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United Nations Development Programme

Annotated Project Document template for nationally implemented projects financed by the GEF/LDCF/SCCF Trust Funds

Project title: GEF GOLD Peru - Integrated Sound Management of Mercury in Peru's Artisanal and Small-Scale Gold Mining (ASGM)	
Country: Peru	Implementing Partner: Ministry of Environment (MINAM)
Management Arrangements: National Implementation Modality (NIM)	
UNDAF/Country Programme Outcome: By 2021, people living in poverty and vulnerability improve access to decent livelihoods and productive employment by means of sustainable development that strengthens social and natural capital, integrating an adequate management of risk. UNDP Peru's CPD 2-17- 2021 Outcome: 1: Growth and development are inclusive and sustainable and incorporate productive capacities that create jobs and livelihoods for the poor and those excluded from CPD 2017-2021.	
UNDP Strategic Plan Output: Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.	
UNDP Social and Environmental Screening Category: Low	UNDP Gender Marker: Gen2
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Planned start date: 1 April 2018	Planned end date: 30 March 2023
PAC meeting date:	
Brief project description: Worldwide Artisanal and Small-scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment (35%). ¹ 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 threat to the development of the child in utero and early in life ² . ASGM is a very important source of jobs and livelihoods. ASGM accounts for about 17-20% of the world's annual gold production ³	

¹ UNEP Global Mercury Assessment (2013)

² WHO Fact Sheet No. 361 (2013)

³ Estelle Levin Limited (2014)

with 15 million people directly participating in ASGM activities⁴ and another 100 million depending on ASGM for their livelihoods.

The objective of the project is to reduce/eliminate mercury releases from the Peruvian Artisanal and Small-scale Gold Mining (ASGM) sector by i) Strengthening institutions and the policy/regulatory framework for mercury-free ASGM; ii) Establishing financing lending arrangements to provide loans for mercury free processing equipment; iii) Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization; and, (iv) Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.

Over the life of the project, the project will support 12 ASGM mining communities in Peru (located in the departments of Arequipa, Puno and Piura) as well as support national, regional and local government entities and private sector partners in reducing mercury releases by 15 metric tonnes, thus generating Global Environmental Benefits (GEBs).

FINANCING PLAN		
GEF Trust Fund <i>or</i> LDCF <i>or</i> SCCF		3,990,000 USD
(1) Total Budget administered by UNDP		3,990,000 USD
PARALLEL CO-FINANCING		
	UNDP	USD 25,000
	Government	USD 27,239,585
	Bilateral donors and cooperating agencies	USD 4,916,456
	NGOs	USD 3,052,471
(2) Total co-financing		USD 35,233,512
(3) Grand-Total Project Financing (1)+(2)		USD 39,223,512
SIGNATURES		
Signature: print name below	Agreed by Government	Date/Month/Year:
Signature: print name below	Agreed by Implementing Partner	Date/Month/Year:
Signature: print name below	Agreed by UNDP	Date/Month/Year:

⁴ UNEP (2013) The Negotiating Process: <http://www.unep.org/hazardoussubstances/Mercury/Negotiations/tabid/3320/Default.a.spx>

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LIST OF ACCRONYMS

AGC	Artisanal Gold Council
ANA	Autoridad Nacional del Agua / National Water Authority
ASGM	Artisanal and small-scale gold mining
AWP	Annual Work Plan
BEP/BAT	Best Environmental Practice/Best Available Technology
BGI	Better Gold Initiative
CIN CIA	Centro de Innovación de Amazonia / Amazonian Innovation Center
CIRDI	Canadian International Resources and Development Institute
COFIDE	Corporación Financiera de Desarrollo / Finance Development Corporation
CSR	Corporate Social Responsibility
CTA	Chief Technical Advisor
DED	Detailed Engineering Design
DGFM	Dirección General de Formalizaci Minera / General Office of Mining Formalization
DREM	Dirección Regional de Energía y Minas / Regional Office of Energy and Mining
EPA	United States Environmental Protection Agency
ESM	Environmental Sustainable Management
ESMP	Environmental and Social Management Plan
FS	Feasibility Study
FSP	Full Sized Project
GAMA	Gestión Ambiental Minería Artesanal / Artisanal Mining Environment Management
GBV	Gender Based Violence
GEF	Global Environment Facility
GEF OFF	GEF Operational Focal Point
GEF PIR	GEF Project Implementation Report
GEF SEC	Global Environment Facility Secretariat
GEWE	Gender Equality and Women Empowerment
GHG	Green House Gases
GII	Gender Inequality Index
GREM	Gerencia Regional de Energía y Minas/ Regional Office of Energy and Mining
HACT	Harmonized Approach to Cash Transfer
Hg	Mercury
IPEC	International Programme on the Elimination of Child Labor
ISAT	Instituto Salud y Trabajo / Health and Labor Institute
LOA	Letter of Agreement
MAPEM	ProgMinería Artesanal y Pequeña Minería / Artisanal and Small Mining Program
MEF	Ministerio de Relaciones Exteriores/Ministry of Foreign Affairs
MINAGRI	Ministerio de Agricultura y Riego/ Ministry of Agriculture and Irrigation
MINAM	Ministerio del Ambiente / Ministry of the Environment
MINCULTURA	Ministerio de Cultura/ Ministry of Culture
MINEM	Ministerio de Energía y Minas / Ministry of Energy and Mining

MINEXTERIORES	Ministerio de Economía y Finanzas/Ministry of Economy and Finance
M&E	Monitoring and Evaluation
MSP	Medium Sized Project
MTR	Mid-term Review
NAP	National Action Plan
NIM	National Implementation Mechanism
NGO/CSO	Non-Governmental Organization/Civil Society Organization
NPD	National Project Director
OECD	Organization for Economic Cooperation and Development
OEFA	Organismo de Evaluación y Fiscalización Ambiental / Environmental Evaluation and Oversight Organization
OIT	Organización Internacional del Trabajo / International Labor Organization
PAN	Plan de Acción Nacional/National Action Plan
PEMA	Programa Pequeña Minería y Minería Artesanal/Small and Artisanal Mining Programme
PIF	Project Identification Form
PCM	Presidencia del Consejo de Ministros /Presidency of the Council of Ministers
PIR	GEF Project Implementation Report
PM	Project Manager
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
PRIDER	Inclusive Rural Development Programme
PSC	Project Steering Committee
RBM/PCM	Results Based Management/Project Cycle Management
SDG	Sustainable Development Goals
SERNAP	Servicion Nacional de Áreas Protegidas/The National Service of Natural Areas Protected by the State
SESP	Social and Environmental Screening Procedure
SOTRAMI	Sociedad de Trabajadores Mineros de Santa Filomena/Santa Filomena Mining Workers Society
STAP	GEF Scientific and Technical Advisory Panel
SUNARP	Superintendencia de Registros Públicos/ Superintendent of Public Records
SUNAT	Superintendencia Nacional de Aduanas y de Administración Tributaria / National Superintendent of Customs and Tax Management
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
UNIDO	United Nations Industrial Development Organization

II. DEVELOPMENT CHALLENGE

Artisanal and Small-Scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment, accounting for about 35% of total mercury releases⁵. Mercury is a potent and persistent toxin, which can lead to acute neurological and renal disorders in adults and severe mental and physical dysfunction in children. It accumulates in the food chain, leading to ecosystem impacts worldwide and exposure of people who are not involved in gold mining activities. Rudimentary practices applied in ASGM also bring about other environmental, health and safety impacts owing to the unregulated discharge of mining sediments into water bodies, land degradation, and poor safety practices.

Peru is the largest producer of gold in Latin America and the sixth largest in the world⁶. Total mercury releases to the environment from ASGM in Peru were estimated to be 70 tonnes in 2010⁷, and this has likely risen with increasing gold production and miner population. According to the Ministry of Energy and Mines, as many as 200,000⁸ Artisanal and Small-scale Gold miners produced 38.7 tonnes of gold, or roughly one quarter of Peru's total gold exports in 2016⁹. This gold transfers wealth to rural areas providing immediate livelihoods for the poorest and most disenfranchised, in areas like the Andean Regions (e.g. Sierra Rural) where approximately 14,9% (2016¹⁰) of the population lives in extreme poverty. Depending on the gold price and new prospects, migratory waves of potential ASGM miners are the result.

The latest gold rush has hit the Peruvian Amazon. Deforestation from illegal mining is destroying indigenous lands, ASGM activities are encroaching on protected areas at a rate of 50,000 hectares per year¹¹, and staple fish of people living far downstream is being polluted as a result of the use of mercury and the release of other heavy metals from the dumping of tailings. In a Carnegie Institute study of people from across the Peruvian Amazon, three quarters of subjects had a mercury body burden greater than allowable limits, and indigenous populations were found to have double the burden of non-indigenous peoples¹². Likewise, in the Andean Regions mining activities have significantly increased since the 1980s. Mining has become the main economic activity in this region which has resulted in economic stagnation and regression because other productive and industrial sectors received little attention.¹³

In 2014, Peru recorded a Gender Inequality Index (GII) of 0.406, which indicated that the gender inequality had improved as compared to the one recorded in 2000 (0.527) and in 2006 (0.441). However, the situation of women still presents serious disadvantages as compared to men. Territories in which mining takes place, record high gender inequality with regard to human trafficking, sexually transmitted diseases (STDs), maternal mortality rate, adolescent birth rate, education and labour force participation.¹⁴

Most of Peru's ASGM are informal, with the highest concentrations found in the departments of Arequipa, Puno, and the Peruvian Amazon (Madre de Dios, Cusco and Puno). The Government of Peru has been trying to formalize the ASGM sector for almost two decades, under three different regulatory frameworks, of which the last (*Estrategia de Saneamiento de la Pequeña Minería y de la Minería Artesanal*¹⁵) was enacted in 2016. The most recent enacted regulatory framework significantly simplifies the number and complexity of steps necessary to complete the formalization processes that were put into place under the 2012 legislations, and extends the grace period until June

⁵ UNEP Global Mercury Assessment (2013)

⁶ Environmental Performance Evaluation Peru 2016 OCDE

⁷ mercurywatch.org, Artisanal Gold Council, accessed May 2014 (no new data available at present)

⁸ MINEM: 2017: exhibition held in MINEM in LIMA June 2017

⁹ http://www.minem.gob.pe/_estadistica.php?idSector=1&idEstadistica=11299

Anuario Minero 2016, MINEM 2017.

¹⁰ Perú Perfil de la Pobreza por Dominios Geográficos (2007-2016) - INEI

¹¹ <http://www.pnas.org/content/110/46/18454.abstract>

¹² <https://phys.org/news/2013-09-natives-affected-amazon-mercury.html>

¹³ <http://cooperacion.org.pe/wp-content/uploads/2017/03/La-Miner%C3%ADa-en-el-Sur-Andino-Cusco.pdf>

¹⁴ <http://hdr.undp.org/es/composite/GII>

¹⁵ <http://www.actualidadambiental.pe/wp-content/uploads/2014/04/Estrategia-de-saneamiento-de-la-peque%C3%B1a-miner%C3%ADa-y-la-miner%C3%ADa-artesanal.pdf>

2019. Almost 70,000 informal miners that have registered for formalization, and until now only 1,124 have successfully formalized¹⁶. The primary barriers to formalization are land tenure, low capacity among miners, insufficient manpower in regional Energy and Mines offices where formalization applications are administered, access to best practices technology and to finance. Informality forces miners to sell their gold through long and inefficient supply chains for as little as 70% of the real value, and prevents them from being able to invest in best practices.

The sluice and the quimbaleta are the most common methods of extracting gold in Peru. Inefficient sluices are used to process river or glacial sediment in the Amazon and Titicaca basins respectively, and without any tailings containment. Uncontrolled discharges lead to significant mercury contamination and turbidity that threaten clean water supplies and fisheries. Quimbaletas are giant mortar and pestle carved from granite blocks that are rocked back and forth manually to grind gold bearing quartz. Often mercury is added directly to the mill, which ensures maximum mercury contamination in the tailings. Mine wastes are generally dumped into random piles or discharged into streams, thus creating long term hazards from dust production, sulfuric acid generation, and heavy metal leaching. Furthermore, both sluice and quimbaleta operations lose most of the gold that is contained in the ore. Therefore, the tailings are often reworked by the poorest miners. Women are often the ones relegated to tailings reprocessing, or to collecting mine waste rocks that have small bits of gold vein on them, the processing of which exposes them to unacceptable high levels of mercury exposure, dust, and physical harm.

Most miners work in small teams of just a few business partners (“socios”) to excavate and process ore with the help of some hired labour. Although they are usually grouped into cooperatives, each team of socios process their own ore in small batches because each produces ore of a different gold content. Lack of trust and administrative capacity hinders the ability of mining cooperatives to make decisions and pool capital in a way that would enable them to design and commission mercury free processing plants, obtain subsurface concessions and permits, and mitigate environmental risks. Furthermore, they often mistrust or are unaware of equipment suppliers and consulting companies that could help them to implement best practices. Local mining equipment manufacturers are increasingly common, and many produce products of adequate quality (grinding mills in particular), but many do not conform with standards set by the Ministry of Production and are therefore themselves informal. As a result, miners tend to mistrust them and may not even be able to formalize or finance plants made with unlicensed equipment.

Many miners are therefore forced to sell their bulk ore directly to “toll mills” that collect ore from all over the country to be processed in massive industrial cyanidation facilities. Miners pay the cost of freight, and are heavily discounted for moisture content and for cyanide consuming elements such as copper. Women miners face additional challenges. They often sell their recovered gold in the location where they live or close-by. Because of their informality, lack of knowledge and negotiating skills, they often experience abuse or are being deceived by gold/ore buyers and mills owners who impose unfavourable purchase conditions. Toll mill laboratory analyses often claim that the gold content is as little as half of the real value, but many miners have no option but to sell their ore, perhaps keeping the highest grade material for artisanal grinding and amalgamation. As a result, miners earn little of the value contained in the ore that they risk their lives underground to obtain and tend to mistrust all toll millers, even though there are some ethical operations to which they could sell. Modest progress in eliminating mercury use has been achieved by identifying these ethical toll mills and fostering trust and uptake contracts between them and rural mining communities. However broad transformational change will require greater capacity building among miners and regional mining equipment and services industries.

It is instructive to look at SOTRAMI, the world’s first fair trade label gold producer, as one of the only ASGM operations in Peru (and perhaps the world) to go from stone age quimbaletas and mercury amalgamation to highly sophisticated and responsible industrial processing using cyanide. SOTRAMI was the beneficiary of direct technical assistance and funding from the Swiss Government, World Bank, and consistent support from local NGOs over more than a decade. To reach the many thousands of other mining communities in Peru with this level of funding and assistance is simply not practical. It was hoped that fair trade gold certification would catalyze systemic change by offering premium prices for ethically and environmentally responsible gold, but this has not come to pass and even

¹⁶ Dirección General de Formalización Minera (DGFM), personal communication to PPG team, August 2017.

SOTRAMI no longer goes to the expense and trouble of maintaining their premium status because the market for premium gold has not generated sufficient demand. Nevertheless, the Government of Peru is developing a national responsible gold brand in hopes of developing the market for local raw and value added gold.

DRAFT

III. STRATEGY

One of the main challenges of ASGM is that informal and illegal activities are increasing. In addition to the environmental impacts such as vegetation and soil loss and mercury releases to water and the environment there are important social consequences, further aggravated by the market price of gold in recent years.

The objective of the project is to reduce/eliminate mercury releases from the Peruvian 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.

The Peru GEF GOLD project is one of the eight¹⁷ (8) country-level projects being implemented as part of the Global Opportunities for Long-term Development of the ASGM sector – GEF GOLD programme. As such, the Peru GEF GOLD project will be able to benefit from efforts, lessons-learned and experiences coming out of the other seven (7) country-level projects as well as the GEF GOLD global component on communications and knowledge management, which is being managed by UNEP. The objective of the global component is to unify and coordinate efforts among all the GEF GOLD child projects and to capture experiences and lessons-learned and to disseminate knowledge among the child projects as well as to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM.

The project's Strategy has been based on a Theory of Change (ToC) of which a diagram can be found in Annex S. The ToC diagram summarizes the linkages between the development challenge and the immediate, underlying and root causes as described in *Section II: Development Challenge* as well as the project's proposed interventions and expected outcomes described in *Section III: Strategy* and *Section IV: Results and Partnerships*.

STRENGTHENING INSTITUTIONS AND THE POLICY/REGULATORY FRAMEWORK FOR MERCURY-FREE ASGM

As part of the project, national and regional level policies, plans, regulations, standards and measures will be assessed, and changes suggested, with the objective of creating an enabling environment for the process of formalization as a first step towards the reduction and phase-out of mercury from ASGM. Secondly, policy and regulatory measures will be improved to further advance mercury phase-out and formalization in the ASGM sector. In addition, the project will further develop the capacity of national and regional government agencies to assess, plan, implement, support and monitor sustainable and mercury-free interventions in the ASGM sector. It will do so by initially assessing the capacity of these project partners, developing plans for strengthening their capacity and subsequently implementing these.

In terms of past and on-going formalization efforts supported by the Government of Peru in the last 15 years, two main formalization processes can be highlighted, each of which resulting in the issuance of laws and regulations (mining and environment sectors) with varying level of results. The "First ordinary formalization stage" was implemented during the 2002 – 2012 period under Law 27651. It resulted in 6,884 formalized miners. The "extraordinary stage" which was implemented over the period 2012 – 2016 under Legislative Degrees 1100 - 1105 produced resulted in 108 formalized miners. Within the framework of their formalization efforts, key laws were issued, such as the Supreme Degree 045-2010 Presidency of Ministerial Council (PCM) that created the Multisectoral Commission to follow-up on and monitor the formalization process, as well as the Supreme Degree 004-2012 (MINAM) that issued the Corrective Environment Management Instrument (IGAC) that constitutes one of the key requirements in the formalization process.

¹⁷ Burkina Faso (UNIDO), Colombia (UNDP), Guyana (Conservation International), Indonesia (UNDP), Kenya (UNDP), Mongolia (UNEP/UNIDO), Peru (UNDP), and Philippines (UNEP/UNIDO).

The project will support the Government of Peru at national and regional level to overcome and address the gaps in the above-mentioned formalization processes as well relevant laws to strengthen formalization efforts.

For example, the project will collaborate with the Permanent Multisectorial Commission on Formalization and Illegal Mining to build capacity for improved inter-agency collaboration among national and regional offices (e.g. DREM/GREM). The Project will increase the frequency of meetings and facilitate the exchange of information to help government entities make the application processes for local concessions, environmental licenses and other permits, simpler, clearer, more efficient and accessible to well functioning ASGM cooperatives within in a reasonable time frame and reasonable cost.

ESTABLISHING FINANCING LENDING ARRANGEMENTS TO PROVIDE LOANS FOR MERCURY FREE EQUIPMENT TO LEGALIZED ASGM MINERS/COOPERATIVES.

To improve miners' access to financing to procure mercury-free processing equipment, introduce best practices and improve the performance of their production processes, the project will support the improvement/development of financing mechanisms that can tailor to the ASGM sector.

Leveraging of existing financial mechanisms and funding opportunities or developing new financial mechanisms requires awareness raising, training and capacity building among potential lenders, the mining service industry, and miners themselves. The project aims to establish innovative financial mechanisms with banks, funding institutions and other potential investors, and build their capacity and understanding through training and awareness raising to i) develop financial products that would tailor to the ASGM sector and ii) allow funders to be able to better assess loan applications from miners. The project will also help finance partners assess to what degree a mining organization could use land tenure (approved mineral concession licenses from the government) as a loan guarantee, due to inherent value and potentiality for formality and stability that they represent.

In partnership with government agencies, financial institutions, investors, equipment manufacturers and distributors, and other mining service providers, the project also will train miners and mining cooperatives in OECD due diligent record keeping and reporting (e.g. reporting on resource exploration and estimation, gold production tracking, economic modeling, and full life cycle mine planning) that can increase miners' potential access to conventional financing options as well as new financial mechanisms and can prove the economic case for loans and leases. The project will develop (in partnership with MINEM) evidence based economic models of processing plant upgrades based on existing and functioning best practice mines (e.g. SOTRAMI) and chemical-free pilot plants established as part of this project. The results will present strong economic arguments (including processing plant payback periods) to miners and financiers to encourage change through investment. Subsequently, miners and mining cooperatives will be trained by the project in developing loan/investment applications and submitting these applications to financiers. These opportunities rely on formality. Therefore, throughout the project miners will be supported in their formalization processes. Finally, the project will help miners, cooperatives, banks, and financiers assess the value of tailings as a resource and find responsible processing facilities in the country or abroad that may purchase mine waste as it is produced, thereby reducing the landscape burden and risks of long term unmanaged tailings disposal.

INCREASING CAPACITY FOR MERCURY-FREE ASGM THROUGH PROVISION OF TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER AND SUPPORT FOR FORMALIZATION.

The project's core strategy for mercury reduction/elimination is to facilitate the adoption of alternative processing methods which utilize less or preferably no mercury. The project will assist regional and national stakeholders and beneficiaries in Peru in implementing mercury reduction/elimination interventions by providing technical assistance, while tracking changes in mercury use and practices (which in turn provides insights in emission and exposure reduction) at ASGM sites benefitting from the project.

This project will assist twelve (12) mining groups (concession/operator owners¹⁸) from the regions of Puno (Ananea district), Arequipa (Yanaquihua district), Cusco (Amazon districts), and Piura (Ayabaca or Suyu). The goal is to

¹⁸ **Puno:** CECOMIP/CECONSAP/HALCÓN DE ORO IV/ORO SUR-LIMATA; **Arequipa:** MINERA REY/ISPACAS AMACCI/ISPACAS SOLEDAD/MINERA SAN

eliminate mercury use completely in each of the priority mining communities, but the project indicators call for at least a 50% reduction of mercury emissions among all target mining groups. At least 1,200 miners will participate in project activities, with on average 100 miners from each intervention site. Preliminary estimates from research and PPG fieldwork suggest cumulative emissions among all target communities could exceed 6 tonnes of mercury per year. The mercury reduction target is therefore 5 tonnes per year (starting in year three (3) of the project), resulting in a cumulative mercury release reduction of 15 tonnes over the duration of the 5-year project.

A socioeconomic baseline survey and a mercury/gold mass balance inventory will be conducted at each of the 12 priority project sites. The assessment will also collect sex-disaggregated data. These surveys/inventories will include the ranking of cooperatives and village enterprises in these priority sites, by degree of formalization, organization, existence or possibility of land tenure, accessibility to ASGM sites, security, land conflict issues, mercury use/contamination, women's participation, etc. The surveys/inventories will be informed by the National Action Plan (NAP) process, but will in turn also support the NAP process as well as global estimates of Hg emissions.

Initially the project will focus most of its support on the most formalized and organized mining groups holding legal concessions (with a priority for women-led mining groups or mining groups with female members), however the project will also evaluate the potential for project support to assist other mining groups in their formalization processes. Ultimately the goal of the project is to help these mining groups to reach a stage of formalization in which they have access to finance and clean technologies.

In the regions of the 12 selected priority sites, the project will assess existing analytical, consulting, and equipment resources and services. (Regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers can be key partners in enabling changes in formalization and ore processing methods. The project aims to partner with such entities to implement project interventions, to facilitate replication of project successes and support long-term continuation of changes made during the project.

FORMALIZATION: The first and most important step in formalization is to obtain the subsurface exploitation rights. That is often complicated because in many cases there is already a concession holder for a given site where miners are operating. For miners that do not have legal subsurface rights, the project will help miners apply for open concessions or to negotiate with mineral title holders. The project will also review loopholes and non-compliant concessions that present obstacles to formalization of ASGM. Miners that already have a permit to exploit the subsurface resource often still have significant work to do in order to become fully formalized. For these miners, the project will help i) Design processing and waste management plans (including tailings storage) that comply with Government of Peru (GoP) laws and environmental standards; and ii) Facilitate the process to obtain permits to establish and operate a plant (possibly including plans for changing existing plant infrastructure).

In parallel, the project will also support the development of a consulting service sector (or in case of existing services improve their capacity) that can support miners in their formalization processes by assisting in the design of processing and waste management plans and obtaining permits.

REDUCING MERCURY BY IMPROVING GOLD PROCESSING PRACTICES: Key mining sites used by mining groups supported by the project will be characterized in terms of ore and production means, and will undergo a general needs assessment. Ore assays will be conducted in accredited metallurgy labs, but will be supplemented with practical on-site liberation tests/training events in the field to give miners the opportunity to observe results first hand and learn how to obtain such results themselves. These results will then be used to help the miners/mining groups design processing strategies and economic models to convert to mercury free practices.

Training and demonstration activities organized by the project to support miners/mining groups in converting to mercury-free practices require long-term training plants and facilities to be available in or close to key project sites and as early on in the project as possible.

At least one (1) mercury-free ore processing pilot training plant will be established in 1 project location. This training plant will be a full-scale mercury free processing facility where miners can engage in hands-on mineral processing experiments with their own ore, determine the gravity recoverable gold yields of their ore (and prepare samples for analysis in a lab using best practices), and decide on methods for all the different ores produced by the mine cooperative members. This gravimetric processing plant would include: a batch mill of 5-10 T per day capacity and crusher/sorting screens to produce the optimal mill feed; a batch centrifuge for primary concentration, shaker table for final concentration, torches and crucibles for direct smelting, water pumps to circulate water from waste ponds back into the mill, and a de-watering screw to condition the tailings for sale and transport. The project will partner with local manufacturers in the establishment of the pilot chemical-free plant. The milling facility will also be accessible to nearby mines, to whom they can rent surplus milling capacity. This could create further demand that would enable pilot site miners to expand their capacity. The pilot training plant is expected to be leased to a cooperative or community by a credible lender through a *lease-to-own-programme*. The lease payments would accrue to a revolving fund managed by the lender out of which new mercury free instalations could be financed.

In addition, small mobile gravimetric training plants, to be financed by the project, will be established in each project region (4 mobile plants in total). The mobile plants will be composed of lab scale processing tools that will be used to teach artisanal grade control and exploration (using only simple mills and gravity concentration tools to assess the ore grades, prove presence of gold in exploration samples from prospective mine locations, and determine optimal grain size of milled ore for maximal gold liberation), as well as help miners make economic calculations and comparisons of mercury versus non-mercury processing methods. The core of these mobile plants is a high capacity (~2 tonnes per hour) concentration tool that can concentrate small amounts in demonstrations and ore analysis, but can also be directly incorporated into a full-scale plant to directly eliminate mercury. Similar to the large pilot training plant, at the end of the project, the ownership of the mobile plants will be transferred from credible lenders to mining cooperatives or community groups in a *lease-to-own-programme* so that the miners can continue mercury-free processing and train new miners in its use. The lease payments would accrue to a revolving fund managed by the lender out of which new mercury free instalations could be financed.

In the process of establishing processing plants and the mobile gravimetric plants, the capacity of local engineering and consulting firms (tailings transport, gravity assay laboratory services, ore crushing, etc. with a particular focus on women led enterprises) will be built to encourage the replication of successful practices elsewhere and support businesses in preserving and improving their livelihoods.

The project will train a total of 1,200 miners through activities centered around the large pilot training plant and the 4 smaller mobile training plants. These training activities will foster linkages among miner, financier, equipment manufacturer, distributor, regulator, and community participants in a way that each participant can build an economic model of mercury free practices according local ores they have tested themselves.

Subsequently, building on capacity established by the project (formalization, increased access to finance and lenders that understand the associated challenges and opportunities, increased access to alternative technologies and services, stronger production and recovery data, etc.), the project will support at least 6 mining groups in establishing full scale processing plants that will eliminate mercury use.

As a result of establishing mercury-free processing plants and introducing mercury-free techniques, mercury releases from ASGM to the environment will be reduced by 15 metric tonnes over the life of the project, and thus generate Global Environmental Benefits (GEBs).

Once proven and profitable models backed by a modernized equipment supply become rooted in a community the gains to be made by using best practices will drive further mercury reductions. More accessible access to financing will spur further mercury-free installations and thus mercury reductions. In parallel, the project will facilitate trust and transparency among responsible toll milling companies (medium scale industrial cyanidation facilities that buy ore) and ASGM groups that cannot meet the fiduciary, organizational, or formality required to develop their own mercury free processes. This is a proven approach that can eliminate significant mercury use without the need for large investments in training or equipment.

Tailings Management: Mercury containing legacy tailings present a long term environmental and human health risk from mercury releases, acid generation and potential storage failures. Yet such tailings can also be a resource as they can contain considerable concentrations of gold. The project will therefore undertake a feasibility study to assess the potential for the removal of mercury from tailings by large-scale mining companies, who operate facilities that could be adapted to recover mercury from ASGM mine wastes (for instance, many industrial mines produce mercury as a byproduct, so they already have industrial retorts and environmental management facilities. ASGM tailings processing could extend the useful life of large scale plants). Based on the outcomes of this feasibility study, partnerships with large-scale mining companies could potentially be developed and lead to a reduction in environmental risks from unsound tailings disposal (by trucking away tailings and ultimately extracting remaining gold concentrations), and improve relationships between ASGM miners and large mining cooperatives.

Pilot Remediation: Finally, the project will undertake one small scale mercury removal pilot project, with extreme precautions for the prevention of remobilization of mercury in fugitive suspended sediments, to recover residual gold and mercury from orphaned illegal alluvial mine sites in the Amazon. Several centrifuges and shaker tables in series will progressively remove metals from the tailings, and a de-watering spiral will pile the residual sands for use as fill when restoring natural landscapes. Careful testing of sediments before and after will establish the efficiency of the methods used, and ensure that end tailings contain as little as possible residual mercury. A series of settling ponds in which lime and flocculants are added will ensure maximum recovery of fine suspended sediments before recycling the wastewater back into the process in a closed circuit. A full economic balance of the activity will be analyzed, with the hopes that recovered gold can significantly offset the cost of restoration and reforestation.

Better access to gold markets: More income for miners can also accrue from better access to markets for clean gold and tailings. Presently, miners sell their gold to middlemen that pay a low price for their gold. The project's support to build the capacity of miners in record keeping of local ore production and gold yields (which are essential for operational quality control) are also key elements of OECD due diligence in proving the provenance of gold, so that miners can sell their gold directly to international refiners.

