



Global Opportunities for Long-term Development of ASGM in Guinea

Part I: Project Information

Name of Parent Program

[Global Opportunities for Long-term Development of artisanal and small-scale gold mining \(ASGM\) Sector Plus - GEF GOLD +](#)

GEF ID

10844

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Global Opportunities for Long-term Development of ASGM in Guinea

Countries

Guinea

Agency(ies)

UNEP

Other Executing Partner(s)

CASE

Executing Partner Type

CSO

GEF Focal Area

Chemicals and Waste

Taxonomy

Focal Areas, Land Degradation, Sustainable Land Management, Community-Based Natural Resource Management, Chemicals and Waste, Waste Management, Hazardous Waste Management, Best Available Technology / Best Environmental Practices, Mercury, Artisanal and Scale Gold Mining, Sound Management of chemicals and waste, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Deploy innovative financial instruments, Demonstrate innovative approaches, Stakeholders, Communications, Awareness Raising, Behavior change, Education, Beneficiaries, Private Sector, Individuals/Entrepreneurs, Capital providers, Financial intermediaries and market facilitators, SMEs, Large corporations, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Local Communities, Type of Engagement, Information Dissemination, Consultation, Participation, Partnership, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Capacity, Knowledge and Research, Knowledge Exchange, Knowledge Generation, Access and control over natural resources, Women groups, Learning, Indicators to measure change, Theory of change, Adaptive management, Innovation, Workshop, North-South, South-South, Peer-to-Peer, Field Visit

Sector**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

6/15/2022

Expected Implementation Start

9/1/2022

Expected Completion Date

8/31/2027

Duration

60In Months

Agency Fee(\$)

477,180.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CW-1-1	Reduction of anthropogenic releases/emissions of mercury from Artisanal and Small-Scale Gold mining into the environment	GET	5,302,000.00	14,487,066.00
Total Project Cost(\$)			5,302,000.00	14,487,066.00

B. Project description summary

Project Objective

To reduce the use of mercury in the ASGM sector in Guinea through a holistic, multisectoral, integrated formalization approach, and increase access to traceable gold supply chains and finance for adoption of sustainable mercury free technologies

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Promoting institutional strengthening and a regulatory framework for improved ASGM practices and governance	Technical Assistance	<u>Outcome 1:</u> Strengthened government agencies and national stakeholders update current regulations to promote formalization of ASGM miners.	<u>Output 1.1:</u> The update of regulations relating to formalization of the artisanal gold mining sector is supported in order to adapt them to the current ASM context and create a corresponding formalization guide <u>Output 1.2:</u> A sensitization campaign is led to reinforce women's leadership and professional development in ASGM <u>Output 1.3:</u> The jurisdictional approach is piloted	GET	1,669,682.00	2,239,505.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Access to Finance	Technical Assistance	<u>Outcome 2:</u> A financial mechanism for the ASGM sector is adopted by financial institutions and cooperatives.	<u>Output 2.1:</u> Dialogue is facilitated between financial institutions and other finance actors (e.g. investors) to encourage engagement with the ASGM sector <u>Output 2.2:</u> Technical support is provided to cooperatives and/or exporters <u>Output 2.3:</u> Cooperatives/exporters are supported to prepare for and negotiate purchasing and financing contracts with supply chain actors (e.g. refiners)	GET	1,421,517.00	10,350,000.00
Component 3: Enhancing uptake of mercury-free technologies	Technical Assistance	<u>Outcome 3:</u> Miners in Guinea adopted mercury-free processing techniques	<u>Output 3.1:</u> ASGM miners and communities are sensitized on the health and environmental risks of mercury usage <u>Output 3.2:</u> Mercury-free technologies available to miners in two prefectures	GET	1,094,212.00	1,387,500.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 4: Knowledge sharing, communication and local capacity building support		<u>Outcome</u> 4: Increased adoption of mercury free technologies, responsible sourcing plans and financing by ASGM miners beyond pilot sites through sharing of lessons learned and peer to peer exchange.	<u>Output</u> 4.1: Knowledge products and tools developed through the project are made available nationally to all GEF planetGOLD project stakeholders in Guinea <u>Output</u> 4.2: Knowledge products and tools developed through the project are available globally through the GEF planetGOLD programme	GET	851,489.00	475,061.00
Monitoring and evaluation	Technical Assistance	Project achieves objective on time through effective monitoring and evaluation	Project monitored and evaluated	GET	60,000.00	
Sub Total (\$)					5,096,900.00	14,452,066.00
Project Management Cost (PMC)						
		GET	205,100.00		35,000.00	
		Sub Total(\$)	205,100.00		35,000.00	
Total Project Cost(\$)			5,302,000.00		14,487,066.00	

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Private Sector	Climate Genius	In-kind	Recurrent expenditures	100,000.00
Civil Society Organization	IMPACT	In-kind	Recurrent expenditures	400,000.00
Civil Society Organization	CASE	In-kind	Recurrent expenditures	35,000.00
Civil Society Organization	Carbon Guinée	In-kind	Recurrent expenditures	75,250.00
Civil Society Organization	UNOG ? Union des Orpailleurs de Guinée	In-kind	Recurrent expenditures	386,400.00
Private Sector	Anglo Gold Ashanti Guinea	In-kind	Recurrent expenditures	1,317,425.00
Private Sector	Argor Heraeus	In-kind	Investment mobilized	10,000,000.00
Private Sector	LBMA	In-kind	Recurrent expenditures	100,000.00
Private Sector	SAP	In-kind	Recurrent expenditures	100,000.00
Recipient Country Government	Ministry of Environment and Sustainable Development	In-kind	Recurrent expenditures	199,811.00
Recipient Country Government	Ministry of Mines and Geology	In-kind	Recurrent expenditures	1,237,500.00
Recipient Country Government	Ministry of Health and Public Hygiene	In-kind	Recurrent expenditures	535,680.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
			Total Co-Financing(\$)	14,487,066.00

Describe how any "Investment Mobilized" was identified

The investment mobilized via Argor Heraeus was identified via ongoing collaboration between the project implementing and executing agency. The investment mobilized pertains to envisioned supply chain partnerships between Argor Heraeus and ASGM associations/communities identified as partners to the project.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Guinea	Chemicals and Waste	Mercury	5,302,000	477,180	5,779,180.00
Total Grant Resources(\$)					5,302,000.00	477,180.00	5,779,180.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

150,000

PPG Agency Fee (\$)

13,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Guinea	Chemicals and Waste	Mercury	150,000	13,500	163,500.00
Total Project Costs(\$)					150,000.00	13,500.00	163,500.00

Core Indicators

Indicator 9 Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	48.60	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
	48.60		

Indicator 9.3 Hydrochlorofluorocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
	4		

Indicator 9.6 Quantity of POPs/Mercury containing materials and products directly avoided

**Metric Tons
(Expected at
PIF)**

**Metric Tons (Expected at
CEO Endorsement)**

**Metric Tons
(Achieved at
MTR)**

**Metric Tons
(Achieved at
TE)**

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		2,939		
Male		2,081		
Total	0	5020	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

1A. PROJECT DESCRIPTION

describe any changes in alignment with the project design with the original pif

Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario with a description of outcomes and components of the project; 4) alignment with GEF focal area and/or impact program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovativeness, sustainability and potential for scaling up. ?

1.A.1 Global Baseline: Global Environment Problem, Root Causes & Barriers

The negative health and environmental impacts of mercury usage across the world have garnered the attention of and mobilized action amongst a variety of actors and stakeholders, including governments, international bodies, the private sector, civil society, and affected communities. With the artisanal and small-scale gold mining (ASGM) sector serving as the largest contributor of global anthropogenic mercury emissions^[1], emphasis has been placed on identifying scalable and sustainable solutions to reducing and eventually eliminating the use of mercury in the production of artisanal gold. These efforts are complicated by the complex environments in which artisanal mining often takes place and the characteristics of the sector, which is often understood as poverty-driven^[2] and operating largely in an informal and unregulated manner.

The Global Environmental Facility's (GEF) planetGOLD programme, which aims to make artisanal and small-scale gold mining safer, cleaner, and more profitable, is a key initiative in driving large-scale, systemic change across the ASGM sector globally^[3]. The programme recognizes that tackling the elimination of mercury in ASGM supply chains requires a holistic approach that addresses the root causes of mercury usage and the barriers that often impede miners from transitioning to mercury-free technologies. This includes a focus on several key areas: access to financing and responsible gold markets, support for formalization, awareness raising on the harmful effects of mercury towards human health and the environment, increasing access to mercury-free technology and strengthening local capacity for sustainability of solutions. This effort comes as follow up to previous GEF efforts on ASGM mercury reduction such as the Global Mercury Project, the ongoing planetGOLD programme (GEF GOLD) and several bilateral initiatives. At a global scale, the Programme supports countries' commitments under the Minamata Convention on Mercury entered into force in August 2017^[4]. These efforts have contributed to addressing mercury reduction through addressing root causes for more than a decade, through the planetGOLD Programme, the planetGOLD+ Programme, and finally the planetGOLD Programme.

1.A.1.1 Global Environmental Problem

The Properties of Mercury

Mercury is a naturally occurring element released primarily through human activity and is recognized as one of the most toxic substances in the world for the human population. Mercury can be found in three main forms: elemental (or metallic), inorganic compounds, and organic compounds.^[5] Elemental mercury is liquid at room temperature and has traditionally been used in certain products such as thermometers or dental amalgams, as well as in different processes, such as gold mining, and it is released into the air when burned. Inorganic mercury is formed when mercury combines with other elements, creating inorganic mercury compounds. These can occur naturally and are primarily used in industrial processes. Organic mercury is formed when mercury attaches itself to carbon. A common form of organic mercury compound ? methylmercury ? is created when small microorganisms found in water or soil convert inorganic and elemental mercury into methylmercury.^[6]

Mercury is known to affect the brain, kidney, lungs, nervous, digestive, and immune systems, skin, and the eyes. As such, the toxic metal is one of the chemicals of major public health concern for the World Health Organization (WHO).^[7] While in certain forms and smaller quantities, mercury exposure and consumption are less likely to be harmful to humans and the environment, anthropogenic exposure to mercury via respiration of mercury vapor, skin contact with liquid mercury or consumption of contaminated water or food sources, especially when these are in high frequency and long-term, can cause severe and irreparable harm. In contrast, direct exposure to the organic mercury compound dimethylmercury can be deadly in even the smallest amounts (i.e., several drops) if absorbed into the skin.^[8]

Mercury sulfide (HgS), or cinnabar is a red shaded ore with deposits located throughout much of the world. The term cinnabar is believed to come from the Persian *zinjifrah*, meaning dragon?s blood. Elementary mercury, which is liquid at room temperature, is obtained by heating or roasting HgS with calcium oxide (CaO) at 600°C^[9] to extract vapors. These vapors are captured and condensed as liquid, ?quicksilver?, mercury.^[10] The USGS defined 26 belts in which mercury deposits occur in three different types: silica-carbonate, hot-springs, and Almaden (additionally, around 5% of the world?s production resides in gold-silver by-products).^[11] China is responsible for the vast majority of mercury production globally. According to the USGS, the country produces 3,500 tons annually, far outpacing the second producer, Mexico with 240 tons and Tajikistan with 100 tons.^[12] Mercury is also released from the earth through natural processes, such as volcanic activity, as well as through mercury mining processes. In addition to primary mining, it should be noted, however, that mercury is used in gold mining processes; in industrial processes for making batteries, lamps, thermometers and barometers; in dental amalgam (fillings); in waste incinerators; in coal-fired power plants; as well as in some skin lighteners and other pharmaceutical products^[13].

Mercury that is released into the atmosphere can eventually make its way into water sources, and subsequently the aquatic food chain as it is transformed into methylmercury. This toxic form of mercury biomagnifies as it passes from one trophic level of the food chain to another, meaning as it passes from one animal to another ? or to a human - it becomes more and more concentrated along the way, increasing the threat from one level to another^[14]. This leads to a phenomenon known as

bioaccumulation?, in which those at the highest tiers of the food chain ? including humans and larger animals ? are exposed to the greatest amounts of mercury.^[15]¹⁵

Uses of Mercury

Mercury was once used in a wide range of products and processes, in a variety of its forms. For a long period, it was once believed to be a key ingredient in a variety of medicines and medical treatments, such as calomel ? a treatment used for teething toddlers and other illnesses in the early 1900s ? or in steam baths that were once deemed beneficial to the health of individuals.^[16]¹⁶ In the 1800s, the metal was even used in the felting process to make hats, leading to mercury poisoning for hatters and the birth of the expression ?mad as a hatter?.^[17]¹⁷ As an effective tool for keeping moisture at bay, mercury has been used in fungicides to protect agricultural products from mold, as well as in batteries to prevent the buildup of gases that can lead to leakages.^[18]¹⁸ Typical uses for mercury have also included dental restoration products (e.g. fillings), thermometers, incandescent lights, and more.

In recent time, concerns over the toxicity and harmful effects of mercury on human health and the environment have led to the phasing out of mercury usage in several products, though the extent of this phase out differs across industries and countries. Global efforts to phase out the use of mercury have been primarily executed through the Minamata Convention on Mercury, an international convention designed to protect the health of people and the environment from the negative impacts of mercury. The Minamata Convention on Mercury is discussed in greater depth in section 1.1.3.

Of most relevance to global mercury emissions however is the use of mercury in extraction of gold from ore, notably in the ASGM sector. In this regard, mercury is mixed with gold-bearing ore to form a gold-mercury amalgam, and subsequently burned off to leave out gold sponge. Through this process, mercury is released into the air and can find its way into both humans and the local environment, notably water sources and soil.^[19]¹⁹

Prevalence of Mercury Around the World

It is difficult to assess the extent to which mercury contamination occurs worldwide, especially in regions with less government oversight. The United Nations Environmental Programme (UNEP) has conducted several global mercury impact assessments to help fill this void, with the most recent edition released in 2018. This report estimated that approximately 2,220 tons of mercury were released into the air from anthropogenic sources in 2015, reflecting a 20% increase from previous estimates in 2010^[20]²⁰. Of this amount, the ASGM sector contributed 838 tons to global air emissions, with Latin America, Sub-Saharan Africa, and East and Southern Asia serving as the largest contributors with 340 tons, 252 tons, and 214 tons respectively^[21]²¹. Further, the report estimated that the artisanal and small-scale mining contributed approximately 1,220 tons of mercury to soil and water sources worldwide, and twice the amount released by other sectors. Geographically, South America represents 53%, East and Southeast Asia 36%, and Sub-Saharan Africa 8% of ASGM releases to water and soils.^[22]²²

Impact of mercury on human health and the environment

There is no known physiological role for mercury in the human body, and it is one of the most harmful heavy metals to both humans and animals. Mercury can spread throughout the human body and be difficult to excrete ? leading to a range of negative health impacts, depending on type, quantity, and frequency of exposure^[23]²³. It is widely accepted within the health community that frequent or direct exposure to significant quantities of both elemental and methyl mercury can cause serious harm to humans and animals. While there is somewhat less certainty regarding the exact point at which more negligible or low-level exposure to mercury becomes more threatening,

the global consensus with respect to mercury has been to eliminate it to the extent possible from various uses and products.

During mining and processing activities in the ASGM sector, mercury losses to the environment occur during amalgamation and amalgam burning. Due to primarily unsafe practices in the sector, mercury is released directly into the environment, contaminating air, lands, and soils. The uncontrolled loss of mercury, especially released from whole ore amalgamation, can travel long distances around the globe, contributing to mercury pollution and contaminating the world's ecosystems. In tropical regions with heavy rainfall, water, and consequently fisheries are particularly impacted. Consumption of mercury-contaminated fish exposes communities to methylmercury, an organic form of mercury that bio-accumulates and bio-magnifies along aquatic food webs.^[24]²⁴

According to the World Health Organization (WHO), elemental mercury exposure can cause several harmful effects if inhaled, consumed or through direct contact, including various neurological and behavioral disorders that include symptoms such as tremors, insomnia, memory loss, neuromuscular effects, headaches and cognitive and motor dysfunction.^[25]²⁵ Some studies have shown that young children and women of childbearing age (and especially pregnant women) are at heightened risk of negative impacts from mercury exposure.^[26]²⁶ For example, a study of mercury concentration in Nile tilapia in Kenya concludes that "consumption of [the fish] from the studied area carries a significant risk of Hg exposure in frequent fish-eaters, pregnant women, and developing children, but is safe for the general population."^[27]²⁷ Hence, the extent to which mercury can be harmful varies depending on the pathway to exposure, the type of mercury, and the concentration levels.

Methylmercury is a powerful neurotoxin with exposure primarily identified through the food chain. Exposure to high levels of the toxicant often results in adverse health effects such as loss of vision, tingling of hands and feet, lack of coordination, impairment of speech, hearing and walking and muscle weakness. Methylmercury toxins bypass the placenta and can negatively impact fetuses. The toxicant can transfer to unborn children via breast milk^[28]²⁸ and the mothers' food diet,^[29]²⁹ and expose the forming brains and nervous system, resulting in impact in the children's cognitive abilities^[30]³⁰.

