There were no shortcomings; quality of M&E design/implementation exceeded expectations
5 = Satisfactory (S)	There were minor shortcomings; quality of M&E design/implementation met expectations
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of M&E design/implementation more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of M&E design/implementation was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of M&E design/implementation was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in M&E design/implementation
Unable to Assess (UA)	The available information does not allow an assessment of the quality of M&E design/implementation

Implementation/Oversight and Execution Rating Scale

Raging	Description
6 = Highly Satisfactory (HS)	There were no shortcomings; quality of implementation/execution exceeded expectations
5 = Satisfactory (S)	There were no or minor shortcomings; quality of implementation/execution met expectations
4 = Moderately Satisfactory (MS)	There were some shortcomings; quality of implementation/execution more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of implementation/execution was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of implementation/execution was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in quality of implementation/execution
Unable to Assess (UA)	The available information does not allow an assessment of the quality of implementation and execution

Outcome Rating Scale – Relevance, Effectiveness, Efficiency

Raging	Description
6 = Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings
5 = Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor shortcomings
4 = Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate shortcomings
3 = Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings
2 = Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major shortcomings
1 = Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were severe shortcomings
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements

Sustainability Rating Scale

Raging	Description
4 = Likely (L)	There are little or no risks to sustainability
3 = Moderately Likely (ML)	There are moderate risks to sustainability
2 = Moderately Unlikely (MU)	There are significant risks to sustainability
1 = Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

Annex 8: Signed UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism)

Evaluators/Consultants:

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 limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

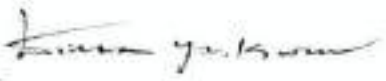
Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Yu Chiu William Kwan (Mr.)

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 New York, USA on 31 May 2023

Signature: 

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Evaluators/Consultants:

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 limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

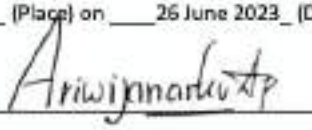
Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Ari W. Adipratomo (Mr.)

Name of Consultancy Organization (where relevant): _____

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

Signed at __Jakarta____ (Place) on ____26 June 2023_ (Date)

Signature:  _____

Annex 9: TE Report Clearance Form

Terminal Evaluation Report for the project *"**Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (ISMIA)**", UNDP PIMS ID 5872* **Reviewed and Cleared By**:

Commissioning Unit (M&E Focal Point)

Name: Ari Pratama_____Quality Assurance and Results Unit

Signature: _____ DocuSigned by: A9E92855636D444... Date: 28-Jun-2023

Regional Technical Advisor (Nature, Climate and Energy, Chemicals/MPU)

Name: Anderson Alves

Signature: _____ DocuSigned by: BA83D420D2784F7... Date: 28-Jun-2023

Resident Representative

Name: Norimasa Shimomura

Signature: _____ DocuSigned by: Norimasa Shimomura 4B63DD0498CD41A... Date: 29-Jun-2023