The project will help broker uptake arrangements with international refiners, with local banks as intermediate gold custodians and fund transfer/holding agents, so that miners can safely accumulate enough gold for export to international refiners while still meeting their daily needs. As a result, miners will get a much higher value for their gold and more income stability, and this will incentivize others to formalize and become responsible miners.

Where possible the project will assist interested and eligible groups in ethical gold certifications. The project might engage certification organizations to assess the top performing mining groups in the project for their possible certification, which will make recommendations for improvements and next steps.

AWARENESS RAISING, CAPTURING AND DISSEMINATING EXPERIENCES, LESSONS-LEARNED AND BEST PRACTICES.

To raise awareness of project stakeholders and beneficiaries on various aspects related to the objective of the project, the project will develop and implement an awareness raising plan that is expected to reach ~ 20,000 people.

The Peru GEF GOLD project, being a part of the Global Opportunities for Long-term Development of the ASGM sector – GEF GOLD programme, will also be able to benefit from the efforts of the UNEP implemented GEF GOLD global child project that will unify and coordinate efforts among all the GEF GOLD child projects, focusing on the capturing of experiences and lessons-learned and subsequently disseminating knowledge generated to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM. For example, the Peru GEF GOLD project will report its results¹⁹ to the global child project for analysis and reporting purposes on a quarterly basis using report templates provided by the GEF GOLD global

¹⁹ Tons of mercury avoided; # of miners brought into formalization process; x amount of gold produced without mercury and sold to international market; and \$ made available to ASGM through financial mechanisms.

component. In turn experiences, lessons-learned and best practices will be disseminated by the GEF GOLD global component.

In addition, The Peru GEF GOLD project will participate in yearly face-to-face Programme Conferences, Global ASGM Forums and monthly programme/project calls with all the eight (8) GEF GOLD child country projects. These exchanges will facilitate South-South and Triangular Cooperation and dissemination of experiences, lessons-learned and best practices.

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IV. RESULTS AND PARTNERSHIPS

Expected Results:

For details on the project outputs please refer to the multi-year work plan in Annex A.

PROJECT OBJECTIVE: PROTECT HUMAN HEALTH AND THE ENVIRONMENT FROM MERCURY RELEASES ORIGINATING FROM THE INTENTIONAL USE OF MERCURY IN ARTISANAL AND SMALL-SCALE GOLD MINING (ASGM)

Objective indicators: There are a number of targets the project is going to work towards to achieve the project's overall objective (in addition to the outputs and results that will be achieved through the four (4) project components). These include:

- *At least four (4) new partnership mechanisms establishment at national level with funding for sustainable management solutions for mercury elimination at ASGM.* These partnership mechanisms will be established as part of project Component 2 (*Establishing financing lending arrangements to provide loans for mercury-free processing equipment*), and Project Component 3 (*Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization*) to enable the achievements of the project's various outputs and targets.

The project aims to establish/improve at least 4 financial mechanisms to increase funding for sustainable ASGM as part of Component 2. The project will mainly work with the Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and with the Rural Savings and Loans Banks and their respective branches located in the three pilot regions (See Annex R for the financial assessment conducted as part of the project) on the development of Concessional Loans and Revolving Funds tailored to the ASGM sector. Potentially the project will also work with other international and national public and private financial entities in order to establish and implement feasible financial mechanisms. The project will also support MINEM in the development and operation of the Mining Formalization Fund.

In addition, the project aims to establish/improve the following partnership mechanisms to increase funding for sustainable ASGM as part of Component 3: Establish at least 1 new partnership with an international refiner.

- *47,097 direct project beneficiaries (44% women and 56% men) for which the risk of mercury exposure has been reduced.* Direct project beneficiaries are those that will experience a reduction in mercury releases to their living, working and school environment. The total number of direct beneficiaries is based on the District Population (47,097)²⁰ which include those trained by the project (1,200). Additional project beneficiaries are those people reached by the awareness raising campaign (~5,000) and their family members (~15,000) who do not live in the project districts.

²⁰ Inhabitants in pilot districts: Ananea (Puno): 20,572 inhabitants (11,769 men and 8,803 women); Yanaquihua (Arequipa): 4,936 inhabitants (2,500 men and 2,436 women); Paimas (Piura): 9,638 inhabitants (4,800 men and 4,836 women); Suyo (Piura): 11,951 inhabitants (5,999 men and 5,952 women).

PROJECT COMPONENT 1/OUTCOME 1: STRENGTHENING INSTITUTIONS AND THE POLICY/REGULATORY FRAMEWORK FOR MERCURY-FREE ASGM.

This component aims to further advance the capacity of national and regional government agencies to assess, plan, implement, support and monitor sustainable and mercury-free interventions in the ASGM sector. It will do so by initially assessing the capacity of these project partners, developing plans for strengthening their capacity and subsequently implementing these.

Furthermore, as part of this component, policies, plans, regulations, standards and measures will be assessed, and changes suggested, with the objective of creating an enabling environment for the process of formalization as a first step towards the reduction and phase-out of mercury from ASGM. Secondly, policy and regulatory measures will be improved to further advance mercury phase-out in the ASGM sector.

Ultimately the objective of strengthening institutions and the policy/regulatory framework at national, regional and local level is to improve the coordination among entities, improve the capacity of entities for regional and local oversight of ASGM mining activities, and make the formalization process (application process for local concessions, and the issuing of environmental licenses and other permits) simpler, clearer and more affordable so that they are accessible to well-functioning ASGM cooperatives within in a reasonable time frame and reasonable cost.

Outcome Indicator 1.1: National systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.

1.1.1 Capacity of 4 government entities increased to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.

The project will start with conducting an assessment (including gender aspects) of the capacity of government entities (national and regional level) that are responsible for providing ASGM extension services to the project's priority 12 pilot ASGM sites. The assessment will also assess existing extension programmes and available resources at pilot level to identify remaining needs and gaps.

Based on the outcomes of the assessment, the project will make recommendations to improve the capacity of these entities and to improve the quality and scope of the type of extension services and programmes offered. Based on preliminary assessments conducted during the PPG phase, at national level the project expects to support the Ministry of Energy and Mining (Permanent Multisectoral Commission for the Formalization of the mining and illegal mining). At regional level the project will support the capacity building of the three (3) Regional Energy and Mining Authorities and their staff.

The project will build the capacity of these 4 entities involved in/responsible for ASGM in the 12 project priority sites, through the implementation of capacity building plans that will be formulated based on the recommendations coming out of the capacity assessment. These capacity building plans will include the provision of joint training and workshops (To ensure better coordination and exchanges of experiences and lessons-learned between national, regional and local staff) to increase capacity on:

- Support policy and regulatory reform to make essential steps for formalization easier, faster and less costly
- Best Available Technologies (BAT) and Best Environmental Practices (BEP) for ASGM;
- How to coach ASGM communities in adopting better practices;
- Monitor on-going ASGM practices and improve enforcement of local regulations and standards
- Improving cross sectoral coordination;
- Incorporating gender dimensions in all ASGM related government support.

Furthermore, the project will collaborate with the Permanent Multisectoral Commission on Illegal Mining and Formalization. The project aims to build capacity its capacity for improved inter-agency collaboration among national and regional offices (e.g. DREM/GREM) and increase the frequency of meetings and the exchange of information to ultimately help government entities make the application process for local concessions, and the issuing of

environmental licenses and other permits, simpler, clearer more efficient so that they are accessible to well functioning ASGM cooperatives within in a reasonable time frame and reasonable cost.

The project expects to promote gender responsive dimensions by providing training, including gender responsive assessments and training, to approximately 40 government staff members.

- Output 1.1.1 Assessment conducted of the capacity of government entities (national and regional level) involved in the management of ASGM and/or responsible for providing ASGM extension services to the project's priority ASGM sites.
- Output 1.1.2 Capacity building plans developed and implemented for 4²¹ institutions.
- Output 1.1.3 Trainings provided, including gender responsive assessments and training, to ~ 40 government staff members.

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 2 policies, regulations and standards revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.

The ultimate objective of strengthening the policy/regulatory framework at national and regional level is to make the formalization process (application process for local concessions, and the issuing of environmental licenses and other permits) simpler, clearer and more affordable so that they are accessible to well-functioning ASGM cooperatives within in a reasonable time frame and reasonable cost.

The project will start with an assessment of policies, plans, regulations, standards and measures in place pertaining to the formalization of ASGM and mercury phase-out in the ASGM sector. The assessment will identify remaining needs and gaps, overlaps and unclarities relevant for each of the 12 project ASGM sites including needs for gender mainstreaming. Subsequently the project will provide a list of recommendations and proposed actions to address these.

Based on the rapid regulatory and policy assessment conducted during the PPG phase (these needs will be verified during the project's assessment of policies, plans, regulations, standards and measures) the project will most likely focus on policies and regulations related to the mining concession system and land tenure. The main challenge encountered by ASGM miners in mining zones across the country is that often the rights of the land owner and the concession owner overlap, most frequently in favor of the concession owner. Since a land title does not provide the rights to subsurface wealth, but a concession does, this leads to legal and social conflicts, and presents obstacles for the formalization of the ASGM sector. Unfortunately, Regional Governments lack sufficient technical and legal capacity to resolve such conflicts and distinguish between the different rights.

In addition, the project will also focus on reinforcing policies and regulations related to human health, worker safety, child labour, women protection and mercury use as stipulated in the Peruvian National Action Plan for Artisanal and Small-scale Gold Mining.

Note: While developing the above listed policies, regulations and guidance documents, the project will ensure the mainstreaming of gender dimensions.

- 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 12 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 mercury for ASGM gold processing.

²¹ National Level: Ministry of Energy and Mining (Permanent Multisectoral Commission for the Formalization of the mining and illegal mining). Regional Level: Three (3) Regional Energy and Mining Authorities and their staff.

- Output 1.2.2 Recommendations to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups.
- Output 1.2.3 2 policies, regulations and guidelines²² revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization 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.

For miners, one of the most significant and pernicious barriers to the development of a responsible ASGM sector is access to finance. Finance entities (banks, microfinance institutions, and other lenders) do not commonly provide loans to the ASGM sector as the risks are often perceived too high and such entities do not have the expertise and experience to review ASGM loan applications or develop financial products that are tailored to the ASGM sector. On the other hand, miners' cooperatives and organizations do not have much experience in record keeping and reporting (e.g. resource exploration and estimation, production tracking, economic modeling, and full life cycle mine planning) or the preparation of loan applications, which can increase their access to conventional and new financing options.

To overcome this challenge, as part of Component 2, the project aims to: i) Establish partnerships with finance entities and build their capacity and understanding to develop financial products that would tailor to this sector and better assess loan applications from miners, and ii) work with miners' cooperatives and organizations to build their capacity in developing loan/investment applications for mercury-free processing equipment/investments and subsequently apply for loans or investments.

Outcome Indicator 2.1: Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.

- 2.1.1 4 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector.

Based on the outcomes of the financial mechanism assessment conducted during the PPG phase (See Annex R), the project expects to establish/improve at least 4 financial mechanisms to increase funding for sustainable ASGM.

The project aims to establish/improve at least 4 financial mechanisms to increase funding for sustainable ASGM as part of Component 2. The project will mainly work with the Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and with the Rural Savings and Loans Banks and their respective branches located in the three pilot regions (See Annex R for the financial assessment conducted as part of the project's PPG phase) on the development of Concessional Loans and Revolving Funds tailored to the ASGM sector. The project also aims to explore possibilities to partner with the Inclusive Rural Development Program (PRIDER), developed by the *Corporación Financiera de Desarrollo / Finance Development Corporation (COFIDE)* and supported by UNDP, to set up financial products that could serve the ASGM sector. Potentially the project will also work with other international and national public and private financial entities in order establish and implement feasible financial mechanisms. The project will also support MINEM in the development and operation of the Mining Formalization Fund.

The project will first analyze the entities' existing financial products, and prepare recommendations for their improvement and redesign (e.g. by incorporating soft criteria that promote the formalization and association of women/youth – women entrepreneurship, accessibility and suitability for women miners/groups, the legalization of land, among others). Subsequently the staff of the financial entity(ies) will be trained in the (re)design of these financial products so they suit women and men mining groups' needs for the ASGM sector (30% of financial staff trained are expected to be women).

²² Policy and regulations regarding to the Concession Mining System (Land Tenure). Reinforcing policies and regulations related to human health, worker safety, child labour, women protection and mercury use.

The project will also train financial entities on how to use the kinds of long-term records miners may already have (such as gold sales records, records of ore production, etc.) to assess the economic case for loans and leases. Furthermore, the project will work with the financial entity(ies) to assess to what extent land tenure can be used (approved mineral concession licenses from the government) as a loan guarantee, because of the inherent value and potential for formality and stability that they represent. Finally, the project will help banks and financiers learn how to assess the value of tailings as a resource.

After the training is completed, the project will support the redesign and launch of the improved financial mechanisms that meet the needs of women and men mining groups.

The project will also conduct a number of workshops or awareness raising events to increase the awareness of mining communities (including women miner groups) on the availability of these loan facilities (as part of Outcome 2.2, miners will receive the necessary training on how to apply for loans offered by existing or new loan facilities).

To build the confidence of banks and/or other funding institutions in supporting change through investment (providing financing for upgrading processing plants and reducing mercury use), and at the same time provide miners with insights in the economic opportunities such upgrades can bring about, the project will develop (in partnership with MINEM) evidence based economic models of processing plant upgrades. These economic models will be based on existing and functioning best practice mines (e.g. SOTRAMI) and chemical-free pilot plants established as part of this project. The results will present strong economic arguments (including processing plant payback periods) to miners and financiers to encourage change through investment.

- Output 2.1.1 4 finance entities selected that the project will partner with.
 - Output 2.1.2 Memoranda of Understanding (MoU) signed with each of the finance entities the project is going to partner with.
 - 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.
 - Output 2.1.4 Staff of the financial entity(ies) trained in the (re)design of these financial products for the ASGM sector.
 - 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.
 - Output 2.1.6 4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups.
 - Output 2.1.7 Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and Sharia and private sector financing possibilities.
 - Output 2.1.8 Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions)
 - Output 2.1.9 Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established.
- 2.1.2 15 million USD²³ (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms.
- 2.1.3 3 million USD²⁴ (Total amount of funding) allocated to the ASGM sector through approved loans.

²³ The National Fund for Mining Formalization (managed by MINEM) currently has approximately 12 million US\$ available, but this funding level is expected to rise in the coming years. In addition, the project aims to work with the Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and with the Rural Savings and Loans Banks to develop additional financial mechanisms which are expected to make available an additional 3 million US\$. Therefore, the total amount of funding available to the ASGM sector through existing and new financial mechanisms would then be 12 + 3 = 15 million US\$ per year.

²⁴ Taking into account the number of miners (1,200) to be trained in accessing financial resources and the kind of technology requirements to improve

As previously pointed out, for miners, one of the most significant and pernicious barriers to the development of a responsible ASGM sector is access to finance, which is why increasing access to finance is one of the project's objectives.

To ensure that sufficient progress is being made, the project will regularly (prior to the project's launch and subsequently on a yearly basis), undertake an assessment to determine 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.

If at the time of the Mid-Term-Review/Evaluation, it appears that not sufficient loans are being received by the ASGM sector, the project will assess if it must provide support to additional financial entities, or whether additional support to mining communities would be in place. The recommendations coming out of the Mid-Term-Review/Evaluation will then reshape the direction of the project in this regard.

Output 2.1.10 Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implementation of project Outcome 2.1

Output 2.1.11 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.**

Outcome Indicator 2.2: 12 ASGM miner groups (of which 20% of the miners are women) are capacitated to apply for loans for mercury-free processing equipment/investments.

2.2.1 12 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).

The project will work with miners' cooperatives and organizations to build their capacity in developing loan/investment applications for mercury-free processing equipment/investments.

As a first step, the project will train miners and mining cooperatives on how to use the kinds of long-term records miners may already have (such as gold sales records, records of ore production, etc.) and train them in improving the recording and reporting of present production activities as well as other aspects critical to prove the economic case for loans and leases (e.g. how to report on resource exploration and estimation, production tracking, economic modeling, and full life cycle mine planning). Improving this type of reporting can increase the potential access of miners and mining cooperatives to conventional financing options as well as new financial mechanisms and opportunities.

The project aims to train 12 miners groups (of which 20% of the members are women) on record keeping and reporting, including business plan development.

Output 2.2.1 At least 120 miners and managers of mining groups trained (of which 20% of the miners are women) on record keeping and reporting;

2.2.2 12 loan applications developed

The project will support 12 mining groups and train them in the development of loan applications for submission to financial mechanisms. In doing so, the project will work with mining groups, communities or cooperatives located in

their production processes and mercury phase-out, it is estimated that the project would support mining groups in accessing around 3 million USD in financial assistance. This is roughly proportional to the amount of funding available through the Mining Formalization Fund for the project's three pilot regions (the 47,097 miners in these regions represent roughly 25% of the total number of ASGM miners in the country (200,000), which percentage wise would grant them access to ~ 3 million US\$).

the 12 project priority sites. Initially the project will work with those groups that are most formalized and organized and hold legal concessions, however the project has the intention to expand this support later on to groups that might be less organized at the start of the project but will have advanced in their formalization processes later on as a result of project Component 3.

The project will keep track on a yearly basis of the number of loan applications developed with project support. If at the time of the Mid-Term-Review/Evaluation, it appears that not sufficient loans are being received by the ASGM sector, the project will assess if it must provide support to additional financial entities, or whether additional support to mining communities would be in place. The recommendations coming out of the Mid-Term-Review/Evaluation will then reshape the direction of the project in this regard.

Output 2.2.2 12 loan applications developed with project support.

2.2.3 50% of loan applications (developed with technical support of the project) approved.

Although the project will not have full control over the approval process of the loan applications, the project will regularly (on a yearly basis), conduct an assessment of the number of project-supported loan applications that have been approved, the percentage of approvals as well as other relevant statistics (total amount of funding, funding per loan approved, etc.). The results of these assessments will provide an indication of the success of the project in supporting mining groups in the development of their loan applications.

If at the time of the Mid-Term-Review/Evaluation, it appears that not sufficient loans are being approved, the project will assess if it has to provide support to additional financial entities, or whether additional support to miner communities would be in place. The recommendations coming out of the Mid-Term-Review/Evaluation will then reshape the direction of the project in this regard.

Output 2.2.3 Assessment conducted on a yearly basis of the number of approved loan applications.

PROJECT COMPONENT 3/OUTCOME 3: INCREASING CAPACITY FOR MERCURY-FREE ASGM THROUGH PROVISION OF TECHNICAL ASSISTANCE, TECHNOLOGY TRANSFER AND SUPPORT FOR FORMALIZATION.

The main objective of this project component 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 which utilize less or preferably no mercury. The project will do this 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).

In order for mercury reduction efforts and the adoption of alternative technologies to be cost-effective and sustainable, the project will also support ASGM miners in their formalizing processes. This is important as miners will need to reach a certain stage of formalization to be able to access formal financing to purchase cleaner technologies. Formalization also leads to more sustainable income opportunities and safer working conditions and this will benefit the sustained phase-out of mercury in the long-term. Finally, to further increase income for ASGM miners who produce mercury-free gold, the project will also work on establishing partnerships with gold buyers and refiners to establish routes to market for mercury-free mined gold.

Outcome Indicator 3.1: 15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices.

This project will assist twelve (12) mining groups (concession/operator owners²⁵) from the regions of Puno (Ananea district), in Arequipa (Yanaquihua district), Cusco (Amazon districts), and Piura (Ayabaca or Suyo). The goal is to eliminate mercury use completely in each of the priority mining communities, but the project indicators call for at least a 50% reduction of mercury emissions among all target mining groups. At least 1,200 miners will participate in project activities, with on average 100 miners from each intervention site. Preliminary estimates from research and

²⁵ **Puno:** CECOMIP/CECONSAP/HALCÓN DE ORO IV/ORO SUR-LIMATA; **Arequipa:** MINERA REY/ISPACAS AMACCI/ISPACAS SOLEDAD/MINERA SAN CRISTÓBAL; **Piura:** JAMBUR I/ JAMBUR II/ JAMBUR III/ HANS XXX

PPG fieldwork suggest cumulative emissions among all target communities could exceed 6 tonnes of mercury per year. The mercury reduction target is therefore 5 tonnes per year (starting in year three (3) of the project), resulting in a cumulative mercury release reduction of 15 tonnes over the duration of the 5-year project.

A socioeconomic baseline survey and a mercury/gold mass balance inventory will be conducted at each of the 12 priority project sites. The assessment will also collect sex-disaggregated data. The results of the mercury-gold mass balance inventory, (which will set the project baseline in terms of gold production and mercury use/releases for all the 12 priority sites) will be presented to the relevant government agencies, who in turn can use this data to inform the NAP process and reporting process for the Minamata Convention.

These surveys/inventories will include the ranking of cooperatives in these priority sites, by degree of formalization, organization, existence or possibility of land tenure, accessibility to ASGM sites, security, land conflict issues, mercury use/contamination, women participation, etc. The surveys/inventories will be informed by the National Action Plan (NAP) process, but will in turn also inform the national NAP process as well as global estimates of Hg emissions. Following this socioeconomic baseline survey, and in agreement with the project's local, regional and national implementing partners, the project will select the most formalized, organized and committed mining groups (holding legal concessions) for project participation. The project will aim to select mining groups that contain 20% women.

Initially the project will focus most of its support on the most formalized and organized mining groups (with a priority for women-led mining groups or mining groups with female members) holding legal concessions, however the project will also evaluate the potential for project support to assist other mining groups in their formalization processes. Ultimately the goal of the project is to help these mining groups to reach a stage of formalization in which they have access to finance and clean technologies.

In the regions of the 12 selected priority sites, the project will also assess existing analytical, consulting, training and equipment resources and services. (Regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers can be key partners in enabling changes in formalization and ore processing methods during the project's implementation but are also key in replicating successful practices elsewhere after the project has come to an end. Where possible, partnerships with such entities will be established.

For example, equipment suppliers/manufacturers will be engaged in the establishment of 5 training plants (during which time the capacity of these suppliers will be built), while other ASGM service providers will be trained as part of the project in how and which services to provide 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).

Following the selection of the mining groups, key mining sites used by these groups will be characterized in terms of ore and production (technology) means, and will undergo a general needs assessment. Ore assays will be conducted in accredited metallurgy labs, but will be supplemented with practical on-site liberation tests/training events in the field (using pilot (mobile or fixed) plants established by this project and its partners) to give miners the opportunity to observe results first hand and learn how to obtain such results themselves. These results will then be used to assist miners/mining groups in the design of processing strategies and economic models to convert to mercury free practices.

Training and demonstration activities organized by the project to support miners/mining groups in converting to mercury-free practices require long-term training plants and facilities to be available in or close to key project sites and as early on in the project as possible.

In order to support miners/mining groups in converting to mercury-free practices, the project will train a total of 1,200 miners at existing²⁶ and newly established (with project support – see below) ore processing plants and laboratory installations.

To develop a sound and sustainable training programme, the project will establish partnerships with existing training centers and assess the availability of ASGM training materials and resources globally (GEF GOLD, etc.) as well as nationally, to identify which materials can be used by the project, and which additional resources/materials should be developed to ensure successful project implementation. Based on the training material needs identified, additional training resources will be developed in partnership with a number of training centers. The complete package of training resources will be integrated as an ASGM curriculum in the project's partner training centers, to ensure long-term sustainability and to further built the capacity of these training centers.

Making use of the existing and newly developed training materials, the project will train 30 trainers (who will be selected from project partners, mining communities and training centers) in the use and application of the full package of training resources as well as the use of equipment at existing and newly established ore processing plants and laboratory installations. After obtaining their training certification, these trainers will in turn train 1,200 miners on mercury-free mining practices including the sound management of mining tailings.

The project will support the establishment of at least one (1) mercury-free ore processing training plant in 1 project location (best suitable location will be agreed upon in consultation with national, regional and local project partners). The economic analysis for the plant as well as the design of the plant will be supported by the project, however the financing of the plant will be covered by applying one of the new improved finance mechanisms developed as part of component 2.

This training plant will be a full-scale mercury free processing facility where miners can engage in hands-on mineral processing experiments with their own ore, determine the gravity recoverable gold yields of their ore (and prepare samples for analysis in a lab using best practices and technologies), and decide on methods for all the different ores produced by the mine cooperative members. This processing plant would include: a batch mill of 5-10 T per day capacity and crusher/sorting screens to produce the optimal mill feed; a batch centrifuge for primary concentration, shaker table for final concentration, torches and crucibles for direct smelting, water pumps to circulate water from waste ponds back into the mill, and a de-watering screw to condition the tailings for sale and transport. The project will partner with local manufacturers in the establishment of the pilot chemical-free plant. The milling facility will also be accessible to nearby mines, they can either pay rent to the mining cooperative or company that owns/leases the processing plant for using the milling facilities or to have their ore milled for them. This could create further demand that would enable pilot site miners to expand their capacity. The pilot training plant is expected to be leased to a cooperative or community by a credible lender through a *lease-to-own-programme*. The lease payments would accrue to a revolving fund managed by the lender out of which new mercury free instalations could be financed.

In addition, small mobile gravimetric training plants, to be financed by the project, will be established in each project region (4 mobile plants in total). The mobile plants will be composed of lab scale processing tools that will be used to teach artisanal grade control and exploration (using only simple mills and gravity concentration tools to assess the ore grades, prove presence of gold in exploration samples from prospective mine locations, and determine optimal grain size of milled ore for maximal gold liberation), as well as help miners make economic calculations and comparisons of mercury versus non-mercury processing methods. The core of these mobile plants is a high capacity (~2 tonnes per hour) concentration tool that can concentrate small amounts in demonstrations and ore analysis, but can also be directly incorporated into a plant to result in direct mercury elimination. Similar to the large pilot training plant, at the end of the project, the ownership of the mobile plants will be transferred from credible lenders to mining cooperatives or community groups in a *lease-to-own-programme* so that the miners can continue mercury-free processing and train new miners in its use. The lease payments would accrue to a revolving fund managed by the lender out of which new mercury free instalations could be financed.

²⁶ Early training could be held at sites such as the SOTRAMI mine, BGI partner mines in Puno and Arequipa, the CREEH site near Lima, among others.

The mobile plants are themselves a new kind of business; gravity recoverable gold analysis is a badly needed service in mining areas, as miners often mistrust formal laboratory analyses that cannot be observed and are prohibitively expensive. The owner of a mobile plant could use it to help others design and optimize their processes, and of course also to extract gold from their own ore mercury free.

In the process of establishing processing plants and the mobile gravimetric plants, the capacity of local engineering and consulting firms (tailings transport, gravity assay laboratory services, ore crushing, etc. with a particular focus on women led enterprises) will be built to encourage the replication of successful practices elsewhere and support businesses in preserving and improving their livelihoods.

The project will train a total of 1,200 miners through training activities centered around the establishment of the large pilot training plant and the 4 smaller mobile training plants. These training activities will foster linkages among miner, financier, equipment manufacturer, distributor, regulator, and community participants in a way that each participant can build an economic model of mercury free practices according local ores they have tested themselves.

The capacity building of ASGM miners resulting from the training at existing and new processing facilities combined with support for formalization (*Outcome 3.2 - Support ASGM miners in their formalization processes*) and (*Outcome 2.2 - Capacity of ASGM miners built in applying for loans for mercury-free processing equipment/investments*) is expected to lead to project mining groups being able to obtain loans and purchase the necessary equipment to eliminate Hg from their ore processing. In each of the target communities, there are subgroups of miners with differing levels of organization and formalization, each with sufficient ore processing need for a modest size processing plant. In each community, the project will support several of the most promising of these groups in the formalization process, economic planning, and securing financing. This way at least one (1) plant in each of the 12 project areas will be built or converted to mercury free processing through financing outside the GEF GOLD budget.

In some cases, milling equipment can be optimized to enable mercury free gold separation, and only certain pieces of equipment, such as a shaker table or a centrifuge, will be needed to greatly reduce or eliminate mercury use. These cases, for which investment barriers are lower and benefits immediate, will further reduce mercury use. Once proven and profitable models backed by a modernized equipment supply become rooted in a community the gains to be made by using best practices will drive further mercury reductions. These full-scale plants will directly eliminate large amounts of mercury, and more accessible access to financing will spur further installations and mercury reductions. In parallel, the project will facilitate trust and transparency among responsible toll milling companies (medium scale industrial cyanidation facilities that buy ore) and ASGM groups that cannot meet the fiduciary, organizational, or formality required to develop their own mercury free processes.

As indicated in Section II (Development Challenge) legacy (abandoned) tailings, in particular those containing mercury, present a long term environmental and human health risk from mercury releases, acid generation and potential storage failures. However, such tailings can also be a resource as they can contain considerable concentrations of gold.

The project will therefore undertake a feasibility study to assess the potential for the removal of mercury from tailings by large-scale mining companies, who operate facilities that could be adapted to recover mercury from ASGM mine wastes (for instance, many industrial mines produce mercury as a byproduct, so they already have industrial retorts and environmental management facilities. ASGM tailings processing could extend the useful life of large scale plants considerably). Based on the outcomes of this feasibility study, partnerships with large-scale mining companies could potentially be developed and lead to a reduction in environmental risks from unsound tailings disposal (by trucking away tailings and ultimately extracting remaining gold concentrations), and improve relationships between ASGM miners and large mining cooperatives.

Finally, the project will undertake one small scale mercury removal pilot project, with extreme precautions for the prevention of remobilization of mercury in fugitive suspended sediments, to recover residual gold and mercury from orphaned illegal alluvial mine sites in the Amazon. Several centrifuges and shaker tables in series will progressively remove metals from the tailings, and a de-watering spiral will pile the residual sands for use as fill when restoring

natural landscapes. Careful testing of sediments before and after will establish the efficiency of the methods used, and ensure that end tailings contain as little as possible residual mercury. A series of settling ponds in which lime and flocculants are added will ensure maximum recovery of fine suspended sediments before recycling the wastewater back into the process in a closed circuit. A full economic balance of the activity will be analyzed, with the hopes that recovered gold can significantly offset the cost of restoration and reforestation.