While mercury is also in use at Large-Scale Mining (LSM) operations^[31]³¹, ASGM remains the main source of mercury emissions. Studies have shown the effects of mercury usage on individuals working in the ASGM sector who are exposed to elemental mercury when processing ore and extracting gold. From Brazil^[32]³² to Indonesia^[33]³³ and China^[34]³⁴ to Mongolia^[35]³⁵, mercury contamination from ASGM usage has been widely reported. These studies also highlight the impacts of mercury usage nearby communities, exposed through contamination of air, soil and water. Downstream communities are impacted by methylmercury contamination through the food chain.^[36]³⁶ While the effect is most acute for workers in the sector working directly with mercury and having skin contact or inhaling vapor, mercury vapor can stay in the air and be transported

beyond the site of emission.^[37] A recent study estimated that 25-33% of those working in the ASGM sector suffered around the world suffered from chronic mercury vapor inhalation, and that this resulted in an approximate global disease burden of 1.22 to 2.39 million disability-adjusted life years. The authors note that the study was impacted by a lack of accessibility of accurate and credible data and suggest that this figure presents an underestimated disease burden due to mercury usage by those working in the ASGM sector.^[38]

The process of artisanal mining, and in particular gold, also leads to wider degradation of the environment that are not directly linked to mercury usage. Clearing large areas of forest and vegetation to mine the ore can leave surrounding communities lacking arable land for farming and clean water. However, studies have shown that deforestation also increases mercury mobilization in ASGM areas, increasing levels of both naturally occurring and anthropogenic toxins.^[39] Additionally, mercury, as a basic chemical element, cannot be broken down or degraded. Once released into the biosphere the toxic metal readily moves and cycles through the environment. Once in the environment, the extent to which it can move between the atmosphere and further into waterways is influenced by its form. The harmful effects that different forms of mercury can have on living organisms are greatly influenced by bioaccumulation (build up inside an organism) and biomagnification (build up along the food chain), as described above. In particular, methylmercury is taken up at a faster rate than other forms and bioaccumulates to a greater extent. In fish, methylmercury becomes so tightly bound in the tissues that, even if exposure ceases, recovery only occurs a long time after.^[40]

The use of mercury differs between geological areas. Depending on the areas where gold is concentrated among hard rock more mercury is needed for its extraction. The scale of mining capacity in each village and the geology of the site, therefore, also have important implications for rural development, environmental protection, and mercury usage. Any intervention in such context must include in-depth understanding of these dynamics to appropriately tackle the issue at stake.

1.A.1.2 The ASGM Global Context

- Artisanal and small-scale gold mining (ASGM) is carried out in over 70 countries by 10-15 million women and men,^[41] many of whom with several dependents relying on the mining sector as a source of livelihood. Unfortunately, there are also a significant number of children that can be found working in artisanal and small-scale gold mines in a variety of direct and indirect roles.^[42] ASGM is defined in the Minamata Convention on Mercury as "gold mining conducted by individual miners or small enterprises with limited capital investment and production".^[43] Globally, it is the main source of income for many rural and low-income communities, particularly in developing countries where alternative economic opportunities are scarce.^[44] ASGM is a key part of the artisanal and small-scale mining (ASM) sector, and accounts for approximately 20% of global gold supply,^[45] making it a USD 35 billion industry per year.^[46]

ASGM is typically carried out in the informal sector, poorly controlled by local authorities, either due to an absence of an effective regulatory framework, lack of enforcement capacity or corruption.^[47] Consequently, ASGM is highly susceptible to predatory actors, including those complicit in human rights violations. Artisanal and small-scale gold miners often have no formally recognized access to mineral resources rights and are thus frequently criminalized by extractive companies and government bureaucrats. This makes them vulnerable to extortion by corrupt

officials who frequently demand payments for using mine sites. Unlicensed, informal gold production presents a missed opportunity for economic growth. Where mining activities are operating outside the law, national governments are not able to collect tax revenue. Coupled with illicitly traded gold, facilitated by the sector's informality, significant losses in government revenues are associated with ASGM. Such complex issues of mining taxation, land tenure and fraudulent financing put the sector at a disadvantage to larger scale industrial mining. These factors are crucial in determining the contribution the ASGM sector makes to national economic growth.

Forced to secure financing through informal means, miners and their families often become trapped in a cycle of poverty.^[48]⁴⁸ To achieve their livelihood goals, 'push' factors – meaning factors that play a role in driving or encouraging individuals to enter the ASM sector – at the microeconomic level force people to engage in ASGM. For example, impoverished subsistence farmers may turn to ASGM as an alternative source of income due to local population growth or negative climatic impacts on agriculture. 'Pull' factors that attract people to ASGM may typically include higher wages and the chance to inject greater cash flows for small business growth.

However, it remains important to avoid viewing individuals only as maximization agents attracted to the hopes of getting rich quick.^[49]⁴⁹ In this context, mercury amalgamation is the quickest and least expensive method of recovering gold for individual miners. It is often the most trusted method for artisanal and small-scale miners, as it gives them a better sense of control over the recovery process. Low productivity, limited incomes, and difficulties to access financial opportunities^[50]⁵⁰ make it harder for many ASGM operators to invest in alternative mercury-free technologies. Not only does this perpetuate environmental damage and deteriorating health outcomes, but it keeps miners in debt to their financiers, further limiting their economic options.

The ASGM sector is also responsible for 35% of all global mercury pollution into the environment, which makes it the largest source of emissions worldwide.^[51]⁵¹ A key reason for this is the fact that ASGM uses rudimentary techniques of extraction, often undertaken by miners with little technical knowledge of its impacts on the environment or their health. With limited capacity to mitigate the hazards, workers operate under dangerous conditions.

As noted above, the open burning of mercury-gold amalgam in ASGM and refining facilities provides major risks to health and safety. Additionally, these practices raise questions around gender-related concerns in the ASGM sector, a growing field of inquiry.^[52]⁵² Female miners are at risk of toxic exposure from mercury with the majority working in the amalgam-processing stage.^[53]⁵³ Even women and children not directly involved in mining activities share this danger due to amalgam burning in residential areas.^[54]⁵⁴

1.A.1.3 Global Efforts to Reduce and Eliminate the Use of Mercury

In recognition of the harmful effects of mercury on the human population and the global environment, governments came together, supported by the Chemicals and Health Branch of the UNEP's Economy Division, to establish the Minamata Convention on Mercury^[55]⁵⁵, a global treaty to protect human health and the environment from the adverse effects of mercury. Signed in 2013, the Minamata Convention on Mercury came into force in August 2017, and currently has 128 signatories and 137 parties. The African continent is leading with 37 countries parties to the convention (out of 54 countries), followed by the Asia Pacific region with 34 countries parties to the convention.^[56]⁵⁶

Main components of the Minamata Convention on ASGM are found in its seventh article and in annex C on the prohibition of new mercury mines and phasing out existing ones, phasing out mercury usage in various processes and products, addressing proper mercury storage and disposal, and regulating the artisanal and small-scale gold mining sector.

Countries that have ratified the Minamata Convention and determined their domestic artisanal and small-scale gold mining sector is, in the words of the convention, more than insignificant, are required to develop a National Action Plan (NAP). NAPs are tailored to the individual country context but must include several key elements as outlined in the Minamata Convention, such as strategies to facilitate formalization and regulation of the ASGM sector and to increase the use of mercury-free technologies. NAPs should be submitted to the convention's Secretariat no longer than 3 years after entry into force of the convention or notification to the Secretariat. Finally, parties should provide a review every three years of the progress made to date.^[57]

However, it should be noted that the NAP is a bold plan organized according to nine pillars: (1) actions to eliminate the worst practices, (2) the strategy formalization of ASGM in Guinea, (3) the strategy to introduce best mining practices, (4) the strategy to manage the mercury trade and prevent its diversion, (5) the strategy for the management of abandoned sites, (6) the strategy to involve stakeholders in the implementation of the NAP, (7) the public health strategy relating to the exposure of artisanal gold miners and communities to mercury, (8) the strategy to prevent the exposure of vulnerable populations to mercury to advance gender equality and manage children's labor, and (9) finally the strategy to inform artisanal miners and the public communities in general.

As underlined by article 9, the convention promotes a collaborative approach between parties and with intergovernmental organizations. To implement the Minamata Convention on Mercury, many governments require capacity building and resources to carry out relevant activities. As such, funding mechanisms have been established, including through the Global Environmental Facility (GEF), which is the primary source of financial contributions for the implementation of the Minamata Convention.

The GEF supports governments and implementing partners to carry out assessments of mercury usage and risks within their national contexts, to conduct needs assessments for reducing and eliminating mercury usage, to create their NAPs and to undertake activities in a number of strategic areas to help reduce and eliminate the use of mercury in ASM gold supply chains, such as support for formalization, adaptation of mercury-free technologies, access to financing and awareness raising. In this regard, GEF has created a specific programme 'planetGOLD' that brings together several governments, private sector, and civil society organizations to support ASGM communities in these key areas.

Additionally, many donor governments, multilateral institutions, industry actors and civil society organizations have prioritized the reduction and/or elimination of mercury from ASGM supply chains in a variety of formalization, governance and environmental focused projects and initiatives. While efforts to tackle mercury usage in the ASGM should be continued and increased, awareness of criticisms remains critical. As listed in a recent article, limitations of these programmes implemented for decades create inefficiencies constraining the ability to effectively tackle mercury use in the ASGM sector.

While these criticisms are not specifically targeted at the planetGOLD programme, they bring important lessons as to how defining and orienting programmatic priorities. Criticisms include (1) lack of consultation with stakeholders in previous projects; (2) short-term assistance without continuity; (3) lack of consultation on the need to mine and the ability of miners to learn new technologies; (4) concentration on assessment of environmental and health impact and not reduction or elimination of mercury; (5) fund used to convince partnering government and not to facilitate formalization; (6) limited knowledge of geological topic; (7) perception that gravity concentration can eliminate the use of mercury in all types of ores; and (8) lack of focus on how capital-intensive are mercury-free technologies.^[58]

1.A.1.4 Root Causes and Barriers to be Addressed

There is a myriad of intertwined health, environmental, legal and socio-economic challenges related to high mercury usage and emissions in the ASGM. Informality is a defining feature of the sector worldwide and is a key obstacle to capital investment in more responsible mining infrastructure. Despite ongoing efforts to encourage alternative extractive techniques, mercury use is still the primary method of recovering gold across West Africa. The main barriers to the adoption of mercury-free practices include:

Poverty

Participation in ASGM has become a primary means of survival for many miners and their families, with some miners depending on the sector to address food insecurity.^{[59]59} Most alternative work is low paid and hard to come by. Despite its intensive labor demands, ASGM has lucrative income generating potential, especially in certain areas where other income generating activities are more difficult. ASGM provides an opportunity for these groups to supplement their seasonal earnings. Poverty-driven ASGM represents a crucial obstacle to reducing mercury use especially as barriers to entry in the sector are low, while barriers to access mercury-free technologies can be high.

Informality and Lack of Effective Legislative and Regulatory Framework

The perpetual informality of the ASGM sector is one of the main root causes of its dependence on mercury in extracting gold from the ore. While Guinea's *2011 Code Minier* recognizes artisanal operations in its Chapter II, Section III, ASGM activities remain predominantly informal, meaning that the operators do not have the requisite licenses and permits. Artisanal mining throughout West Africa, including Guinea, is the result of a negotiated agreement allowing farmers, miners, and other land users to perform their own activities.

In Guinea the vast majority of land is not titled and belongs to a village or community under customary rights. The issue of rural land rights and customary rights has significant impacts in the country, in particular in the titling of mining rights.^{[60]60} This provides a substantial barrier for mining communities in acquiring enforceable property rights or accessing finance that can support improvements to their operations.^{[61]61}

The drivers of informality are primarily rooted in the lack of an effective governance framework for the ASGM sector that serves to both regulate and incentivize miners to formalize. This includes the presence of fiscal-administrative obstacles, such as high costs for licenses, long wait periods, burdensome processes and distance between government services and ASGM sites, all of which can encourage informal activity.

Despite exploring various forms of land access by ASGM, which include working in sites managed by license holders, landlords, pit owners or machine owners, the sector remains highly informal. Its informality and migratory nature weaken the organizations structuring the industry ? namely ASGM associations ? which are in most cases inactive. This presents itself in two ways.

First, miners within Guinea and its various mining regions can move from one location to another based on perceived productivity and prospects of gold. Second, migratory informality is observed through the permeability of the borders with Guinea's neighboring countries. This permeability further contributes to informality as it favours the smuggling of gold ore, given that gold traders are able to move around in order to trade in countries that are cheaper and offer more profit.^{[62]62}

Legislation prioritizing large-scale mining has also often put ASGM practitioners at a big disadvantage, who struggle to comply with the rules. In Guinea, this industry, in particular the illicit operations, are considered an epidemic by the government for threatening the industrial investments in the sector. Bureaucratic tape has greatly limited the ability of artisanal miners to request authorization to establish an ASGM operation while the Mining Code's requirement that the authorization be renewed every year makes it improbable to secure a title. In the LSM sector, however, industrial or semi-industrial mining permits are valid for five years, renewable several times (Article 33 of the Guinean mining code). Similarly, a rehabilitation deposit is required for all artisanal operations, increasing the cost for miners to establish themselves in the parameters of the law. Finally, the size of artisanal gold operations allowed in the country is limited to half a hectare per authorization (1.3 acres), with a maximum of two authorizations per operator. This is to be compared to 25 hectares (61 acres) in Cote d'Ivoire, and from one to 100 hectares (2.5 to 247 acres) in Burkina Faso, both neighbouring countries. These types of requirements, if not adapted to the realities of the ASM sector, risk giving monopolized access to mineral bearing land for large-scale mining companies, thus marginalizing the ASGM sector to an even greater extent. The issue of land ownership is therefore a significant source of conflict.^{[63]63} Informality also allows

ASGM communities to operate in remote areas in the absence of appropriate social and environmental impact oversight.

Beyond an effective regulatory and legislative framework for formalizing the ASGM sector, a lack of resources and capacity have hindered the ability of government ministries and departments to reinforce regulations, laws, and policies or to provide effective support services to the ASGM sector so that it is able to move towards formalization and improve their practices (including mercury reduction). Globally, a lack of decentralization and coordination has also played a role in minimizing the effectiveness of existing formalization efforts.

Poor Knowledge of Environmental and Health-related Best Practices for ASGM

Miners and government officials often have limited knowledge and understanding of the potentially negative health and environmental impacts that are associated with mercury usage. Additionally, those who may understand these negative impacts often have limited awareness of and access to technologies that reduce or eliminate the use of mercury, or that can at least improve environmental and worker safety risks when it is used. While education is an important component in addressing this barrier, it is also important to consider this in the broader context of those working in the ASGM sector or governing it.

A lack of effective local solutions and capacities to organize and collectively address these problems, especially via scalable knowledge sharing and communication efforts, can often weaken the impact of efforts to educate and improve understanding. The mercury-free methods used are labor intensive, discouraging wider adoption by miners. A lack of active engagement by academic institutions and equipment manufacturers in developing locally grown solutions on mercury-free gold processing keeps knowledge and capacity generally low.

Limited Access to Finance

The financing of the ASGM sector comes with high risks. Concerns over risks such as money laundering, child labor, mercury usage and corruption provide the threat of reputational damage for lenders.^{[64]⁶⁴} Investors are often discouraged by the fact that ASGM is largely financed through informal channels,^{[65]⁶⁵} as well as the unpredictability of the sector regarding prospective production, the migratory nature of the sector, and the lack of collateral on behalf of most of those working in the sector.

The majority of ASGM in West Africa, and more globally, do not benefit from the presence of formal lending systems, instead relying on informal lending provided by family, friends, gold traders or informal savings groups.^{[66]⁶⁶} When lenders are willing to engage in the ASGM sector, they often demand high interest rates or strict repayment schedules to balance the risk of their investment. This means loans are often very inaccessible for many small-scale businesses. Further, even when banking institutions or credit initiatives are willing to lend to ASGM actors, many are unable to access these options as they are unbanked altogether.^{[67]⁶⁷}

As a result, there is no incentive for miners to adopt responsible mining practices, such as mercury-free technology, as their primary sources of financing and gold sales are not providing the demand for mercury-free gold. Furthermore, it reduces their ability to invest in mercury-free technology or practices, as this cost directly impacts their margins and is not shared amongst supply chain actors further downstream.

Risks Facing the ASGM Sector

For years now, the ASM sector, and in particular the gold industry has been at the fore in discussions around risks and human rights abuses. Section 1502 of the Dodd-Frank Act placed this issue to the core of corporate due diligence in 2010, in particular in the Central African region.^{[68]⁶⁸} This year, the implementation of the EU Regulation 2017/821 brought these concerns to the global stage.^{[69]⁶⁹} The attractiveness of gold, which requires only small quantities for significant gains, has gathered the attention of armed groups, militias, and other groups as a financing mechanism through illegal taxation.

Beyond this issue, ASGM is often at the center of disasters linked to the remoteness and low technological development of the extractive practices. Collapse of mine pits are frequent, while disease propagation has been rampant. Regarding this last point, epidemics and pandemics have had a significant impact on artisanal and industrial^[70] operations throughout Africa. The case of Ebola in the DRC^[71] and Sierra Leone^[72], and even more visible the impact of the COVID-19 pandemic on artisanal gold mining^[73] highlights these critical limitations for intervention. Research shows that these events and the government response to tackle major health issues deeply impacts the movement of people, a critical aspect of artisanal gold mining.

In Guinea, most of the artisanal mining population is migratory while the export of gold can only be performed with a highly mobile workforce. As governments put regions in lockdowns, particularly during the Ebola epidemic, the livelihoods of millions of people are threatened. Similar dynamics are at stake with the COVID-19 pandemic. However, the scope of the pandemic impacted the gold market as whole and cut export routes, hence limiting the ability of miners to sell their production and earn money.^[74]

The exposure to risks greatly limits intervention by legitimate private actors, including risk averse refiners and downstream purchasers. In part due to the increasing scrutiny around sourcing practices, especially in the gold sector, these actors abstain from directly intervening in the risky ASGM sector, hence limiting financing for artisanal operators, and stifling their ability to tackle these risks' root causes. The involvement of traders and refiners with poor sourcing practices, without established price control, and negatively impacts the miners' ability to secure a living wage, while evading taxes in the countries in which they operate.^[75]

Intertwining of Illegal Mercury Trade and Gold Trade

Globally, mercury is a highly regulated chemical substance, controlled by different mechanisms restricting its trade. Some early national-level efforts took place, such as through the Mercury Export Ban Act of 2008, the United States made it illegal to export elemental mercury, and other countries adopted similar measures aim at curbing the trade in mercury. Recent efforts globally have been led by those involved in the creation and implementation of the Minamata Convention. With regulatory measures increasingly banning the trade in mercury, imports to ASGM areas are often controlled by illicit networks.

The complexity of intervention in this context resides in the intertwining of illicit mercury trade with other needed goods and services for the industry. In particular, mercury trade uses the same routes than gold exports but in the opposite direction. The actors involved in the trading and export of gold produced in ASGM areas build on their network to provide mercury to the artisanal operators. Consequently, adopting a repressive-only approach to mercury trade would greatly limit the capacity of artisanal miners to sell and export their production, negatively impacting their finances and livelihoods.^[76] Targeting behavioral changes in the use of mercury at the mine site level then appears the most promising intervention.

Local Realities for Adopting Mercury-free Technologies

The introduction of mercury-free technologies has been very slow in the country. A study was conducted in 2006 by Viega *et al.* to assess the use of mercury in the country^[77].

However, while Guinea is a signatory of the Minamata Convention since 25 November 2013; and has developed a National Action Plan, available information states that only one pilot project was conducted in the country as of 2022. The project was informed by a study and engagement conducted by the Artisanal Gold Council (AGC) between 2015 and 2017.^[78] It was implemented by AGC and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, German Cooperation) was established in the village of Tonso. The pilot aimed at replicating the learnings

made in Tonso through a community development fund mechanism. However, the project seems to have not continued after the departure of AGC and GIZ.^{[79]79}

Further upscaling of mercury-free ASGM is needed in the country. The difficulties to implement these programs are often due to localized realities that disincentivize their use, such as the price and availability of technologies to operate the machines or lower grade ore. Access to equipment, funding, and geological knowledge makes ASGM and mercury reduction particularly complex.

To successfully implement mercury-free programs, it is important to consider that many miners are working at an individual or small team level, producing very small quantities that are at times less conducive to processing via mercury-free technologies and processes compared to larger quantities. Furthermore, it is important to have an in-depth understanding of their decision-making and barriers to using mercury-free technology, such as increasing time for processing compared to mercury processing. Further analysis of why mercury-free technologies has not upscaled in the Upper-Guinea region would provide some insights into some of the barriers and challenges.

Gender Inequality

Representing a significant part of the workforce women in the ASGM sector, recognition of the role of women is critical to all formalization efforts, including mercury reduction.^{[80]80} Powerful cultural and patriarchal norms, where it is considered taboo for women to participate in the sector, where women are consigned to domestic and childcare responsibilities, and where women do not have equal access to and control over gold resources, have marginalized their perceived role in ASGM. The traditional view that mining is a male activity limits women's direct involvement at mine sites.^{[81]81}

However, this situation doesn't mean that women are absent from the mining process. Instead, they are mostly engaged in non-digging activities such as sluicing, washing, sieving, and processing, including using mercury-gold amalgamation.^{[82]82} Consequently, women are exposed to serious health risks, as they can often be the ones to perform ore purification with mercury.^{[83]83}

Being largely excluded from activity that includes gold discovery also means that women do not have the same opportunities as men in benefitting from sales. Discrimination is also a significant barrier at the policy level. In certain contexts, legal texts deny access to mining licenses, finance, and resourceful land.^{[84]84}

These factors present unique economic challenges, denying women access to control over their own earnings, which forces them to perform the most toxic jobs. As there are few alternative economic opportunities for women, processing the amalgam is often an important source of livelihood.

Despite these challenges and barriers, it is important to note that the ASM sector, and in this case gold, also provides many economic and social benefits for women participants, as documented through research in Africa.^{[85]85} Women are often able to use the income generated from the sector to meet their household needs and to invest in other types of income generating activities, which can also support them in advancing their social status.^{[86]86}

Given the challenges and barriers that women face in the ASGM, and the gendered roles they play that are linked to mercury usage ? it's important to consider the extent to which gender inequality in the sector serves as a root cause for women's exposure to mercury contamination.

While from the perspective of sheer numbers, men are the most impacted by mercury contamination in the ASGM sector, this is explained by their larger representation in the sector, and not necessarily driven by gender inequality. This is contrasted with the experiences of women, by which they find themselves, in some circumstances, dependent on the use of mercury to guarantee their income related to the sector given their more limited access to other income generating activities.

Specific to Guinea, a sociological analysis shows that women come from the forest Guinea and belong to the Soussou, Koniank?, Peulh, Guerz?, Toma, Kissi, and Maninka ethnic groups. These women are usually young, with a majority between 15 and 25 years old. While the 26-49 years old population is still represented, it is rare to see women above 50 on the mine sites.^[87] As it was previously described, women are constantly excluded from mining activities. Cissoko (2015) argues that less than six percent of mining licenses are held by women, illustrating their *de facto* exclusion from the licensing process.

This is linked to ingrained customary systems and the lack of knowledge of legal procedures, as well as a prevalence of patriarchal relationships. Hence, women usually perform support tasks such as the lifting the buckets from the pits and cleaning the ore. In these activities, women are considered junior miners, and as such receive collectively 1/12 of the value of the production according to Cissoko.^[88] These mining-related tasks are completed by other activities linked to the booming nature of the mining industry, including the development of small businesses and prostitution.

1.A.2 National Baseline: ASGM Context in Guinea

Guinea is located in West Africa, bordering Sierra Leone, Liberia, and Côte d'Ivoire to its south, Guinea-Bissau and Senegal to its north and Mali in the east. In 2019, the country had a population of 12.8 million people spread along the 245,900.00 square kilometers of its territory.^[89] With a gross domestic product (GDP) of USD 15.7 billion (per capita GDP of USD 1,058), a Gini index of 33.7 in 2012, and an annual growth of 5.1 percent spurred by mining investments, the country remains a powerhouse in the region. It should be noted however that, while the mining sector, in particular linked to bauxite (alumina oxide used for aluminum production), is booming, the country's economy suffered from the COVID-19 pandemic.^[90]

The artisanal and small-scale mining (ASM) sector in Guinea is a vibrant and ever-expanding industry providing large segments of population with the means to sustain their livelihoods. The country's resources, from diamonds to bauxite and gold, are exploited in both legally recognized and informal operations, often located in remote areas. In Guinea, the main artisanal gold mining districts are located in Kouroussa, Siguiri, Mandiana and Dinguiraye and artisanal mining has been practiced in the Upper Guinea region since the 12th century.^[91]

The gold sector, in particular, represents a significant part of these sites mostly located in the Upper Guinea (*Haute Guinée*) region, regrouping the Kankan and Faranah administrative regions.^[92] Gold is extracted both in alluvial and primary deposits, with the latter being dominated by industrial mines.

The first sources mentioning gold mining in the region date back from the 12th Century while mechanized extraction is described as starting in the early 20th Century. As a former French colony, Guinea also saw geological exploration missions conducted by its former metropole in the 1930s and 1940s. However, it seems that a significant gold deposit was only discovered in the region in the early 60s, leading to the development of industrial mine sites and in turn attracting large numbers of artisanal miners.^[93] First exploited by Canadian and Chinese companies, the deposit changed hands with the *Union Minière de Belgique* to finally be acquired by AngloGold Ashanti in 1996.^[94] The Siguiri mine sites now contribute to seven percent of the company's production, with an estimated 214,000 ounces of gold extracted annually.^[95]

In parallel to the development of industrial mines in the region, a booming artisanal sector attracted hundreds of thousands of miners and their relatives. In 2006, Veiga et al. estimated the number of these miners at 200,000 to 300,000, with an annual legal artisanal production of 6 tons (plus 2.3 tons being smuggled through neighboring countries).^[96]

In 2016, estimations of the economic value of artisanal gold mining reached an astonishing USD 300 million.^[97] In 2018, the NAP counted 243,187 people involved in the ASGM sector, a surprisingly detailed number. Additionally, the report provides estimates regarding the origins of these miners, with 15 percent being foreigners, 40 percent Guineans originating away from the extractive region and 45 percent Guineans originating from the extractive region.^[98]

The region is also known for its highly migratory working population. Migrations occurred inside the country between over-populated urban areas not offering jobs prospects anymore to the mining

areas, as well as transborder migrations with neighboring countries.^{[99]99} These include Mali, Côte d'Ivoire, and Burkina Faso (despite not directly bordering Guinea).^{[100]100}

Hence the regional economic and political context holds a significant impact on Guinea's artisanal gold mining industry structure.^{[101]101} Several hundred miners from Burkina Faso and Mali have settled in villages in Guinea, introducing new gold mining and processing techniques aimed at reaching deeper primary gold deposits and processing the hard rock with appropriate machinery or chemicals.^{[102]102} Shafts are now larger, more irregular in shape and location, and deeper; they reach a depth of 30m or more, and required reinforcements and scaffolding. These developments thus affected the visual landscape of villages and mining areas, the level of pressure on local resources, and the role of customary authorities in the pre-existing institutional arrangements governing access to gold in Guinea.^{[103]103}

In most cases, these foreigners are seasonal migrant miners, bringing a heritage of technical knowledge accumulated during their career, and reproducing their practices and a heterogeneous set of procedures.^{[104]104} This otherness of mining knowledge is associated with the perception of gold mining sites as partially autonomous spaces.^{[105]105}

Not only is the knowledge of the different techniques in the artisanal mining sector transmitted through the sharing of workspaces; but institutional, symbolic or financial agreements can also intervene to regulate collaboration between Guinean people and migrants.^{[106]106} This is the case, for example, of the so-called "selection" and association informal agreements where the local inhabitants of certain mining sites demanded to be associated with the different phases of extraction in each well, often by also sharing the expenses.^{[107]107} This model has increased their participation in the local mining economy, and facilitated the learning of gold mining techniques among young people.

In the past few years, the country has also been subjected to critical challenges that have deeply influenced the sector. The Ebola outbreak in West Africa between 2014 and 2016 surprisingly increased the attractiveness of the sector as a quick money-making industry (especially compared to diamond mining). As an independent activity that can be performed in isolation, artisanal gold mining allowed miners to evade government-mandated quarantines.^{[108]108} Additionally, the country's political and social instability in recent years, including the 2019-2020 demonstrations against former president Alpha Condé, and the military coup in September 2021 that saw his removal, play a role in the attractiveness of gold mining as a more stable source of revenue.^{[109]109}

Similar to many African jurisdictions, Guinea's artisanal gold sector suffers from significant challenges. First the poor working conditions and inexistent occupational health and safety (OHS) monitoring under which artisanal miners operate are directly related to the high number of accidents in mine sites. Bolay records up to 200 deaths from pit collapses and other incidents of the same category annually.^{[110]110} For example, in 2021, an incident cost the lives of 15 miners in the Siguiri gold-rich region due to a shaft collapse.^{[111]111} Beyond these incidents, other challenges remain, including the use of mercury in the extraction process (explored in more details in the

subsequent parts), conflicts with large-scale mining operators, [\[12\]](#)¹¹² gender inequality and violence, and general informal nature.

1.A.2.1. Governance of the Sector: Administrative, Legal, and Regulatory Framework

Administratively, the artisanal gold mining sector is under the supervision of the *Ministère des Mines et de la Géologie* (MMG, Ministry of Mines and Geology). Production and commercialization of the sector is supported by the following structures and institutions:

- The National Directorate of Mines / Artisanal Exploitation Division (*La Direction Nationale des Mines / Division Exploitation Artisanale*). This division was created within the National Directorate of Mines, and is responsible for the parcelling, instruction and delivery of mining titles, as well as control of mine sites through its technical teams.
- The Precious Materials Anti-Fraud Brigade - BAF/MP (*La Brigade Anti-fraude des Matières Précieuses*): This enforcement unit monitors the regularity of precious materials trade and operations.
- The National Bureau of Precious Materials Expertise (*Le Bureau National d'Expertise des Matières Précieuses*): This bureau is responsible for the evaluation of precious materials and the collection of taxes and royalties along the value chain.
- The Central Bank of the Republic of Guinea (*La Banque Centrale de la République de Guinée - BCRG*): The bank ensures the evaluation of gold produced both artisanally and industrially in two (2) laboratories – one in Conakry and the other in Kankan. It also is responsible for collecting the export tax, the conservation and the transfers at the time of the export in relation with the BNE and the Customs.

The Guinean mining sector is governed by a 2011 *Code Minier* (Mining Code) as amended by the legislation amending the Act L/2011/006/CNT of 09 September 2011 enacting the Mining Code of the Republic of Guinea.

In particular, the articles 51 to 64 apply to artisanal and small-scale mining, including ASGM. Importantly, the definition of artisanal operations, as defined in the Mining Code covers both processes deemed manual and traditional.[\[13\]](#)¹¹³ The mining code provides the backbone of the legal framework around industrial, artisanal, and semi-industrial mining operations. However, it is implemented in the framework on the *Loi Portant Constitution et Gestion du Patrimoine Minier* (Law on the Creation and Management of Minerals' Assets) of August 2011. In particular, article 28 of the law recognizes the existence of artisanal mining.[\[14\]](#)¹¹⁴

The Guinean mining law and regulation system is based on the existence of both the MMG and a *Commission Nationale des Mines* (National Mining Commission). This last body is composed by representatives of a series of ministries directly or indirectly involved in the mining sector. The Commission also has a civil society and a union representative. Its role differs depending on the type of mining permit requested.

However, in the case of a mining license, including for artisanal operations, the positive notice of the commission is required. Hence the commission's role is only to assess mining/exploration permits and the related activities, including withdrawal and revocation.[\[15\]](#)¹¹⁵

This legal framework is completed by regulatory measures acting implementation of the requirements included in the laws. Importantly, the 2014 *Décret Portant Gestion des Autorisations et Titres Miniers* (Decree Governing the Management of Authorizations and Mining Titles ? 2014/012/PRG/SGG) brings clarity to the Mining Code's articles on authorization and mining titles. The Decree contains detailed descriptions of the ways by which an artisanal mining operator applies, renews, and manages a mining license. It points to some of the limitations described in the global baseline, including the length of the mining license (one year), the complexity of the

application process (including the need to adopt environmental regulations), and the limited surface of the artisanal license (half a hectare, with a maximum of two licenses).^[116]¹¹⁶

Additionally, the 2014 *D?cret Relatif ? l'Application des Dispositions Financi?res du Code Minier* (Decree Governing the Implementation of the Financial Provisions of the Mining Code) reiterates that the artisanal miner cannot be the exporter of precious metals, including gold, a role only played by the *Bureaux d'Achat* (Buying Centers).^[117]¹¹⁷ This decree also highlights that the country's mining regulations do not include a tax on the artisanal production of precious minerals. However, the export tax can easily be transferred by the buying centers directly to the miners (for more information tax rates, see section 1A.1.4.).

Decree A/2017/6163/MMG/SGG on the regime of artisanal mining activity and procedures for the allocation of land parcels, makes it possible to apply Decree D/2014/012. Indeed, it specifies the availability of plots falling under the artisanal mining practice, the area that can be allocated to the artisanal gold sector, the quality of the holders of the artisanal authorization which can be either nationals or non-nationals originating from countries granting the reciprocity to Guineans, or even legally constituted groups. The list of documents making up the authorization application file is mentioned in Article 12 of this decree.

The same is true for specifications related to employment and labour. This same decree recommends that measures to be taken in order to comply with environmental regulations and the Labor Code by prohibiting all persons under the age of 18 as workers in artisanal mining sites.^[118]¹¹⁸

Importantly, the Guinean regulation also recognizes that the context of artisanal mining, while having the potential to negatively impact communities and the environment, cannot be bounded by an environmental impact assessment (EIA) as defined for industrial operations. Artisanal miners are then required to define an *Engagement Environmental* (environmental engagement) covering both the exploitation and closing phases of the mine site.^[119]¹¹⁹

In addition to the documents cited above, including the Mining Act of 2011, there are several other pieces of legislation, regulation or policies that are relevant to the ASGM sector. While these texts usually do not deal directly with artisanal mining, their content is important to appropriately address ASGM-related topics. In particular, laws governing natural resources and activities competing with ASGM for access to land are critical. These include:

- ? Code Foncier et Domanial (Land and Public Land Code)
- ? Code de l'Environnement (Environmental Code)
- ? Code de l'Eau (Water Code)
- ? Code de l'levage (Farming Code)
- ? Code de la Faune (Wildlife Code)
- ? Code Forestier (Forest Code)
- ? Code Pastoral (Pastoralism Code)

More specific legal instruments also apply, in particular on child labor, OHS, environmental, and corruption issues. These include:

- ? Ministerial Decree 2791/MTASE/DNTLS/96 - *Relatif Au Travail Des Enfants* (governing Child Labor)
- ? Law L/2014/072/CNT ? *portant Code du travail de la R?publique de Guin?e* (governing Labor Code of the Republic of Guinea)
- ? Law L/2017/041/AN ? *portant Prevention, D?tection, et R?pression de la Corruption et des Infractions Assimil?es* (governing Prevention, Identification, and Repression of Corruption and Similar Violations)

? Law L/2006/010/AN *relative ? la Lutte contre le Blanchiment des Capitaux en R?publique de Guin?e* (governing the r?pression of Money Laundering in the Republic of Guinea)

? *Strat?gie Nationale du D?veloppement Durable*. 2019. Minist?re de l?Environnement, des Eaux, et For?ts. (National Strategy for Sustainable Development, NSSD)

Decree D/97/287/PRG/SGG *r?glementant la gestion et le contr?le des substances chimiques nocives et dangereuses en R?publique de Guin?e* (governing the management and control of harmful and dangerous chemicals in the Republic of Guinea). In line with the signature of the Minamata Convention, Guinea has ? through the work of the MEDD ? adopted a *Plan d?Action National pour l?Extraction Mini?re Artisanale et ? Petite Echelle de l?Or* (EMAPE, National Action Plan for the Artisanal and Small-scale Gold Mining Extraction). This document is explored more in-depth in the last section of the National Baseline (see section 1.A.2.5).