At the time of the project's priority site baseline assessments, the Mid-Term Review (MTR) and the Terminal Evaluation (TE) the project will prepare a report on the amount of mercury-free gold produced and the reduction in mercury use/releases achieved by the mining groups supported by the project.

- 3.1.1 Total mercury use/releases from ASGM avoided by 15 tonnes.
- 3.1.2 2,000 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 12 priority project sites.
- 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.
- Output 3.1.3 Most formalized, organized and committed mining groups (containing 20% women) selected for project participation.
- 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.
- Output 3.1.5 Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers).
- 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).
- Output 3.1.7 Ore assays (from the selected mining groups) conducted in accredited metallurgy labs.
- Output 3.1.8 Partnerships established with training centers that already provide or could provide in the future, training on sound ASGM practices.
- Output 3.1.9 The availability of training materials and resources globally (GEF GOLD, etc.) and in Peru, 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.
- 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.
- Output 3.1.11 Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project.
- 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.
- 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.
- Output 3.1.14 100 miners trained²⁷ 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves).

²⁷ Approximately 200 miners will be trained at the full-scale pilot plant build by this project. In addition, 1000 miners will be trained using the 4 mobile plants.

- 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 practices designed for all project selected mining groups.
- Output 3.1.16 Locations where 1 mercury-free ore processing training plant and 4 small mobile plants can be installed/showcased identified.
- Output 3.1.17 Permitting requirements for long-term installation of the 1 mercury-free ore processing training plant and 4 small mobile plants addressed and permits obtained.
- Output 3.1.18 Memoranda of Understanding (MoU) drawn up and signed by mobile plant host(s) *(if required)*.
- Output 3.1.19 Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared.
- Output 3.1.20 Equipment and spare parts for 4 small mobile plants and 1 mercury-free ore processing training plant procured.
- Output 3.1.21 One (1) mercury-free ore processing training plant in 1 project location established.
- 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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members.
- Output 3.1.23 4 small mobile plants in 4 project locations established.
- Output 3.1.24 1,000 miners trained by trainers at 4 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).
- Output 3.1.25 At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms.
- Output 3.1.26 Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies.
- Output 3.1.27 (Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings.
- 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.
- 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.

Outcome Indicator 3.2: 12 ASGM miner groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions.

As highlighted throughout the document, formalization of ASGM miners is a first step towards the reduction and phase-out of mercury from ASGM. Formalization is important as miners will need to reach a certain stage of formalization to be able to access formal financing to purchase cleaner technologies.

There are many steps to formalization; the first and most important step is to obtain the rights to the subsurface resource. That is often complicated because in most cases there is already a concession holder for a given site where miners are operating. For miners that do not have legal subsurface rights, the project will help miners to negotiate with mineral titleholders or apply for them where they are still open. The project will also review loopholes and non-compliant concessions that present obstacles to formalization of ASGM.

Miners that already have a permit to exploit the subsurface resource often still have significant work to do in order to become fully formalized. For these miners, the project will help i) Design processing and waste management plans (including tailings storage) that comply with Government of Peru (GoP) laws and environmental standards; and ii) Facilitate the process to obtain permits to establish and operate a plant (possibly including plans for changing existing plant infrastructure).

These efforts to formalization will be complemented with other project outcomes, such as Outcome 1.2 as part of which the project will revise/develop policies, regulations and standards to improve the enabling environment for formalization; Outcome 3.1, as part of which the project will train identified ASGM service providers in providing better and needed services to mining groups to support them in their formalization processes; and, Outcome 2.2 as part of which mining groups will be trained on better prospecting and records keeping to make them become bankable.

- Output 3.2.1 12 mining groups (of which 20% of the miners are women) have received leadership training.
- Output 3.2.2 12 project mining groups (of 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).
- Output 3.2.3 12 project mining groups supported in obtaining a license/permit for ASGM or to establish/operate a processing plant.
- Output 3.2.4 12 project mining groups supported in designing processing and environmental management plan (incl. tailings storage plans) that comply with national laws and environmental standards.

3.2.1 At least 12 mining groups²⁸ (of which 20% of the miners are women) supported in their formalization processes.

Outcome Indicator 3.3: Route to market for mercury-free gold improved/established.

More income for miners can also accrue from better access to markets for clean gold and tailings. Presently, miners sell their gold to middlemen that pay a low price for their gold. The project's support to build the capacity of miners in record keeping of local ore production and gold yields (which are essential for operational quality control) are also key elements of OECD due diligence in proving the provenance of gold (e.g. by issuance of a Certificate of Origin), so that miners can sell their gold directly to international refiners. The project will support mining groups in record keeping of local ore production and gold yields as part of Outcome 2.2 (ASGM miners are capacitated to apply for loans for mercury-free processing equipment/investments).

The project will help broker uptake arrangements with international refiners, with local banks as intermediate gold custodians (possibly in combination with Outcome 2.1 (*Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives*)) and fund transfer/holding agents, so that miners can safely accumulate enough gold for export to international refiners while still meeting their daily needs. As a result, miners will get a much higher value for their gold and more income stability, and this will incentivize others to formalize and become responsible miners.

Where possible the project will assist interested and eligible groups in ethical gold certifications. The project might engage certification organizations to assess the top performing mining groups in the project for their possible certification, which will make recommendations for improvements and next steps.

3.3.1 700 kg²⁹ of mercury-free gold sold to the formal market.

- Outputs 3.3.1 At least 1 partnership established with an international refiner.
- Outputs 3.3.2 At least 1 partnership established with a local bank (possibly in combination with Outcome 2.1).
- Outputs 3.3.3 At least 1 partnership established with a fund transfer/holding agent.
- Outputs 3.3.4 Establish a partnership with a gold certification organization to assess top performing project mining groups for possible certification.

PROJECT COMPONENT 4/OUTCOME 4: MONITORING AND EVALUATION, AWARENESS RAISING, CAPTURING AND DISSEMINATING EXPERIENCES, LESSONS-LEARNED AND BEST PRACTICES.

²⁸ In each pilot location, 10 mining groups would be supported in their formalization efforts.

²⁹ It is assumed that 60% of the Hg free gold gets sold to formal market.

This component's overall purpose as reflected in Outcome Indicators 4.1, 4.2 and 4.3 is to ensure the monitoring and evaluation of project results; raising awareness of project stakeholders and beneficiaries on the dangers of mercury and ways to reduce its use in ASGM; and, capturing project results, experiences, lessons-learned and best practices for publishing and dissemination.

Outcome Indicator 4.1: 19,000 people³⁰ (5,000 females and 14,000 males) of whom awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.

4.1.1 Awareness raised of 19,000 people (5,000 females and 14,000 males) on the dangers of mercury and ways to reduce its use in ASGM.

The project will start with the development and implementation of an awareness raising plan. The awareness raising plan will be developed based on an initial assessment that will be carried out by the project to determine what the most successful awareness raising strategies and mechanisms would be to convince miners and mining communities to reduce the use of mercury. This assessment will also look at what the messages to miners could be, what type of information/data would help convince them to change their practices, if different approaches to create awareness among women and male miners would be, and in which way these messages should be conveyed (TV, radio, pamphlets, newspapers, drama series, videos, technical guidance documents, hands-on training at processing plants, stakeholder group meetings, etc.) and by whom these messages/information should be delivered.

Besides miners and their communities, the awareness of project stakeholders (including decision makers), health professionals and the general public, also needs to be raised. The initial assessment will look at the best mechanisms and strategies to inform these parties, which media to use (educational curricula, policy briefs, mainstream media, etc.) and what types of messaging would be most effective.

Following this initial assessment, an awareness raising plan, covering all awareness raising aspects that will be supported by the project over its entire duration, using gender sensitive approaches, will be drafted. The project's gender expert will ensure that the awareness raising plan and its activities meet the needs of female and male miners. Project stakeholders such as national, provincial and local government entities, BPPT, APRI, international, national and local NGOs and CBOs, universities and schools as well as other partners will be assigned roles and responsibilities as part of this awareness raising plan.

The project will engage third parties to conduct the initial assessment, develop the awareness raising plan and support the implementation of the awareness plan as well as ensure the monitoring of the results of the awareness plan, so the project can report on the extent of awareness raising (level of awareness and number of people of whom awareness has been raised). By the end of the project, the awareness of ~19,000 people will have been raised (including direct family members of those of whom awareness has been raised).

Output 4.1.1 Initial assessment carried out on awareness raising strategies and mechanisms.

Output 4.1.2 Awareness raising plan (incl. gender dimensions) developed.

Output 4.1.3 Awareness raising plan (incl. gender dimensions) implemented.

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.

³⁰ The awareness raising campaign aims to raise at a minimum the awareness of miners living in the pilot areas (4,750), who in turn will inform their direct family members (thus raising the awareness of a total of 19,000 people).

GEF and UNDP M&E requirements include: 1 Inception Workshop conducted and report issued; 5 PIRs completed/submitted (one for each year the project has been operational); 1 audit completed (*frequency as per UNDP Audit policies – on average 1 per year*); 10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational); 5 Monitoring and supervision missions conducted; 1 Mid-Term GEF Tracking Tool updated; 1 Gender Assessment of project impact completed (*as part of MTE*); 1 Independent Mid-term Review (MTR) conducted (*translated into English*) and management responses submitted; 1 GEF Secretariat oversight missions conducted; 1 Terminal GEF Tracking Tool updated; 1 Independent Terminal Evaluation conducted (*translated into English*) and management responses submitted.

- Output 4.2.1 1 National Inception Workshop conducted and report issued.
- Output 4.2.2 5 PIRs completed/submitted (one for each year the project has been operational)
- Output 4.2.3 1 audit completed (*frequency as per UNDP Audit policies – on average 1 per year*)
- Output 4.2.4 10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational)
- Output 4.2.5 5 Monitoring and supervision missions conducted
- Output 4.2.6 1 Mid-Term GEF Tracking Tool updated
- Output 4.2.7 1 Gender Assessment of project impact completed (*as part of MTE*)
- Output 4.2.8 1 Independent Mid-term Review (MTR) conducted (*translated into English*) and management responses submitted
- Output 4.2.9 1 GEF Secretariat oversight missions conducted
- Output 4.2.10 1 Terminal GEF Tracking Tool updated
- Output 4.2.11 1 Independent Terminal Evaluation conducted (*translated into English*) and management responses submitted.

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.

- 4.3.1 1 GEF GOLD country project webpage (using the template developed by the Global Gold Project) maintained.
- 4.3.2 Country project participated on a yearly basis in 1 Global ASGM Forum (3 in total), 1 Annual Programme Conference, and 12 monthly programme/project calls.
- 4.3.3 Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration with the GEF GOLD global component.
- 4.3.4 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*.

The Peru child project is one of the eight³¹ (8) country-level projects being implemented as part of the Global Opportunities for Long-term Development of the ASGM sector – GEF GOLD programme. The GEF GOLD programme has a global component on communications and knowledge management, which is being managed by UNEP. The objective of the global component is to unify and coordinate efforts among all the GEF GOLD child projects and disseminate knowledge generated by the child projects to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM.

The Peru GEF GOLD project will maintain and regularly update (at least once every quarter) the GEF GOLD country project website (using the template developed by the Global Gold Project) dedicated to the Peru GEF GOLD project. The website will be designed by the UNEP managed GEF GOLD global component, but its maintenance and updating as well as posting of news items and project progress, will be the responsibility of the Peru project team. The country

³¹ Burkina Faso (UNIDO), Colombia (UNDP), Guyana (Conservation International), Indonesia (UNDP), Kenya (UNDP), Mongolia (UNEP/UNIDO), Peru (UNDP), and Philippines (UNEP/UNIDO).

project website will support the dissemination of project related information at national, regional and global levels. On a quarterly basis, the project will identify opportunities for the communication of project activities – in collaboration with the UNEP managed GEF GOLD global component. This communication exercise will present a good opportunity to update the website and at the same time identify topics/activities that could be reported on by the GEF GOLD global component. The project's gender expert will support the project in identifying gender specific results and how to present these in GEF GOLD reports and publications that summarize results, lessons-learned, best practices and experiences.

The Peru GEF GOLD project will also participate in a yearly face-to-face Programme Conference, Global ASGM Forums and monthly programme/project calls with all the eight (8) GEF GOLD child country projects. This will encourage the exchange of experiences, lessons-learned and best practices among the 8 project countries and encourage south-south cooperation.

Finally, the Peru child project will ensure that project results, experiences, lessons-learned and best practices are captured, published, and taken up by the *GEF GOLD Global Dissemination Platform* on a quarterly basis for national and global dissemination, using report templates provided by the *GEF GOLD global component* (where appropriate).

To support the dissemination of the project materials at national and local level, the Peru GEF GOLD will translate reports and publications prepared by the project and ensure that their design meets the needs of local ASGM communities.

- Output 4.3.1 1 GEF GOLD country project webpage developed (using the template developed by the Global Gold Project) and updated on a quarterly basis.
- 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.
- Output 4.3.3 Opportunities for communication of project activity results identified on a quarterly basis in collaboration with the GEF GOLD global component.
- 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.
- 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-learned, best practices and experiences.
- Output 4.3.6 Reports and publications adapted and translated into local languages to facilitate dissemination at local, district, provincial and national needs.

Partnerships:

The project will work with a multitude of partners and initiatives to achieve the project’s objective. In table 1 below, an overview is provided of the project’s stakeholders and partner initiatives, **what these stakeholders/initiatives are currently doing to address the development challenge, what the role of the partner/initiative will be in the project’s implementation**, as well as the assumptions and expected results that will be achieved by the project’s partners that are critical for the achievement of the results of this project.

Table 1. Partnerships

Name of stakeholder/initiative	What is the stakeholder/initiative currently doing to address the development challenge?	What will be the role of the partner in project’s implementation?	What are the assumptions and expected results (to be) achieved by partners that are critical for the achievement of results of this project?
Ministry of Environment (MINAM)	<p>National authority for environmental policies and regulations. Hosts GEF PFP/OFP.</p> <p>National Focal Point for the Minamata Convention.</p> <p>Coordinates preparation of the Minamata National Action Plan.</p> <p>Coordinates Mercury Emissions Inventory.</p>	<ul style="list-style-type: none"> • Project Implementing Partner (Lead). • The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of GEF resources. • Kindly refer to Section IV: GOVERNANCE AND MANAGEMENT ARRANGEMENTS for a detailed description of the role of the Ministry of Environment (MINEM) in the project’s implementation. 	<ul style="list-style-type: none"> • MINAM supervises and monitors compliance of the Multisectoral Action Plan for Minamata Convention implementation (Under DS/010-2016 MINAM). • Coordinates inter-sectorial activities to establish progressive reduction targets of mercury use in the ASGM sector.
Ministry of Energy and Mining (MINEM) incl. DREM-GREM	<p>Governing body to formulate and evaluate, jointly with the general policy and Government plans, the national policies on sustainable development of energy and mining related activities. It is also the competent authority with regard to environment issues in energy and mining activities, and in charge of the development of the Comprehensive National Formalization Process for the ASGM sector.</p> <p><i>Dirección Regional de Energía y Minas (DREM) for Puno and Piura & Gerencia Regional de Energía y Minas (GREM) for Arequipa:</i> Regional authorities in charge of promoting the ASGM formalization process and the sustainable development of mining activities.</p>	<ol style="list-style-type: none"> 1) Project Responsible Party for mining sector related activities under Components 1,2 and 3. Kindly refer to Section IV: GOVERNANCE AND MANAGEMENT ARRANGEMENTS for a detailed description of the role of the Ministry of Energy and Mining (MINEM) in the project’s implementation. 2) Lead and coordinate strategies and activities agreed in the Multisectoral Permanent Commission on Formalization. <ul style="list-style-type: none"> • Support the reduction/avoidance of 15 tonnes of mercury use/releases from ASGM during the project’s life. • Carry out and complete the formalization process with cooperatives and communities that already submitted all the required documentation. 	<ul style="list-style-type: none"> • MINEM has supported the process to replicate best mining practices among pilot cooperatives to encourage reduction in the use of mercury. • Involvement of MINEM/DREMs has facilitated/supported the training of 1,200 miners and the formalization process of additional mining groups. • MINEM developed and promoted training programmes to support mining groups and cooperatives to improve their entrepreneurial skills and increase access to the gold market. • Consolidated pilots in the three project regions generating spread lessons learned for replication to other regions in the country.

		<ul style="list-style-type: none"> • Support the identification and selection of mining operations/plants to replicate successful pilot activities. • Support the improvement of ore and tailings processing in pilot sites. • Support the development, validation and dissemination of ASGM training and awareness raising materials. • Support the training of 1,200 miners. 	
Ministry of Health – (MINSA) Dirección General de Salud Ambiental e Inocuidad Alimentaria (DIGESA)	National Authority on Environmental Health and Food Safety, in charge of the monitoring of external physical, chemical and biologic risks to people. Also monitors the quality of residential soil impacted by manufacturing activities including the use of chemicals such as mercury.	<ul style="list-style-type: none"> • Conduct monitoring and evaluation activities in pilot sites to assess the impact on human health from direct and indirect exposure to mercury used in ASGM. 	<ul style="list-style-type: none"> • Places inhabited by mining communities and families are monitored to detect possible incidences of mercury releases. • Strategy implemented to manage and prevent direct and indirect impacts on human health.
SUNAT (National Superintendence of Customs and Taxes Administration)	Among other responsibilities, SUNAT is part of the Peruvian national initiative against illegal mining through the control and monitoring of imports, exports, transport and distribution of mining products, chemical substances (such as mercury) and equipment.	<ul style="list-style-type: none"> • Monitor and keep records on the import of chemical substances (mercury) as an official source of data. 	<ul style="list-style-type: none"> • Complete record of mercury imports/exports (if any) and identification of sources. • Technical support provided to the establishment of financial mechanisms for the ASGM sector including tax incentives.
SECO - Better Gold Initiative BGI	The Better Gold Initiative is a project which aims to support the ASGM sector to reach standards that allows them to sell their gold on a fair price basis to buyers who value environmental, social and labour commitments, propelling ASGM as a mean for better livelihoods and sustainable development.	<ul style="list-style-type: none"> • Develop and sign a partnership/agreement with the project or mining associations for purchasing legally and more responsibly produced gold. • Promote technologies that support a phase-out/reduction in the use of mercury in ASGM. • Strengthening of ASGM related policies and laws to identify and address gaps. 	<ul style="list-style-type: none"> • Gold being produced by entities/miners who have received project support and who are producing gold in a more responsible manner (less or no mercury), are purchased at a higher (fair) price by a public or private legal buyer. • Public policies on ASGM address gender and other socio-economic issues in a better way.
CIRDI	CIRDI is an independent centre of expertise in natural resource-led development that advises developing country governments that seek to strengthen their capacity to govern and manage their natural resources.	<ul style="list-style-type: none"> • Increase education for mining communities. • Build research capacity for data collection and analysis in mining communities. • Support the development of integrated ASGM processes, programs and policies. 	<ul style="list-style-type: none"> • At least one strategy designed and implemented to raise awareness on health risks related to mercury and to introduce a precautionary approach.
Embassy of Canada in Peru	The Canadian Government is supporting two projects to support the formalization process for the ASGM sector in Peru. 1)MEJORO: Aims to reduce mercury use by implementing better practices and technology	<ul style="list-style-type: none"> • Implement institutional strengthening activities for 3 regional mining authorities (DREMs) in Puno, Arequipa and Piura, to promote best 	<ul style="list-style-type: none"> • Better mining activities and production processes in pilot regions. • The gravimetric plant installed in Arequipa as part of the Canadian funded MEJORO project

	improvements; 2) MEGAM: Aims to strengthen institutional capacity at national and regional level to improve environment approaches related to mining activities.	environmental practices (BEP) among miner groups and cooperatives. <ul style="list-style-type: none"> As part of the MEJORO project, one gravimetric plant was installed in Arequipa. The Embassy of Canada aims to donate this plant to the Regional Government to support both the formalization process and the training of miners in BEP/BAT. 	serves as one of the project's training centres to demonstrate mercury-free processing approaches.
Embassy of the United States of America in Peru	The US Government is supporting various projects to strengthen the environmental performance of mining exploration and exploitation in Peru in regions such as Madre de Dios. It also supports the transfer of technology, training and capacity building in the ASGM to promote cleaner and safer livelihoods in the country. Furthermore, an MOU was signed between the US and Peru in January 2017 on cooperation related to Small-Scale Gold Mining.	<ul style="list-style-type: none"> Coordinate possible joint activities in frame of the Action Plan of the Memorandum of Understanding between Peru and the United States of America. 	<ul style="list-style-type: none"> Regional energy and mining authorities have improved capacity in the ESM of mercury. Identifiable, transparent value chains and responsible mining practices in place that help mitigate social, economic and environmental impacts.
Alliance for Responsible Mining ARM	ARM aims to transform the ASGM sector into a more socially and environmentally responsible one to ensure better quality life of artisanal mining communities. ARM developed the Fair Mined Standard to create opportunities for the sale of responsibly produced gold to fair supply chains.	<ul style="list-style-type: none"> Support a reduction in the use mercury in gold processing plants in Peru. Increase social, economic and environmental performance of the ASGM sector in Peru. 	<ul style="list-style-type: none"> Participatory plans for mercury reduction/phase-out implemented in the GEF GOLD project's pilot regions.
Instituto de Redes de Desarrollo Social Red Social	A non-profit organization aimed to attain a better quality of life for vulnerable populations in Peru such as those working in the ASGM or extractives sector, by using a sustainable development, gender and social inclusion approach.	<ul style="list-style-type: none"> Ensure, by mainstreaming a gender approach in all project activities (including the relevance of the role of men and women) the improvement of the quality of life and livelihood conditions of vulnerable populations in the ASGM sector. 	<ul style="list-style-type: none"> Market and financial incentives mechanisms developed for women organizations.
SOLIDARIDAD	Seeks to implement best practices in the ASGM sector to curve poverty and diminish the environmental impact of ASGM activities.	<ul style="list-style-type: none"> Support the development of financial mechanisms and incentives to promote formalization and best practices to reduce and/or eliminate mercury use. 	<ul style="list-style-type: none"> At least two (2) financial mechanisms developed/improved to serve the ASGM sector to promote formalization and association of women/youth, the legalization of land, and women entrepreneurship in ASGM.
Private Sector	Within the project's context, the private sector is integrated through miner cooperatives/associations, and is considered the main project beneficiary, which is expected to make commitments to formalization and to	<ul style="list-style-type: none"> Provide data on mercury use, processing practices, gold production. Allow for the assessment of facilities, including surroundings. 	<ul style="list-style-type: none"> Tax incentives and financial mechanisms are sufficiently enticing for miner cooperatives/associations that these are being applied to finance cleaner gold processing.

	implement a variety of measures in order to reduce or phase out the use of mercury.		
UNDP/GEF Project Integrated Water Resources Management in the Titicaca-Desaguadero-Poopo-Salar de Coipasa (TDPS) System	Project objective is 'To promote the conservation and sustainable use of water resources in the Titicaca-Desaguadero-Poopó- Salar de Coipasa (TDPS) transboundary system, through the updating the Global3 Binational Master Plan.'	<ul style="list-style-type: none"> Organic, chemical and bacterial pollution of the water in the TDPS system is primarily a result of untreated or insufficiently treated wastewater and of industrial discharges from urban centres (Puno, El Alto, Viacha, Oruro and Juliaca) as well as uncontrolled ASGM processes taking place in the headwaters of the Suches and Ramis rivers. 	<ul style="list-style-type: none"> Strategies and activities to deal with mercury releases from ASGM activities impacting the environment are mutually reinforced and any duplication is avoided.

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Risks and Assumptions:

Table 2. Risk Table

Description	Type	I & P	Countermeasures / Management Response	Owner	Status
Lack of coordination between relevant institutions/ministries as well as activities/programmes in the same areas as the project (ASGM). <i>(Non-SESP)</i>	Political	P = 1 I = 3	Coordination among the project's various stakeholders will be ensured by involving them in the Project Board and the Project Technical Advisor Committee (TAC). Furthermore, a stakeholder engagement assessment (see Annex F) has been conducted during the project PPG phase based upon which a Stakeholder Engagement Plan has been developed (see Annex F), which stipulates in what type of project activities which stakeholders will be engaged, involved and their responsibilities.	MINA M	No Change
Mistrust of miners towards Government agencies and entities (as well as their affiliates – such as UNDP) hampers the active participation of miners in the project. <i>(Non-SESP)</i>	Political	P = 2 I = 2	Miners and in particular informal ASGM miners are extremely mistrustful of 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.	MINA M	No Change
Economic incentives perceived too low to adopt and replicate BEP/BAT practices resulting in continued polluting practices. <i>(Non-SESP)</i>	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 entities 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.	MINA M	No Change
Geological risks (ore deposits being exhausted, oxidization/leaching/collapse of tailings, landslides, among else).	Environmental	P = 2 I = 4	There are different types of geological risks that ASGM activities supported by the project might face. These include the ore deposits being exhausted and miners moving on to other areas, jeopardizing long-term livelihoods or rural communities who typically bear the social costs associated with ASM. Other geological risks are the risk of injury or degradation of land by ASGM miners, the oxidization, leaching or collapse of tailings and landslides caused by unsafe mining practices which can create a risk of cave or slope collapse. The project will include measures to ensure safe mine operation from the start of mine exploration to its closure. Project support to build capacity for adequate planning, and possible sale of tailings to responsible processors, will dramatically reduce mentioned geologic hazards. The analysis of the ore of mining communities the project is going to work with, will include an assessment/analysis of toxic potential of ore wastes, and the stability of existing and potential tailings storage with a view to mitigating these hazards. Finally, to minimize unsafe mining practices, the project will build the capacity and interlinkages among miners, mining service/equipment providers and government provided extension services to help foster better underground and open pit mining practices.	MME- UNDP	No Change
Delay in the implementation of project activities due to the time it takes to obtain permits/licenses.	Regulatory Operational	P = 2 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	MINA M	No Change

(Non-SESP)			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 prove 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. 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.	MINA M	No Chang e
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 = 2 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.	MINA M	No Chang e
The Project could potentially cause adverse impacts to and/or involve changes to the use of habitats (e.g. modified, natural, and critical habitats) and/or ecosystems, ecosystem services and livelihoods. (SESP Risks 1 and 2)	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 tonnes of mercury over the project's duration, and support miners in introducing best 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.	MINA M	No Chang e
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. However 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.	MINA M	No Chang e

Stakeholder Engagement Plan: Prior to developing a Stakeholder Engagement Plan, the project undertook a simplified Stakeholder Analysis (see Annex F). Based on this stakeholder analysis Table 5 (“Identification of key stakeholders and their interests, importance and influences for the GEF GOLD project”) in Annex F was prepared. Table 6 summarizes the various stakeholder groups and individuals that would need to be engaged by the project, the interests of these stakeholders/individuals in the project itself, whether the project would have a positive effect on the interest of these stakeholders, how important these stakeholders are to the success of the project and what the influence of these stakeholders will be on the success of the project.

The main project stakeholders identified by the stakeholder analysis include:

- Ministry of Environment (Ministerio del Ambiente)
- Ministry of Energy and Mines (Directorate for Mining Formalization) / Ministerio de Energía y Minas (Dirección General de Formalización Minera)
- Ministry of Health (Environmental Directorate) / Ministerio de Salud
- Regional Office of Energy and Mining / Direcciones Regionales de Energía y Minas
- Internasional Cooperation Projects and Programmes.
- Internasional and National Non-Governmental Organizations.
- Universities
- Civil Society Organizations
- Financial Institutions and Banks
- Women Organizations
- Mining Organizations
- Private Sector

Following the preparation of the simplified Stakeholder Analysis, the project prepared a simplified Stakeholder Engagement Plan. In so doing, the project indicated **why** stakeholders are being engaged, **how** engagement will proceed, **who** will ensure engagement, **when**, and **how** engagement will be financed/supported. The simplified Stakeholder Engagement Plan can be found in Table 6 (“*Simplified Stakeholder Engagement Plan*”) in Annex F.

Gender equality and empowering women:

During the Project Preparation Phase, a Gender Analysis (see Annex G) was conducted by a national gender expert. The gender analysis (centered on sex and gender variables), allowed for the identification of the different roles and tasks that men and women perform in daily life and in particular in the ASGM sector that put them at risk of exposure to mercury. The gender assessment also identified irregularities and power relations, inequities and inequalities and helped to recognize the causes of these inequalities.

Based on the outcomes of the Gender Analysis, a Gender Action Plan was formulated to help design project interventions (component/outcomes and activities) that would contribute towards women empowerment and to overcoming gender inequality, while taking into account the current National Action Plan on Gender Equality (2012-2017). The Gender Action Plan can be found in Annex G.

The findings from the gender analysis and the project interventions proposed as part of the Gender Action Plan have been integrated into the project’s strategy, theory of change and results framework. The main elements of the gender action plan, as related to the project’s 4 components, are summarized below:

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

- *Outcome 1.1:* The trainings and workshops provided to the 4 institutions as part of their capacity building efforts, will include gender responsive assessment training.
- *Outcome 1.2:* The existing ASGM policy and regulatory frameworks will also be assessed in light of gender dimensions; Policies, regulations and standards will be revised and/or developed while mainstreaming gender dimensions; Gender dimensions will be mainstreamed in the participatory

local government regulations on ASGM and mercury use that will be developed with project support; and finally, technical guidance on mercury-free methods of gold extraction and tailing management will contain gender dimensions.

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

- *Outcome 2.1:* Existing financial products of project partners will be assessed in terms of accessibility and suitability for women mining groups; Staff of the financial entities will be trained in the (re)design of these financial products so they suit women and men mining groups' needs; New financial products will be launched that meet the need of women mining groups, while the awareness of women miner groups will be increased on the availability of various incentives and loan facilities that meet their needs (through awareness raising events).
- *Outcome 2.2:* At least 2 women mining groups, and mining groups containing women, will be trained in developing loan/investment applications (including undertaking technical and financial feasibility studies and record keeping and reporting).