Specific to the environmental questions, the NSSD established in 2019 a *Conseil National de l?Environnement et du D?veloppement Durable* (National Council for the Environment and Sustainable Development) in charge of implementing the strategy. This council includes the ministry in charge of mines, highlighting the need to include both industrial and crucially artisanal mining in the strategy.

Beyond the existence of strict laws and regulations on the sector, customary governance of ASGM remain central. The complex tenure regimes that govern artisanal mining in the country are linked to the continuous use of these traditional means of organization. Land management issues, particularly in cases of competing claims are often managed in customary settings, using traditional laws instead of statutory regimes. Huntington and Marple-Cantrell show that customary land rights have had a positive impact on managing conflicts and promoting stable relationships between land rights holders.

However, they also highlight that this regime had done little to protect the environment from mining-related pollution, including mercury, as well as promoting stable shared revenues for the communities. However, the presence of customary rule significantly increases satisfaction and the participation of miners in site restoration. Nevertheless, according to their research there is a need for government regulation, particularly as the ASGM sector is composed by an important migratory workforce not always recognizing, or aware of local customary practices.^{[120]¹²⁰} Hence any intervention in the ASGM sector should consider these factors and adopt a holistic approach with a deep understanding of the specific local customary practices.

Specifically, customary law is the very one that is applied for the organization of work in the artisanal gold mining sector. The hierarchical structure is generally based on the ancestral tradition of land chiefs.

The actors found on the sites generally belong to four categories: that of the customary administration (head of the land, heads of security, heads of pits, etc.), that of the mine (diggers, shooters, experts in wood support, blasters, etc.), that of services (transport, processing, mechanics, detectors, etc.), and finally that of trade and services (food, materials, purchase of gold, etc.).^{[121]¹²¹}

This traditional organizational structure of gold panning, which still works today, is based on socio-economic groups whose pattern is as follows^{[122]¹²²}:

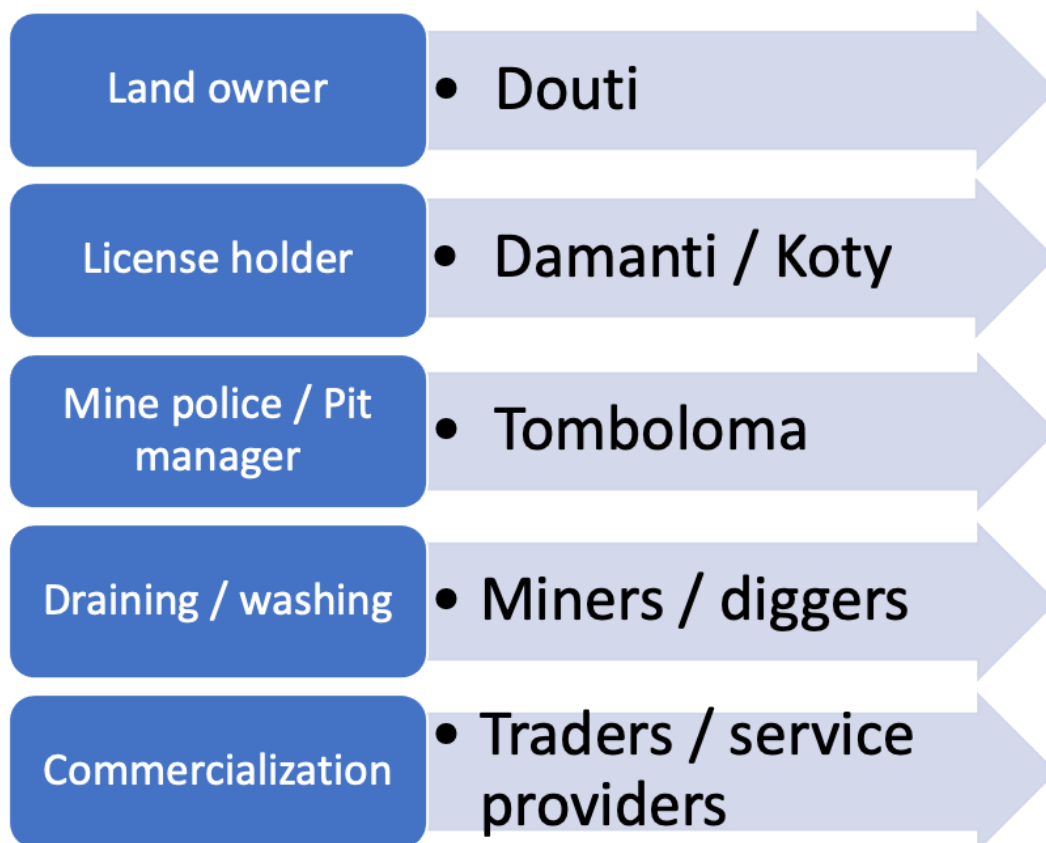


FIGURE 1: TRADITIONAL ORGANIZATIONAL STRUCTURE FOR GOLD PANNING IN GUINEA

1.A.2.2 Access to Finance

The informality of the ASGM sector often limits the ability of various supply chain actors, including miners, traders, and exporters, to access legitimate forms of financing. According to the National Action Plan, there are no formal financing systems in ASGM sites and miners are reticent to contact loan providers due to their lack of understanding of the system. There are many factors that contribute to this reality. For one, the lack of a formal business entity upon which legitimate financiers can enter a lending relationship presents a significant barrier.

As is the case in other regions, without access to formal and legitimate sources of financing, ASGM actors are often reliant on informal lending actors and networks, some of which engage in predatory lending behaviours. These often leave miners at risk of receiving unfavourable terms and heavily indebted to informal dealers. Informal dealers advance cash or mercury to miners, who then must sell their gold back to the dealer in order to repay their debt. These debt relationships can often create a dependency on mercury usage. Other sources of informal lending often occur amongst friends and family ? whether through an organized vehicle or one-on-one.

Viega et al. noted the very limited access to finance in 2006. As they argued, increased organization of the sector would be needed to introduce practical measures such as micro-credit. Underlining the critical need of access to finance, they supported that “[improving access to finance] is badly needed since these miners, as individuals, do not have possibilities to buy anything?”.^[123]¹²³ It seems that 15 years later, improvement still needs to be made on this front.

More broadly, Village Saving and Loan Associations (VSLAs) have been developed in the country. As of 2016, Plan International, an international development organization, established 827 VSLAs with more than 21,000 members, including 71 percent of women. In 2014, this groups raised more than 6 GNF (USD 1 million). These groups are provided by Plan with training and equipment to efficiently perform their tasks. These include safes, stamps, calculators, and notebooks.^[124]¹²⁴

It should be noted that this international development organisation continues to operate in the country to this day. In parallel to the VSLA micro finance, through micro loans, in particular, provides another avenue for access to financing. In 2018, 26 organizations were recognized as micro financing institutions in the country.^{[125]¹²⁵} One of them, Wakili, created by Entrepreneurs du Monde, is the only social microfinance institution in Guinea to grant loans without any material guarantee or joint or personal guarantee, to offer to open a savings account without opening fees and to disburse these savings on demand. The program now covers 5,620 people, of which 82 percent are women.^{[126]¹²⁶}

The micro-lending sector in the country is dominated by one organization, the *Credit Rural de Guinée* (CRG, Rural Credit of Guinea). The company was established by the central government in 1989 and privatized in 2001. The organization is now implanted in the Guinea's 33 *prefectures* and has 157 service points, almost half of all service points in the country. Critically, as argued in a World Bank document, the organization has a strong rural implantation. While most of the other microfinancing institutions are mostly located in urban areas, CRG provides loans and financing services in remote and rural regions. Additionally, CRG also targets very small loans as its average is located around 120 euros (USD 135). These loans remain very low for mining operations, even at the artisanal level, and the lack of collaterals for ASGM operators make it very hard to secure these loans. However, generally speaking, in 2016 alone, CRG provided 102,800 loans with an 81 percent acceptance and for a total 128 billion GNF (around USD 140,000).^{[127]¹²⁷}

These strategies of financing are not directly applied to the artisanal mining industry. However, they have the potential to have a significant impact on the sector. Soumahila Bayo demonstrates how indebtedness is a key factor for women to start being involved in the ASGM in Upper Guinea. His research shows that debt is the first driver for women to join the artisanal mining sector often involved in the crushing or washing in the minerals, as well as petty commerce and prostitution.^{[128]¹²⁸} Hence, the development of micro-loan systems can prevent the migration of women who have incurred debt by securing their finances. CRG should also be supported to provide larger loans applicable to the ASGM operations, potentially through new grouping loans (loans with multiple individuals to increase their collaterals).

1.A.2.3 Mercury Usage & Mercury-free Technology

Mercury imports into Guinea appear to be almost fully illegal and undeclared. According to the United Nations Industrial Development Organization (UNIDO), the country imported 14 kilograms of mercury in 2014 with no data available since then. In contrast, during the same year 2014, code 2805, which includes several metals including mercury in its elemental form, recorded 32,969Kg imported. It should be noted, however, that it is impossible to know the exact nature of the metals in the absence of additional or disaggregated information. Thus, the MEEF study on Guinea's initial assessment of the 2018 Minamata Convention on Mercury states that it is impossible to track exports and imports of mercury-containing products based on UN COMTRADE data as they do not distinguish between mercury and non-mercury containing products.^{[129]¹²⁹}

By comparison, in 2015 Cote d'Ivoire reported importing almost 98 tons while neighboring Ghana reported the year after more than 9 tons. The report states that "[Guinea] do[es] not record mercury imports of sufficient volumes to support current levels of mercury use in ASGM".^{[130]¹³⁰} Additionally, research has shown that most mercury used in Guinea is traded via Burkina Faso. Observations made on ASGM sites have shown that most of the Burkinabé miners on the sites are both importers, users, and distributors of mercury to other gold miners at the sites. The same report describes how the mercury is shipped using canoes on rivers in borderlands, evading state control.^{[131]¹³¹} Finally, part of the mercury traded in Guinea appears to continue its way into neighboring countries, including Senegal or Cote d'Ivoire.^{[132]¹³²}

The theme of cross-border mobility of artisanal miners has become central in recent socio-anthropological research on the sector.

Artisanal miners in ASGM use mercury in the processing process. Guinea has made commitments against the use of this highly toxic metal by ratifying several international agreements including the Basel Convention, the Rotterdam Convention, and the Stockholm Convention, and most notably the Minamata Convention, with the aim of reducing/eliminating the use of mercury and thus ensuring the sound management of chemicals and toxic substances throughout their life cycle.^[133]¹³³

In Guinea, the Ministry of Environment and Sustainable Development (MEDD) is the custodian of the Minamata Convention, whose implementation it oversees. Through the National Directorate of Pollution, Nuisances and Climate Change (*Direction National des Pollutions, Nuisances et du Changement Climatique ?* DPNCC), intervenes in the regulation and control of chemical products and substances including mercury and its compounds. In this context, it cooperates closely with the Ministries of Mines, Public Health, and Finance. The Ministry of Finance was previously responsible for regulating mercury imports through the customs services. However, the increase in the use of mercury in the ASM sector and the recognition that mercury was not legally imported prompted the government to change its strategy and entrust this task to the MEDD.

Historically, liquid mercury was prohibited from import because of its use in counterfeit bank notes. However, apart from the Minamata Convention, there is no legal framework specific to mercury in the country. Decrees and codes, including decree 287, tackle the use of chemicals, but none are specific to mercury.

UNEP has estimated that globally about 10% of mercury emissions to the atmosphere come from naturally occurring emissions; 30% are generated by human activities; and the remaining 60% of emissions consist of re-emissions of mercury already present in the environment, resulting from previous human activities.^[134]¹³⁴ This is based on the level 1 national inventory of the UNEP Toolkit which shows that the mercury inputs in Guinea are estimated at around 6.45 tons/year of gold with mercury amalgamation (with no use of retort) and of approximately 7.71 tons/year for gold extracted by methods other than mercury amalgamation.^[135]¹³⁵ While knowing of course that all these inputs of mercury in Guinea generate emissions and discharges into the environment; mercury amalgamation gold mining contributes 2.59 tons/year of mercury emissions to air; 2.05 tons/year in water; 1.81 tons/year in the soil.^[136]¹³⁶

In 2012, the Artisanal Gold Council (AGC) estimated that mercury use in the Guinean ASGM sector be located between 13,4 and 24,8 tons annually.^[137]¹³⁷ Unfortunately data on mercury imports and use, as previously highlighted, are lacking for the country. However, a 2018 estimate for the NAP estimated the use of mercury in the sector at 42,08 tons, with a clear dominance of the Siguiri region with 18,5 tons.

However, as Veiga et al. argue, the main issue in the gold recovery process is not the concentration but the comminution (crushing and grinding). Performed manually, this step is highly inefficient and gold liberation is insufficient to improve gravity concentration.^[138]¹³⁸ Specific methods could be introduced to limit, or even completely stop the use of mercury in the ASGM. For example, leaching gold from concentrates could be done using the Mintek IGoli method which could achieve a good gold liberation level.^[139]¹³⁹ Mercury-free technologies include gravity concentration, sluice boxes, shaking tables, centrifuges, direct smelting, and more complex techniques, such as chlorine processing, cyanide leaching, flotation methods, agglomeration, and electrolytic processes. In recent years, mercury alternatives have been identified, such as elutriation, and leaching with lixivants (such as thiosulphate).

However, the high costs of alternatives to mercury use combined with limited technical knowledge continue to serve as significant obstacles to the transition to mercury-free gold processing by artisanal miners globally, and in Guinea specifically. Some of these methods are yet to be tested at field level to ascertain efficacy and ease of application in ASGM.

Additionally, the majority of ASGM miners are processing very small quantities of gold (< 1 gr), which are generally less conducive for the mercury-free technologies that have been developed. As such, the incentive for using these is not strong from an economic perspective, as miners worry that these will lead to greater losses and less efficiency than mercury.

In typical ASGM operations, mercury-free technologies that can be applicable to lower volume production methods, such as improved panning and direct smelting, apply to high grade ores. However, these are not always representative of the type of deposits that the majority of miners work in. As such, innovative approaches to integrate existing mercury-free methods to the ASGM processing should be explored. The major challenge for adaptation of mercury free technologies lies in their applicability to different ASGM operations and conditions, including smaller production quantities and lower ore grades, as well as their general ease of use, accessibility, and associated costs.

In 2006, the Blacksmith Institute (now known as Pure Earth), the UN Industrial Development Organization (UNIDO) and the University of British Columbia (UBC) performed a first study in Mozambique to identify and address mercury use in the gold artisanal sector. The conclusions of this study were then replicated in the region of Siguiri in Guinea with the support of the *Centre d'Appui au Développement* (CAD, Development Support Center) and the Ministry of Environment and Sustainable Development.^[140]¹⁴⁰

The first mercury-free gold processing system applied to the Guinean artisanal sector was inaugurated in 2018 in the country. Implemented by AGC and the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) in Tonso, the pilot project was intended to be self-replicating to increase the adoption of mercury-free technologies through a community development fund mechanism.^[141]¹⁴¹ However, as the program ended, this pilot remains the only concrete step taken in the country to curb the use of mercury in the ASGM sector. It was the continuation of a 2015/2017 engagement and research program by AGC in the country that informed the on-the-ground needs and realities of mercury usage.^[142]¹⁴²

As part of the development of the Minamata Convention in Guinea and within the framework of the elaboration of the Minamata Convention in Guinea implemented by UNEP, the 'Minamata Initial Assessment' (MIA) project was completed in 2018 to enable the activities, assessments and investigations necessary to draw up the national profile in terms of concerns over mercury flows.^[143]¹⁴³ The MIA project thus made it possible to draw up assessments of institutional capacities, infrastructures and national legislation for mercury management, the national inventory of sources of mercury releases into the environment.^[144]¹⁴⁴ Following the MIA, a National Action Plan (NAP) was devised.

The third pillar of the NAP study consists of introducing best mining practices in ASGM in Guinea. Progressive learning is the most effective approach in encouraging gold miners to better understand best mercury-free mining and processing practices. While complete elimination of mercury is the ultimate goal, it is recognized that reduction of mercury and safer practices can also lead to improved health and environmental outcomes in intermediate term while mercury-usage is being phased out. This can be coupled with sensitization around the legislative and regulatory framework that bans the use of mercury.

To avoid processing gold produced with mercury; the NAP suggests using the technique of using retorts, extractor hoods and mercury activation techniques, all of which are very important methods that can help reduce mercury emissions and make amalgamation treatment safer. These techniques can lead to a lower use of mercury by allowing its capture, recycling, and purification while also encouraging the use of personal protective equipment (PPE). The NAP also puts forward other techniques for reducing the use of mercury, including: improvement of crushing of mining stones,

optimization of crushing, improvement of concentration of gold ores by gravimetry, the use of vibrating tables or shaking tables, the reduction of the use of mercury by improved refining, etc. It is important to notice that mercury use is a technology that has easily spread with Guinea, as it did in many other West African countries. Indeed, a 2006 study confirmed that the mercury processing was not used in ASGM sites in Mandiana and Kouroussa.^[145]¹⁴⁵ Although amalgamation could double or triple artisanal gold production, most miners in these areas lack the knowledge, funds or even access to mercury due to severe government restrictions and extreme poverty.

1.A.2.4. Gold Pricing and Costs

The identification of gold pricing is particularly complex in Guinea as very limited research has been performed. The prices also fluctuate significantly depending on global prices of gold as well as on the specific negotiations that occur between buyers and sellers. As such, research conducted for Guinea's NAP indicated that gold prices could range from 250 000 GNF to 400 000 GNF per gram (approximately 28.11 to 48.98 USD per gram), without accounting for currency fluctuations between currency valuations at the time of research and at the time of writing).

1.A.2.4.1. Cost of establishing a legal artisanal operation

As previously stated, the 2011 Mining Code includes provisions increasing the cost for artisanal miners to establish and maintain legal operations:

- ? Costs for defining the environmental engagement;
- ? Costs associated with the yearly application to renew mine site license;
- ? Costs associated with accurate record keeping of production from artisanal mining permit areas;
- ? Costs associated with abiding by the measures for health, safety and environmental protection prescribed by regulations.

1.A.2.4.2. Cost of exporting gold

According to the Economic Community of West African States (ECOWAS), Guinea is the country with the lowest royalty rate for gold exports. In fact, the 0 percent levy is described as an attractive incentive to smuggle gold from neighboring countries. While Cote d'Ivoire levies range from 3.5 to 6 percent, Guinea offers significant benefits for exporters of gold. Additionally, the full cost of export includes a 300 GNF (around USD 0.03) per gram for assay and casting. UNIDO estimated the cost of exporting one kilogram of Guinean gold is USD 33 while the exporter makes a benefit of USD 35,043.^[146]¹⁴⁶ This corresponds to a 1,061 percent benefit. This estimation from 2018 can almost be doubled today as the global gold prices reach new highs.^[147]¹⁴⁷

1.A.2.4.3. Other Costs Related to the Sale and Export of Artisanal Gold

Establishing an export office in the country is governed by a set of different rules and is subject to specific taxation. Legally, artisanal miners must sell their production to a *comptoir d'achat et d'exportation de l'or* (Gold Buying and Exporting Office) which can only be opened after a bylaw provided by the ministry in charge of mines. The table below provides more details on the taxes and costs of setting up such an office. All taxes are to be paid to the *Trésor Publique* (Public Treasury) housed by the BCRG.

TABLE 1: TAXES APPLICABLE TO THE TRADE AND EXPORT OF ARTISANAL GOLD MATERIALS^[148]¹⁴⁸

Applicability	Tax Concept in French	English translation	Cost in GNF	Cost in USD*
Taxes applicable to intermediaries between miners and the buying and exporting office.	Balanciers	Scale operators	500,000	53
	Collecteurs d'or	Gold collectors	2,500,000	267

Taxes applicable to the establishment of a gold buying and exporting office.	Caution de garantie restituable en fin d'activit?	Garantie deposit reimbursable at the end of the activity	25,000,000	2,673
	Redevance pour l'ouverture du comptoir	Royalty for the establishment of the office	25,000,000	2,673
	Redevance Mandataire acheteur	Royalty as buying agent	5,000,000	534
Additional taxes applicable to gold exports.	Frais de laboratoire	Lab fees	300/g	0.03/g
	Taxe d'exportation	Exportation tax	0.55 percent of the full value	
	Taxe pour reception, conservation et transport securise a l'aeroport.	Reception, conservation, and secured transport to the airport tax	0.15 percent of the full value	

* Based on a currency change of USD 1 equals 9,350 GNF

1.A.2.5. Knowledge Sharing and Efforts to Date

As previously mentioned, Guinea is a signatory of the Minamata Convention and, as such, devised a National Action Plan (NAP). This process served to significantly increase understanding of the sector and its operations in a number of important regions. This includes an inventory of sites, number of miners (women and men) and use of mercury. Further, it outlined a number of recommendations with respect to potential mercury-free processing equipment that could be explored. It should be noted, however, that the NAP faces certain limitations in that it did not cover every region where mining is present.

The migratory nature of the sector also means that information collected can become outdated as miners move from one gold producing area to another in the hopes of identifying additional gold sources. And it is the national entity of Guinea which was responsible for the implementation of these strategies mentioned above.^[149]¹⁴⁹ The NAP recommends a set of objectives and specific activities to be implemented between 2020 and 2025 for a budget of around USD three million, funded by *financement externe* (FINEX, external funding) and *the budget national de developpement* (BND, national budget for development).^[150]¹⁵⁰

Beyond the mercury reduction focus, some programmes have been conducted to increase formalization and access to technologies. Olimining for example purchases gold from ASGM by wire transfer or by the monetary equivalent in mining equipment, mining permits, land ownership rights, or medical equipment and supplies. However, the Hong-Kong based company has little information available online, and its assertions that its sources fair mined products come without any substantial proofs.^[151]¹⁵¹ The lack of oversight and available information in Guinea appears to create a fertile ground for actors to make questionable claims in order to justify sourcing from ASGM.

1.A.3 Alternative Scenario

Alternative Scenario: planetGOLD in Guinea

The project structure is built around 4 components that reflect the identified needs in terms of activities, outcomes, and key outputs. The components are:

1. The promotion of formalization in the national ASGM sector through the strengthening, awareness-raising, and support to mining organizations that will facilitate sustainable changes and enhance the organizational capacity of the targeted ASGM communities.
2. The provision of adequate financial solutions that can promote a competitive mercury-free gold market in the country, integrated in transparent and traceable international gold supply chains.
3. The introduction and adoption of efficient mercury-free gold processing technologies in the ASGM sector.
4. The fostering of dissemination and exchange of information initiatives at the national level and the international sphere in line with the planetGOLD programme outreach strategy.

The structure is reflected in the Theory of Change figure below, where based on a few assumptions taken, the project aims to reach several outputs. Thanks to the action of different drivers at the national and international levels, the outputs will contribute to the achievement of four outcomes, one for each project component. Ultimately, the four outcomes will ensure long-lasting changes in the ASGM sector at the national level and will help to trigger global environmental benefits through coordination and participation in the planetGOLD global programme.

Appendix 1: Theory of Change, Problem Tree, Solution Tree

Theory of Change

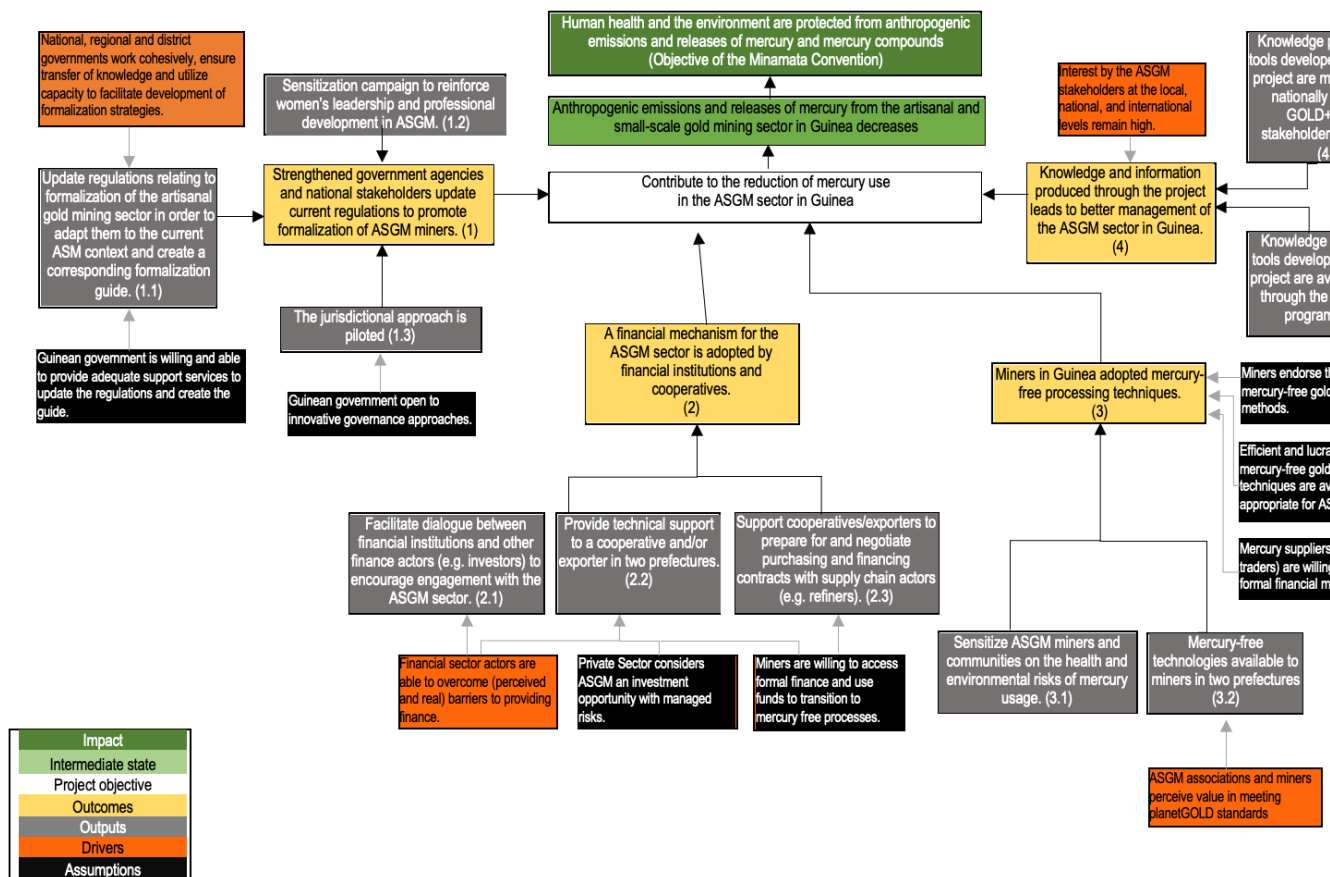


Figure 2: Theory of Change Diagramme.

The project plans to focus its activities in three administrative regions in Guinea ? KanKan, Farana and Bok?.

In the KanKan region, the project will work in Siguri, Mandiana and Kouroussa prefectures, which host the largest number of artisanal gold mining sites in Guinea who are using the most mercury across the country.

In the Farana Region, the project will work in the Dinguiraye prefecture, which hosts the 4th largest number of artisanal gold mine sites and mercury usage.

The project also plans to intervene in the Bok? Zone, notably in the prefecture of Gaoual^[152]¹⁵². This region and prefecture have been selected because of recent increase in ASGM activity in the area that have not been captured during the MIA and NAP process, as well as beliefs that there is a significant quantity of mercury being used in the area.

The project will support a mercury assessment in the area and general baseline assessment prior to confirming this location for project activities. It is noted that the ASGM sector in Guinea is prone to significant shifts and movements of miners from one location to another, depending on production rates and identification of new deposits in other areas. As such, while the initial target areas zones have been identified, the Project Steering Committee may revise these locations should there be significant shifts in ASGM activity in a particular zone (i.e. significant decrease/increase in mining activity and presence of artisanal gold miners).

The proposed activities for the project are aligned with those established in Guinea's National Action Plan, as well as the overall thematic areas and Theory of Change of the planetGOLD programme (localized to the national context in Guinea).

TABLE 2: MERCURY USAGE ESTIMATES IN GUINEA

Prefectures	Number of sites per category			Total Mining Population in the Prefecture	Average minimum grams/day/miner	Number of days worked per year	Average gold production t/year	Ratio Hg/Au West Africa	Quantity of Hg used
	Large	Medium	Small						
Siguiri	11	50	91	107065	0,6	222	14,26	13	18,538
Mandiana	4	16	30	35 650	0,6	222	4,74	13	6,162
Kouroussa	3	14	30	30 750	0,6	222	4,09	13	5,317
Dinguiraye	2	10	19	21 085	0,6	222	2,80	13	3,64
Kindia	1	4	7	3847	0,6	222	0,14	13	0,18
Farannah	1	8	10	9354	0,6	222	2,33	13	3,02
Kankan	2	6	15	25 122	0,6	222	2,98	13	3,87
Macenta	1	4	10	10314	0,6	222	1,02	13	1,33
Total general	25	112	212	243 185			32,36		42,08

SOURCE: GUINEA'S NATIONAL ACTION PLAN, PAGE VII

Component 1: Promoting institutional strengthening and a regulatory framework for improved ASGM practices and governance.

Outcome 1:

Strengthened government agencies and national stakeholders update current regulations to promote formalization of ASGM miners.

Output 1.1: The update of regulations relating to formalization of the artisanal gold mining sector is supported in order to adapt them to the current ASM context and create a corresponding formalization guide

The project will support the updating of existing regulations in the ASM sector. It will support relevant stakeholders to address the regulatory shortcomings identified during the development of

the NAP, particularly with regard to: the issuing of decrees allowing the application of the provisions of the Labor Code and the Child Protection Code; strengthening protective measures against the introduction of harmful and dangerous products; legalizing the framework of collaboration between UNOG, territorial and customary administrations and artisanal miners; operationalizing the cooperation framework between the industrial mines and the groups of artisanal miners for the reduction of conflicts; as well as the supervision of the artisanal miners by the supervisory agents.

Once these are adapted, the project will support the development of a formalization guide that will enable better understanding of the requirements and processes for formalization in the ASGM sector. This includes anything related to permitting and licensing, such as procedures and timelines for obtaining these, the roles of various institutions, and any other requirements that need to be maintained by ASGM actors in order to retain their status (e.g. environmental assessments). The creation and sensitization of this guide will be conducted using the following activities:

Activity 1.1.1: Consultation sessions with stakeholders to outline the provisions to be incorporated into the various legislative texts to be adopted and/or improved

The first activity of this product will serve to bring together key players such as the National Directorate of Mines, the Directorate of Pollution, Nuisances and Climate Change, the Directorate in charge of Child Protection, the Directorate of Health and Safety in the Work, representatives of the customary administrations of the major ASM regions of Guinea and UNOG to discuss and agree on the provisions to be incorporated into the Guinean legal framework to improve the formalization process for the ASGM sector in Guinea.

Activity 1.1.2: Development and validation of legislative texts, requirements, and procedures to strengthen the ASM formalization process in Guinea

This second activity will involve recruiting a team of consultants to develop and refine the legal texts desired by the relevant stakeholders in order to improve the process of formalizing the ASGM sector. A maximum 2-day workshop with 35 people representing various stakeholders will be held to validate the various legal texts, which will then be introduced by their respective legal authorities. Stakeholders included in these workshops may include:

- ? Minist?re de l'Environnement et du D?veloppement Durable
- ? Minist?re des Mines et de la G?ologie
- ? Minist?re de la Sant? et de l'Hygi?ne Publique
- ? Minist?re de l'Agriculture et de l'levage
- ? Minist?re de l'Enseignement Sup?rieur de la Recherche Scientifique et de l'Innovation
- ? Minist?re charg? de l'?conomie des Finances et du Plan
- ? Minist?re du Commerce de l'Industrie et des PME
- ? Minist?re charg? du budget
- ? Minist?re de la S?curit? et de la Protection Civile
- ? Minist?re de la Promotion f?minine, de l'Enfance et des Personnes vuln?rables
- ? Minist?re de l'Administration du Territoire et de la D?centralisation
- ? Conseil National de la Transition
- ? Secteur priv?
- ? Autorit?s coutumi?res de Kankan, Bok?, Mandiana
- ? ONG Carbone Guin?e
- ? UNOG

A follow-up workshop will bring together the same group to clarify roles and responsibilities amongst the various government actors once the texts are finalized, in order to clearly delineate the content of a formalization guide that will provide guidance to various actors in the ASGM sector.

Activity 1.1.3 Host discussion groups in ASGM zones to compare formalization from a theoretical and practical perspective

This activity will be carried out in collaboration with UNOG to organize discussion groups in ASGM mining areas in order to compare the theoretical processes and procedures for formalization (i.e., what is technically prescribed by various legal, regulatory, decrees, etc.) with the way in which the ASGM operates in practice. The goal of this activity is to allow the government to take into consideration the local dynamics of ASGM in various places, so that the formalization guide can be streamlined to recognize the reality in which ASGM is operating. The discussion groups will be hosted in all three zones where the project activities will occur, and will involve miners,

cooperative representatives, local level government and national level government representatives deployed at the regional level, and traders/buyers in the sector (e.g. comptoirs, exporters).

Activity 1.1.4 Create a draft of the Guide

This activity will involve the creation of the content of the guide based on the requirements, processes and procedures agreed upon in the workshop. The content will be designed to be simple, clear and straightforward. The Executing Agency will work with the *Ministry of the Environment and Sustainable Development* and the Ministry of Mines through the National Directorate of Artisanal Mining to complete a draft guide. Prior to finalizing and printing the guide, the project will support the *National Directorate of Artisanal Mining* to test and validate the guide in the same three regions that provided input during Activity 1.1.3. This will be done through a technical meeting with a small group of individuals who represent different stakeholder groups in each of the three regions (approx. 10-15 people).