Component 3: Increasing capacity for mercury-free ASGM through provision of technical assistance and technology transfer

- *Outcome 3.1:* The socioeconomic baseline surveys and mercury/gold mass balance inventories conducted for each of the 12 priority project sites, will also collect sex-disaggregated data; Of the mining groups selected for project participation at least 20% will contain women miners or be women mining groups that will be supported in formalization efforts and in improving ASGM practices; The comprehensive ASGM training curriculum that will be developed with project support and will be used to train miners (men and women), will contain gender aspects and contain a module on gender in ASGM to encourage a culture change in how women are being viewed in the mining sector; Women mining groups and women miners will also receive separate leadership training.
- *Outcome 3.2:* Of the project mining groups supported in their formalization efforts (e.g. gaining access to legal subsurface rights, obtaining a permit to establish/operate a processing plant; designing processing and waste management plan) at least 20% will contain women miners or be women mining groups; The project will also support women groups interested in mining in the establishment of ASGM associations/cooperatives.

Component 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices

- *Outcome 4.1:* The awareness raising plan that will be developed and implemented as part of the project will contain important elements related to gender. The project's gender expert will ensure that the developed awareness raising plan and its activities meet the needs of female and male miners.
- *Outcome 4.2:* The project will conduct a Gender Assessment of project impact as part of the Mid-Term Review. Based on the results of the Gender Assessment and other recommendations coming out of the MTR, the project might further improve its gender related interventions.
- *Outcome 4.3:* On a quarterly basis, project results and information on project progress will be communicated to the GEF GOLD global component. The project's gender expert will support the project in identifying gender specific results and how to present these in reports and publications that summarize results, lessons-learned, best practices and experiences.

South-South and Triangular Cooperation (SSTrC):

The Global Opportunities for Long-term Development of the ASGM sector – GEF GOLD programme, is a programmatic approach on ASGM involving three UN agencies (UNDP, UNEP, and UNIDO) and one NGO (Conservation International). The GEF GOLD programme has a global component on communications and knowledge management, which is being managed by UNEP and country-level projects in eight countries: Burkina Faso (UNIDO), Colombia (UNDP), Guyana (Conservation International), Indonesia (UNDP), Kenya (UNDP), Mongolia (UNEP/UNIDO), Peru (UNDP), and the Philippines (UNEP/UNIDO).

The objective of the UNEP implemented GEF GOLD global child project is to unify and coordinate efforts among all the GEF GOLD child projects and disseminate knowledge generated to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM. As part of the GEF GOLD programme, various approaches to South-South Cooperation and Triangular Cooperation have been embedded in the individual country child projects as well as in the global child projects.

Component 2 of the UNEP global child project will provide access to information and opportunities for exchange among Parties and other ASGM Practitioners by *informing the GEF GOLD projects as well as the wider ASGM community about experiences in formalization, access to finance and market and technology transfer*. Under component 2, the global project will create mechanisms by which ASGM communities and governments can increasingly share, access and use information, technical materials, guidance, and lessons learned to assist the development and implementation of National Action Plans.

As part of Component 2, each individual country child project (including the Peru GEF GOLD project), will report its results³² to the global child project for analysis and reporting purposes. In addition, each child project will participate in a yearly face-to-face Programme Conference, Global ASGM Forums and monthly programme/project calls with all the eight (8) GEF GOLD child country projects. These exchanges will facilitate South-South and Triangular Cooperation.

Component 3 of the UNEP global child project will educate the general public about ASGM as a global issue. This component will use targeted communication to garner support among the public, gold consumers, governments, and the financial sector, for sector reform, increased access to finance and improved markets for ASGM gold. Component 3 will create outreach materials that are highly accessible for both specialized and general audiences, and deploy these assets through a carefully planned media/PR strategy. This component will also coordinate a specific PR campaign in conjunction with a downstream user or users of gold, specifically jewelers, to increase awareness and demand for responsible gold.

The Peru child project will ensure that project results, experiences, lessons-learned and best practices are captured, published, and taken up by the *GEF GOLD Global Dissemination Platform* on a quarterly basis for national and global dissemination and to foster South-South and Triangular Cooperation, using report templates provided by the *GEF GOLD global component* where appropriate.

Sustainability and Scaling Up:

To support the long-term phase down/out of mercury in ASGM and thus ensure sustainability of project results beyond the duration of the project, the project is going to:

- 1) **Strengthen institutions and the policy and regulatory framework for mercury-free ASGM**, by increasing the capacity of national, provincial and district institutions and entities to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector and by creating an enabling environment for mercury-free ASGM through improving the national ASGM policy and regulatory framework. When the project comes to an end, the increased capacity of national, provincial and district systems/entities and the

³² tons of mercury avoided; # of miners brought into formalization process; x amount of gold produced without mercury and sold to international market; and \$ made available to ASGM through financial mechanisms.

improved policy and regulatory enabling environment for mercury-free ASGM will continue to serve the ASGM sector and encourage continued phase-out of mercury.

- 2) **Establishing financing lending arrangements to provide loans to legalized ASGM miners/cooperatives for mercury-free processing equipment.** The project will partner with banks, (micro) financial institutions and other lenders to make loans for the purchase of mercury-free processing equipment/investments available, more affordable and more easily accessible to legalized ASGM miners and cooperatives. The project will do this by supporting lending institutions/entities to develop or improve financial products for the ASGM sector and build their capacity to undertake financial risks assessments, with the purpose to eventually increase the amount of financing made available through these new or improved financial mechanisms to the ASGM sector. These financial products/mechanisms will continue to exist after the project ends and will continue to serve the ASGM sector and encourage the continued phase-out of mercury. As part of the project, miners will also be trained in how to develop loan/investment applications for their cooperatives/communities and how to apply for loans. Results of this support will be captured in simple lessons-learned flyers so that information can be easily disseminated and replicated by other mining communities.
- 3) **Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization.** The project will demonstrate, by supporting 12 mining communities, that it will be possible to reduce/avoid the use of mercury to extract gold while increasing the income of miners and their communities. The project will achieve this by supporting 12 mining communities in introducing more efficient and environmentally friendly mining and processing practices and supporting miners in their formalization processes leading to more sustainable income opportunities and safer working conditions. Throughout this process, not only miners and their communities will be trained, but the project will also support the Training-of-Trainers (ToT). These trainers will be selected from not only the mining communities supported by the project but also from project partners at national, but also provincial and district level who liaise with or provide services to the ASGM sector frequently. These events will take place at existing processing plants, pilot plants built early in the project that will serve as hands on training facilities, field gravity recovery analysis and testing laboratories, and will directly eliminate mercury use. This will allow the partners to observe and practice first hand improved practices and apply gained knowledge and expertise to support other mining communities in the future. Furthermore, the project will help establish a route to market for mercury-free gold which will allow miners to obtain better prices for their mercury-free gold.
Even though capacity building support will come to an end when the project is closed, the project will have demonstrated that more efficient mercury-free processing and mining practices can increase income. An increase in income is by itself the most convincing argument for replication by other mining communities. Furthermore, trainers who have been trained can pass hand-on knowledge on more efficient mercury-free processing and mining practices. Results of the support to the 12 mining sites will also be captured in simple lessons-learned flyers so that information can be easily disseminated and replicated by other mining communities.
- 4) **Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.** Throughout the project's implementation, project results, experiences, lessons-learned and best practices will be captured, published, and taken up by the GEF GOLD Global Dissemination Platform. The objective of the UNEP-led GEF GOLD Global Dissemination Platform is to unify and coordinate efforts among all the GEF GOLD child projects and disseminate knowledge generated (e.g. experiences in formalization, access to finance and market and technology transfer) to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM. When the project ends, these materials and resources will continue to remain available and to serve the wider ASGM community.

In summary, replication of project results is being ensured by improving the capacity of government, the private sector and miners (among others) in more efficient and lucrative ASGM practices (that also happen to be more environmentally friendly and use less or no mercury) and by facilitating the access of miners to financing/loans that allow them replicate these practices that make sense from a financial point of view.

V. PROJECT MANAGEMENT

Cost efficiency and effectiveness:

The project is expected to deliver maximum results with available resources, using the following approaches:

- **Support the establishment of long-term financial lending arrangements to provide affordable and easy accessible loans to legalized ASGM miners/cooperatives to purchase more efficient and mercury-free processing equipment.** The project does not have sufficient resources to support the entire ASGM sector to introduce environmentally friendly, more efficient and safer mining processing practices. It is for this reason that the project aims to support at least 4 financial entities in developing new or improving existing financial products/mechanisms for the ASGM sector. In this manner, resources applied by the project in building the capacity of such financial entities in how to allocate and manage ASGM loans will be limited, while the financial products that will be developed with project support can in turn assist many ASGM communities and groups in introducing better and more profitable ASGM practices, and most importantly continue to provide such support after the project has come to an end.
- **Supporting a number of mining communities in demonstrating improved practices.** The project does not have sufficient resources to support the entire ASGM sector to introduce environmentally friendly, more efficient and safer mining processing practices. Therefore, in consultation with Ministry of the Environment, Ministry of Energy and Mining and Regional Energy and Mining Authorities, the project has selected 12 mining communities that are currently not receiving support for mercury-free ASGM from organizations with ongoing ASGM support programmes. To match each of the three pilot regions conditions, the project will develop a tailored strategy to implement pilot and training activities for mining process including best available technologies (BAT) and best environmental practices (BEP). This approach also allows for replication of demonstrated interventions in mining communities located within the same district and province but which do not benefit directly from the project.
- **Increasing long-term capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization.** The project will demonstrate, by supporting 12 mining communities, that it will be possible to reduce/avoid the use of mercury to extract gold while increasing the income of miners and their communities. The project will achieve this by training 12 mining communities in more efficient and environmentally friendly mining and processing practices. Throughout this process, not only miners and their communities will be trained, but the project will also support the Training-of-Trainers (ToT). These trainers will be selected from the mining communities supported by the project but also from project partners (including but not limited to MINEM, MINAM, DREMs, NGOs, private sector, other interested stakeholders, among others) at national, but also regional level who liaise with or provide services to the ASGM sector frequently. This will allow these partners to observe and practice first hand improved practices and apply gained knowledge and expertise to support other mining communities in the future.

Project management: The project's implementation/administrative unit will be based in the Ministry of Energy and Mines and will be in charge of the implementation of project activities in the 12 mining communities, located in four (4) districts of the three (3) pilot regions: Puno (Ananea district); Arequipa (Yanaquihua district); and Piura (Paimas and Suyo districts). In order to ensure continuous engagement with regional authorities (DREM/GREM) and beneficiaries, one Regional Project Coordinator will be based in each DREM/GREM.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy³³ and the GEF policy on public involvement³⁴.

³³ See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

³⁴ See https://www.thegef.org/gef/policies_guidelines

VI. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): SDGs 1, 3, 5, 8, 9, 10, 12 and 16					
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:					
By 2021, people living in poverty and vulnerability improve access to decent livelihoods and productive employment by means of sustainable development that strengthens social and natural capital, integrating an adequate management of risk.					
UNDP Peru's CPD 2-17- 2021 Outcome: 1: Growth and development are inclusive and sustainable and incorporate productive capacities that create jobs and livelihoods for the poor and those excluded from CPD 2017-2021					
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.					
	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Data Collection Methods and Risks/Assumptions
Project Objective: Protect human health and the environment from mercury releases originating from the intentional use of mercury in artisanal and small-scale gold mining (ASGM)	4 new partnership mechanisms with funding for gender friendly and <i>sustainable management solutions</i> of natural resources, ecosystem services, chemicals and waste at national level.	No partnership mechanisms exist that provide access to funding for gender friendly sustainable management solutions in the ASGM sector.	2 new partnership mechanisms with funding for gender friendly and sustainable management solutions of chemicals and waste established at national and/or subnational level.	4 new partnership mechanisms with funding for gender friendly and sustainable management solutions of chemicals and waste established at national and/or subnational level.	<p><i>Data Collection Method:</i> The project will conduct a yearly assessment on the total amount of funding available to the ASGM sector, and the total amount of funding allocated to the ASGM sector, through existing/new financial mechanisms.</p> <p><i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector too risky.</p> <p><i>Assumptions:</i> Existing financial mechanisms would be interested in adapting their financial products to make them accessible to the ASGM sector.</p>
	47,097 <i>direct</i> project beneficiaries (44% females and 56% males) <i>for which the risk of mercury exposure has been reduced.</i>	Inhabitants in pilot districts (47,097): <u>Ananea (Puno):</u> 20,572 inhabitants (11,769 men and 8,803 women) <u>Yanaquihua (Arequipa):</u> 4,936 inhabitants (2,500 men and 2,436 women). <u>Paimas (Piura):</u> 9,638 inhabitants (4,800 men and 4,836 women). <u>Suyo (Piura):</u>	25,000 direct project beneficiaries (44% females and 56% males) <i>for which the risk of mercury exposure has been reduced.</i>	47,097 direct project beneficiaries (44% females and 56% males) <i>for which the risk of mercury exposure has been reduced.has been reduced.</i>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> Direct project beneficiaries are those that will experience a reduction in mercury releases to their living, working and school environment (47,097 inhabitants in the 12 project areas) + which include miners trained by the project (1,200) + Gov. Staff trained by the project (40). achieved by the project in a certain district, the most recent census can provide the number of inhabitants in the project area benefiting from the mercury reduction. Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information

		11,951 inhabitants (5,999 men and 5,952 women).			<p>on the number of people trained as well as the number of people that have been reached by the awareness raising campaign.</p> <p><i>Assumptions:</i> Mercury reductions will start to occur in year 2/3 of the project.</p>
<p>Component/Outcome³⁵ 1: Strengthening institutions and the policy/ regulatory framework for Mercury-free ASGM.</p>	<p>National systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.</p>	<p>Regional Governments have few or inefficient processes and procedures to manage mercury-free ASM.</p> <p>The permanent Multisectoral Commission for the formalization of mining and illegal mining does not address management aspects related to ASGM.</p> <p>Regional DREMs do not have the capacity or budget to support the formalization process.</p>	<p>Capacity of 4 government entities³⁶ increased to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.</p>	<p>Capacity of 4 government entities increased to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ Assessment report on the capacity of government entities. ▪ 4 capacity building plans prepared by the project. ▪ Trainings provided to ~ 40 government staff – training/workshop attendants lists will provide the total number of people trained. ▪ Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information on the number of entities assessed, plans developed and implemented and staff trained. <p><i>Risks:</i> MINEM and the 3 Regional Energy and Mining Authorities do not have sufficient staff available to support mining groups within a reasonable amount of time with their formalization requirements, thus hampering the speed of formalization of the project’s pilot mining groups.</p> <p><i>Assumptions:</i> The project will not only train government staff who are currently involved in supporting miners in their formalization processes but the Regional Energy and Mining Authorities, so that additional personnel can be called upon when needed or when there is staff turn-over.</p>
	<p>Enabling environment created through improved national policies and regulatory frameworks for ASGM and</p>	<p>In 2017, the Government of Peru initiated the design of the National Action Plan for ASGM.</p> <p>Many ASGM that officially registered for the formalization process, often have their requests</p>	<p>1 policy, regulation or standard revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.</p>	<p>2 policies, regulations and standards³⁷ revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ Assessment report on the needs and gaps for policies, plans, regulations, standards and measures to support formalization and mercury phase-out in the ASGM sector. ▪ Copies of the policies, regulations, Ministerial Agreements and guidance documents. ▪ Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information

³⁵ 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.

³⁶ Ministry of Energy and Mining (Permanent Multisectoral Commission for the Formalization of Mining and Illegal Mining) + three (3) Regional Energy and Mining Authorities.

³⁷ Policy and regulations regarding to the Concession Mining System (Land Tenure). Reinforcing policies and regulations related to human health, worker safety, child labour, women protection and mercury use.

	mercury phase-out in the ASGM sector.	for exploitation contracts rejected by concession owners, which are a fundamental prerequisite for the formalization process.			on the number regulatory measures drafted and approved. <i>Risks:</i> The approval and/or adoption of regulatory measures and guidance documents developed by the project is delayed during the project and will hamper the implementation of project activities, in particular formalization efforts.
Component/ Outcome 2: Establishing financing lending arrangements to provide loans for mercury free processing equipment.	Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.	The Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and the Rural Savings and Loans Banks are present in the project pilot regions. The number of their respective branches are: Arequipa: EDYPYME (9); Municipal Bank (58) and Rural Bank (8) branches. Piura: EDYPYME (29); Municipal Bank (57) and Rural Bank (7) branches. Puno: EDYPYME (5); Municipal Bank (48) and Rural Bank (23) branches. However, the finance assessment could not find	2 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector. US\$ 3 million (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms. US\$ 1 million (Total amount of funding) allocated to the ASGM sector through approved loans.	4 ³⁸ new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector. US\$ 15 million ³⁹ (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms. US\$ 3 million ⁴⁰ (Total amount of funding) allocated to the ASGM sector through approved loans.	<i>Data Collection Method:</i> <ul style="list-style-type: none"> The project will conduct a yearly assessment on the total amount of funding available to the ASGM sector, and the total amount of funding allocated to the ASGM sector, through existing/new financial mechanisms. Records of the National Fund for Mining Formalization, COFIDE/PRIDER, and/or Rural, Municipal and Regional Banks to obtain an overview of loans/grants allocated to the ASGM sector. <i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector too risky. <i>Assumptions:</i> Existing financial mechanisms would be interested in adapting their financial products to make them accessible to the ASGM sector.

³⁸ The project will mainly work with the Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and the Rural Savings and Loans Banks and their respective branches located in the three pilot regions, and potentially with other national and international public and private financial entities in order to establish and implement feasible financial mechanisms, which are expected to include Concessional Loans and Revolving Funds. The project will also support MINEM in the development and operation of the Mining Formalization Fund.

³⁹ The National Fund for Mining Formalization (managed by MINEM) currently has approximately 12 million US\$ available, but this funding level is expected to rise in the coming years. In addition, the project aims to work with the Rural, Municipal and Regional Savings Banks to develop additional financial mechanisms which are expected to make available an additional 3 million US\$. Therefore, the total amount of funding available to the ASGM sector through existing and new financial mechanisms would then be 12 + 3 = 15 million US\$.

⁴⁰ Taking into account the number of miners (1,200) to be trained in accessing financial resources and the kind of technology requirements to improve their production processes and mercury phase-out, it is estimated that the project would support mining groups in accessing around 3 million USD in financial assistance. This is roughly proportional to the amount of funding available through the Mining Formalization Fund for the project's three pilot regions (the 50,000 miners in these regions represent 25% of the total number of ASGM miners in the country (200,000), which percentage wise would grant them access to ~ 3 million US\$).

		<p>any proof of these banks providing funding to the ASGM sector or having financial mechanisms in place that tailor to the ASGM sector</p> <p>Informal ASGM financing networks sometimes involve illegal actors, and are often predatory. Borrowers are sometimes bound to unreasonable terms or unfair dependencies.</p> <p>The National Fund for Mining Formalization (managed by MINEM) has approximately 12 million US\$ available, but this funding level is expected to rise in the coming years.</p> <p>The amount of credit in 2016 (6.6 million US\$) that was awarded to the mining sector in general (not gold or ASGM specific) was awarded by Multiple Banks (97.7%) Municipal Banks (0.57%) and Rural Banks (0.12%) (Source: Superintendencia de Banca, Seguros y AFP).</p>			
	<p>12 ASGM miner groups (of which 20% of the miners are women) are</p>	<p>Approximately 4,800 male miners and 3,000 women miners from the districts where the pilot sites are</p>	<p>600 ASGM miners (of which 200 women and 400 men miners) are trained in developing a</p>	<p>1,200 ASGM miners (of which 400 women, 800 men and miners are trained in developing a</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> Training/workshop attendants lists, in combination with training reports will provide the total number of people trained.

	capacitated to apply for loans for mercury-free processing equipment/investments.	located do not have access to financing and are considered a finance risk by financial entities. The miners located in the selected pilot areas do not carry out feasibility studies or profit studies when they apply for MAPE investments. 0 ASGM loan applications developed. 0 ASGM loan applications approved.	loan/investment application (incl. undertaking technical and financial feasibility studies). 12 loan applications developed (with technical support of the project). 50% of loan applications (developed with technical support of the project) approved.	loan/investment application (incl. undertaking technical and financial feasibility studies). 12 loan applications developed (with technical support of the project). 50% of loan applications (developed with technical support of the project) approved.	<ul style="list-style-type: none"> Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information on the total number of miners trained. <i>Risks:</i> Financial partners/mechanisms might (even after project training) find investing in the ASGM sector too risky. <i>Assumptions:</i> <ul style="list-style-type: none"> Existing financial mechanisms would be interested in adapting their financial products to make them accessible to the ASGM sector. If 12 ASGM mining groups are trained in developing loan applications, it is assumed only 50% of those would be approved, leaving 6 mining groups to work with to establish mercury-free processing plants.
Component/ Outcome 3: Increasing capacity for mercury-free ASGM through provision of technical assistance, technology transfer and support for formalization.	15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices.	Total mercury releases to the environment from ASGM in Peru were estimated to be 70 tonnes in 2010 ⁴¹ , and this has likely risen with gold production and miner population. Based on PPG estimates, approximately 6 tonnes of mercury are emitted annually in the 12 project sites. The annual gold production in the districts where the pilot sites are located is 2.5 tonnes.	Mercury use/releases from ASGM avoided by 5 tonnes/year. 650 kg of gold produced per year without mercury.	Total mercury use/releases from ASGM avoided by 15 tonnes. 2,000 kg of gold produced without mercury.	<i>Data Collection Method:</i> <ul style="list-style-type: none"> Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance (using the UNEP mercury inventory methods) conducted for each of the 12 priority project sites and reports prepared. Training/workshop attendants lists, in combination with training reports will report on the total number of miners trained. Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information on the total number of miners trained, number of Hg-free processing plants established, Hg reduction achieved, gold produced without mercury. <i>Risks:</i> less than 50% of the loans will be approved, resulting in less than 6 mercury-free processing plants, and lower Hg reduction targets. <i>Assumptions:</i>

⁴¹ mercurywatch.org, Artisanal Gold Council, accessed May 2014 (no new data available at present)

					<ul style="list-style-type: none"> ▪ Hg use to gold production is 2.5:1. Therefore, the amount of Hg reduced should be divided by 2.5 to obtain the amount of gold produced without mercury. ▪ Miners involved in the project are willing to report to the project on their gold production. ▪ At least 1 mining group in each project site will be able to obtain a loan, applies this loan to purchase mercury-free processing equipment and is able (with project support), to obtain the right permits/licenses for the plant.
	<p>12 ASGM miner groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions.</p>	<p>Between 2012 and 2017, 1,124 ASM miners were formalized (through the extraordinary process).</p> <p>As of August 2017, nationwide 55,737 mining activities have been registered with REINFO.</p> <p>Of the 55,737 miners in the process of formalization (as of August 2017), 10% are located in Puno; 24% in Arequipa; and 3% in Piura. Thus a total of 20,621 miners located in the pilot areas are in the process of formalization.</p> <p>There are approx. 20,000 informal ASGM miners in the districts of Ananea (Puno), Yanaquihua (Arequipa), Paimas and Suyo (Piura).</p>	<p>At least 600 ASGM miners (of which 200 women miners and 400 men miners) supported in their formalization processes.</p>	<p>At least 1,200 ASGM miners (of which 400 women miners and 800 men miners) supported in their formalization processes.</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ REINFO records (to obtain an overview of how many ASGM miners have been formalized since the project's start) ▪ Registry of mining licenses at district or regional level (to have an overview of how many ASGM miners have obtained licenses since the project's start). ▪ Kadaster (to have an overview of the number of ASGM miners who obtained legal subsurface rights). ▪ Training/workshop attendants lists, in combination with training reports will provide the total number of miners trained. ▪ Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information on the total number of miners trained, no. of miners formalized, no. of miners who have obtained permits/licenses, no. of subsurface rights obtained, etc. <p><i>Risks:</i> Regional Energy and Mining Authorities do not have sufficient staff to review requests for registration, licenses/permits etc. within a reasonable timeframe, which in turn hampers formalization efforts and potential access to financing.</p> <p><i>Assumptions:</i> Project will ensure capacity building of Regional Energy and Mining Authorities so that delays in formalization processes are reduced.</p>

	Route to market for mercury-free gold improved/established.	None of the gold produced in the project's priority areas is currently produced mercury free. During the project's PPG phase the ratios gold production : Hg use were determined to be: Puno (Ananea): 192 Kg Au : 384 Kg Hg Arequipa (Yanaquihua): 144 Kg Au : 288 Kg Hg Piura (Suyo): 96 Kg Au : 192 Kg Hg	350 kg of mercury-free gold sold to the formal market.	700 kg of mercury-free gold sold to the formal market.	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ Records of mining groups. ▪ Interviews with mining groups. ▪ Records of formal buyers. ▪ Quarterly reports sent to the <i>GEF GOLD global component</i> will provide information on the amount of Hg free gold sold to the formal market. <p><i>Risks:</i> Even though miners might be producing Hg-free gold with project support, there is a high likelihood that many of them will continue (especially in the beginning) selling to their original buyers.</p> <p><i>Assumptions:</i> The project will be able to establish partnerships with formal buyers (e.g local banks, holding agents, international refiners, etc.) possibly with support of the GEF GOLD global component who will pay 100% of the gold price.</p>
<p>Component/ Outcome 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.</p>	19,000 ⁴² people (5,000 women and 14,000 men) of whom awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.	<p>The population in the four districts has very little knowledge or no knowledge at all on how mercury can affect human health and the environment in direct or indirect manners.</p> <p>The number of ASGM miners who live/work in each of the pilot areas: Ananea: 1,800 Yanaquihua: 2,200 Paimas: 650 Suyo: 100 Total: 4,750</p>	Awareness raised of 10,000 people (3,000 women and 7,000 men) on the dangers of mercury and ways to reduce its use in ASGM.	Awareness raised of 19,000 people (5,000 women and 14,000 men) on the dangers of mercury and ways to reduce its use in ASGM.	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ Training/workshop attendees lists, in combination with training reports will provide the total number of people trained. ▪ Interviews with mining groups/priority site inhabitants. ▪ Reports provided by the entity implementing the awareness raising campaign will provide the total number of people reached by the project's awareness raising campaign. ▪ Quarterly progress reports (QPRs) sent to the <i>GEF GOLD global component</i> will provide information on the total number of miners trained and the number of people of whom awareness has been raised. <p><i>Assumptions:</i> The awareness raising campaign aims to raise at a minimum the awareness of miners living in the pilot areas (4,750), who in turn will inform their direct family members (thus raising the awareness of a total of 19,000 people). In addition the project will raise the awareness of 40</p>

⁴² The awareness raising campaign aims to raise at a minimum the awareness of miners living in the pilot areas (4,750), who in turn will inform their direct family members (thus raising the awareness of a total of 19,000 people).

					government officials who in turn will inform their direct family members (thus raising the awareness of a total of 160 people). As such the project aims to raise at a minimum the awareness of 19,160 people. For ease of reporting we stick with the number of 19,000.
	M&E and adaptive management applied in response to needs and Mid-Term Evaluation findings.	0 GEF M&E requirements met by the project.	15 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Review (MTR) findings.	34 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Review (MTR) findings.	<p><i>Data Collection Method:</i> 1 National Inception Workshop + Report; 6 District Level Inception Workshops + Reports; 5 PIRs (1 per year); 5 audits (average 1 per year); 10 project board meetings (2 per year); 5 Monitoring missions + Back-to-Office Report (BTOR) (1 per year); 1 mid-term GEF tracking tool updated; 1 Gender assessment completed (as part of MTE); 1 MTR conducted; 1 GEF Secretariat oversight mission conducted + BTOR; 1 TE GEF Tracking Tool updated; 1 TE conducted.</p> <p><i>Assumptions:</i> The project team and UNDP CO can meet all the GEF M&E requirements and within the time planned</p>
	Project results, experiences, lessons-learned and best practices are captured, published, and taken up by the <i>GEF GOLD Global Dissemination Platform</i> for national and global dissemination, using report templates provided by the <i>GEF GOLD global component</i> where appropriate.	0 project results, experiences, lessons-learned or best practices are captured, published, and taken up by the <i>GEF GOLD Global Dissemination Platform</i> .	<p>1 GEF GOLD country project webpage (using the template developed by the Global Gold Project) maintained.</p> <p>Country project participated on a yearly basis in 1 Global ASGM Forum (3 in total), 1 Annual Programme Conference, and 12 monthly programme/project calls.</p> <p>Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration</p>	<p>1 GEF GOLD country project webpage (using the template developed by the Global Gold Project) maintained.</p> <p>Country project participated on a yearly basis in 1 Global ASGM Forum (3 in total), 1 Annual Programme Conference, and 12 monthly programme/project calls.</p> <p>Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration</p>	<p><i>Data Collection Method:</i></p> <ul style="list-style-type: none"> ▪ 1 GEF GOLD website developed (using the template developed by the Global Gold Project) and quarterly updated. ▪ Back-to-Office-Reports from yearly Global ASGM Forum and yearly Annual Programme Conference ▪ Meeting minutes from monthly project calls ▪ Quarterly progress reports (QPRs) in GEF GOLD global component format. ▪ Articles published on websites, papers, etc. and on TV. ▪ Indonesia GEF GOLD project reports and publications or reports/publications in which the Indonesia GEF GOLD project figures. <p><i>Assumptions:</i> The project team can meet all reporting and communication requirements on time.</p>

			<p>with the GEF GOLD global component.</p> <p>On a quarterly basis, information on project progress (using agreed metrics and templates provided by the <i>GEF GOLD global component</i> where appropriate) is submitted to the <i>GEF GOLD global component</i>.</p>	<p>with the GEF GOLD global component.</p> <p>On a quarterly basis, information on project progress (using agreed metrics and templates provided by the <i>GEF GOLD global component</i> where appropriate) is submitted to the <i>GEF GOLD global component</i>.</p>	
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VII. MONITORING AND EVALUATION (M&E) PLAN

The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. *Supported by Component/Outcome Four: Knowledge Management and M&E, the project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.*

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies⁴³.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.⁴⁴

M&E Oversight and monitoring responsibilities:

Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. ESMP, gender action plan, stakeholder engagement plan etc.) occur on a regular basis.

Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

Project Implementing Partner: The Implementing Partner is responsible for providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used and generated by the project supports national systems.