Activity 1.1.5 Training for those responsible in conducting sensitization

This activity will involve training in Conakry of approximately 30 individuals that hold responsibility for promulgating and enforcing the legal, regulatory and policy framework for the ASGM sector (e.g. National Directorate of Artisanal Mining as well as other relevant actors within the Ministry of Mines). This training will focus on ensuring that these actors first have clarity with respect to their mandate and understand the legal, regulatory and policy framework themselves, and secondly that they are trained on how to carry out gender-inclusive sensitization of the formalization guide in ASGM communities. The 30 officials will partake in 1 training session (3 days), and will include an overview of the formalization framework in Guinea (i.e applicable laws, regulations, policies, etc.), the particular roles and responsibilities of government ministries, as well as how to deliver gender-responsive sensitization sessions and the importance of gender equality, emphasizing gender-sensitive communication and strategies.

Activity 1.1.6: Support distribution and sensitization

The officials responsible for sensitizing ASGM miners and cooperatives will be supported by the project to carry out sensitization in the 3 regions targeted by the project. The project will provide resources to host sensitization sessions in the targeted Districts and mine sites, such as travel support, location rentals and/or refreshments. The project will also provide expert support in ensuring sensitization sessions are carried out in a gender-sensitive manner, mainly via the help of the project's gender officer and resources that are gender-sensitive (i.e. the formalization guide and accompanying material). The project will host 2 sensitization sessions in each prefecture (approximately 30 people each). While the main target group for the sessions will be artisanal miners and cooperatives, previous experience has shown that formalization requires different stakeholders playing their part, and thus the sensitization sessions will also include other stakeholders, such as regional/local levels of government, landowners, traditional leaders, traders, representatives of financial institutions, and so on.

Output 1.2: A sensitization campaign is led to reinforce women's leadership and professional development in ASGM

Activity 1.2.1: Develop a capacity building plan to supporting women's leadership and professional development in ASGM

The project will work with a national NGO, which will be selected through a call for proposals, to develop a capacity building plan that will help increase women's leadership and support their professional development in the ASGM sector. The project will host 1 workshop (including 3 representatives from each zone where the project will work) to develop the capacity building plan. The workshop will take place over a 3-day period.

Activity 1.2.2: Prepare sensitization materials and tools

Based on the plan created in Activity 1.2.1, the project will support the selected NGO to create sensitization materials and tools based on the thematic areas identified. Sensitization tools and materials may include:

- ? Posters
- ? Brochures
- ? Radio spots
- ? Tools (e.g. checklists)
- ? Community Theatre Skits

The selected NGO will be provided with communications expertise and support for producing the materials.

Activity 1.2.3: Train women to deploy the sensitization materials

The project will provide training to a selected group of women in each of the three regions to carry out sensitization using the materials created in Activity 1.2.2.

Activity 1.2.4: Support sensitization sessions

The project will support the selected group of women to carry out sensitization in their designated areas. The project will support up to 2 sensitization sessions to be carried out close to the mine sites, in order to maximize the participation of women miners.

Output 1.3 The Jurisdictional Approach is piloted

Activity 1.3.1 Introduction of the jurisdictional approach to stakeholders in Siguri

The project will introduce the jurisdictional approach to various stakeholders in the Siguri prefecture, in order to familiarize them with the concept and approach. Principles of multistakeholderism, gender equality and inclusive participation and representation will be embedded in this sensitization. Support will be provided by Conservation International to carry out this activity.

Activity 1.3.2 Support local stakeholders to conduct a gap and SWOT analysis of existing formalization/access to credit/mercury reduction programs/services available at the local level

The group of local stakeholders will be supported to conduct a gap and SWOT analysis of the existing incentives, programmes and services supporting ASGM formalization, including access to finance and mercury reduction efforts. The project will lend support to the group of local stakeholders to conduct the gap and SWOT analysis ? such as through the provision of facilitators, sensitization on thematic issues, meeting, and workshop support, etc. ? but the gap and SWOT analysis itself will be led and driven by the group of local stakeholders. The SWOT analysis will rely on various types of assessment tools identified through the JA/LA methodology of the global project, under the guidance of Conservation International. These will include, at minimum:

- 1) Underlying Drivers Assessment: This assessment will serve to identify current barriers to sustainable practices in ASGM (i.e. what are the current incentive structures that are leading ASGM actors to put aside their environment and health) and identify potential value propositions and policies that could motivate a coalition of stakeholders to act, help to lower costs of interventions and improve the feasibility of sustainable action. This assessment will be conducted by the MSG with the support of the project and expert facilitators, using the CUDLs approach (Changing Underlying Drivers in Landscapes). This approach primarily relies on directed focus group discussions, surveys and desk-based research.
- 2) Governance Assessment: Using a tool developed by LandScale called the Sustainable Landscape Rating Tool, the project will support the MSG to undertake a governance assessment to identify strengths and weaknesses of the governance of the sector in the targeted districts, and where there are priorities for improvement.

Activity 1.3.3 Host a validation workshop to validate the findings of the JA/LA assessments

The project will support the group of local stakeholders to discuss the findings of these assessments, both amongst those who directly participated but also additional stakeholders that may increasingly become interested in the findings, and will use these to formulate the basis of a dialogue on how a multistakeholder process or grouping at the prefecture level could begin to address the findings of the assessments.

Activity 1.3.4 Create a multi-stakeholder group to coordinate the JA/LA approach in Siguri

Once stakeholders express a sound understanding of the analysis conducted in Activity 1.2.2, as well as an interest to implement the approaches defined in the JA/LA sensitization sessions, local stakeholders will be supported to formulate a multi-stakeholder group (MSG) to continue implementing the JA/LA approaches. Members of the MSG will be identified, with particular focus on ensuring an inclusive and gender balanced set of representatives. This is a process that may take time. It will be important to ensure all the different actors are engaged, with government taking a leading jurisdictional role.

Component 2: Access to Finance

Outcome 2:

A financial mechanism for ASGM sector adopted by financial institutions and cooperatives.

Output 2.1 Dialogue is facilitated between financial institutions and other finance actors (e.g. investors) to encourage engagement with the ASGM sector

Activity 2.1.1 Conduct a mapping of existing financial structures and analyze how these respond to the needs of ASGM actors (e.g. loans, credit, etc.)

The project will carry out a study to map out the existing financial structures and programmes (both public and private sector) and analyze how these respond to the needs of the ASGM sector. This will include identifying traditional financial institutions (e.g. the banking and investment sector), alternative financial inclusion initiatives (microfinance institutions) as well as the presence and maturity of community lending schemes (village savings and loans associations (VSLAs), for example) that have taken place in the targeted areas – either as initiatives targeting the mining sector or other informal non-mining sectors, such as agriculture. The scoping study will review efforts and initiatives based on the options identified in planetGOLD's *Unlocking Finance for Artisanal and Small-Scale Gold Mining A Frontier Investment Sector*. The purpose of identifying these existing initiatives is two-fold. In addition to identifying potential actors that can provide access to financing to the ASGM sector, the study will also provide an opportunity to identify what has and hasn't been successful to date, and what the lessons learned from these efforts have been. The study will build off of previous studies to assess the state of finance and financial inclusion in Guinea, but which may not have included the ASGM sector and its unique context, or which may have been conducted prior to significant political developments in Guinea over the past couple of years. An example is a USAID-supported study *Initial Scoping Assessment of Guinea's Financial Sector*^[153]¹⁵³ as well as the World Bank's *Support to MSME Growth, Competitiveness and Access to Finance Project*^[154]¹⁵⁴ which will overlap with the planetGOLD programme. Additional attention will be paid to lessons learned from other planetGOLD projects via the Global Component.

Activity 2.1.2 Host a national workshop and regional workshops to sensitize financial actors to the needs of the ASGM sector and encourage engagement (and vice versa)

The project will host a national-level workshop and a workshop in each targeted zone (KanKan, Faranah and Boke). This activity will be carried out in collaboration with UNOG. The purpose of the workshops will be to allow both actors in the financial sector to better understand the ASGM sector and its financing needs and opportunities, as well as for actors in the ASGM sector to understand the operating environment and expectations of the finance sector. This includes certain parameters and requirements that the finance sector may be bound to (e.g. Know Your Customer requirements, anti-money laundering legislation, etc.). This increased understanding between the two sectors can contribute to a more conducive collaboration and engagement in the activities that will be carried out in Output 2.2.

Output 2.2: Technical support on financial access is provided to a cooperative and/or exporter in two prefectures (in 2 different regions)

Activity 2.2.1 Sensitization on responsible production and sourcing using the planetGOLD responsible gold criteria

The project will begin by carrying out sensitization with two selected ASGM associations/cooperatives to understand various standards and guidelines for responsible production of artisanal gold, starting with the OECD Due Diligence Guidance (DDG) and building up to the planetGOLD criteria. The cooperatives/associations with whom the project will work will be selected by the project Steering Committee based on:

- 1) Demonstrated commitment and interest in adopting responsible sourcing practices (i.e. via participation in project activities, engagement opportunities, past projects, etc.);
- 2) Existing level of formalization (i.e. already formalized entities or entities that have already commenced certain formalization processes);
- 3) Agreeing to and passing a due diligence assessment based on the OECD DDG.

Where appropriate, the project will use and/or adapt existing resources that are available to support the sensitization. These include planetGOLD resources available on the site and through other country-projects, as well as resources previously created by other organizations (e.g. IMPACT's video – available in French – on the risks that are present in the ASGM supply chain^[155]¹⁵⁵).

Activity 2.2.2 Create a responsible sourcing plan for cooperative(s)/exporter(s)

The project will then support the associations to build a plan to progressively reach the planetGOLD criteria, which are more stringent. A responsible sourcing assessment will be conducted in order to identify gaps with the OECD DDG and planetGOLD criteria, and a

progressive improvement plan will be developed to address these. Based on past experiences, the project anticipates that the cooperatives/associations will likely need support with the following:

- 1) Creating a responsible sourcing policy.
- 2) Carrying out risk assessment and mitigation.
- 3) Improving documentation and information sharing (i.e. 'Know Your Customer' information, traceability, etc.)

The project will work with the associations and the downstream actors involved in the supply chain (e.g. the refiner) to prepare for a transition plan beyond the life of the project, to ensure continued implementation and clear roles and responsibilities vis-à-vis continued implementation of due diligence, traceability, monitoring, and reporting. This includes a transition to mercury free technology (also supported by activities under Outcome 3) through access to finance.

Activity 2.2.3 Support implementation of the responsible sourcing plan for cooperative(s)/exporter(s) in line with the planetGOLD principles

The cooperatives/exporters will be supported to identify and mitigate risks via corrective action plans, site-level monitoring, and exploring the implementation of due diligence systems. For example, the project will explore the use of gold traceability mechanism(s), such as SAP's Rural Sourcing Management (RSM)^[156]¹⁵⁶ application, which is a supply chain management software system originally designed and built to connect smallholder farmers to the agricultural value chain).

This type of emerging software has significant applicability to the artisanal mining sector, and includes functionalities that allow for traceability, miner registry, monitoring of inventory financing, and more. Additional added value of this tool is that it has been developed within the African context, and has been rolled out in the agricultural sector in various African countries (and boasts training and sensitization materials that can be adapted for the ASGM sector). It is also being tested through another planetGOLD project in Uganda.

Activity 2.2.4 Support cooperatives/exporters to prepare for and negotiate financing contracts with financial institutions (banks, credit unions, investors, etc.)

This activity will support ASGM associations to access finance from financial institution(s) (banks, credit unions, investors, etc.) by providing them with technical expertise from an access to finance specialist. The activities under Output 2.1 will serve to help establish and solidify relationships with interested financial institutions based in Guinea, with whom the project can approach alongside the identified partner cooperatives/exporters. The project will also share additional tools and guidance documents that may be produced through the global planetGOLD programme (link with Activity 4.1.2 below).

Output 2.3 Cooperatives/exporters are supported to prepare for and negotiate purchasing and financing contracts with supply chain actors (e.g. refiners)

Activity 2.3.1 Support cooperatives/exporters to prepare an investment portfolio, including due diligence information, financial, production and geological information

The project will provide technical support, including a geologist and access to finance specialist, to support the partner cooperative/exporter to develop a simple investment portfolio that outlines important information to potential financiers/investors. This includes relevant due diligence information, geological and production information, as well as projected financial information based on the production estimates.

Activity 2.3.2 Promote investment portfolios with investors and supply chain actors (e.g. refiners)

The project will support its partner cooperatives/exporters to disseminate and present their investment portfolio to interested investors and supply chain actors, notably LBMA refiners. The project has preliminarily identified Argor Heraeus as an interested refiner, and as such will begin with this engagement. However, other investors and refiners may also be engaged in order to increase the likelihood of securing some type of investment or financing.

Activity 2.3.3 Support cooperatives/exporters to negotiate a purchase and financing agreement

With respect to ASGM supply chain actors, the project will pursue an inventory finance model with an LBMA refiner, for example Argor Heraeus. The inventory financing will be used as a rotating fund for cooperatives/exporters to purchase artisanal gold from registered miners (with the assumption that artisanal gold production will progressively meet the expectations established through the planetGOLD criteria). This gold will then be sold to the international market, targeting LBMA refiners such as Argor Heraeus (with whom discussions have already begun).

Other refiners will also be engaged throughout the project, in order to increase the likelihood of securing an agreement for the partner cooperatives/exporters. Note that inventory financing and gold sales will not be initiated until the results of appropriate responsible sourcing assessments and due diligence processes demonstrate the absence of red flags (as defined by the OECD DDG).

To achieve this, the project will engage in outreach with LBMA refiners (e.g. Argor Heraeus), supporting relationship building between the supply chain actors, and exploring possible business model arrangements between the supply chain actors that can incentivize sustained and scalable responsible ASGM practices ? including mercury-reduction. This includes the identification and implementation of an incentive-based business model ? such as the Just Gold model^[157] ? which incorporate pricing incentives for miners to formalize or adapt to mercury-free technologies.

This type of model meets the need for more immediate incentives for miners, as well as longer-term incentives for associations and cooperatives (via inventory financing and/or other types of investment). In return, miners and ASGM associations or cooperatives are expected to progressively improve their practices and to document these by sharing pertinent data and information on their supply chain with the refiner in order to demonstrate progressive improvement. This can include traceability and due diligence data, such as purchase records, daily gold production, numbers of miners registered.

In this model, the Just Gold price received by the miners is calculated as the LBMA spot price, minus any deductions from the exporter and cooperative to cover various costs (e.g. logistics, taxes, impurities, etc.). The Just Gold model was originally developed to incentivize legal sales and due diligence implementation (including traceability), by offering a price for both gold and the data provided to the refiner to meet traceability and due diligence expectations. However, as noted in the infographic, the model is flexible and can be adjusted to account for incentivizing additional good practice, such as mercury-free extraction methods, by offering discounted prices for gold produced with mercury. Alternatively, if the supply chain dynamics allow, a higher price could be offered for gold produced without mercury, rather than a discount.

The project will offer an opportunity to test the application of this type of model ? adapted to the particular context in Guinea ? to reducing the use of mercury in artisanal gold mining. It is important to note that the implementation of this type of model requires significant sensitization with ASGM associations and member miners, in order for them to understand the pricing model, to ensure that the model is offering an attractive option compared to what is on offer in the informal market, as well as to reduce the potential for unintended consequences.

This includes ensuring transparency of the pricing model (e.g. posting daily LBMA prices, explaining pricing calculations, sharing assay results, etc.). Equal considerations need to be made with respect to a transitional phase and/or pilot phase that is implemented at the right time (i.e. once miners and associations have had received the necessary support in transitioning to mercury-free technologies ? including technical expertise and equipment). This is necessary to create local buy-in and ownership for the model amongst ASGM associations and miners, as well as to ensure that miners and ASGM associations actually have the ability to produce gold without the use of mercury (i.e. to ensure that this is achievable and realistic).

Component 3: Enhancing uptake of mercury-free technologies

Outcome 3 Miners in Guinea adopted mercury-free processing techniques.

The third component will deepen ASGM transition to mercury-free gold processing through application of acceptable mercury-free technologies and educating stakeholders on their role and responsibilities in supporting mercury elimination in the sector. Mercury use in Guinea's ASGM sector varies by zones. Additional information regarding a new zone experiencing a gold mining boom (Boke) will also be completed under this component.

Output 3.1: ASGM miners and communities are sensitized on the health and environmental risks of mercury usage

Activity 3.1.1 Complete outstanding mercury inventories (e.g. Boke zone)

The project will support the completion of any outstanding mercury inventory assessments ? or revised assessments ? that may be necessary to inform decision-making by the PSC. The ASGM sector is prone to sudden shifts and changes, as miners and communities are often adapting to shifts in production, seasons and the identification of new deposits. Updated information will help to ensure that the project's resources are focused on the right areas based on need and mercury-usage.

Activity 3.1.2 Develop sensitization materials on the harms of mercury usage and safer practices/equipment

This activity will support the Ministry of the Environment and Sustainable Development to develop a set of sensitization and training tools to be used at the targeted project sites. To build on past efforts, the project will first compile existing tools and guidance, and will then analyze any gaps where new material may be required, or where potential improvements may be made for existing materials. PlanetGOLD documents, resources from the Global Mercury Partnership, and existing training tools that are appropriate to the context (e.g. IMPACT's video on the harmful effects of mercury usage^{[158][158]}) will be useful resources to use directly, or to build off of and guide the development of tools relevant to stakeholders in Guinea.