⁴³ See https://www.thegef.org/gef/policies_guidelines

⁴⁴ See https://www.thegef.org/gef/gef_agencies

UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the *independent mid-term review* and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.⁴⁵

Additional GEF monitoring and reporting requirements:

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; SESP, Environmental and Social Management Plan and other safeguard requirements; project grievance mechanisms; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July

⁴⁵ See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

(previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefits: *list the required GEF Tracking Tool(s), as agreed with the UNDP-GEF Regional Technical Advisor*. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted as Annex to this project document – will be updated by the Project Manager/Team (not the evaluation consultants hired to undertake the *MTR* or the *TE*) (*indicate other project partner, if agreed*) and shared with *the mid-term review consultants* and terminal evaluation consultants before the required *review/evaluation* missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed *Mid-term Review report* and Terminal Evaluation report.

Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

Final Report: The project’s terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Table 3. Mandatory GEF M&E Requirements and M&E Budget

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ⁴⁶ (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	10,000	40,000	Within two months of project document signature 1 National Inception Workshops and 6 District Level Inception Workshops
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Risk management	<ul style="list-style-type: none"> ▪ Project Manager ▪ Country Office 	None	None	Quarterly, annually
Monitoring of indicators in project results framework	<ul style="list-style-type: none"> ▪ Project Manager ▪ Working Group Coordinator Component 4 	10,000 (2,500/year)	40,000 (10,000/year)	Annually before PIR
GEF Project Implementation Report (PIR)	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office ▪ UNDP-GEF team 	None	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	25,000 (5,000/year)	100,000 (20,000/year)	Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	<ul style="list-style-type: none"> ▪ Project Manager ▪ Working Group Coordinator Component 4 	20,000	80,000	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office 	5,000	20,000	On-going

⁴⁶ Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ⁴⁶ (US\$)		Time frame
		GEF grant	Co-financing	
Stakeholder Engagement Plan (as part of the Awareness Raising Plan)	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office ▪ Working Group Coordinator Component 4 	5,000	20,000	On-going
Gender Action Plan (as part of the Awareness Raising Plan)	Project Manager UNDP Country Office UNDP GEF team Gender Expert	5,000	20,000	On-going
Addressing environmental and social grievances	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP Country Office 	20,000	80,000	On-going
Project Board meetings	Project Board UNDP Country Office Project Manager	20,000 (10 in total, 2,000/meeting)	80,000	At a minimum annually
Supervision missions	UNDP Country Office	None ⁴⁷	10,000	Annually
Oversight missions	UNDP-GEF team	None ⁴⁷	10,000	Troubleshooting as needed
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None	10,000	To be determined.
Mid-term GEF Tracking Tool to be updated	<ul style="list-style-type: none"> ▪ Project Manager ▪ Working Group Coordinator Component 4 	7,500	10,000	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	<ul style="list-style-type: none"> ▪ UNDP Country Office and Project team and UNDP-GEF team 	25,000	32,000	Between 2 nd and 3 rd PIR.
Terminal GEF Tracking Tool to be updated by	Project Manager	7,000	10,000	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	40,000	20,000	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	NA	NA	As required. GEF will only accept reports in English.
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses		199,500	582,000	

⁴⁷ The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Peru, and the Country Programme. The Ministry of Environment (MINAM) will be the Implementing Partner in this project, given its role in ensuring compliance *with environmental standards and defining national planning and procedures*, in coordination with other responsible entities.

The Implementing Partner is responsible for:

- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

The United Nations Development Programme (UNDP), as GEF Implementing Agency, will support the implementation of the project by providing the necessary technical and operational assistance. Likewise, it will be responsible for high-level monitoring of the project and all necessary reporting to GEF. All actions will be planned and conducted in close collaboration between MINAM, UNDP, and the other members of the Project Board.

UNDP will function as Responsible Party for Monitoring and Evaluation and for Project Management, and as such will be responsible for the selection, appointment and oversight of consultants and contractors, and for the procurement of other goods and services necessary under these components.

For these services, a Letter of Agreement will be signed between UNDP and MINAM, through which the Implementing Partner will request UNDP to put in place and directly oversee the Project Management Unit, and provide the services required for the implementation of activities indicated in the multi-annual work plan. In this context, UNDP's rules and regulations will apply, and will include direct cost recovery; it will charge Direct Project Services (DPS) as shown in Section X: Total Budget and Workplan.

The **Implementing Partner (IP)** for this project is the Ministry of the Environment (MINAM), which will appoint the chair of the Project Board and the National Project Director (see below). The Implementing Partner (IP) is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

The project will be under the overall leadership of a **National Project Director (NPD)**, who will be a representative of MINAM and will be responsible for orienting and advising the National Project Manager on Government policy and priorities. The NPD will also be responsible for maintaining regular communication with the lead institutions in the mining, health and environment sectors and ensuring that their interests are communicated effectively to the National Project Coordinator. The National Project Director will be represented on the Project Board.

Project Board: The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager.

Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Agree on project manager's tolerances as required;

- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Approve the project's Annual Work Plan, the budget structure and project progress reports;
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded;
- Assess and decide to proceed on project changes through appropriate revisions.

The composition of the Project Board must include the following roles:

Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: The National Project Director (NPD), Vice-minister of Environmental Management, Ministry of the Environment.

The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

Specific Responsibilities: (as part of the above responsibilities for the Project Board)

- Ensure that there is a coherent project organisation structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organise and chair Project Board meetings.

Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Supplier is: The United Nations Development Programme (UNDP).

Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiaries are: Energy and Mining Regional Manager's Office for Puno (Dirección Regional de Energía y Minas de Puno); Energy and Mining Regional Manager Office for Arequipa (Gerencia Regional de Energía y Minas de Arequipa); and Energy and Mining Regional Office for Piura (Dirección Regional de Energía y Minas de Piura).

The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

Technical Advisory Committee (TAC): The TAC will provide technical advice and inputs relating to project implementation and will be chaired by the National Project Director (Vice-minister of Environment Management, Ministry of the Environment) with support from the Project Manager. The members of the TAC will consist of representatives from Government that are also members of the Permanent Intersectoral Committee for Formalization and Illegal Mining, coordinated by MINEM, as well as other government entities that are stakeholders in this project. In addition, the TAC will be made up of (inter) national NGOs, CBOs, Women organizations, International Cooperation partners, Universities, among others. A preliminary TAC list has been provided below:

- Ministry of Environment - MINAM
- Ministry of Energy and Mining - MINEM
- Ministry of Culture - MINCULTURA
- Ministry of Interior - MININTERIOR
- Ministry of Defense - MINDEFENSA
- Ministry of Agriculture and Irrigation - MINAGRI
- Ministry of Economy and Finance - MEF
- Ministry of Foreign Affairs - MINRE
- Ministry of Labor and Employment Promotion - MINTPE
- National Superintendence of Customs and Taxes Administration - SUNAT
- National Superintendence of Public Registries – SUNARP
- International Cooperation partners (e.g. SECO, Canadian Embassy, The United States Embassy, among others)
- International NGOs (e.g. CIRDI, Aliace for Responsible Mining, SOLIDARIDAD, among others)
- National NGOs (e.g. Red Social, CREEHPERU, among others)
- National Universities (e.g. Universidad Católica, Universidad de Piura, among others)
- Mining Cooperatives (e.g. SECOMIP, ORO SUR, San Cristóbal, among others)
- Community Based Organizations
- Women Organizations

Technical experts may be invited to participate in the TAC meetings to discuss specific issues.

TAC meetings will function as a dialogue space to discuss the project implementation strategy and to address issues (complaints or suggestions) related to the project as they come up. As necessary, the TAC could have additional meetings with the Government of Peru and UNDP to further discuss issues of information, dialogue and incorporation of suggestions.

Draft Terms of Reference (ToRs) for the TAC can be found in Annex D. These ToRs frame the Committee's functions and ensure that its focus remains on issues directly associated with the Project. The ToR will be reviewed by the Project Board during project inception and may be extended as necessary.

Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

The Implementing Partner appoints the Project Manager, who should be different from the Implementing Partner's representative in the Project Board.

The Project Manager will be responsible for the implementation of the project, providing technical expertise, reviewing and preparing TOR's and reviewing the outputs of consultants and other sub-contractors. The NPC will:

Specific responsibilities include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Provide monitoring, supervision and guidance to the technical teams based in the project areas.
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Ensure the logistical, administrative and financial effectiveness of the Implementing Partner (IP) in fulfilling its roles set out above;
- Promote coordination with MINEM, UNDP and the donor agencies that are supporting the project;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the GEF PIR and submit the final report to the Project Board;
- Based on the GEF PIR and the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board.

The Project Manager (PM) will be supported by an Administrative Staff and three (3) Regional Coordinators, who will be responsible for ensuring coordination between national and regional stakeholders and support and advise Regional Authorities under the guidance of Project Manager.

The PMU will be led by a **Project Manager**, who will be hired through a competitive process and who will coordinate directly with the National Project Director. The Project Manager's (PM) function will end when the final project terminal evaluation report and corresponding management response, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

As **GEF implementing agency**, UNDP will be ultimately accountable and responsible for the delivery of results, subject to their certification by MINAM as Implementing Partner. UNDP shall provide project cycle management services as defined by the GEF Council that will include the following:

- Providing financial and audit services to the project;
- Overseeing financial expenditures against project budgets;
- Ensuring that activities including procurement and financial services are carried out in strict compliance with UNDP/GEF procedures;
- Ensuring that the reporting to GEF is undertaken in line with the GEF requirements and procedures;
- Facilitate project learning, exchange and outreach within the GEF family;
- Contract the project mid-term and final evaluations and trigger additional reviews and/or evaluations as necessary and in consultation with the project counterparts.

Project Assurance: UNDP 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 must be totally independent of the Project Management function. The quality assurance role 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.

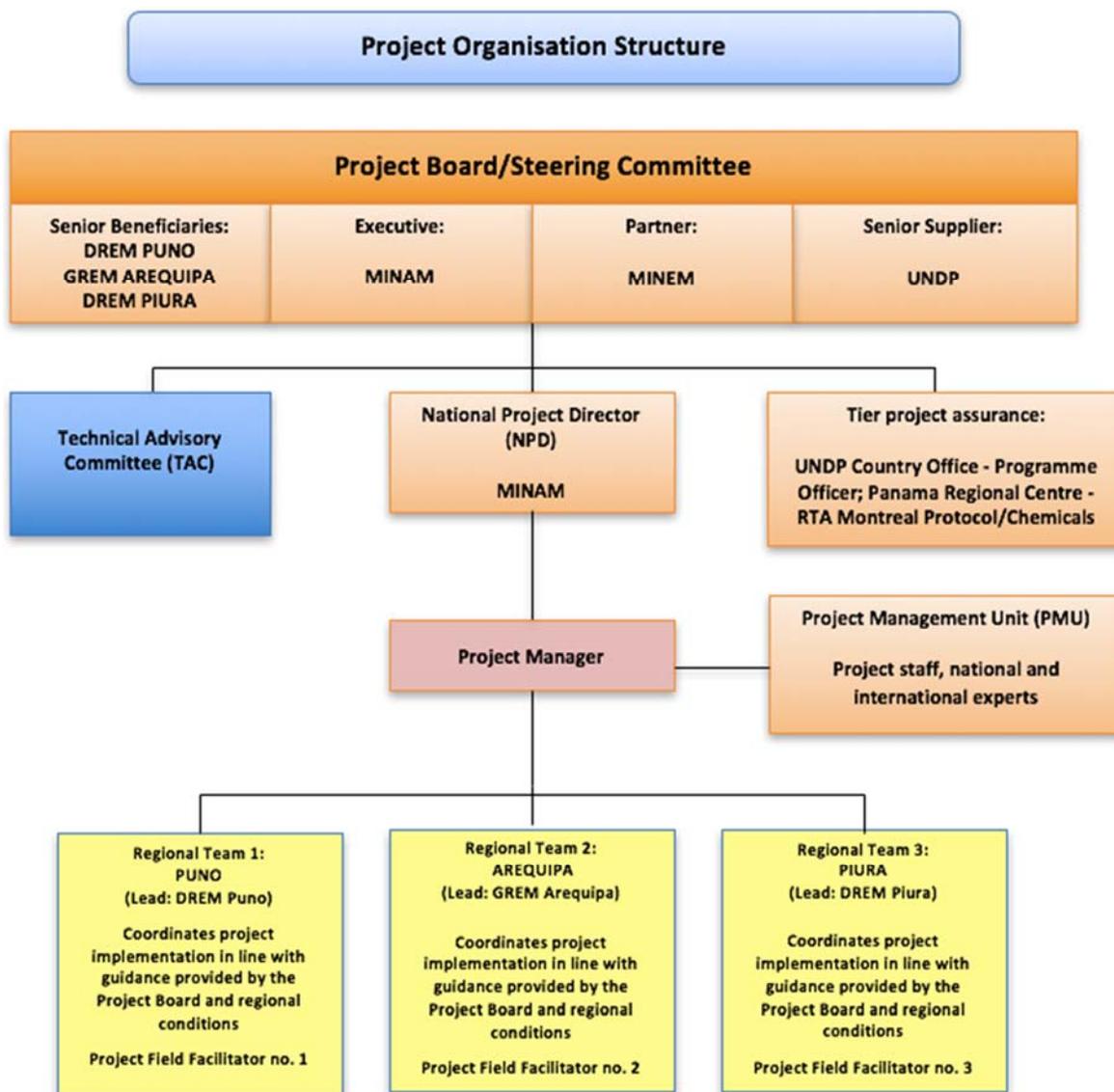
The **project assurance** role will be provided by the UNDP Country Office Programme Officer. Additional quality assurance will be provided by the UNDP Regional Technical Advisor as needed.

Within the UNDP Country Office, the Internal Control Framework will be strictly followed, through which roles and responsibilities are explicitly differentiated among staff members. In this sense, at the request of the government of Peru and in accordance with UNDP's Operational Policies and Procedures, UNDP provides operational and programmatic support as described in the Prodoc and LOA. At the same time, UNDP will fulfill its role as project assurance and service provider according to the project's governance structure.

Governance role for project target groups:

In order to engage with local stakeholders, communities and project beneficiaries, Regional Project Advisory Boards will be established for each of the district pilot areas (4) that are involved in project Component 3. The Regional Project Advisory Boards will be called upon by the regional government in the respective districts, and will comprise of representatives from the regional Government, mining concessionaries, as well as non-governmental and community groups active in gold mining.

Regional Coordinators will be appointed for each of the regions (Puno, Arequipa and Piura) who will be responsible for liaising with government and stakeholders at the local level on technical and operational project aspects. The project organisation structure is as follows:



IX. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 39,223,512. This is financed through a GEF grant of USD 3,990,000 and USD 35,233,512 in parallel co-financing.

UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Parallel co-financing: The actual realization of project co-financing will be monitored during the *mid-term review* and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

Table 4. Co-financing

Co-financing source	Co-financing type	Co-financing amount	Planned Activities/Outputs	Risks	Risk Mitigation Measures
National Government – Ministry of Energy and Mines	Grant	25,700,000	Implementation of ASGM formalization process	Budget allocation change by the Ministry of Finance. Low risk since the resources belong to the national budget.	UNDP CO will monitor the Ministry's co-financing contribution to the project.
Regional Government – DREM Piura	In kind	447,280	Adaptation and development of the formalization process to meet regional circumstances. Collaboration on and support to project activities in Piura pilot sites.	The amount could change during the project's implementation as a result of the allocation and availability of national and regional budget resources.	Verify each 6 months the amount and type of budget disbursements.
Regional Government – GREM Arequipa	Grant	1,092,305	Adaptation and development of the formalization process to meet regional circumstances. Collaboration on and support to project activities in Arequipa pilot sites.	The amount could change during the project's implementation as a result of the allocation and availability of national and regional budget resources.	Verify each 6 months the amount and type of budget disbursements.
International Cooperation - Embassy of Canada in Peru	Grant	3,118,026	Share lessons-learned, outcomes and experiences from activities implemented within the scope of the MEJORO project.	Staff turnover or a realignment of priorities.	Jointly assess project activities and outcomes in the project's pilot regions.
SECO – BGI	Grant	1,798,430	Build transparency, accountability and profitability in the gold value chain.	Change of prioritized pilot areas that do not match with GEF GOLD priority areas.	Regularly coordinate with BGI possible changes in policies or procedures in its projects.
ARM	In kind (615,905 US\$) & Grant (962,305)	1,578,210	Development of standards and certification systems. Adoption of best mining practices and their inclusion in public policies.	Changes in policies and priorities related to ASGM.	Regularly coordinate with ARM possible changes in policies or its project activities.
CIRDI	Grant	1,474,261	Gender, water and mining.	Changes in policies and	Regularly coordinate with

			Improvement of public sector capacity and governance. Integrated Natural Resources Management.	priorities related to ASGM.	CIRDI possible changes in policies or its project activities.
UNDP	In kind	25,000	Support the Government in project implementation and the achievement of project outcomes.	Low risk of overwhelmed staff causing unexpected delays in implementation.	UNDP will coordinate activities in line with the project's work plan.

UNDP Direct Project Services as requested by Government (if any): UNDP Direct Project Services (DPS) as requested by Government: The UNDP, as GEF Agency for this project, will provide project management cycle services for the project as defined by the GEF Council. In addition, the Government of Peru may request UNDP direct services for specific projects, according to its policies and convenience. The UNDP and Government of Peru acknowledge and agree that those services are not mandatory, and will be provided only upon Government request. If requested, the services would follow the UNDP policies on the recovery of direct costs. These services (and their costs) are specified in the Letter of Agreement (Annex J for LOA and K for DPC calculation). As is determined by the GEF Council requirements, these service costs will be assigned as Project Management Cost, duly identified in the project budget as Direct Project Costs. Eligible Direct Project Costs should not be charged as a flat percentage. They should be calculated on the basis of estimated actual or transaction based costs and should be charged to the direct project costs account codes: "64397- Services to projects – CO staff" and "74596 – Services to projects – GOP for CO".

Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team to ensure accurate reporting to the GEF: a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.⁴⁸ On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

⁴⁸ see <https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx>

Transfer or disposal of assets: In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file⁴⁹.

Financial completion: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

⁴⁹ See https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

X. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00104395	Atlas Primary Output Project ID:	000105988
Atlas Proposal or Award Title:	Integrated Sound Management of Mercury in Peru's Artisanal and Small-scale Gold Mining (ASGM)		
Atlas Business Unit	PER10		
Atlas Primary Output Project Title	Integrated Sound Management of Mercury in Peru's Artisanal and Small-scale Gold Mining (ASGM)		
UNDP-GEF PIMS No.	5874		
Implementing Partner	Ministry of Environment (MINAM)		

GEF Outcome/Atlas Activity	Responsible Party/Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	See Budget Note:
Component/Outcome 1: Strengthening institutions and the policy/regulatory framework for Mercury-free ASGM.	MINAM	62000	GEF	71200	International consultants	36,000	15,000	0	0	0	51,000	1.
				71300	Local consultants	77,000	35,000	0	0	0	112,000	2.
				71600	Travel	40,000	8,000	0	0	0	48,000	3.
				72100	Contractual services - Companies	0	106,000	0	0	0	106,000	4.
				71500	UNV	11,000	0	0	0	0	11,000	5.
				74200	Audio Visual & Print Prod, Costs	2,500	6,000	0	0	0	8,500	6.
				75700	Training, Workshops and Confer	25,000	12,500	0	0	0	37,500	7.
					Sub-total Component 1	191,500	182,500	0	0	0	374,000	
Component/ Outcome 2: Establishing financing lending arrangements/revolving funds to provide loans to legalized ASGM miners/cooperatives.	MINAM	62000	GEF	71200	International consultants	15,000	25,000	60,000	0	0	100,000	8.
				71300	National consultants	20,000	38,000	5,000	5,000	5,000	73,000	9.
				71400	Service Contracts	30,000	57,000	70,000	30,000	30,000	217,000	10.
				71600	Travel	10,000	15,000	0	0	0	25,000	11.
				72100	Contractual services - Companies	0	160,000	16,667	16,667	16,666	210,000	12.
				72600	Grants	0	0	500,000	0	0	500,000	13.
				71500	UNV	4,000	8,000	10,000			22,000	14.
				74200	Audio Visual & Print Prod, Costs	0	47,000	11,666	6,667	6,667	72,000	15.
				75700	Training, Workshops and Confer	0	50,000	40,000	0	0	90,000	16.
	Sub-total Component 2	79,000	400,000	713,333	58,334	58,333	1,309,000					
Component/ Outcome 3: Increasing capacity for mercury-free ASGM through provision of technical assistance and technology transfer.	MINAM	62000	GEF	71200	International consultants	30,000	30,000	72,500	0	0	132,500	17.
				71400	Service Contracts	99,400	99,400	99,400	99,400	99,400	497,000	18.
				71600	Travel	15,000	35,000	55,000			105,000	19.
				72100	Contractual services – Companies	0	25,000	245,000	50,000		320,000	20.
				72200	Equipment and Furniture	0	270,000	0	0	0	270,000	21.

				74200	Audio Visual & Print Prod, Costs	15,000	4,000	40,000	0	0	59,000	22.
				75700	Training, Workshops and Confer	5,000	25,000	45,000	20,000	0	95,000	23.
					Sub-total Component 3	164,400	488,400	556,900	169,400	99,400	1,478,500	
Component/ Outcome 4: Monitoring and evaluation, awareness raising, capturing and disseminating experiences, lessons-learned and best practices.	MINAM	62000	GEF	71200	International consultants	0		15,000	0	25,000	40,000	24.
				71300	National consultants	0	0	5,000	0	13,000	18,000	25.
				71400	Service Contracts	44,000	44,000	44,000	44,000	44,000	220,000	26.
				71600	Travel	21,500	15,000	27,500	15,000	30,000	109,000	27.
				72100	Contractual services - Companies	15,000	15,625	15,625	15,625	15,625	77,500	28.
				71500	UNV	14,500	14,500	14,500	14,500	14,500	72,500	29.
				74100	Professional Services – audit	5,000	5,000	5,000	5,000	5,000	25,000	30.
				74200	Audio Visual&Print Prod Costs	6,000	6,000	10,000	6,000	10,500	38,500	31.
				75700	Training, Workshops and Confe	22,000	4,000	4,000	4,000	4,000	38,000	32.
					Sub-total Component 4	128,000	104,125	140,625	104,125	161,625	638,500	
Project Management	MINAM	62000	GEF	71400	Service Contracts	14,000	14,000	14,000	14,000	14,000	70,000	33.
				72200	Equipment and Furniture	4,000	4,000	4,000	4,000	4,000	20,000	34.
				72400	Communic & Audio Visual Equip	3,003	3,003	3,003	3,003	3,001	15,013	35.
				72500	Supplies	5,000	5,000	5,000	5,000	5,000	25,000	36.
				74596	Direct Project Costs (DPC)	11,997	11,997	11,997	11,997	11,999	59,987	37.
					Sub-total Project Management	38,000	38,000	38,000	38,000	38,000	190,000	
TOTAL BUDGET						600,900	1,213,025	1,448,858	369,858	357,359	3,990,000	

Summary of Funds:⁵⁰

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	600,900	1,213,025	1,448,858	369,858	357,358	3,990,000
(cash and in-kind) e.g. Government	5,500,000	10,233,512	12,500,000	3,500,000	3,500,000	35,233,512
TOTAL	6,100,900	11,446,537	13,948,858	3,869,858	3,857,358	39,223,512

Budget note #	Comments
1.	Component 1: International Consultants to support Output 1.1.1 (Assessment conducted of the capacity of government entities (national, regional 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); Output 1.1.2 (Capacity building plans developed and implemented for 4 institutions); 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 12 project priority sites in order to identify gaps that would

⁵⁰ Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

	need to be addressed to further advance the formalization of the ASGM sector and phase-out the use of mercury for ASGM gold processing); Output 1.2.3 (2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector).
2.	Component 1: Local Consultants to support Output 1.1.1 (Assessment conducted of the capacity of government entities (national, regional 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); Output 1.1.2 (Capacity building plans developed and implemented for 4 institutions); Output 1.1.3 (Trainings provided, including gender sensitization training, to ~ 40 government staff); 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 12 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 mercury for ASGM gold processing); Output 1.2.2 (Recommendations (methodology) to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups); Output 1.2.3 (2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector).
3.	Component 1: Travel to support Output 1.1.1 (Assessment conducted of the capacity of government entities (national, regional 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); Output 1.1.2 (Capacity building plans developed and implemented for 4 institutions); Output 1.1.3 (Trainings provided, including gender sensitization training, to ~ 40 government staff); 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 12 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 mercury for ASGM gold processing).
4.	Component 1: Contractual Services - Companies to support Output 1.1.3 (Trainings provided, including gender sensitization training, to ~ 40 government staff) and Output 1.2.3 (2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector).
5.	Component 1: UNV: Funds to be allocated towards a UNV Gender Expert to support Output 1.1.3 (Trainings provided, including gender sensitization training, to ~ 40 government staff); 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 12 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 mercury for ASGM gold processing); Output 1.2.2 (Recommendations (methodology) to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups).
6.	Component 1: Audio Visual & Print Prod, Costs to support Output 1.1.2 (Capacity building plans developed and implemented for 4 institutions) and Output 1.2.3 (2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector).
7.	Component 1: Training, Workshops and Confer to support Output 1.1.3 (Trainings provided, including gender sensitization training, to ~ 40 government staff); 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 12 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 mercury for ASGM gold processing) and Output 1.2.2 (Recommendations (methodology) to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups).
8.	Component 2: International consultants to support Output 2.1.1 (4 finance entities selected that the project will partner with); 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); Output 2.2.1 (1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting); Output 2.2.2 (12 loan applications developed with project support).
9.	Component 2: National consultants to support the implementation of project Output 2.1.1 (4 finance entities selected that the project will partner with); Output 2.1.2 (Memoranda of Understanding (MoU) signed with each of the finance entities the project is going to partner with); 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); Output 2.1.7 (Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities); Output 2.1.8 (Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions); Output 2.1.11 (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).
10.	Component 2: Service Contracts. Funding to be allocated for an Administrative Assistant (150,000 US\$) and funds to be allocated to 3 Project Field Facilitators (47,000 US\$) to support the implementation of Output 2.1.9 (Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established); Output 2.2.1 (1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting) and Output 2.2.2 (12 loan applications developed with project support).
11.	Component 2: Travel to support Output 2.1.1 (4 finance entities selected that the project will partner with); 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); Output 2.1.9 (Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established).
12.	Component 2: Contractual services – Companies to support 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); Output 2.1.4 (Staff of the financial entity(ies) trained in the (re)design of these financial products for the ASGM sector); 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, risk assessments, evaluation of legal and technical requirements, etc.) as well as the evaluation of loan guarantees to evaluate the economic case for loans and leases); Output 2.1.6 (4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups); Output 2.1.7 (Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities); Output 2.1.10 (Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implementation of project Outcome 2.1); Output 2.1.11 (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); Output 2.2.3 (Assessment conducted on a yearly basis of the number of approved loan applications).
13.	Component 2: Grants for Output 2.1.6 (4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups) <i>Note: Use of Grant will follow UNDP micro-capital grant policy.</i>
14.	Component 2: UNV: Funds to be allocated towards a UNV Gender Expert to support 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); Output 2.1.7 (Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities); Output 2.1.8 (Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions); Output 2.2.1 (1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting); Output 2.2.2 (12 loan applications developed with project support).

15.	Component 2: Audio Visual & Print Prod, Costs for Output 2.1.6 (4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups); Output 2.1.7 (Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities); Output 2.1.9 (Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established); Output 2.1.10 (Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implementation of project Outcome 2.1); Output 2.1.11 (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); Output 2.2.2 (12 loan applications developed with project support) and Output 2.2.3 (Assessment conducted on a yearly basis of the number of approved loan applications).
16.	Component 2: Training, Workshops and Confer for Output 2.1.4 (Staff of the financial entity(ies) trained in the (re)design of these financial products for the ASGM sector); 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, risk assessments, evaluation of legal and technical requirements, etc.) as well as the evaluation of loan guarantees to evaluate the economic case for loans and leases); Output 2.1.7 (Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities); Output 2.1.8 (Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions); Output 2.2.1 (1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting).
17.	Component 3: International consultants to support 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); 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); Output 3.1.19 (Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared); Output 3.1.25 (At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms); Output 3.1.27 ((Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings); 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).
18.	Component 3: Service Contracts funds in the amount of 497,000 US\$ will be allocated towards the hiring of 3 Project Field Coordinators who will be based in the 3 project regions to support the implementation of Output 3.1.1 (Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance inventories conducted for each of the 12 priority project sites); Output 3.1.3 (Most formalized, organized and committed mining groups (containing 20% women) selected for project participation); 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); Output 3.1.5 (Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers); 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); 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); 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); Output 3.1.14 (100 miners trained 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves)); 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 practices designed for all project selected mining groups); Output 3.1.19 (Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared); Output 3.1.21 (One (1) mercury-free ore processing training plant in 1 project location established); 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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members); Output 3.1.23 (4 small mobile plants in 4 project locations established); Output 3.1.24 (1,000 miners trained by trainers at 4 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)); Output 3.1.25 (At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms); Output 3.1.26 (Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies); Output 3.1.27 ((Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings); 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); 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); Output 3.2.1 (12 mining groups (of which 20% of the miners are women) have received leadership training); Output 3.2.2 (12 project mining groups (of 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)); Output 3.2.3 (12 project mining groups supported in obtaining a license/permit for ASGM or to establish/operate a processing plant); Output 3.2.4 (12 project mining groups supported in designing processing and environmental management plan (incl. tailings storage plans) that comply with national laws and environmental standards)
19.	Component 3: Travel to support Output 3.1.1 (Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance inventories conducted for each of the 12 priority project sites); 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); 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)); 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); 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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members); and Output 3.3.1 (At least 1 partnership established with an international refiner).
20.	Component 3: Contractual services – Companies to support Output 3.1.7 (Ore assays (from the selected mining groups) conducted in accredited metallurgy labs); Output 3.1.11 (Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project); Output 3.1.23 (4 small mobile plants in 4 project locations established); 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); Output 3.2.1 (12 mining groups (of which 20% of the miners are women) have received leadership training); Output 3.3.1 (At least 1 partnership established with an international refiner); Output 3.3.2 (At least 1 partnership established with a local bank (possibly in combination with Outcome 2.1)); Output 3.3.3 (At least 1 partnership established with a fund transfer/holding agent); Output 3.3.4 (Establish a partnership with a gold certification organization to assess top performing project mining groups for possible certification).

21.	Component 3: Equipment and Furniture to support Output 3.1.20 (Equipment and spare parts for 4 small mobile plants and 1 mercury-free ore processing training plant procured); Output 3.1.21 (One (1) mercury-free ore processing training plant in 1 project location established).
22.	Component 3: Audio Visual&Print Prod Costs to support Output 3.1.2 (Accumulated data (incl. amount of gold produced and amount of mercury used/released) presented to the relevant government agencies in a report); Output 3.1.5 (Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers)); Output 3.1.11 (Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project).
23.	Component 3: Training, Workshops and Confer to support 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)); Output 3.1.8 (Partnerships established with training centers that already provide or could provide in the future, training on sound ASGM practices); 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); Output 3.1.14 (100 miners trained 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves)); 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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members); Output 3.2.1 (12 mining groups (of which 20% of the miners are women) have received leadership training).
24.	Component 4: International consultants to support Output 4.2.9 (1 Independent Mid-term Review (MTR) conducted (translated into English) and management responses submitted); and Output 4.2.12 (1 Independent Terminal Evaluation conducted (translated into English) and management responses submitted).
25.	Component 4: National consultants to support Output 4.2.9 (1 Independent Mid-term Review (MTR) conducted (translated into English) and management responses submitted); and Output 4.2.12 (1 Independent Terminal Evaluation conducted (translated into English) and management responses submitted).
26.	Component 4: Service Contracts. Funds in the amount of 150,000 US\$ will be allocated towards the hiring of a Project Manager, and funds in the amount of 70,000 US\$ will be allocated towards the hiring of a Monitoring and Evaluations Expert to support outputs 4.2.7 (1 Mid-Term GEF Tracking Tool updated); Output 4.2.11 (1 Terminal GEF Tracking Tool updated); and 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).
27.	Component 4: Travel to support Output 4.2.1 (1 National Inception Workshop Conducted and Report Issued); Output 4.2.2 (3 Regional Level Inception Workshops organized and Reports issued); Output 4.2.8 (1 Gender Assessment of project impact completed (as part of MTE)); Output 4.2.9 (1 Independent Mid-term Review (MTR) conducted (translated into English) and management responses submitted); Output 4.2.12 (1 Independent Terminal Evaluation conducted (translated into English) and management responses submitted); 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).
28.	Component 4: Contractual services – Companies to support Output 4.1.1 (Initial assessment carried out on awareness raising strategies and mechanisms); Output 4.1.2 (Awareness raising plan (incl. gender dimensions) developed); Output 4.1.3 (Awareness raising plan (incl. gender dimensions) implemented).
29.	Component 4: UNV: Funds (22,500 US\$) to be allocated towards a UNV Gender Expert to support Output 4.1.2 (Awareness raising plan (incl. gender dimensions) developed); Output 4.2.1 (1 National Inception Workshop Conducted and Report Issued); Output 4.2.8 (1 Gender Assessment of project impact completed (as part of MTE) UNV: Funds (50,000 US\$) to be allocated towards a UNV Communications Expert to support implementation of Output 4.3.1 (1 GEF GOLD country project webpage developed and updated on a quarterly basis) and 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-learned, best practices and experiences).
30.	Component 4: Professional Services – audit to support Output 4.2.4 (1 audit completed (frequency as per UNDP Audit policies – on average 1 per year)
31.	Component 4: Audio Visual&Print Prod Costs to support Output 4.2.9 (1 Independent Mid-term Review (MTR) conducted (translated into English) and management responses submitted); Output 4.2.12 (1 Independent Terminal Evaluation conducted (translated into English) and management responses submitted); and Output 4.3.6 (Reports and publications adapted and translated into local languages to facilitate dissemination at local, district, provincial and national needs).
32.	Component 4: Training, Workshops and Confe to support Output 4.2.1 (1 National Inception Workshop Conducted and Report Issued); Output 4.2.2 (3 Regional Level Inception Workshops organized and Reports issued); Output 4.2.5 (10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational).
33.	PMC: Service Contracts to support 30% of a project manager position.
34.	PMC: Equipment and Furniture to support the functioning of the PMU with furniture and computer equipment.
35.	PMC: Communic & Audio Visual Equip to support the functioning of the PMU (telephone, internet connection, electricity, etc.).
36.	PMC: Supplies to support the functioning of the PMU with supplies.
37.	DPC. Kindly refer to Annex K for a detailed overview of DPC costs.

XI. LEGAL CONTEXT

This document together with the Country Programme Document 2017-2021 signed by the Government of Peru and UNDP, constitute together the instrument envisaged and defined in the Project Document.

This project will be implemented by the Ministry of the Environment (MINAM) (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes: (i) revision of, or addition to, any of the annexes to the Project Document; (ii) revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation; (iii) mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and (iv) inclusion of additional annexes and attachments only as set out here in this Project Document.

XII. RISK MANAGEMENT

Government Entity (NIM)

Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).

The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable

times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XIII. MANDATORY ANNEXES

- A. Multi Year Work Plan
- B. GEF Tracking Tool at baseline
- C. Overview of technical consultancies/subcontracts
- D. Terms of Reference
- E. UNDP Social and Environmental and Social Screening Template (SESP)
- F. Stakeholder Engagement Plan
- G. Gender Analysis and Gender Action Plan
- H. UNDP Risk Log
- I. Results of the capacity assessment of the project implementing partner and HACT micro assessment
- J. Letter of Agreement (LOA) between UNDP and the Government for the Provision of Support Services
- K. DPC Calculations
- L. STAP & GEFSEC Response
- M. Procurement Plan
- N. List of people consulted during project development
- O. Co-financing Letters (including unofficial translation)
- P. GOLD Programme: Knowledge Sharing and Communications Elements to be Included in All Country Projects
- Q. Project Identification Form (PIF)
- R. Financial Mechanism Assessment
- S. Theory of Change (ToC) diagram
- T. Criteria for Site Selection and Selected Sites

Annex A: Multi Year Work Plan

Note: The full list of outputs and indicators can be found below the table.

PM = Project Manager

PFF = Project Field Facilitator (PFF)

NE = National Expert

SC = Service contract

IC = International Consultant

CO = Country Office

GE = Gender Expert

Output	Ind.	Responsible Party (Project)	Responsible Party (Nat. Partner)	Year 1				Year 2				Year 3				Year 4				Year 5			
				Q1	Q2	Q3	Q4																
1.1.1	1.1	PM & NE & IC	MINAM – MINEM-UNDP																				
1.1.2	1.1	PM & NE & IC	MINAM – MINEM-UNDP																				
1.1.3	1.1	PM & NE & SC	MINAM – MINEM-UNDP																				
1.2.1	1.2	PM & NE & IC	MINAM – MINEM-UNDP																				
1.2.2	1.2	PM & NE	MINAM – MINEM-UNDP																				
1.2.3	1.2	PM & NE & IC	MINAM – MINEM-UNDP																				
2.1.1	2.1	PM & NE & IC	MINEM-UNDP																				
2.1.2	2.1	PM & NE	MINEM-UNDP																				
2.1.3	2.1	PM & IC & SC	MINEM-UNDP																				
2.1.4	2.1	PM & SC	MINEM-UNDP																				
2.1.5	2.1	PM & SC	MINEM-UNDP																				
2.1.6	2.1	PM & SC	MINEM-UNDP																				
2.1.7	2.1	PM & NE & SC	MINEM-UNDP																				
2.1.8	2.1	PM & NE	MINEM-UNDP																				
2.1.9	2.1	PM & NE & IC	MINEM-UNDP																				
2.1.10	2.1	PM & SC	MINEM-UNDP																				
2.1.11	2.1	PM & NE & SC	MINEM-UNDP																				

Output	Ind.	Responsible Party (Project)	Responsible Party (Nat. Partner)	Year 1				Year 2				Year 3				Year 4				Year 5			
				Q1	Q2	Q3	Q4																
3.1.24	3.1	PM & PFFs	MINEM-UNDP																				
3.1.25	3.1	PM & IC & PFFs	MINEM-UNDP																				
3.1.26	3.1	PM & IC & PFFs	MINEM-UNDP																				
3.1.27	3.1	PM & IC & PFFs	MINEM-UNDP																				
3.1.28	3.1	PM & IC & PFFs	MINEM-UNDP																				
3.2.1	3.2	PM & SC & PFFs	MINEM-UNDP																				
3.2.2	3.2	PM & PFFs	MINEM-UNDP																				
3.2.3	3.2	PM & PFFs	MINEM-UNDP																				
3.2.4	3.2	PM & PFFs	MINEM-UNDP																				
3.3.1	3.3	PM & SC	MINEM-UNDP																				
3.3.2	3.3	PM & SC	MINEM-UNDP																				
3.3.3	3.3	PM & SC	MINEM-UNDP																				
3.3.4	3.3	PM & SC	MINEM-UNDP																				
4.1.1	4.1	PM & SC	MINEM-UNDP																				
4.1.2	4.1	PM & SC	MINEM-UNDP																				
4.1.3	4.1	PM & SC	MINEM-UNDP																				
4.2.1	4.2	PM & PFFs	MINEM-UNDP																				
4.2.2	4.2	PM & PFFs	MINEM-UNDP																				
4.2.3	4.2	PM & CO	MINEM-UNDP																				
4.2.4	4.2	PM & CO & PFFs	MINEM-UNDP																				
4.2.5	4.2	PM & CO & PFFs	MINEM-UNDP																				
4.2.6	4.2	PM & PFFs	MINEM-UNDP																				
4.2.7	4.2	PM & GE	MINEM-UNDP																				
4.2.8	4.2	CO & PM & PFFs & IC	MINEM-UNDP																				
4.2.9	4.2	CO & PM & PFFs	MINEM-UNDP																				
4.2.10	4.2	CO & PM & PFFs	MINEM-UNDP																				
4.2.11	4.2	CO & PM	MINEM-UNDP																				

Output	Ind.	Responsible Party (Project)	Responsible Party (Nat. Partner)	Year 1				Year 2				Year 3				Year 4				Year 5			
				Q1	Q2	Q3	Q4																
4.3.1	4.3	PM & NE	UNDP																				
4.3.2	4.3	PM & PFFs	UNDP																				
4.3.3	4.3	PM	UNDP																				
4.3.4	4.3	PM	UNDP																				
4.3.5	4.3	PM & NE	UNDP																				
4.3.6	4.3	PM	UNDP																				

Outcome Indicator 1.1: National systems have the capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector.

End-of-Project Target: Capacity of 4 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 (national and regional level) involved in the management of ASGM and/or responsible for providing ASGM extension services to the project's priority ASGM sites.
- Output 1.1.2 Capacity building plans developed and implemented for 4⁵¹ institutions.
- Output 1.1.3 Trainings provided, including gender responsive assessments and training, to ~ 40 government staff members.

Outcome Indicator 1.2: Enabling environment created through improved national policies and regulatory frameworks for ASGM and mercury phase-out in the ASGM sector.

End-of-Project Target: 2 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 12 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 mercury for ASGM gold processing.
- Output 1.2.2 Recommendations to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups.
- Output 1.2.3 2 policies, regulations and guidelines⁵² revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector.

Outcome Indicator 2.1: Loans for the purchase of mercury-free processing equipment/investments are accessible to legalized ASGM miners and cooperatives.

End-of-Project Target: 4 new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector.

End-of-Project Target: 15 million USD⁵³ (Total amount of funding) available to the ASGM sector through existing/new financial mechanisms.

End-of-Project Target: 3 million USD⁵⁴ (Total amount of funding) allocated to the ASGM sector through approved loans.

⁵¹ National Level: Ministry of Energy and Mining (Permanent Multisectoral Commission for the Formalization of the mining and illegal mining). Regional Level: Three (3) Regional Energy and Mining Authorities and their staff.

⁵² Policy and regulations regarding to the Concession Mining System (Land Tenure). Reinforcing policies and regulations related to human health, worker safety, child labour, women protection and mercury use.

⁵³ The National Fund for Mining Formalization (managed by MINEM) currently has approximately 12 million US\$ available, but this funding level is expected to rise in the coming years. In addition, the project aims to work with the Municipal Savings Banks, the Small and Micro Enterprise Development Entities (EDYPYME) and with the Rural Savings and Loans Banks to develop additional financial mechanisms which are expected to make available an additional 3 million US\$. Therefore, the total amount of funding available to the ASGM sector through existing and new financial mechanisms would then be 12 + 3 = 15 million US\$ per year.

⁵⁴ Taking into account the number of miners (1,200) to be trained in accessing financial resources and the kind of technology requirements to improve their production processes and mercury phase-out, it is estimated that the project would support mining groups in accessing around 3 million USD in financial assistance. This is roughly proportional to the amount of funding available through the Mining Formalization Fund for the project's three pilot regions (the 47,097 miners in these regions represent roughly 25% of the total number of ASGM miners in the country (200,000), which percentage wise would grant them access to ~ 3 million US\$).

- Output 2.1.1 4 finance entities selected that the project will partner with.
- Output 2.1.2 Memoranda of Understanding (MoU) signed with each of the finance entities the project is going to partner with.
- 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.
- Output 2.1.4 Staff of the financial entity(ies) trained in the (re)design of these financial products for the ASGM sector.
- 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.
- Output 2.1.6 4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups.
- Output 2.1.7 Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and Sharia and private sector financing possibilities.
- Output 2.1.8 Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions).
- Output 2.1.9 Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established.
- Output 2.1.10 Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implementation of project Outcome 2.1.
- Output 2.1.11 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**.

Outcome Indicator 2.2: 12 ASGM miner groups (of which 20% of the miners are women) are capacitated to apply for loans for mercury-free processing equipment/investments.

End-of-Project Target: 12 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).

End-of-Project Target: 12 loan applications developed

End-of-Project Target: 50% of loan applications (developed with technical support of the project) approved.

- Output 2.2.1 At least 120 miners and managers of mining groups trained (of which 20% of the miners are women) on record keeping and reporting.
- Output 2.2.2 12 loan applications developed with project support.
- Output 2.2.3 Assessment conducted on a yearly basis of the number of approved loan applications.

Outcome Indicator 3.1: 15 tonnes of mercury avoided through the introduction of BEP, BAT and socially and environmentally sound ASGM practices.

End-of-Project Target: Total mercury use/releases from ASGM avoided by 15 tonnes.

End-of-Project Target: 2,000 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 12 priority project sites.

- 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.
- Output 3.1.3 Most formalized, organized and committed mining groups (containing 20% women) selected for project participation.
- 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.
- Output 3.1.5 Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers).
- 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).
- Output 3.1.7 Ore assays (from the selected mining groups) conducted in accredited metallurgy labs.
- Output 3.1.8 Partnerships established with training centers that already provide or could provide in the future, training on sound ASGM practices.
- Output 3.1.9 The availability of training materials and resources globally (GEF GOLD, etc.) and in Peru, 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.
- 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.
- Output 3.1.11 Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project.
- 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.
- 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.
- Output 3.1.14 100 miners trained⁵⁵ 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves).
- 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 practices designed for all project selected mining groups.
- Output 3.1.16 Locations where 1 mercury-free ore processing training plant and 4 small mobile plants can be installed/showcased identified.
- Output 3.1.17 Permitting requirements for long-term installation of the 1 mercury-free ore processing training plant and 4 small mobile plants addressed and permits obtained.
- Output 3.1.18 Memoranda of Understanding (MoU) drawn up and signed by mobile plant host(s) (*if required*).
- Output 3.1.19 Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared.
- Output 3.1.20 Equipment and spare parts for 4 small mobile plants and 1 mercury-free ore processing training plant procured.
- Output 3.1.21 One (1) mercury-free ore processing training plant in 1 project location established.

⁵⁵ Approximately 200 miners will be trained at the full-scale pilot plant build by this project. In addition, 1000 miners will be trained using the 4 mobile plants.

- 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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members.
- Output 3.1.23 4 small mobile plants in 4 project locations established.
- Output 3.1.24 1,000 miners trained by trainers at 4 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).
- Output 3.1.25 At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms.
- Output 3.1.26 Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies. .
- Output 3.1.27 (Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings.
- 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.
- 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.

Outcome Indicator 3.2: 12 ASGM miner groups (of which 20% of the miners are women) supported in their formalization processes leading to more sustainable income opportunities and safer working conditions.

End-of-Project Target: At least 12 mining groups⁵⁶ (of which 20% of the miners are women) supported in their formalization processes.

- Output 3.2.1 12 mining groups (of which 20% of the miners are women) have received leadership training.
- Output 3.2.2 12 project mining groups (of 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).
- Output 3.2.3 12 project mining groups supported in obtaining a license/permit for ASGM or to establish/operate a processing plant.
- Output 3.2.4 12 project mining groups supported in designing processing and environmental management plan (incl. tailings storage plans) that comply with national laws and environmental standards.

Outcome Indicator 3.3: Route to market for mercury-free gold improved/established.

End-of-Project Target: 700 kg⁵⁷ of mercury-free gold sold to the formal market.

- Outputs 3.3.1 At least 1 partnership established with an international refiner.
- Outputs 3.3.2 At least 1 partnership established with a local bank (possibly in combination with Outcome 2.1).
- Outputs 3.3.3 At least 1 partnership established with a fund transfer/holding agent.
- Outputs 3.3.4 Establish a partnership with a gold certification organization to assess top performing project mining groups for possible certification.

⁵⁶ In each pilot location, 10 mining groups would be supported in their formalization efforts.

⁵⁷ It is assumed that 60% of the Hg free gold gets sold to formal market.

Outcome Indicator 4.1: 19,000 people⁵⁸ (5,000 females and 14,000 males) of whom awareness has been raised on the dangers of mercury and ways to reduce its use in ASGM.

End-of-Project Target: Awareness raised of 19,000 people (5,000 females and 14,000 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.
- Output 4.1.2 Awareness raising plan (incl. gender dimensions) developed.
- Output 4.1.3 Awareness raising plan (incl. gender dimensions) implemented.

Outcome Indicator 4.2: M&E and adaptive management applied in response to needs and Mid-Term Evaluation findings.

End-of-Project Target: 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.
- Output 4.2.2 5 PIRs completed/submitted (one for each year the project has been operational)
- Output 4.2.3 1 audit completed (*frequency as per UNDP Audit policies – on average 1 per year*)
- Output 4.2.4 10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational)
- Output 4.2.5 5 Monitoring and supervision missions conducted
- Output 4.2.6 1 Mid-Term GEF Tracking Tool updated
- Output 4.2.7 1 Gender Assessment of project impact completed (*as part of MTE*)
- Output 4.2.8 1 Independent Mid-term Review (MTR) conducted (*translated into English*) and management responses submitted
- Output 4.2.9 1 GEF Secretariat oversight missions conducted
- Output 4.2.10 1 Terminal GEF Tracking Tool updated
- Output 4.2.11 1 Independent Terminal Evaluation conducted (*translated into English*) and management responses submitted.

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.

End-of-Project Target: 1 GEF GOLD country project webpage maintained.

End-of-Project Target: Country project participated in 1 Global ASGM Forum, 1 Annual Programme Conference, and 12 monthly programme/project calls on a yearly basis.

End-of-Project Target: Opportunities for communication of project activity results at a global level are identified on a quarterly basis in collaboration with the GEF GOLD global component.

End-of-Project Target: 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*.

- Output 4.3.1 1 GEF GOLD country project webpage developed and updated on a quarterly basis.
- 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

⁵⁸ The awareness raising campaign aims to raise at a minimum the awareness of miners living in the pilot areas (4,750), who in turn will inform their direct family members (thus raising the awareness of a total of 19,000 people).

basis.

- Output 4.3.3 Opportunities for communication of project activity results identified on a quarterly basis in collaboration with the GEF GOLD global component.
- 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.
- 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-learned, best practices and experiences.
- Output 4.3.6 Reports and publications adapted and translated into local languages to facilitate dissemination at local, district, provincial and national needs.

Annex B: GEF Tracking Tool at baseline

Note: Annex attached Separately

Annex C: Overview of Technical Consultancies/subcontracts

Consultant	Time Input	Tasks, Inputs and Outputs
For Project Management / Monitoring & Evaluation		
Local / National contracting		
<i>Project Manager Rate: \$1,250/week</i>	<i>176 weeks over 5 years</i>	<i>The Project Manager (PM) will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. See Annex A and D for details.</i>
<i>Project Assistant Rate: \$750/week</i>	<i>200 weeks over 5 years</i>	<i>The Project Assistant (PA) will assist the Project Manager (PM) in day-to-day management and oversight of project activities. See Annex D for details.</i>
<i>Project Field Facilitator (3x) Rate: \$1,250/week</i>	<i>150 weeks over 5 years</i>	<p>To ensure day-to-day follow-up at project site level, the project will engage 3 <i>Project Field Facilitator</i> whose responsibility will be to liaise with local government entities and project beneficiaries in the project priority sites where they are stationed on all aspects related to the project. The <i>Project Field Facilitator</i> will report to the Project Manager. <i>See Annex D for details.</i></p> <p>The <i>Project Field Facilitator</i> will be responsible for the implementation and support to the following project outputs:</p> <ul style="list-style-type: none"> ▪ <i>Output 2.1.9 - Evidence-based economic models of processing plant upgrades based on existing best practice mines and chemical-free pilot plants established.</i> ▪ <i>Output 2.1.1 - 1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting</i> ▪ <i>Output 2.2.2 - 12 loan applications developed with project support.</i> ▪ <i>Output 3.1.1 - Socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance inventories conducted for each of the 12 priority project sites.</i> ▪ <i>Output 3.1.2 - Accumulated data (incl. amount of gold produced and amount of mercury used/released) presented to the relevant government agencies in a report.</i> ▪ <i>Output 3.1.3 - Most formalized, organized and committed mining groups (containing 20% women) selected for project participation.</i> ▪ <i>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.</i> ▪ <i>Output 3.1.5 - Assessment completed of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. (regional) universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers).</i> ▪ <i>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).</i> ▪ <i>Output 3.1.7 - Ore assays (from the selected mining groups) conducted in accredited metallurgy labs.</i>

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul style="list-style-type: none"> ▪ <i>Output 3.1.8 - Partnerships established with training centers that already provide or could provide in the future, training on sound ASGM practices.</i> ▪ <i>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.</i> ▪ <i>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.</i> ▪ <i>Output 3.1.14 - 100 miners trained 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves).</i> ▪ <i>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 practices designed for all project selected mining groups.</i> ▪ <i>Output 3.1.16 - Locations where 1 mercury-free ore processing training plant and 4 small mobile plants can be installed/showcased identified.</i> ▪ <i>Output 3.1.17 - Permitting requirements for long-term installation of the 1 mercury-free ore processing training plant and 4 small mobile plants addressed and permits obtained.</i> ▪ <i>Output 3.1.18 - Memoranda of Understanding (MoU) drawn up and signed by mobile plant host(s) (if required).</i> ▪ <i>Output 3.1.19 - Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared.</i> ▪ <i>Output 3.1.21 - One (1) mercury-free ore processing training plant in 1 project location established.</i> ▪ <i>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, determine the gravity recoverable gold yields of their ore, and decide on methods for the different ores produced by the mine cooperative members.</i> ▪ <i>Output 3.1.23 - 4 small mobile plants in 4 project locations established.</i> ▪ <i>Output 3.1.24 - 1,000 miners trained by trainers at 4 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).</i> ▪ <i>Output 3.1.25 - At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms.</i> ▪ <i>Output 3.1.26 - Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies.</i>

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul style="list-style-type: none"> ▪ <i>Output 3.1.27 - (Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings.</i> ▪ <i>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.</i> ▪ <i>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.</i> ▪ <i>Output 3.2.1 - 12 mining groups (of which 20% of the miners are women) have received leadership training.</i> ▪ <i>Output 3.2.2 - 12 project mining groups (of 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).</i> ▪ <i>Output 3.2.3 - 12 project mining groups supported in obtaining a license/permit for ASGM or to establish/operate a processing plant.</i> ▪ <i>Output 3.2.4 - 12 project mining groups supported in designing processing and environmental management plan (incl. tailings storage plans) that comply with national laws and environmental standards.</i> ▪ <i>Output 4.2.1 - 1 National Inception Workshop conducted and report issued.</i> ▪ <i>Output 4.2.2 - 3 Regional Level Inception Workshops organized and Reports issued.</i> ▪ <i>Output 4.2.3 - 5 PIRs completed/submitted (one for each year the project has been operational)</i> ▪ <i>Output 4.2.5 - 10 Project Board Meetings held (2 Project Board meetings will be organized for each year the project is operational)</i> ▪ <i>Output 4.2.6 - 5 Monitoring and supervision missions conducted</i> ▪ <i>Output 4.2.7 - 1 Mid-Term GEF Tracking Tool updated</i> ▪ <i>Output 4.2.9 - 1 Independent Mid-term Review (MTR) conducted (translated into English) and management responses submitted</i> ▪ <i>Output 4.2.10 - 1 GEF Secretariat oversight missions conducted</i> ▪ <i>Output 4.2.11 - 1 Terminal GEF Tracking Tool updated</i> ▪ <i>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.</i>
<p><i>Gender Expert - UNV Rate: \$350/week</i></p>	<p><i>158 weeks over 5 years</i></p>	<p><i>The Gender Expert will report to the PM. See Annex D for details on the responsibilities of the gender expert. The gender expert will support the gender aspects of the following outputs:</i></p> <ul style="list-style-type: none"> ▪ <i>Output 1.1.1 - Trainings provided, including gender sensitization training, to ~ 40 government staff.</i> ▪ <i>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 12 project priority sites in order to identify gaps that would need to be</i>

Consultant	Time Input	Tasks, Inputs and Outputs
		<p><i>addressed to further advance the formalization of the ASGM sector and phase-out the use of mercury for ASGM gold processing.</i></p> <ul style="list-style-type: none"> ▪ <i>Output 1.2.2 - Recommendations (methodology) to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups.</i> ▪ <i>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.</i> ▪ <i>Output 2.1.7 - Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities.</i> ▪ <i>Output 2.1.8 - Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions)</i> ▪ <i>Output 2.2.1 - 1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting</i> ▪ <i>Output 2.2.2 - 12 loan applications developed with project support.</i> ▪ <i>Output 4.1.2 - Awareness raising plan (incl. gender dimensions) developed.</i> ▪ <i>Output 4.1.3 - Awareness raising plan (incl. gender dimensions) implemented.</i> ▪ <i>Output 4.2.8 - 1 Gender Assessment of project impact completed (as part of MTE)</i>
<p><i>Governance, Policy and Regulations Expert</i> <i>Rate: \$1,000/week</i></p>	<p><i>51 weeks over 5 years</i></p>	<p><i>The Governance, Policy and Regulations Expert will report to the PM and will be responsible for the following outputs:</i></p> <ul style="list-style-type: none"> ▪ <i>Output 1.1.1 - Assessment conducted of the capacity of government entities (national, regional 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.</i> ▪ <i>Output 1.1.2 - Capacity building plans developed and implemented for 4 institutions.</i> ▪ <i>Output 1.1.3 - Trainings provided, including gender sensitization training, to ~ 40 government staff.</i> ▪ <i>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 12 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 mercury for ASGM gold processing.</i> ▪ <i>Output 1.2.3 - 2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector.</i>
<p><i>Finance Expert to set up financial mechanisms</i> <i>Rate: \$1,000/week</i></p>	<p><i>73 weeks over 5 years</i></p>	<p><i>The Finance Expert will report to the PM and will be responsible for the following outputs:</i></p> <ul style="list-style-type: none"> ▪ <i>Output 2.1.1 - 4 finance entities selected that the project will partner with.</i> ▪ <i>Output 2.1.2 - Memoranda of Understanding (MoU) signed with each of the finance entities the project is going to partner with.</i>

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul style="list-style-type: none"> ▪ 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. ▪ Output 2.1.7 - Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities. ▪ Output 2.1.8 - Training of women association on financial management (improve their capacity in finance issues, to be aware of their financial duties, making financial sound decisions) ▪ Output 2.1.11 - 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.
<p>Communications Expert - UNV Rate: \$350/week</p>	<p>142 weeks over 5 years</p>	<p>The Communications Expert will report to the PM and will be responsible for the following outputs:</p> <ul style="list-style-type: none"> ▪ Output 4.3.1 - 1 GEF GOLD country project webpage developed and updated on a quarterly basis. ▪ 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-learned, best practices and experiences.
<p>Monitoring and Evaluation Expert Rate: \$1,000/week</p>	<p>70 weeks over 5 years</p>	<p>The Monitoring and Evaluation Expert will report to the PM and will be responsible for the following outputs:</p> <ul style="list-style-type: none"> ▪ Output 4.2.7 - 1 Mid-Term GEF Tracking Tool updated ▪ Output 4.2.11 - 1 Terminal GEF Tracking Tool updated ▪ 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.
International / Regional and global contracting		
<p>International ASGM Consultant Rate: \$3,500/week</p>	<p>37 weeks over 5 years</p>	<p>The International ASGM Consultant will be responsible for providing overall technical backstopping and management support to the Project. See the TOR in Annex D.</p> <ul style="list-style-type: none"> ▪ 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. ▪ 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. ▪ Output 3.1.19 - Technical specifications for the 1 mercury-free ore processing training plant and 4 small mobile plants prepared. ▪ Output 3.1.25 - At least 6 mining groups supported in establishing their own mercury-free processing plant with technical assistance provided by the project, but funding allocated through one of the 4 financing mechanisms.