Particular attention will be paid to ensuring that the sensitization and training tools are gender-sensitive ? meaning that they not only represent both women and men in how they experience the sector, but that they address potential differences in how women and men learn. This includes considering things like which languages are most commonly spoken by both women and men, or the levels of literacy common for women and men. Additionally, the institutions will be encouraged to develop training materials that do not overly stigmatize or demonize the ASGM sector for its use of mercury, but rather present the risks and negative impacts to ASGM actors themselves and the broader community, and how these may be addressed.

Activity 3.1.3 Training of trainers from the Ministry of Environment and Sustainable Development and the Ministry of Health

Training will be provided for health and environment officials to carry out sensitization in the designated prefectures using the materials identified and/or created in Activity 3.1.2 (approximately 5 officials per zone). Tentatively, these trainings will be carried out in each zone ? however, the locations of trainings may be reevaluated depending on cost savings opportunities (e.g. where officials may be coming together for other purposes in one location). The trainings will be carried out over a 2-day period, and will include themes related to gender-sensitive communications and engagement.

Activity 3.1.4 Support sensitization sessions in the targeted prefectures

Health and environment officials will be supported to roll out their respective sensitization and training strategies amongst the target audience at project sites, which includes miners, associations/cooperative representatives, gold and mercury traders, pit owners. This will include providing technical expertise to support the trainers/trainees, resources for trainings (e.g. demonstrative equipment, PPE, etc.) and other operational support. To maximize participation and convenience for participants, the trainings will be hosted as close to the mine sites as possible, and will be practical in nature (e.g. demonstrations of safer techniques, safer equipment for individuals ? such as better sluices or pans, visuals showcasing the effects of mercury usage, etc.).

The project will deliver 2 trainings per prefecture through half-day sessions that will target between 15-25 people, and will cover a range of topics, including the harmful characteristics of mercury, the dangers posed to miners and surrounding community members, alternatives to mercury, and protective measures through proper personal protection equipment (PPE) and safer handling techniques.

To incentivize participation and complement the sensitization and training, as well as to increase interest in safer practices and mercury-free methods, the project will provide small equipment (includes PPE (gloves, masks, boots, etc.) as well as retorts, pumps, pans or sluices) to participants of the sensitization and training sessions which either help to reduce mercury usage, or which help to increase production (which can serve to remove a common barrier to using mercury-free methods, as they are generally more suitable at higher quantities).

The equipment will target the specific needs of the particular sites (e.g. based on the type of mining at the site, existing equipment, etc.), and consider the needs of both women and men ? which are often very different based on their different roles in production process.

This equipment is a cost-effective way of significantly reducing the harmful impacts of mercury usage. For example, the NAP states that retorts or fume hoods can capture and recycle mercury, and avoid heating the amalgam in the open air. Simple and inexpensive models (between 5 and 50 USD) can reduce emissions by 75 to 95%. By recycling mercury, miners and traders reduce their mercury consumption and their costs.

Like the sensitization and training materials, the execution of the trainings will also take a gender-sensitive and inclusive approach. Provisions to remove barriers for women's participation will be made ? such as offering childcare supervision or hosting sessions at appropriate times.

Output 3.2 Mercury-free technologies available to miners in two prefectures

Activity 3.2.1 Carry out a technical and environmental assessment on selected mine sites

Before the interventions, an environmental, gender and technical impact assessment and baseline will be conducted, and a technical assistance plan developed with considerations for gender dimensions in ASGM processing. Research in a number of countries ? including Guinea ? has shown that mercury usage in ASGM mine sites is often highly gendered. Any attempt to introduce mercury free technologies will have a huge impact on the women's livelihood and that should be taken into consideration as to how women's roles can be integrated into a clean supply chain.

The technical assistance plan will identify the technologies relevant to the context and support the project can provide, and will also identify potential technical partners in local areas ? such as existing equipment providers, potential equipment providers (e.g. private sector actors that may already produce or import other types of equipment for different sectors), technicians, and technical training institutions. Some of this work has already been carried out through the NAP process, which has identified the following equipment as relevant for the Guinea context:

Improving ball mills: Ball crushers are manufactured locally by adapting flour mills operated by common motors, and are relatively easy to maintain. This is possible using sieves calibrated according to metallurgical standards (e.g. ISO). For example, the sieves used locally for cereal mills can be used, whose mesh size is already predefined according to the standards, or a better sieve could be used. This precision sieving will help to control whether the right size has been reached and the ore is easily crushed with best results. After screening, the rejects can be returned to the crusher and the passing can be sent to the crusher.

Optimizing grinding: For better release of gold particles trapped in the ores (especially those with low grades), primary crushing can be combined with crushing secondary or pulverization. At the end of the pulverization, we will obtain a ground product in the form of a powder whose seeds are no longer felt to the touch. It is necessary to improve here the sieving by Introduction of sieves whose trunk size is known.

After sieving, the discarded can be returned to grinding while passing particles can go concentration. ?Wet milling? with the addition of water can increase yield and remove dust. From ball mills are locally manufactured and also powered by Chang Fu type motors. Comparatively, the Imported grinders (Pan Mill type or Chinese mill) are more expensive, work by grinding wet and involve high maintenance costs but with better yields. The equipment making it possible to achieve improved grinding cost 2,000 to \$10,000.

Improve sluice concentration: With the sluices, it is important that the water supply flow is constant. When buckets are used to dump water and sediment onto the sluice, an increase sudden flow can drive the gold particles previously stuck on the carpet and reduce the final gold recovery. This problem can be avoided by installing a small tank to have a more hands-controlled flow. Improved sluices cost between US\$10 and US\$100.

Use of shaker tables: A vibrating table at the shaking table works according to the same principle as the sluice, but faster thanks to the vibratory movements. She is composed with a slightly sloping surface and ridged with fine furrows, a raised rim along its lower end, and a motor to vibrate the table. For best performance, it must keep constant the speed of the water flows, and the speed of vibration/shaking of the vibration system. Unlike the sluice, the operation of the vibrating table involves energy/fuel costs (shaking tables cost between \$1,000 and \$10,000).

Refining by optimized pan combined with magnet sorting: An optimized pan made with trough pans has the following advantages: better suited for the alluvial, easy to implement, does not involve costs of energy. It is limited by: the treatment of a quantity weak; the longer time; and the water requirement. It can be associated with a magnet and is less

water consumer. The particle size must be fine to facilitate melting and sorting the magnet can greatly optimize it.

Refining by direct smelting: Fusion uses the blowtorch as an energy source (available in local markets and used by local jewellery stores) and pairs well with charcoal. Direct fusion has the advantage of easy and respected deployment the environmental. This operation is limited by: the quantity limited from concentrate to trailer, requires energy costs and time. Sodium tetraborate (borax) may be added to facilitate melting. A small amount of concentrated ore produced by sorting or vibrating table is melted down to separate the gold from the other minerals. It depends on the use of fluxes (generally Borax) to facilitate the melting of the ore by lowering the melting point of gold. In Guinea, jewellers apply an approach similar to produce solid raw gold from gold dust or spongy gold.

Activity 3.2.2 Procure test equipment and conduct piloting to inform plant design

The environmental, gender and technical assessment will inform the procurement of initial sample equipment to test and pilot in the targeted areas. This will allow for confirmation of the right technologies, inform final plant design, and allow for optimization of processes and use of technologies. It will also allow technical experts to gather initial feedback from miners and associations themselves, prior to making larger equipment investments.

In addition, the project will engage with both supply chain actors and financial institutions to share information regarding the process for piloting and testing mercury-free technologies, and identifying the appropriate interventions ? including the costs, operational costs (incl. maintenance), procurement, and various challenges or risks encountered. This will help to increase the overall knowledge of these actors of the process involved, and inform their potential engagement with and financing of the sector (both within the scope of the project, as well as beyond).

Activity 3.2.3 Install and host demonstrations of equipment in 2 prefectures

The project will support the cooperatives to install the equipment. This will include physical installation, but most importantly, the creation and implementation of a management plan for the equipment. The plan will address such things as who gets to use the equipment, when, and under what terms ? emphasizing the need for inclusive access to equipment that benefits women and men. Transfer of ownership of the equipment to the cooperatives will be done progressively and under the guidance of the MoU established with the associations. Opportunities to build in incentives for usage and uptake of the equipment will also be considered.

Component 4: Knowledge Sharing, Communication and local capacity building

The fourth component of the project focuses on ensuring good communication, promoting knowledge sharing and learnings, and building capacity of local stakeholders to create a foundation for the sustainability of project outcomes. It will closely align with the global coordination, knowledge management and outreach project of the global program.

Further, this component is crosscutting across the first three components of the project, all of which include various capacity building strategies for relevant institutions including government, training institutions, miners? organizations, gold traders, financial services sector, CSOs and media. Additionally, these stakeholders will be provided with capacity building opportunities through the global programme ? such as attendance at various conferences, workshops and networking events.

This component also relates to the Stakeholder Engagement Plan, which has identified various ASGM stakeholders interested in participating in the project and being engaged throughout its implementation. It also identifies potential partners to the project, which will become an important part of ensuring that these partners are involved and provided with the capacity to carry forward project outcomes after the end of the project.

As throughout the rest of the components, special attention will be paid to ensuring that women and other disenfranchised groups are able to fully participate in knowledge sharing and capacity building opportunities throughout the life of the project.

Outcome 4:

Increased adoption of mercury free technologies, responsible sourcing plans and financing by ASGM miners beyond pilot sites through sharing of lessons learned and peer to peer exchange.

Output 4.1 Knowledge products and tools developed through the project are made available nationally to all GEF planetGOLD project stakeholders in Guinea

Activity 4.1.1 Host an Annual Stakeholder Workshop

The Annual Stakeholder Workshop will provide a key opportunity to bring together stakeholders from across Guinea to provide updates on their respective activities, share experiences and lessons learned, as well as to provide input into annual project planning. Opportunities can be taken to organize side sessions amongst specific stakeholders, as well as to provide networking opportunities amongst stakeholders from different regions, especially women miners.

The location of the Annual Stakeholder Workshop will be determined by the Project Steering Committee based on cost effectiveness as well as programmatic opportunities (e.g. where it may be beneficial to combine a workshop in one of the targeted prefectures with learning opportunities in specific prefectures).

Activity 4.1.2 Localization and distribution of GEF planetGOLD programme EIC

The project will facilitate the localization and distribution of GEF planetGOLD programme Education, Information and Communication (EIC) materials to local stakeholder in Guinea. This will be done by translating appropriate EIC materials into local languages, adapting or simplifying existing resources where necessary, and incorporating these into sensitization and training activities conducted in components 1,2 and 3. As noted in the above activities, additional material that has already been identified as also being useful to the project, such as a series of videos produced by IMPACT on responsible production (including the harms of mercury usage), which can also be used throughout the project as an additional sensitization and knowledge-sharing tool.^[159]¹⁵⁹

Activity 4.1.3 Support participation in national and regional knowledge sharing opportunities and events

The project will support various stakeholders participating in the planetGOLD project in Guinea to attend knowledge sharing activities and events hosted in Guinea, as well as additional opportunities for sharing information with regional stakeholders in West Africa. This will allow these stakeholders to share lessons learned with their peers in Guinea and in other countries (particularly members of ECOWAS ? Economic Community of West African States).

Output 4.2: Knowledge products and tools developed through the project are available globally through the GEF planetGOLD programme

Activity: 4.2.1 Participate in GEF planetGOL+ Knowledge sharing activities and events

The project will support various stakeholders participating in the planetGOLD project in Guinea to attend knowledge sharing activities and events hosted by the global component, both virtually and in-person (Covid-19 restrictions permitting). This will allow these stakeholders to share lessons learned with their peers in other countries, and create a community of practice upon which different stakeholders can rely on. This will include an Annual Programme Meeting (APM) and the planetGOLD Global Forum (GF), as well as one other international forum per year, depending on the particular focus and agenda (e.g. the OECD Forum for Responsible Mineral Supply Chains, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, etc.).

In addition, the project?s Communication Manager will participate in a programme communications network that includes monthly calls, a digital communications platform, trainings and sharing of information of major country-level events and activities. The Communication Manager will also attend the GF and the communications network side meeting at the APM.

Additional opportunities for sharing lessons learned and experiences from the project will also be identified, such as by hosting, either independently or through the global programme, webinars and workshops on particular thematic issues to international stakeholders.

Activity 4.2.2 Produce knowledge products (Components 1, 2 and 3)

The project will produce a series of knowledge products that document the approach taken in each of the first three components, as well as the successes, challenges and lessons learned throughout the implementation of the project. These may be adapted as other planetGOLD projects develop complementary knowledge products, in order to avoid duplication or redundancy. The following knowledge products are planned:

- ? Lessons in Applying the Jurisdictional and Landscape Approach in Guinea?s ASGM Sector (Publication): This publication will focus on sharing the lessons learned from applying the JA/LA, which is a new approach for the sector. The publication will share both the challenges that were encountered, opportunities for improvement or replication, as well as accomplishments and successes. The interaction with a large-scale miner within

the application of the JA/LA approach will also offer further insights to other planetGOLD countries applying this method.

- ? Impact of Access to Finance for the ASGM Sector (Infographics/Case studies): Infographics documenting the impact of access to finance to artisanal miners and cooperatives.
- ? Lessons learning in implementing mercury-free technology (Video): This video will seek to specifically document how the project's technical assistance adapts to the realities of ASGM actors in Guinea ? namely the very small quantities produced by individual actors ? in order to identify the appropriate technologies and incentives for sustaining their use.

Activity 4.2.3 Contribute to the planetGOLD knowledge platform

The project will share information and learnings with the planetGOLD knowledge platform through various communications means, such as technical briefs, blogs, news articles, videos, or photographs. These will be coordinated with the global programme to ensure maximum added value based on existing resources produced by the programme.

1.A.4. Alignment with GEF Focal Areas

The project is directly aligned with the Chemicals and Waste Focal area, Industrial Chemicals Program (program 1) which seeks to eliminate or significantly reduce chemicals subject to better management, in this case mercury, within the framework of the Minamata convention. The relevant focal area element is CW1-1: Strengthen the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination. Within the Chemicals and Waste Focal Area, program 1, a specific objective is the reduction and elimination of mercury from the Artisanal and Small-Scale Gold Mining Sector. The Guinea Child Project within the GOLD++ program will contribute directly to this objective, building upon the on-going GEF-6 planetGOLD programme.

Other GEF funded programs implemented or currently being implemented in Guinea that provide alignment with the proposed project include:

- ? *Scaling-up Investment and Technology Transfer to Facilitate Capacity Strengthening and Technical Assistance for the Implementation of Stockholm and Minamata Conventions in African LDCs (under implementation)*
- ? *Minamata Initial Assessment (2018)*
- ? *National Action Plan for ASGM (2021)*

The piloting of on JA/LA approaches in formalization have a potential to integrate other stakeholders implementing GEF 6 funded projects (or projects related to GEF Focal Areas) in climate change, biodiversity and land degradation. These will be identified in the SWOT Analysis that will be conducted in the pilot prefectures using assessment tools identified by Conservation International, such as Landscape.

1.A.5. Incremental/Additional Cost Reasoning and Expected Contributions from the Baseline, the GEFTF, LDCF, SCCF, and co-financing

The use of mercury in Guinea's ASGM sector is a prevalent and systemic challenge, which is driven by a number of factors that include poverty, limited awareness, migratory patterns, lack of formalization and support to the sector, and a lack of access to formal markets and access to financing. As a low-income country, the Government of Guinea lacks the significant resources needed to tackle this challenge which has national, regional and global environmental impacts.

Despite limited resources, the Government of Guinea has shown its political commitment to reducing mercury usage in the sector via its ratification of the Minamata Convention in 2014. Since this time, a Mercury Impact Assessment (MIA) was completed in 2018, and the National Action Plan for tackling mercury usage in the ASGM sector was completed in 2021.

With the support of the GEF Trust Fund, the project will provide incremental funding for formalization, access to finance and reduction of mercury use in ASGM by building on past and current mercury reduction initiatives being implemented in the country.

The project will provide support to a more coordinated effort between various government ministries, organizations, and stakeholders. The Project Steering Committee (PSC) will host an annual workshop for stakeholders of the project to come together, provide input, share lessons learned and planned activities, and identify collective opportunities. The project is designed to play a supportive role to national and local level actors, ensuring that they effectively continue to lead efforts in this area and providing them with the necessary resources and expertise to do so. The project is proposed as a cost-effective way of linking together a multitude of government and non-government efforts in tackling mercury reduction, which will in the end significantly increase the impact and overall value-for-money of all of these projects as duplication and redundancy is avoided, while synchronicity and alignment allow for better results.

In addition, the project will also benefit from knowledge sharing, lessons learned and capacity building materials that have been created within the planetGOLD global component, as well as any future resources created through the GOLD+ programme. The project will build on lessons learned from private sector engagement via other planetGOLD projects in West Africa, which may have similar political, socioeconomic and logistical contexts.