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul style="list-style-type: none"> ▪ Output 3.1.26 - Feasibility study completed to assess the potential for the reprocessing of mercury-containing tailings by large-scale mining companies. ▪ Output 3.1.27 - (Potentially) establish partnership(s) between project mining groups and large-scale mining corporations for the processing of mercury-containing tailings. ▪ 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.
International Consultant to set up financial mechanisms Rate: \$3,500/week	28 weeks over 5 years	<p>The International Finance Expert will be responsible for:</p> <ul style="list-style-type: none"> ▪ Output 2.1.1 - 4 finance entities selected that the project will partner with. ▪ 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. ▪ Output 2.2.1 - 1,200 miners (of which 800 are men and 400 are women) trained (of which 30% of the miners are women) on record keeping and reporting ▪ Output 2.2.2 - 12 loan applications developed with project support.
International Consultant to improve the regulatory and policy framework Rate: \$3,500/week	8 weeks over 5 years	<p>The International Regulatory/Policy Expert will be responsible for:</p> <ul style="list-style-type: none"> ▪ 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 12 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 mercury for ASGM gold processing. ▪ Output 1.2.2 - Recommendations (methodology) to address policy and regulatory needs and gaps, overlaps, unclarities and needs for gender mainstreaming prepared and agreed upon during focus groups. ▪ Output 1.2.3 - 2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector.
International Consultant to increase capacity of government institutions Rate: \$3,500/week	6 weeks over 5 years	<p>The International Capacity Building Consultant will be responsible for:</p> <ul style="list-style-type: none"> ▪ Output 1.1.1 - Assessment conducted of the capacity of government entities (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. ▪ Output 1.1.2 - Capacity building plans developed and implemented for 4 institutions.
For Technical Assistance		
Outcome 1		
Local / National contracting		
Description of Contractual Services	Total Amount (US\$)	Responsible for:

Consultant	Time Input	Tasks, Inputs and Outputs
<i>Contractual Services for capacity building training of government entities</i>	<i>76,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 1.1.3 - Trainings provided, including gender sensitization training, to ~ 40 government staff.</i>
<i>Contractual Services for development of policies, regulations and guidelines.</i>	<i>30,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 1.2.3 - 2 policies, regulations and guidelines revised and/or developed while mainstreaming gender dimensions to improve the enabling environment for formalization and mercury phase-out in the ASGM sector.</i>
Outcome 2		
<i>Contractual Services for the development and monitoring of financial mechanisms</i>	<i>210,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 2.1.3 - Existing financial products of partner entities assessed in terms of accessibility, and suitability for women mining group and recommendations for their improvement and redesign prepared.</i> ▪ <i>Output 2.1.4 - Staff of the financial entity(ies) engaged in the (re)design of these financial products so they suit women, and men mining group's need for the ASGM sector.</i> ▪ <i>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.</i> ▪ <i>Output 2.1.6 - 4 new finance mechanisms/products redesigned/launched that meet the need of women and men mining groups.</i> ▪ <i>Output 2.1.7 - Workshops/awareness raising events conducted to increase mining communities' awareness (including women miner groups) on the availability of various loan facilities, and private sector financing possibilities.</i> ▪ <i>Output 2.1.10 - Assessment conducted of the total amount of funding available to the ASGM sector through existing financial mechanisms prior to the implementation of project Outcome 2.1.</i> ▪ <i>Output 2.1.11 - 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.</i> ▪ <i>Output 2.2.3 - Assessment conducted on a yearly basis of the number of approved loan applications.</i>
Outcome 3		
<i>Contractual Services for Ore Analysis</i>	<i>25,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 3.1.7 - Ore assays (from the selected mining groups) conducted in accredited metallurgy labs.</i>
<i>Contractual Services for the development of training resources</i>	<i>30,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 3.1.11 - Outstanding training resources developed (in partnership with training centers) that are necessary to ensure the successful implementation of the project.</i>
<i>Contractual Services Establishment small mobile plants.</i>	<i>50,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 3.1.23 - 4 small mobile plants in 4 project locations established.</i>

Consultant	Time Input	Tasks, Inputs and Outputs
<i>Contractual Services to establish 1 pilot decontamination plant</i>	<i>75,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>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.</i>
<i>Contractual Services Support to formalization efforts</i>	<i>25,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 3.2.1 - 12 mining groups (of which 20% of the miners are women) have received leadership training.</i>
<i>Contractual Services for establishing a route-to-market</i>	<i>65,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Outputs 3.3.1 - At least 1 partnership established with an international refiner.</i> ▪ <i>Outputs 3.3.2 - At least 1 partnership established with a local bank (possibly in combination with Outcome 2.1).</i> ▪ <i>Outputs 3.3.3 - At least 1 partnership established with a fund transfer/holding agent.</i>
<i>Contractual Services for gold certification</i>	<i>50,000 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Outputs 3.3.4 - Establish a partnership with a gold certification organization to assess top performing project mining groups for possible certification.</i>
Outcome 4		
<i>Contractual Services for development of awareness raising plan and its implementation</i>	<i>77,500 USD (Total)</i>	<ul style="list-style-type: none"> ▪ <i>Output 4.1.1 - Initial assessment carried out on awareness raising strategies and mechanisms.</i> ▪ <i>Output 4.1.2 - Awareness raising plan (incl. Stakeholder Engagement Plan & Gender Action Plan) developed.</i> ▪ <i>Output 4.1.3 - Awareness raising plan (incl. Stakeholder Engagement Plan & Gender Action Plan) implemented.</i>

Annex D: Terms of Reference

National Project Director (NPD)

Background

The Vice-minister of Environmental Management (Ministry of the Environment – MINAM) will be appointed as National Project Director (NPD). The NPD will be accountable to MINAM and UNDP for the achievement of project objectives and results. The NPD will be part of and answerable to the Project Board.

Duties and Responsibilities

- *Serve as a member of the Project Board.*
- *Supervise compliance with objectives, activities, results, and all fundamental aspects of project execution as specified in the project document.*
- *Supervise compliance of project implementation with MINAM policies, procedures and ensure consistency with national plans and strategies.*
- *Facilitate coordination with other organizations and institutions that support the introduction of best practices in the ASGM sector.*
- *Participate in project evaluation, testing, and monitoring missions.*
- *Coordinate with national governmental representatives on legal and financial aspects of project activities.*
- *Coordinate and supervise government staff inputs to project implementation.*
- *Coordinate, oversee and report on government cofinancing inputs to project implementation.*

Project Manager

Background

The Project Manager (PM), will be locally recruited following UNDP procedures, with input to the selection process from the Project partners. The position will be appointed by the project implementing agencies and funded entirely from the Project. The PM will be responsible for the overall management of the Project, including the mobilisation of all project inputs, supervision over project staff, consultants and sub-contractors. The PM will report to the NPD in close consultation with the assigned UNDP Programme Manager for all of the Project's substantive and administrative issues. From the strategic point of view of the Project, the PM will report on a periodic basis to the Project Board, based on the NPD's instruction. Generally, the PM will support the NPD who will be responsible for meeting government obligations under the Project, under the NIM execution modality. The PM will perform a liaison role with the government, UNDP and other UN agencies, CSOs and project partners, and maintain close collaboration with other donor agencies providing co-financing. The PM will work closely with the Working Group Coordinators.

Duties and Responsibilities

- *Plan the activities of the project and monitor progress against the approved work-plan.*
- *Supervise and coordinate the production of project outputs, as per the project document in a timely and high quality fashion.*
- *Coordinate all project inputs and ensure that they adhere to UNDP procedures for nationally executed projects.*
- *Supervise and coordinate the work of all project staff, consultants and sub-contractors ensuring timing and quality of outputs.*
- *Coordinate the recruitment and selection of project personnel, consultants and sub-contracts, including drafting terms of reference and work specifications and overseeing all contractors' work.*
- *Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments, or reimbursement using the UNDP provided format.*

- *Prepare, revise and submit project work and financial plans, as required by Project Board and UNDP.*
- *Monitor financial resources and accounting to ensure accuracy and reliability of financial reports, submitted on a quarterly basis.*
- *Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log.*
- *Liaise with UNDP, Project Board, relevant government agencies, and all project partners, including donor organisations and CSOs for effective coordination of all project activities.*
- *Facilitate administrative support to subcontractors and training activities supported by the Project.*
- *Oversee and ensure timely submission of the Inception Report, Project Implementation Report, Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF and UN Environment.*
- *Review criteria compiled by the GEF GOLD global project (Lead: UN Environment), based on existing standards such as: GEF and implementing agency environmental and social safeguards; Minamata Convention; OECD Due Diligence/LBMA; ARM/Fairtrade standards; Responsible Jewelry Council; suggest any additional criteria that should be considered.*
- *Participate in a consultation, organized by the GEF GOLD global project (Lead: UN Environment) to determine (a) what subset of those criteria should be included as the GOLD programme criteria and (b) how projects can ensure that criteria are met by project participants.*
- *Agree to use of final GOLD programme criteria for gold produced by project participants for sourcing by downstream buyers.*
- *Oversee the exchange and sharing of experiences and lessons learned with relevant ASGM projects nationally and internationally.*
- *In collaboration with the GEF GOLD global component (Lead: UN Environment), identify opportunities for communication of project activity results at a global level on a quarterly basis.*
- *On a quarterly basis, submit information on project progress (using agreed metrics and templates provided by the GEF GOLD global component where appropriate) to the GEF GOLD global component.*
- *Participate in monthly programme/project calls.*
- *Attend GEF GOLD launch event (costs to be borne by the Peru GEF GOLD project).*
- *Attend the five annual GOLD Programme steering committee meetings and attend the GOLD Global ASGM forum every other year. The Steering Committee meeting will be appended to the Global Forum in years that it occurs. For SC and GF meetings, each GOLD project will attend at their own cost (costs to be borne by the Peru GEF GOLD project), and will be prepared to present specific information about their project's progress.*
- *Disseminate project reports and respond to queries from concerned stakeholders.*
- *Report progress of project to the steering committees, and ensure the fulfilment of PSC directives.*
- *Assist community groups, municipalities, CSOs, staff, students and others with development of essential skills through training workshops and on the job training thereby increasing their institutional capabilities.*
- *Encourage staff, partners and consultants such that strategic, intentional and demonstrable efforts are made to actively include women in the project, including activity design and planning, budgeting, staff and consultant hiring, subcontracting, purchasing, formal community governance and advocacy, outreach to social organizations, training, participation in meetings; and access to programme benefits.*
- *Assists and advises the Project Field Facilitators (PFFs) and responsible for activity implementation in the project sites.*
- *Carry regular, announced and unannounced inspections of all project sites and the PFFs.*

Required skills and expertise

- *A university degree (MSc or PhD) in a subject related to Environmental Sciences, Environmental Chemistry, Mining, Geology, or Chemical/Biological Sciences.*
- *At least ten (10) years of experience in the implementation, support and management of environmental projects, including monitoring and evaluation activities.*
- *At least five (5) years of experience in the management of projects related to toxic chemicals, and mercury in particular.*
- *At least five (5) years of experience in ASGM.*
- *At least five (5) years of experience in GEF related project management.*
- *At least five (5) years of experience working with ministries, national or provincial institutions that are concerned with natural resource and/or environmental management.*

Competencies

- *Strong leadership, managerial and coordination skills, with a demonstrated ability to effectively coordinate the implementation of large multi-stakeholder projects, including financial and technical aspects.*
- *Ability to effectively manage technical and administrative teams, work with a wide range of stakeholders across various sectors and at all levels, to develop durable partnerships with collaborating agencies.*
- *Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project.*
- *Ability to coordinate and supervise multiple Project Field Facilitators in their implementation of technical activities in partnership with a variety of subnational stakeholder groups, including community and government.*
- *Strong drafting, presentation and reporting skills.*
- *Strong communication skills, especially in timely and accurate responses to emails.*
- *Strong computer skills, in particular mastery of all applications of the MS Office package and internet search.*
- *Strong knowledge about the political and socio-economic context related to ASGM at national and subnational levels.*
- *Good command of English and local languages.*

Project Field Facilitators (PFFs)

Background

To ensure day-to-day follow-up at the project site level, the project will engage 3 Project Field Facilitators whose responsibility will be to liaise with local government entities (regional & district level) and project beneficiaries in the project priority site where they are stationed on all aspects related to the project. The Project Field Facilitators will report to the Project Manager.

General Duties and Responsibilities:

- *Liaise with regional and district level government staff on formalization, access to finance, mining licenses, subsurface rights, etc.*
- *Support the organization of the regional Project Advisory Board.*
- *Support the organization of training events.*
- *Support the implementation of the awareness raising campaign.*
- *Provide day-to-day support to mining groups in their formalization efforts, gaining access to financing and supporting the establishment of mercury-free processing plants.*

- *Support the monitoring of project results.*

Specific Duties and Responsibilities:

The Project Field Facilitators (PFFs) will be responsible for the implementation and support to the following project outputs:

- *Conduct socioeconomic baseline surveys (including collection of sex-disaggregated data) and mercury/gold mass balance inventories conducted for each of the 12 priority project sites.*
- *Ensure that accumulated data (including amount of gold produced and amount of mercury used/released) is presented to the relevant government agencies in a report.*
- *Select the most formalized, organized and committed mining groups (containing 20% women) for project participation.*
- *Assess mining sites used by project mining groups (supported by the project) in terms of ore and production means, and outstanding (technology) needs.*
- *Conduct an assessment of existing analytical, consulting, training and equipment resources and services present in the regions of the 12 project priority sites (e.g. universities, analytical labs, geoscience consulting firms, and equipment suppliers/manufacturers).*
- *Support the training of identified ASGM service providers 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).*
- *Support the collection of ore for ore assays (from the selected mining groups) in accredited metallurgy labs.*
- *Support the establishment of partnerships with training centers that already provide or could provide in the future, training on sound ASGM practices.*
- *Support the development of a 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.*
- *Train 30 Trainers (selected from project partners, mining communities and training centers) in the application of training resources (existing and new) and the use of equipment at ore processing plants and laboratory installations.*
- *Support the training of 100 miners 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 give miners the opportunity to observe results first hand and learn how to obtain such results themselves).*
- *Design processing strategies and economic models (making economic calculations and comparisons of mercury versus non-mercury processing methods) to convert to mercury free practices for all project selected mining groups.*
- *Support the identification/sections of locations where 1 mercury-free ore processing training plant and 4 small gravimetric plants can be installed/showcased.*
- *Obtain permits for long-term installation of the 1 mercury-free ore processing training plant and 4 small gravimetric plants.*
- *Support the development and signing of Memoranda of Understanding (MoU) by mobile plant host(s) (if required).*
- *Support the establishment of one (1) mercury-free ore processing training plant in 1 project location.*
- *Support the training of 200 miners at the project's mercury-free processing training plant (hands-on mineral processing experiments with their own ore, determining the gravity recoverable gold yields of their ore, and deciding on methods for the different ores produced by the mine cooperative/association members).*

- Support the establishment of 4 small gravimetric plants in 4 project locations.
- Support the training of 1,000 miners at 4 small gravimetric 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).
- Support at least 6 mining groups in establishing their own mercury-free processing plants.
- Provide necessary inputs for the preparation/complementation of the yearly PIR exercise.
- Support the organization of monitoring and supervision missions.

Note: Once the project has been approved, the ToRs for the Project Field Facilitators (PFFs) will have to be expanded to include all the project outputs/activities assigned to them. Please refer to Annex C (Overview of Technical Consultancies/subcontracts) which details the responsibilities of the PFFs.

Project Gender Consultant/Expert

Under the overall supervision and guidance of the Project Manager, the Project Gender Consultant will have the responsibility for the implementation of the Gender Action Plan. The Project Gender Consultant will work closely with the Project Manager (PM) on related aspects of project implementation, reporting, monitoring, evaluation and communication. Specific responsibilities will include:

- Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled.
- Oversee/develop/coordinate implementation of all gender-related work.
- Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary.
- Work with the Project Manager (PM) to ensure reporting, monitoring and evaluation fully address the gender issues of the project.
- Ensure that gender sensitization modules are included in all training activities supported by the project, and support the development of these modules.
- Verify that project training materials and activities are aligned with local family realities, promote positive actions towards the role and involvement of women in family income generating activities and family finances, respect communities' ethnicity, miners/women's time availability, cultural practices, etc.
- Ensure that the comprehensive ASGM training curriculum that will be developed with project support and will be used to train miners (men and women), will contain gender aspects and contains a module on gender in ASGM to encourage a culture change in how women are being viewed in the mining sector. If necessary, support the development of the gender module.
- Support the gender review of existing ASGM policy and regulatory frameworks; Ensure that guidelines, standards and incentives revised and/or developed by the project include gender dimensions.
- Ensure that women participate in all project related activities.
- Support the collection of sex disaggregated and gender specific data⁵⁹ and conduct a characterization of the impacted (work) population. Measure the participation, empowerment and improvement of work/living conditions for men/women, as part of the in-depth mercury related baseline inventories that will be conducted in each of the 12 priority project sites.

⁵⁹ Sex, age, ethnicity, levels education, main diseases, family income, population characteristics, heads of households, time use, family members' roles, among other relevant data.

- *Ensure that the awareness raising plan that will be developed and implemented as part of the project contains important elements related to gender. And that the activities of the awareness raising plan meet the needs of female and male miners.*
- *Support the finance expert in the assessment of existing financial products of project partners in terms of accessibility and suitability for women mining groups.*
- *Support the finance expert in the training of financial staff in the (re)design of financial products so they meet the needs of women mining groups.*
- *Support the finance expert in raising awareness of women miner groups on the launch of new financial products (e.g. incentives, loan facilities, etc.) that meet their needs.*
- *Ensure that of the project mining groups supported in their formalization efforts (e.g. gaining access to legal subsurface rights, obtaining a permit to establish/operate a processing plant; designing processing and waste management plans) at least 20% contain women miners or are women mining groups.*
- *Ensure that the project also supports women groups interested in mining in the establishment of ASGM associations/cooperatives.*
- *Support the leadership training expert in providing leadership training to women mining groups and women miners.*
- *Support the Project Field Facilitators (PFFs) to ensure that mining groups that will be trained in developing loan/investment applications (including undertaking technical and financial feasibility studies and record keeping and reporting) contain at least 20% women, and support women miner groups in the development of loan/investment applications.*
- *Conduct a Gender Assessment of project impact as part of the Mid-Term Review. Based on the results of the Gender Assessment and other recommendations coming out of the MTR, make recommendation on how the project can further improve its gender related interventions.*
- *On a quarterly basis, project results and information on project progress will be communicated to the GEF GOLD global component. The project's gender expert will support the project in identifying gender specific results and how to present these in reports and publications that summarize results, lessons-learned, best practices and experiences.*

The Project Gender Officer will be recruited based on the following qualifications:

- *Master's degree in gender studies, gender and development, environment, sustainable development or closely related area.*
- *Demonstrated understanding of issues related to gender and sustainable development; at least 5 years of practical working experience in gender mainstreaming, women's empowerment and sustainable development in Peru, ASGM and/or environmental management.*
- *Proven experience in gender issues in Peru, ASGM and/or environmental management.*
- *Previous experience with UN projects will be a definite asset.*
- *Demonstrated understanding of the links between sustainable development, social and gender issues.*
- *Experience in gender responsive capacity building.*
- *Experience with project development and results-based management methodologies is highly desired/required.*
- *Excellent analytical, writing, advocacy, presentation, and communications skills.*
- *Excellent language skills in Spanish (writing, speaking and reading) and in local languages.*

Monitoring and Evaluation Expert

Under the overall supervision and guidance of the Project Manager, the M&E Expert will have the responsibility for project monitoring and evaluation. The M&E Expert will work closely with the Communications Officer on knowledge management aspects of the project. Specific responsibilities will include:

- *Monitor project progress and participate in the production of progress reports ensuring that they meet the necessary reporting requirements and standards.*

- *Ensure project's M&E meets the requirements of the Government, the UNDP Country Office, and UNDP-GEF; develop project-specific M&E tools as necessary;*
- *Oversee and ensure the implementation of the project's M&E plan, including periodic appraisal of the Project's Theory of Change and Results Framework with reference to actual and potential project progress and results;*
- *Oversee/develop/coordinate the implementation of the stakeholder engagement plan;*
- *Oversee and guide the design of surveys/assessments commissioned for monitoring and evaluating project results;*
- *Facilitate mid-term and terminal evaluations of the project; including management responses;*
- *Facilitate annual reviews of the project and produce analytical reports from these annual reviews, including learning and other knowledge management products;*
- *Support project site M&E and learning missions;*
- *Visit project sites as and when required to appraise project progress on the ground and validate written progress reports.*

The Project M&E Officer will be recruited based on the following qualifications

- *Master's degree, preferably in the field of environmental or natural resources management;*
- *At least five years of relevant work experience preferably in a project management setting involving multi-lateral/international funding agency. Previous experience with UN projects will be a definite asset;*
- *Significant experience in collating, analyzing and writing up results for reporting purposes;*
- *Very good knowledge of results-based management and project cycle management, particularly with regards to M&E approach and methods. Formal training in RBM/Project Cycle Management (PCM) will be a definite asset;*
- *Knowledge and working experience of the application of gender mainstreaming in international projects;*
- *Understanding of the sound management of chemicals, Artisanal and Small-scale Gold Mining, law enforcement, sustainable livelihoods and associated issues;*
- *Very good inter-personal skills;*
- *Proficiency in computer application and information technology.*
- *Excellent language skills in English (writing, speaking and reading) and in local languages.*

Administrative Assistant

Under the guidance and supervision of the Project Manager, the Project Assistant will carry out the following tasks:

- *Assist the Project Manager in day-to-day management and oversight of project activities;*
- *Assist the M&E officer in matters related to M&E and knowledge resources management;*
- *Assist in the preparation of progress reports;*
- *Ensure all project documentation (progress reports, consulting and other technical reports, minutes of meetings, etc.) are properly maintained in hard and electronic copies in an efficient and readily accessible filing system, for when required by PB, TAC, UNDP, project consultants and other PMU staff;*
- *Provide PMU-related administrative and logistical assistance.*

The Project Assistant will be recruited based on the following qualifications:

- *A Bachelor's degree or an equivalent qualification;*
- *At least three years of work experience preferably in a project involving natural resource management or chemicals management. Previous experience with UN projects will be a definite asset;*
- *Very good inter-personal skills;*
- *Proficiency in the use of computer software applications especially MS Word and MS Excel.*
- *Excellent language skills in English (writing, speaking and reading) and in local languages*

Project Communications Expert

Under the overall supervision and guidance of the Project Manager, the Communications Officer will have the responsibility for leading knowledge management outputs in Component 4 and developing the project communications strategy at the project outset and coordinating its implementation across all project components. The Communications Officer will work closely with the M&E Expert on knowledge management aspects of the project. General responsibilities will include:

- *Develop a project communications strategy/plan, incorporate it with the annual work plans and update it annually in consultation with project stakeholders; coordinate its implementation.*
- *Coordinate the implementation of knowledge management outputs of the project.*
- *Coordinate and oversee the implementation of public awareness activities across all project components.*
- *Facilitate the design and maintenance of the project website/webpages and ensure it is up-to-date and dynamic.*
- *Facilitate learning and sharing of knowledge and experiences relevant to the project.*

Specific responsibilities will include:

1. Knowledge sharing and dissemination:

- *Generate content for the Peru GEF GOLD webpage and provide other regular updates for the GOLD website, including contributing to the website blog at least once per year.⁶⁰*
- *Use the common "visual identity/branding": logo; common hashtag (but with country added) and other identifiers on social media; same banners for meetings; etc.⁶¹*
- *Use standard technical formats developed by the global project for reports documenting results of the projects.*
- *Use the standard programme materials developed by the global project for general education and promotion of the GEF GOLD programme.*
- *Identify specific in-country stakeholders to be included in efforts to disseminate GOLD programme information.*

⁶⁰ For those country projects who wish to designate a qualified focal point to do basic updates of text and documents on the website, the global project will give them direct access to the website do so; otherwise the global project will be responsible for these updates using data provided by the country projects.

⁶¹ Country projects will have an opportunity to participate in development and comment on branding materials developed by the global project before they are finalized.

- *In the final year of the project, collaborate with the staff of the global project (providing additional information if needed to supplement routinely submitted data and project reports) to support a comparative analysis of project results across countries, to assess factors that lead to success or failures of the different technical and financial models.*

2. Regular communication activities among GOLD projects:

- *Participate in regular (e.g., quarterly) full programme calls to share progress⁶².*
- *Participate in more frequent (e.g., monthly) calls among projects in same region/ time zones (Asia, Africa, LAC)⁶³.*
- *Participate in “GOLD communications network” regular (quarterly) calls, to share experience and progress on work.*
- *Using templates provided by global project, submit routine project updates to the global project, using commonly agreed indicators⁶⁴. Projects will provide narrative updates on a semi-annual basis, and provide annual updates with quantitative data on the agreed indicators.*
- *Participate in face-to-face meeting of the communications network during years when there is not a global forum (two meetings total)⁶⁵.*

The Project Communications Officer will be recruited based on the following qualifications:

- *A Bachelor’s degree, preferably in the field of natural resources/environmental management;*
- *A communications qualification (diploma, Bachelor’s degree);*
- *At least three years of relevant work experience of communications for project or programme implementation, ideally involving international donors. Previous experience with UN projects will be a definite asset;*
- *Previous experience in developing and implementing communications strategies for organizations or projects;*
- *Strong professional working capacity to use information and communications technology, specifically including website design and desk top publishing software;*
- *Understanding of ASGM, sound management of chemicals, sustainable livelihoods and associated issues;*
- *Very good inter-personal skills;*
- *Excellent language skills in English (writing, speaking and reading) and in local languages.*

⁶² The global project would organize and initiate these calls

⁶³ The global project would organize and initiate these calls

⁶⁴ Indicators were discussed/agreed in Geneva meeting: *tons of mercury avoided; # of miners supported in their formalization process (including gender indicators); amount of gold produced without mercury OR amount of gold sold to formal market (specific gold-related indicator may vary by country project); \$ made available to ASGM through financial mechanisms (disaggregated by gender and indigenous people*

⁶⁵ Communication network meetings will be organized and supported by the global project

Annex E: UNDP Social and Environmental Screening Procedure and plans as needed

Note: Annex attached separately

Annex F: Stakeholder Engagement Plan

Prior to developing a Stakeholder Engagement Plan, the project undertook a simplified Stakeholder Analysis, based on which Table 5 below was prepared. The table summarizes the various stakeholder groups and individuals that would need to be engaged by the project, the interests of these stakeholders/individuals in the project itself, whether the project would have a positive effect on the interest of these stakeholders, how important these stakeholders are to the success of the project and what the influence of these stakeholders will be on the success of the project.

Table 5. Identification of key stakeholders and their interests, importance and influences for the GEF GOLD project

	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 the Environment MINAM	The project will contribute to the completion and implementation of the Peru National Action Plan (NAP) for mercury phase out (2018-2022). Under the NAP the Ministry will be the lead for regulations, pilot projects demonstrating alternative technologies, licensing, database development on Hg use in ASGM, among else.	+	5	5
2.	Ministry of Energy and Mines MINEM	The Ministry is responsible for reviewing existing regulations including mercury related regulations pertaining to the ASGM sector; disseminating information on alternative technologies; issuing mining permits; resolution of ASGM conflicts and formalization of the ASGM sector at local level.	+	5	5
3.	Ministry of Health	The Ministry is responsible for developing norms and standards, monitoring environment health quality and measuring Hg exposure levels. As a project partner, the Ministry will monitor places inhabited by mining communities and families to detect possible incidences of mercury releases.	+	4	3
4.	Regional Governments (DREM/GREM)	Regional energy and mining authorities have the responsibility to provide oversight for the planning, implementation, licensing, and monitoring of ASGM operations and mercury distribution within their provinces; and, support ASGM formalization process within within their jurisdiction. The project will contribute towards building the capacity of the regional authorities to enable them to better implement their responsibilities related to ASGM.	+	5	5
5.	International NGOs (e.g. CIRDI, ARM, SOLIDARIDAD)	The project will offer opportunities to NGO partners in terms of their participation, influence or becoming a project implementing/executing partner to ensure greater impacts of on-going and future ASGM projects.	+	3	2
6.	Other international cooperation programs (e.g. Canada, USA, SECO)	Where feasible, the project will collaborate with international cooperation programmes, potentially increasing the impacts of these programmes that also focus on the ASGM sector and aim to reduce/phase-out the use of mercury.	+	4	3
7.	National NGOs (e.g. Red Social, CooperAcción)	Where feasible, the project will collaborate with national NGOs, potentially increasing the impacts of their programmes that also focus on the ASGM sector and aim to reduce/phase-out the use of mercury. On the other hand, the project will offer opportunities to NGO partners in terms of their participation, influence or becoming a project implementing/executing partner to ensure greater impacts of on-going and future ASGM projects.	+	3	2

8.	Universities (e.g. Pontificia Universidad Católica del Perú, Universidad de Ingeniería y Tecnología)	Project results and experiences can inform and influence research and education in the area of ASGM and mercury phase-out.	0	2	2
9.	ASGM mining cooperatives / companies	The project will increase the efficiency of ore processing techniques/technologies (increase gold yields), enable miners to obtain higher prices for their gold (mercury-free gold) by shortening the gold supply chain/route to markets, reduce costs for inputs (energy, mercury, water), reduce negative health and safety impacts, among else.	+	5	5
10.	Individual miners/mining communities	The project will increase the efficiency of ore processing techniques/technologies (increase gold yields), enable miners to obtain higher prices for their gold (mercury-free gold) by shortening the gold supply chain/route to markets, reduce costs for inputs (energy, mercury, water), reduce negative health and safety impacts, among else.	+	5	5
11.	Banks, (micro) financial institutions, lenders, investors, etc.	The project will increase opportunities (and thus income from loans) to lend money to potential profitable groups of women, miners, companies, cooperatives, etc. that are less risky than more traditional operations in ASGM.	+	3	3
12.	Community Based Organizations (CBOs)	The project might improve the rights of citizens; increase fairness; increase livelihood opportunities for community members; safeguard community member's health and safety.	+	4	3
13.	Women's organizations	The project might improve the rights of women; increase fairness; increase livelihood opportunities for women; safeguard women's health and safety.	+	4	3
14.	Private sector entities (e.g. small- and medium-scale mining companies)	The project might lead to a reduction in conflict and violence in and around mining concessions; improve the public image of the mining sector; create opportunities for partnerships between ASGM and small, medium and large scale processors.	0	2	3

Following the preparation of the simplified Stakeholder Analysis, the project prepared a simplified Stakeholder Engagement Plan, see Table 6 below.

In preparing the simplified Stakeholder Engagement Plan, the project indicated **why** stakeholders are being engaged, **how** engagement will proceed, **who** will ensure engagement, **when**, and **how** engagement will be financed/supported.

Table 6. Simplified Stakeholder Engagement Plan

	Stakeholder group	Why included (interest)	Participation methods		Timeline	Cost estimate
			Method	Responsibility		
1.	Ministry of the Environment (MINAM)	<ul style="list-style-type: none"> ▪ The Ministry of the Environment is the project's implementing partner. ▪ The project will contribute to the implementation of the Peruvian National Action Plan (NAP) for mercury phase out (2017-2021). ▪ Co-financer to the project. 	<ul style="list-style-type: none"> ▪ Project Implementing Partner. ▪ National Level Inception Workshop. ▪ Project Board (Executive). ▪ Member of Technical Advisory Committee (TAC). 	<ul style="list-style-type: none"> ▪ Project Manager ▪ Director of Control of Contamination and Chemicals 	Continuous	<ul style="list-style-type: none"> ▪ MINAM will be in-kind.

			<ul style="list-style-type: none"> ▪ Regular meetings between the Project's Management Unit (PMU) and Ministry of the Environment. 			
2.	Ministry of Energy and Mines (MINEM)	<ul style="list-style-type: none"> ▪ Under the NAP, MINEM has been assigned the responsibility/lead for the review of existing regulations to support Hg phase out and prohibit the use of Hg in ASGM; disseminate information on alternative technologies; issue mining permits; Support ASGM conflict resolution; pilot projects demonstrating Hg-free alternative technologies, development of a database on Hg use in ASGM, and support the formalization of the ASGM sector at local level. ▪ The project will contribute to the implementation of the Peruvian National Action Plan (NAP) for mercury phase out (2017-2021). ▪ As project partner, MINEM will be focussing on ASGM formalization issues. ▪ Co-financer to the project. 	<ul style="list-style-type: none"> ▪ National Level Inception Workshop. ▪ Project Board (Partner) ▪ Member of Technical Advisory Committee (TAC) ▪ Regular meetings between the Project's Management Unit (PMU) and MINEM. 	<ul style="list-style-type: none"> ▪ Project Manager ▪ Director of Mining Formalization will be the focal point from MINEM. 	Continuous	<ul style="list-style-type: none"> • The Director of Mining Formalization will be in-kind
3.	Ministry of Health	<ul style="list-style-type: none"> ▪ The project will contribute to the implementation of the Peru National Action Plan (NAP) for mercury phase out (2017-2021). ▪ Under the NAP the Ministry will be responsible for developing norms and standards, monitoring environment health quality, and measure Hg exposure levels. ▪ As project partner, the Ministry will be focusing on raising people's awareness on the risks surrounding the use of mercury. ▪ Co-financer to the project. 	<ul style="list-style-type: none"> ▪ National level Inception Workshop. ▪ Member of Technical Advisory Committee (TAC). ▪ Regular meetings between the Project's Management Unit (PMU) and the Ministry. 	<ul style="list-style-type: none"> ▪ Project Manager ▪ TBD at the beginning of project implementation. 	Continuous	<ul style="list-style-type: none"> ▪ The Ministry's Focal Point will be in-kind
4.	Regional Governments (DREMs Puno and Piura – GREM Arequipa)	<ul style="list-style-type: none"> ▪ Regional governments (DREMs) have the responsibility to provide oversight for planning, implementation, licensing, and monitoring ASGM operations and mercury distribution within their jurisdiction. The project will contribute towards building the capacity of the regional governments (DREMs) to enable them to better 	<ul style="list-style-type: none"> ▪ Participation in Technical Advisory Committee (TAC). ▪ Regular meetings between the Project's Management Unit (PMU) and the project's regional governments (DREMs) 	<ul style="list-style-type: none"> ▪ Project Manager ▪ Regional Directors of Energy and Mining 	Continuous	<ul style="list-style-type: none"> ▪ The Regional Governments (DREMs) will be in-kind

		<p>implement their responsibilities related to ASGM.</p> <ul style="list-style-type: none"> ▪ Co-financer to the project. 				
5.	Other international cooperation programs (e.g. Canada, USA, SECO)	<ul style="list-style-type: none"> ▪ Build upon the foundation/baseline of previous/current activities implemented by other programmes and project, including other GEF projects avoiding any duplication. 	<ul style="list-style-type: none"> ▪ National Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Regular meetings between the Project's Management Unit (PMU) and other international initiatives for the ASGM sector. 	<ul style="list-style-type: none"> ▪ Programme and technical officers provide guidance and advise. 	Continuous	<ul style="list-style-type: none"> ▪ Int. cooperation programme and technical officers provide advise on an in-kind basis.
6.	International NGOs (e.g. AGC, CIRDI, etc.)	<ul style="list-style-type: none"> ▪ Build upon the foundation/baseline put in place by projects with similar objectives supported by international NGOs. ▪ Co-financer to the project. ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects. 	<ul style="list-style-type: none"> ▪ National Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Act as executing agency for certain project activities. 	<ul style="list-style-type: none"> ▪ Programme and technical officers provide guidance and advise. 	Continuous	<ul style="list-style-type: none"> ▪ Int. NGOs programme and technical officers provide advise on an in-kind basis.
7.	National NGOs (e.g. Red Social and other)	<ul style="list-style-type: none"> ▪ Build upon the foundation/baseline put in place by projects with similar objectives supported by international NGOs. ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects. 	<ul style="list-style-type: none"> ▪ National Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Act as executing agency for certain project activities. 	<ul style="list-style-type: none"> ▪ Project Manager 	Continuous	<ul style="list-style-type: none"> ▪ Nat. NGOs programme and technical officers provide advise on an in-kind basis.
8.	Universities (e.g. Pontificia Universidad Católica, University of Piura and other)	<ul style="list-style-type: none"> ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects. 	<ul style="list-style-type: none"> ▪ Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Act as executing agency for certain project activities. 	<ul style="list-style-type: none"> ▪ Project Manager 	Continuous	<ul style="list-style-type: none"> ▪ University staff provides advise on an in-kind basis.
9.	ASGM mining cooperatives/communities/companies	<ul style="list-style-type: none"> ▪ ASGM mining cooperatives/communities and/or companies will be one of the main project beneficiaries. ▪ The project will partner with ASGM mining cooperatives/communities and companies, to reduce the use of mercury in gold extraction by increasing the efficiency of ore processing techniques/technologies (increasing gold yields), increasing the price miners obtain for their gold (mercury-free gold) by shortening the gold supply chain/route to market, reducing costs for 	<ul style="list-style-type: none"> ▪ Regional level gender awareness raising ▪ Regional level training. ▪ Regional level awareness raising. ▪ Regular meetings between the Project Field Facilitators, the Project's county Governments and the ASGM mining cooperatives, communities and companies. 	<ul style="list-style-type: none"> ▪ Project Field Facilitators 	Continuous	<ul style="list-style-type: none"> ▪ See project budget – component 3.

		inputs (energy, mercury, water), increasing access to finance, and reducing negative health and safety impacts.				
10.	Banks, (micro) financial institutions, lenders, Rural, Municipal and Regional Banks.	<ul style="list-style-type: none"> ▪ In order to increase the opportunities for ASGM miners (communities, cooperatives, village-owned companies, etc.) to borrow money to make investment in mercury-free processing equipment, the project will establish partnerships with existing banks, (micro) financial institutions and lenders. ▪ As part of these partnerships, the project will build the capacity of these potential lenders in how to assess loan/investment application (incl. technical and financial feasibility studies) originating from the ASGM sector. 	<ul style="list-style-type: none"> ▪ Sign MoU ▪ Act as executing agency for certain project activities. ▪ National Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Participation in national training ▪ Regular meetings between the Project's Management Unit (PMU) and potential lenders. 	▪ Project Manager	Continuous	See project budget – component 2.
11.	Community Based Organizations (CBOs)	<ul style="list-style-type: none"> ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects, through improving the rights of citizens; increasing fairness; increasing livelihood opportunities for community members; safeguarding community members' health and safety. 	<ul style="list-style-type: none"> ▪ Participate in regional platforms. ▪ Act as executing entity for certain project activities. ▪ County level training. ▪ County level awareness raising. ▪ Regular meetings between the Project's Regional Governments and CBOs. 	▪ Project Field Facilitators	Continuous	See project budget – component 3 and 4.
12.	Women's organizations	<ul style="list-style-type: none"> ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects, through improving the rights of women; increasing fairness; increasing livelihood opportunities for women; safeguarding women's health and safety. 	<ul style="list-style-type: none"> ▪ Participate in regional platforms. ▪ Act as executing entity for certain project activities. ▪ County and national level training. ▪ County and national level awareness raising. ▪ Regular meetings between the Project's Regional Governments and women's organizations. 	▪ Project Manager & Project Field Facilitators	Continuous	See project budget – component 3 and 4.
13.	Private sector entities (e.g. small-, medium- and large- scale mining companies)	<ul style="list-style-type: none"> ▪ Opportunities to partner to ensure greater impacts of on-going and future ASGM projects. 	<ul style="list-style-type: none"> ▪ National Inception Workshop. ▪ Participation in Technical Advisory Committee (TAC). ▪ Participation in national and county level training. 	▪ Project Manager & Project Field Facilitators	Continuous	See project budget – component 3 and 4.

			<ul style="list-style-type: none">▪ Participation in national and county level awareness raising.▪ Regular meetings between the Project's Management Unit (PMU) and private sector entities.			
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Annex G: Gender Analysis and Gender Action Plan

Note: Annex attached separately

Annex H: UNDP Risk Log

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mgnt response	Owner	Submitted, updated by	Last update	Status
1	Lack of coordination between relevant institutions/ministries as well as activities/programmes in the same areas as the project (ASGM). <i>(Non-SESP)</i>	31 Dec 2017	Political	P = 1 I = 3	Coordination among the project's various stakeholders will be ensured by involving them in the Project Board and the Project Technical Advisor Committee (TAC). Furthermore, a stakeholder engagement assessment (see Annex F) has been conducted during the project PPG phase based upon which a Stakeholder Engagement Plan has been developed (see Annex F), which stipulates in what type of project activities which stakeholders will be engaged, involved and their responsibilities.	MINAM	31 Dec 2017	31 Dec 2017	No change
2	Mistrust of miners towards Government agencies and entities (as well as their affiliates – such as UNDP) hampers the active participation of miners in the project. <i>(Non-SESP)</i>	31 Dec 2017	Political	P = 2 I = 2	Miners and in particular informal ASG miners are extremely mistrustful of 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.	MINAM	31 Dec 2017	31 Dec 2017	No change
3	Economic incentives perceived too low to adopt and replicate BEP/BAT practices resulting in continued polluting practices. <i>(Non-SESP)</i>	31 Dec 2017	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 entities 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.	MINAM	31 Dec 2017	31 Dec 2017	No change

4.	Delay in the implementation of project activities due to the time it takes to obtain permits/licenses. (Non-SESP)	31 Dec 2017	Regulatory Operational	P = 2 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 prove 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.	MINAM	31 Dec 2017	31 Dec 2017	No change
5.	Local conflict (e.g. organized crime) hampers sale of gold through legal channels. (Non-SESP)	31 Dec 2017	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. 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.	MINAM	31 Dec 2017	31 Dec 2017	No change
6.	Release of hazardous pollutants to the environment due to (non-) routine circumstances and the generation of hazardous waste with the potential for adverse local, regional, and/or transboundary impacts. (SESP Risks 7, 8 and 9)	31 Dec 2017	Environmental	P = 2 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.	MINAM	31 Dec 2017	31 Dec 2017	No change
7.	The Project could potentially cause	31 Dec 2017	Environmental	I = 2 P = 2	Generally, ASGM is intrinsically damaging to habitats, ecosystems and ecosystem services. The project will support ASGM miners in phasing-	MINAM	31 Dec 2017	31 Dec 2017	No change

	adverse impacts to and/or involve changes to the use of habitats (e.g. modified, natural, and critical habitats) and/or ecosystems, ecosystem services and livelihoods. <i>(SESP Risks 1 and 2)</i>				out the use of ~ 15 tonnes of mercury over the project's duration, and support miners in introducing best 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.				
8.	Occupational health and safety risks and vulnerabilities due to physical and chemical hazards during project operation or support for employment/livelihoods that may fail to comply with national and international labor standards. <i>(SESP Risks 3 and 4)</i>	31 Dec 2017	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. However 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.	MINAM	31 Dec 2017	31 Dec 2017	No change

Annex I: Results of the capacity assessment of project implementing partner and HACT micro assessment

Note: Annex attached separately

Letter of Agreement between UNDP and MINAM

LETTER OF AGREEMENT

**BETWEEN UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP) AND THE GOVERNMENT
FOR THE PROVISION OF SUPPORT SERVICES**

Dear Marcos Alegre
Viceminister of Environmental Management
Project 000

Reference is made to consultations between officials of the Government of Peru (hereinafter referred to as “the Government”) and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programs and projects. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government, through its Ministry of Environment (hereinafter referred to as “MINAM”), as described in the Project Document “**Environmentally sound management of mercury in Artisanal Small Gold Mining in Peru**”

1. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of MINAM is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.
2. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the project:
 - a. Technical Assistance, including support of UNDP’s technical team and operations team.
 - b. Identification and/or recruitment of consultants, enterprises, United Nations Volunteers and project personnel
 - c. Procurement of goods and services
 - d. Consultants and Project personnel travel management
 - e. Assessment from the Project Management team.
 - f. Quality assurance of Project’s activities.
3. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in the paragraph above are further detailed in Annex 1. If the requirements for support services by the country office should change during the life of a programme or project, the annex to the project document shall be revised with the mutual agreement of the UNDP resident representative and the designated institution.
4. The relevant provisions of the Country Programme Document 2017 – 2021 (hereinafter referred to as the “CPD”), shall apply to the provision of such support services. MINAM shall retain overall responsibility for the nationally managed project. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the Annex 1.

5. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the CPD.
6. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 2 above are specified in the CPD and detailed in Annex 1.
7. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required
8. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.
9. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between MINAM and UNDP on the terms and conditions for the provision of support services by the UNDP country office for the nationally managed project

Yours sincerely,

Signed on behalf of UNDP
María Del Carmen Sacasa
United Nations Resident Coordinator
UNDP Resident Representative

From the Government
Marcos Gabriel Alegre Chang
Viceminister of Environmental Management
Ministry of Environment

Annex 1

DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Ministry of Environment (MINAM) Peruvian Government Institution, and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project:

“Environmentally sound management of mercury in Artisanal Small Gold Mining in Peru”

2. In accordance with the provisions of the Project Document and the present Letter of Agreement, the UNDP country office shall provide support services for the Project as described below

3. Support services to be provided:

- a. Technical Assistance, including support of UNDP’s technical team and operations team.
- b. Identification and/or recruitment of consultants, enterprises, United Nations Volunteers and project personnel
- c. Procurement of goods and services.
- d. Consultants and Project personnel travel management
- e. Assessment from the Project Management team.
- f. Quality assurance of Project’s activities.

4. Total cost of the services from (April) 2018 through (March) 2023:

Support services	Schedule for the provision of the support services	Cost to UNDP of providing such support services (where appropriate)	Amount and method of reimbursement of UNDP (where appropriate)
Payment Process	For the project duration	\$ 10,986.72	Charged directly to project budget
Staff selection and recruitment process for resident agencies	For the project duration	\$ 14,814.38	Charged directly to project budget
Vendor profile only (Atlas Agencies only)	For the project duration	\$ 163.40	Charged directly to project budget
Consultant recruitment	For the project duration	\$ 6,137.25	Charged directly to project budget
Recurrent personnel management services: Staff Payroll & Banking Administration & Management 9 (annual fee per staff, per calendar year)	For the project duration	\$ 13,448.70	Charged directly to project budget
Procurement (CAP)	For the project duration	\$ 10,380.26	Charged directly to project budget
Procurement (w/o CAP)	For the project duration	\$ 4,056.36	Charged directly to project budget

Important Note: The assistance of one or more experts and publication in newspapers or other media will be charged directly to the Project, once the technical specifications and/or the Terms of References of the goods or services needed and estimated costs are identified.

5. Description of functions and responsibilities of the parties involved:

The funds for the Project's execution shall be from Global Environmental Fund (GEF)

UNDP, per MINAM's request, makes available its management capacity in terms of technical assistance, contracting and procurement of goods and services.

In this context, the roles and responsibilities of the parties involved in this Letter of Agreement are as follows:

MINAM:

- Request UNDP to setup a Project Management Unit team to the implementation of the results anticipated in the Work Plan.

UNDP:

- Appoint a National Director of the Project for the activities indicated in the project's Work Plan
- Develop processes of technical assistance, identification, acquisition and / or contracting of consultants, companies, UN Volunteers and project management team, acquisition of goods and services for the implementation of the activities of this Project. Contracts under the Letter of Agreement and PRODOC will be subject to UNDP rules, policies and procedures.
- Provide support for the follow up and monitoring of the Project as a whole, to ensure the achievement of the results contemplated in the Work Plan.

Annex K: DPC Calculations

Note: Annex attached separately

Annex L: Responses to STAP, GEFSEC and GEF Council comments

Note: Annex attached separately

Annex M: Procurement Plan

	To be procured	Output	Q1	Q2	Q3	Q4
1.	Project Manager (Service Contract)	All				
2.	Administrative Assistant (Service Contract)	All				
3.	Communications Expert	All				
4.	Monitoring and Evaluation Expert	All				
5.	Gender Expert	All				
6.	International ASGM consultant	<i>Component 2 & 3</i>				
7.	Project Field Facilitators (all 3) Service Contract	<i>Component 3</i>				
8.	Contractual services	<i>Component 1: Output 1.1.3</i>				
9.	Contractual services	<i>Component 1: Output 1.2.3</i>				
10.	Int. Consultant – Service Contract	<i>Component 2: Outputs 2.1.1 and 2.1.3</i>				
11.	Contractual Services	<i>Component 2: Outputs 2.1.3; 2.1.4; 2.1.5; 2.1.6; 2.1.7 and 2.1.9</i>				
12.	Workshops (venues, etc.)	<i>Component 2: Outputs 2.1.4 and 2.1.5</i>				
13.	Contractual Services	<i>Component 3: Output 3.1.5</i>				
14.	Contractual Services	<i>Component 3: Output 3.1.6</i>				
15.	Contractual Services	<i>Component 3: Output 3.1.7</i>				
16.	Contractual Services	<i>Component 3: Outputs 3.1.9; 3.1.10; 3.1.11; 3.1.12 and 3.1.13</i>				
17.	Audio Visual & Print Prod, Costs	<i>Component 3: Output 3.1.2</i>				
18.	Audio Visual & Print Prod, Costs	<i>Component 3: Output 3.1.5</i>				
19.	Contractual Services	<i>Component 4: Outputs 4.1.1; 4.1.2 and 4.1.3</i>				
20.	Contractual Services	<i>Component 4: Output 4.2.4</i>				
21.	Workshops (venues, etc.)	<i>Component 4: Output 4.2.1</i>				
22.	Workshops (venues, etc.)	<i>Component 4: Output 4.2.5</i>				

Annex N: List of people consulted during project development

No.	Name	F/ M	Institution	Position	Phone	email	Date of Meeting
1.	Mr. Marcos Alegre	M	MINAM	Viceminister of Environment Management	51+16162222 Anexo 1023	malegre@minam.gob.pe	7 May 2017
2.	Mr. César Ipenza	M	MINAM	Adviser of Ministry Office	51+16162222 Anexo 1820	cipenza@minam.gob.pe	25 May 2017
3.	Ms. Guliana Becerra	F	MINAM	General Director of Environment Quality	51+16116000 Anexo 1254	gbecerra@minam.gob.pe	11 Aug 2017
4.	Mr. Raúl Roca	M	MINAM	Director of Control of Pollution and Chemical Substances General Directorate of Environmental Quality	51+16116000 Anexo 1256	rroca@minam.gob.pe	18 Oct 2017
5.	Eng. Vilma Morales	F	MINAM	Coordinator Environmental Risks Management, Chemicals and Ecoefficiency	51+16116000 Anexo 1720	vmorales@minam.gob.pe	22 June 2017 31 July 2017 3 Aug 2017 21 Aug 2017 22 Aug 2017
6.	Mr. José Antonio González	M	MINAM	Director of the Cooperation and International Negotiations Office	51+16116000 Anexo 1432	agonzalez@minam.gob.pe	20 Oct 2017
7.	Eng. Máximo Gallo	M	MINEM	Director of Mining Formalization	51+14111100 Anexo 2295	mgallo@minem.gob.pe	19 June 2017 20 June 2017 6 July 2017 4 Aug 2017
8.	Mr. Fernando Paca	M	MINEM	Management Especialist	51+14111100 Anexo 3405	fpaca@minem.gob.pe	04 Sept 2017
9.	Ms. Martha Rico	F	MINEM	Coordinator Permanent Multisectorial Commission for Mining Formalization	51+14111100 51+998847966	Temp_dgm104@minem.gob.pe	27 June 2017
10.	Eng. Fausto Carranza	M	DIGESA - MINSA	Executive Director Direction of Control and Surveillance	51+16314430 Anexo 4010	fcarranza@digesa.minsa.gob.pe	31 July 2017

11.	Ms. Claudia Suárez	F	SUNAT	Deputy National Superintendent	51+16343300 Anexo 53309	csuarez@sunat.gob.pe	6 June 2017
12.	Eng. Miguel Rodríguez	M	DREM - Puno	Regional Director of Energy and Mines	51+322431 51+984407972	Mirohu666@hotmail.com	21 June 2017 14 Aug 2017
13.	Mr. Adrián Ahumada	M	CECOMIP	Vicepresident	51+944347412	Ahumada_am@@hotmail.com	14 Aug 2017
14.	Mr. Rony Molina	M	CECOMIP	Secretary	51+958141037	Urmz2016@gmail.com	14 Aug 2017
15.	Ms. Nola Luque	F	Cooperativa Minera Oro Sur	President	51+986698496	Nluque.capricornio20@gmail.com	14 Aug 2017
16.	Mr. Raúl Flores	M	Cooperativa Minera Oro Sur	Manager	51+962396054	rrflores@uc.cl	14 Aug 2017
17.	Eng. Miguel Ángel Sucapuca	M	GREM - Arequipa	Regional Director of Energy and Mines	51+4464129 51+987844960	msucapuca@regionarequipa.gob.pe	17 August 2017
18.	Mr. Wilber Chara	M	Asociación Minera San Cristóbal	Representative	51+951115157	Daniel_danny_@hotmail.com	17 August 2017
19.	Mr. Tiler Reynoso	M	Asociación Minera San Cristóbal	Environmental Engineer	51+959743080	tylerreynoso@hotmail.com	17 August 2017
20.	Eng. Francisco Varillas	M	DREM - Piura	Regional Director of Energy and Mines	51+073600160 Anexo 0160 51+969821090	fvarillas@regionpiura.gob.pe	20 June 2017 21, 22, 23 Aug 2017
21.	Ms. Anik Fournier	F	Embassy of Canada in Peru	Second Secretary (Development)	51+13193229	Anik.fournier@international.gc.ca	7 June 2017 8 Aug 2017 31 Aug 2017
22.	Ms. Gail Cockburn	F	Embassy of Canada in Peru	Director (Peru/Bolivia) and Head of Cooperation (Peru)	51+13193221	Gail.cockburn@international.gc.ca	31 Aug 2017

23.	Mr. Andrew Griffin	M	Embassy of the United States of America in Peru	Director South America Regional Office for Environment, Science, Technology and Health	51+16182710	GriffinAA@state.gov	8 June 2017
24.	Mr. Patrick Fischer	M	Embassy of the United States of America in Peru	Director South America Regional Office for Environment, Science, Technology and Health	51+16182701	FischerPJ@state.gov	19 Oct 2017
25.	Ms. Marlene Stearns	F	Embassy of the United States of America in Peru	Environment, Science, Technology and Health Officer Economic Section	51+16182678	StearnsM@state.gov	8 June 2017 11 Aug 2017
26.	Mr. Samuel Rotenberg	M	Embassy of the United States of America in Peru	Environment, Science, Technology and Health Officer Economic Section	51+16182516	rotenbergsj@state.gov	19 Oct 2017
27.	Ms. Adriana Quevedo	F	Embassy of the United States of America in Peru	South America Environment, Science, Technology and Health Office	51+16181279	quevedoa@state.gov	8 June 2017 11 Aug 2017 19 Oct 2017
28.	Ms. Maina Mártir-Torres	F	USAID-PERU	Climate Change and Biodiversity Specialist Office of Environment and Sustainable Growth	51+16181258	Mmartir-torres@usaid.gov	8 June 2017 12 July 2017
29.	Ms. Jennifer Baldwin	F	USAID-PERU	Environment Officer Office of Environment and Sustainable Growth	51+16181303	jbaldwin@usaid.gov	8 June 2017
30.	Mr. Martin Peter	M	Embassy of Switzerland in Peru	Director of Cooperation for Economic Development State Secretary for Economic Issues - SECO	51+12640305	Martin.peter@eda.admin.ch	26 Oct 2017
31.	Ms. Patricia Tord	F	Embassy of Switzerland in Peru	National Programme Officer	51+12640305	Patricia.tord@eda.admin.ch	26 Oct 2017
32.	Mr. Thomas Hentschel	M	Better Gold Initiative	Global Program Manager	57+3223284322	thomas.hentschel@projekt-consult.de	21 July 2017
33.	Eng. Guillermo Medina	M	Better Gold Initiative	National Coordinator	51+13737948	gmedina@iniciativaororesponse.org gmomedina1@hotmail.com	18 July 2017 26 Oct 2017
34.	Ms. Olinda Orozco	F	Red Social	Executive President	51+4602893	olinda@redsocial.pe	25 May 2017

35.	Mr. André Xavier	M	CIRDI	Program Manager	1+6048224723	Andre.xavier@cirdi.ca	12 June 2017
36.	Phd, PEng Bern Klein	M	University of British Columbia	Professor	1+6048222540	bklein@mining.ubc.ca	12 June 2017
37.	Ms. Ada Lis Rosell	F	SOLIDARIDAD	Country Manager Peru	51+14454242	Adalis.rosell@solidaridadnetwork.org	11 July 2017
38.	Mr. Franco Arista	M	SOLIDARIDAD	Gold Program Manager	51+14454242	franco@solidaridadnetwork.org	11 July 2017

Annex O: Co-financing Letters (including unofficial translation)

Note: Annexes attached separately

Annex P: GOLD Programme: Knowledge Sharing and Communications Elements to be Included in All Country Projects

3. Knowledge sharing and dissemination:

- Generate content for the country pages and provide other regular updates for the GOLD website, including contributing to the website blog at least once per year.⁶⁶
- Use the common “visual identity/branding”: logo; common hashtag (but with country added) and other identifiers on social media; same banners for meetings; etc.⁶⁷
- Use standard technical formats developed by the global project for reports documenting results of the projects.
- Use the standard programme materials developed by the global project for general education and promotion of the GEF GOLD programme.
- Identify specific in-country stakeholders to be included in efforts to disseminate GOLD programme information.
- In the final year of the project, collaborate with the staff of the global project (providing additional information if needed to supplement routinely submitted data and project reports) to support a comparative analysis of project results across countries, to assess factors that lead to success or failures of the different technical and financial models.

4. Regular communication activities among GOLD projects:

- Participate in regular (e.g., quarterly) full programme calls to share progress⁶⁸.
- Participate in more frequent (e.g., monthly) calls among projects in same region/ time zones (Asia, Africa, LAC)⁶⁹.
- Designate a communications focal point for the project, who will participate in “GOLD communications network” regular (quarterly) calls, to share experience and progress on work.
- Using templates provided by global project, submit routine project updates to the global project, using commonly agreed indicators⁷⁰. Projects will provide narrative updates on a semi-annual basis, and provide annual updates with quantitative data on the agreed indicators.

5. In-person meetings:

- Attend GEF GOLD launch event (at own costs).
- Attend the five annual GOLD Programme steering committee meetings and attend the GOLD Global ASGM forum every other year. The Steering Committee meeting will be appended to the Global Forum in years that it occurs. **For SC and GF meetings, each GOLD project will attend at their own cost, and will be prepared to present specific information about their project’s progress.**
- Designate project communication focal point to participate in face-to-face meeting of the communications network during years when there is not a global forum (two meetings total)⁷¹.

6. Defining the common set of criteria for gold production across the GOLD programme:

⁶⁶ For those country projects who wish to designate a qualified focal point to do basic updates of text and documents on the website, the global project will give them direct access to the website do so; otherwise the global project will be responsible for these updates using data provided by the country projects.

⁶⁷ Country projects will have an opportunity to participate in development and comment on branding materials developed by the global project before they are finalized.

⁶⁸ The global project would organize and initiate these calls

⁶⁹ The global project would organize and initiate these calls

⁷⁰ Indicators were discussed/agreed in Geneva meeting: *tons of mercury avoided; # of miners supported in their formalization process (including gender indicators); amount of gold produced without mercury OR amount of gold sold to formal market (specific gold-related indicator may vary by country project); \$ made available to ASGM through financial mechanisms (disaggregated by gender and indigenous people*

⁷¹ Communication network meetings will be organized and supported by the global project

- Review criteria compiled by the global GOLD project, based on existing standards such as: GEF and implementing agency environmental and social safeguards; Minamata Convention; OECD Due Diligence/LBMA; ARM/Fairtrade standards; Responsible Jewelry Council; suggest any additional criteria that should be considered.
- Participate in a consultation, organized by the global project to determine (a) what subset of those criteria should be included as the GOLD programme criteria and (b) how projects can ensure that criteria are met by project participants.
- Agree to use of final GOLD programme criteria for gold produced by project participants for sourcing by downstream buyers.

Annex Q: Project Identification Form (PIF)

Note: Annex attached separately

Annex R: Assessment of Financial Access for Artisanal Gold Mining Activities in Peru

Note: Annex attached separately

Annex S: Theory of Change (ToC) diagram

Note: Annex attached separately

Annex T: Site Selection Criteria and Site Selection

Note: Annex attached separately