The project will support national and local actors to coordinate their efforts, and will directly or partially contribute to their planned interventions identified in the NAP, including in the areas of formalization, financial inclusion and mercury reduction. In particular, the project will contribute to the following key interventions outlined in Guinea's national workplan outlined in the NAP:

- 1) Inform and sensitize ASGM miners and communities on the impacts of burning mercury in open air and residential areas, as well as the importance of using PPE
- 2) Promote mercury-free alternatives for gold processing
- 3) Reinforce Guinea's regulatory framework amongst ASGM miners in Guinea
- 4) Facilitate access to finance for all actors in Guinea's ASGM sector
- 5) Train ASGM actors on better extraction and processing practices
- 6) Promote regional collaboration on the illicit trade in mercury (via other West Africa planetGOLD projects, such as Cote d'Ivoire and Burkina Faso)
- 7) Promote gender equality, women's empowerment and women's status along the ASGM value chain
- 8) Supplementary measures aiming to protect groups vulnerable to mercury exposure (e.g. women and children)
- 9) Sensitization of artisanal miners, communities and local government officials on the risks and negative impacts of using mercury and other chemicals in ASGM

Through the piloting of JA/LA approaches, additional environmental benefits related to biodiversity, climate change and land degradation will be added to the baseline.

The project boasts a number of co-financing partners, including various Ministries of the Guinean government, along with other national and international organizations, such as Argor Heraeus, SAP, IMPACT. All of these actors have been and are continuing to contribute to formalization, access to financing and mercury reduction in Guinea's ASGM sectors, and will be able to capitalize on the coordination and collaboration that is facilitated through the project.

The project will provide opportunities for up-scale and replication by building on lessons learned on the mercury reduction efforts in country and through lessons from global efforts. It is expected that mercury reduction efforts will be deepened through holistic and innovative approaches to formalization with technical support such as research, networking and knowledge exchange being provided by the Global Component.

The project will support the development of catalytic relationships between ASGM cooperatives and associations with downstream market actors and financing instruments, in order to provide enhanced access to incentives, resources and support for transitioning to mercury-free practices. By supporting ASGM actors to progressively meet responsible sourcing expectations of downstream and financing markets, the project can help bridge a gap that currently exists between those wanting to engage with ASGM actors and their need to ensure that they are sourcing according to international best practice and legal requirements. At the same time, the project can also help to establish realistic expectations for downstream market and financing actors to better understand the ASGM sector and how it can support mercury-free production through their provision of access to financing.

The project will also serve to further advance efforts to improve relationships between ASGM and LSM companies via its engagement with its co-financing partner AngloGoldAshanti.

For detailed information on co-financing contributions, please refer to Appendix 3.

1.A.6. Global environmental benefits

Mercury reduction targets in Guinea have been determined based on current mercury use in the national ASGM sector. Several variables were used to estimate current mercury use in each country, such as yearly volume of gold production by ASGM, and the mercury to gold ratios given the type of amalgamation technologies used in different mercury-using areas. Mercury reduction targets are furthermore estimated based on variables such as number and location of ASGM sites, number of ASGM miners, current practices, capacities, and distribution of achievable reductions over the years of project implementation. The Guinea child project is expected to deliver global environmental benefits in chemicals and waste and to some extent biodiversity, waterways, and land degradation particularly through application of jurisdictional and landscape approaches. The country is expected to achieve a 12.15 metric tons reduction in mercury over a 5-year period. It is expected that mercury use reduction will be replicated as a consequence of the project's theory of change which will support formalization efforts, remove barriers to access to finance and promote access to finance, increase adoption of mercury-free technologies, and promote increased knowledge amongst all stakeholders on the impacts of mercury usage and how to reduce its use. Guinea's experiences will further contribute to GEB through replication in other countries. As such, in the 10 years following the program, it is anticipated that a replication by a factor of 3 will be achieved, representing an additional 36.45 metric tons reduction in mercury, bringing total to 48.60 metric tons for the project. These activities in the reduction of mercury use are directly aligned with GEF's long term goal of curbing the exposure of humans and the environment to harmful chemicals through a significant reduction in the use and release of mercury.

With respect to biodiversity, waterways, land degradation, the primary benefits will derive from broader programming on production of responsible artisanal gold, which will take a progressive improvement approach. ASGM partners with whom the project will work with will benefit from sensitization that will reach beyond the use of mercury to include other harmful environmental processes (e.g. non-remediation of land, deforestation, impacts on biodiversity, etc.), and mitigation plans will identify, communicate and support best practice in these areas. The project will also endeavor to engage other actors carrying out environmental programming in these areas that may not be focused on the ASGM sector, and whom the ASGM partners and local communities could potentially collaborate with in order to expand the extent to which they can address a myriad of environmental issues.

The number of direct beneficiaries of GEF's investment in this programme includes 2939 women and 2081 men, including women and men artisanal miners (including those engaged in non-digging tasks, such as washing, crushing, processing, etc.), traders, exporters, ASM community members, government officials supporting the ASM sector, and private sector actors supporting the sector (e.g. representatives of artisanal miner associations).

1.A.7. Innovation, Sustainability and Potential for Scaling Up

Innovation

The project TOC provides key innovation in areas of formalization and further reducing mercury usage through the exploration of the Jurisdictional Approach (JA)/Landscape Approach (LA) and its application of the approach to the ASGM sector, identifying collaborative partnerships with the private sector, and strengthening financial inclusion and bankability of miners. Further, the integration of a large-scale mining company, AngloGoldAshanti, as a co-financing partner offers further opportunities for exploring innovative partnerships and models for engagement between ASM and LSM.

Piloting JA/LA approaches

The legal and regulatory approach to formalization has failed in many countries. Legal frameworks are hardly implemented nor adequately address the various and often conflicting priorities of stakeholders within landscapes. JA approaches with jurisdictional authorities and coalition of stakeholders have potential to address ASGM formalization in a more holistic manner. In addition to formalization and mercury reduction, other environmental benefits such as biodiversity and water protection will be addressed.

Approach to financial inclusion and access to finance

The challenge of ASGM accessing formal financing and markets includes informality, poor record keeping, lack of information about mineral deposits, lack of provenance of mineral supply chains

and poor understanding of formal financial systems of ASGM. The project has identified a two-pronged approach to addressing the barriers created by a lack of access to financing.

The first approach is to identify and collaborate with a gold refiner further downstream to establish a supply chain relationship with two ASGM associations that includes inventory financing ? a source of financing for associations that allows them to create a consistent and predictable sourcing relationship with a reputable downstream actor.

The project will support the exploration of a business model that will be beneficial to all supply chain actors, and which will serve as an incentive for continued improvement of practices related to mercury usage and responsible ASGM (as described in the planetGOLD criteria). Embedding an incentive driven model amongst the supply chain actors is more likely to be sustainable past the life of the project. Furthermore, a successful business model in this context could be replicated with other ASGM associations once the right economic incentives and drivers are considered.

In addition to working directly with a gold refiner further downstream, the project will seek to mobilize financial institutions in Guinea through a study that identifies both the needs of the ASGM and the financial sector. The study will also take stock of learnings from other sectors (e.g. agriculture), which have already explored access to finance for small-scale actors with limited bankability.

The project will also provide technical assistance to support ASGM cooperatives in developing an investment portfolio that will allow them to more clearly articulate and demonstrate the investment case for ASGM. In doing so, the programme will consider the unique challenges that women face in accessing financing, and streamline this work with its support to women?s leadership and professional development in the sector.

Private sector engagement

The project will explore collaboration with private sector to enhance formalization, access to finance and markets. Past experiences from gold formalization projects have demonstrated that creating sourcing relationships between upstream ASGM supply chains with downstream gold refiners can be challenging, and require long-term investment in engagement, collaboration and identifying the appropriate incentives for all actors.

As such, the project will focus on early engagement with the private sector in Guinea and internationally, while identifying opportunities for and investing in progressive improvements amongst upstream supply chain actors in line with OECD Due diligence guidance and the planetGOLD criteria. With committed and engaged downstream and financing actors, the project can test different business models for mercury-free supply chains that encourage and incentivize mercury-free techniques, increasing the likelihood of continued uptake.

Further, the project will engage with a large-scale mining actor ? AngloGoldAshanti ? in order to explore the role that LSM could play in reducing mercury in the ASGM sector ? such as through technical and processing assistance, as well as the promotion of gender equality in the sector.

Sustainability and Scaling Up

The project will provide support to a core group of stakeholders committed to implementing Guinea?s National Action Plan and reducing mercury usage in the ASGM sector. Notably, it will provide support to national and regional governments to clarify formalization processes in the sector and sensitize ASGM actors on this process via a formalization guide that can be replicated and distributed widely. The project will invest in training for national level government officials, so that they can in turn build the capacity and support local stakeholders in key mining areas.

A key element of sustainability will be achieved through the JA/LA approaches. The process of building multistakeholder collaboration amongst interested parties and setting landscape priorities and linkages with market actors can help to build relationships that outlive the timeframe of the project. Landscape plans can continue being implemented long after the project. Care is needed with leadership changes at the jurisdictional level as experience shows that this can at times impact the momentum for the stakeholders and approach.

Engaging private sector actors establishes collaborative business relationships with ASGM which if profitable and mutually beneficial, could continue beyond the life of the project. Models of access to finance to aid transition to mercury free technologies, once developed and functional, will ensure upscaling and continuous access by the sector over the longer term.

Efforts to understand incentives for responsible and mercury-free gold production are key to sustainability and will underpin engagement with two ASGM associations that will be supported through the project to improve their practices and access financing via downstream actors and/or financial institutions. Incentives that are immediate, such as a higher price or more convenient selling location, often work best in the sector. The project will therefore seek to identify both

immediate and long-term incentives for progressively adopting improved practices, which can promote continued implementation beyond the life of the project. Further, successes from these models can serve as positive examples and potential incentive to other ASGM associations in order to encourage uptake and investment in responsible and mercury-free processes.

Knowledge sharing in Guinea (at national level and within mining regions) and with other countries in the planetGOLD programme, along with capacity building of local structures and institutions will ensure technical knowledge, support services and skills are built close to the mining operations. Embedding the project into local structures and stakeholder mandates (local training institutions, ASM organizations, etc.) will also assist the project's sustainability.

^[1] United Nations Environmental Programme (UNEP). 2018. Global Mercury Assessment 2018. Available from: <https://wedocs.unep.org/bitstream/handle/20.500.11822/27579/GMA2018.pdf?sequence=1&isAllowed=y> [accessed November 8, 2021].

^[2] Hilson, Gavin. 2010. "Once a Miner, Always a Miner": Poverty and Livelihood Diversification in Akwatia, Ghana. *Journal of Rural Studies* 26, no. 3: 296-307.

^[3] The Global Environmental Facility (GEF). N.d. planetGold. Available from: <https://www.planetgold.org/about> [accessed November 8, 2021]

^[4] Selin, Henrik. 2014. "Global Environmental Law and Treaty-Making on Hazardous Substances: The Minamata Convention and Mercury Abatement." *Global Environmental Politics* 14, no. 1: 1-19. See also, Hilson, Gavin et al. 2018. "Formalizing artisanal gold mining under the Minamata convention: Previewing the challenge in Sub-Saharan Africa." *Environmental Science and Policy* 85: 123-131.

^[5] Park, Jung-Duck and Wei Zheng. 2012. "Human Exposure and Health Effects of Inorganic and Elemental Mercury." *Journal of Preventative Medicine and Public Health* 45, no. 6: 344-352.

^[6] US Department of Health and Services and Center for Disease Control Environmental Health. 2009. *Mercury Factsheet*. Available from: https://www.cdc.gov/biomonitoring/pdf/Mercury_FactSheet.pdf [accessed November 8, 2021].

^[7] World Health Organization. 2017. Mercury and Health. Available from: <https://www.who.int/news-room/fact-sheets/detail/mercury-and-health> [accessed November 8, 2021].

^[8] US Department of Labor, Occupational Safety and Health Administration. OSHA Hazard Information Bulletins. Dimethylmercury. Available from: https://www.osha.gov/dts/hib/hib_data/hib19980309.html [accessed November 8, 2021].

^[9] Kumar, Mukesh, Neha Sawhney and Roshan Lal. 2021. "Chemistry of Heavy Metals in the Environment." In Vinod Kumar, Anket Sharma and Artemi Cerda. *Heavy Metals in the Environment. Impact, Assessment, and Remediation*, 9-37. London: Elsevier.

^[10] Schmidt, Charles W. 2012. "Quicksilver & Gold: Mercury Pollution from Artisanal and Small-Scale Gold Mining." *Environmental Health Perspective* 120, no. 11: 420-424.

^[11] Rytuba, James J. 2003. "Mercury from mineral deposits and potential environmental impact." *Environmental Geology* 43: 326-338.

^[12] US Geological Survey. 2020. Mercury. Available from: <https://pubs.usgs.gov/periodicals/mcs2020/mcs2020-mercury.pdf> [accessed November 8, 2021].

^[13] Who., 2017. Mercure et sant?

^[14] Johns, N., J. Kurtzman, Z. Shtasel-Gottlieb, S. Rauch, and D.I. Wallace. 2010. "The Bioaccumulation of Methylmercury in an Aquatic Ecosystem." Proceeding of the Annual meeting 2010 of the Society for Mathematical Biology, Neukom Institute, National Science Foundation Epscer Program, July 2010.

^[15] See for example LeBlanc, Molly E. 2020. "Review of Ecological Mercury and Arsenic Bioaccumulation Within Historical Gold Mining Districts of Nova Scotia." *Environmental Reviews* 28, no. 2: 187-198.

^[16] Lydia Kang. 2017. "Mercury was considered a cure ? until it killed you." Toronto Star, October 22, 2017. Available from: <https://www.thestar.com/news/insight/2017/10/22/mercury-was-considered-a-cure-until-it-killed-you.html> [accessed November 8, 2021].

[17] US Department of State. 2017. Mercury: Why is Mercury an Important International Issue. Available from: <https://2009-2017.state.gov/e/oes/eqt/chemicalpollution/87655.htm> [accessed November 8, 2021].

[18] Sloane, Julie. N.d. *Mercury: Elements of the Ancients*. Dartmouth Toxic Metals. Available from: <https://sites.dartmouth.edu/toxmetal/mercury/mercury-element-of-the-ancients/> [accessed November 8, 2021]; US Environmental Protection Agency. *Mercury in Batteries*. Available from: <https://www.epa.gov/mercury/mercury-batteries> [accessed November 8, 2021].

[19] See for example the case of Colombia. Cordy, Paul, Marcello M. Veiga, Ibrahim Salih Sari Al-Saada, Stephanie Console, Oseas Garcia, Luis Alberto Mesa, Patricio C. Velázquez-López, Monika Roeser. 2011. Mercury contamination from artisanal gold mining in Antioquia, Colombia: The world's highest per capita mercury pollution. *The Science of the Total Environment* 410/411: 154-160.

[20] United Nations Environmental Programme (UNEP). N.d. Global Mercury Assessment. Available from: https://wedocs.unep.org/bitstream/handle/20.500.11822/29831/gma_tech.pdf?sequence=1&isAllowed=y [accessed November 8, 2021].

[21] Ibid, page 12

[22] Ibid, page 32

[23] Saturday, Alex. 2018. Mercury and its Associated Impacts on Environment and Human Health: A Review. *Journal of Environment and Health Science* 4, no. 2: 37- 43.

[24] Boudou, Alain, Regine Maury-Brachet, Marina Coquery, Gilles Durrieu and Daniel Cossa. 2005. Synergic Effect of Gold Mining and Damming on Mercury Contamination in Fish. *Environment, Science & Technology* 39, no. 8: 2448-2454. See also, Mason, Robert P., Zofia Baumann, Gunnar Hansen, Koffi Marcellin Yao, Mariame Coulibaly and Safiatou Coulibaly. An assessment of the impact of artisanal and commercial gold mining on mercury and methylmercury levels in the environment and fish in Cote d'Ivoire. *The Science of the Total Environment* 665: 1158-1167.

[25] World Health Organization. 2017. Mercury and Health.

[26] Gibb, Herman and Keri Grace O'Leary. 2014. Mercury Exposure and Health Impacts among Individuals in the Artisanal and Small-Scale Gold Mining Community: A Comprehensive Review. *Environmental Health Perspectives* 122, no. 7: 667-672.

[27] Kola, Samwel, Laetitia Wakonyu Kanja, James Mucunu Mbaria, Joyce Gichiku Maina and Mitchel Otieno Okumu. 2019. Levels of mercury in Nile tilapia (*Oreochromis niloticus*), water, and sediment in the Migori gold mining belt, Kenya, and the potential ramifications to human health. *FI000 Research* 8: 1244-1263.

[28] Björnberg, Karolin Ask, Marie Vahter, Birgitta Berglund, Boel Niklasson, Mats Blennow and Gunilla Sandborgh-Englund. 2005. Transport of Methylmercury and Inorganic Mercury to the Fetus and Breast-Fed Infant. *Environmental Health Perspectives* 113, no. 10: 1381-1385.

[29] Hong, Chuan, Xiaodan Yu, Jihong Liu, Yue Cheng, Sarah E. Rothenberg. 2016. Low-level methylmercury exposure through rice ingestion in a cohort of pregnant mothers in rural China. *Environmental Research* 150: 519-527.

[30] US Environmental Protection Agency. N.d. Health Effects of Exposures to Mercury. Available from: <https://www.epa.gov/mercury/health-effects-exposures-mercury#methyl> [accessed November 8, 2021].

[31] McCarthy, Damien, Grant C. Edwards, Mae S. Gustin, Andrew Care, Matthieu B. Miller and Anwar Sunna. 2017. An innovative approach to bioremediation of mercury contaminated soils from industrial mining operations. *Chemosphere* 184: 694-699.

[32] Miserendino, Rebecca Adler, Jean Remy Davêe Guimarês, Gary Schudel, Sanghamitra Ghosh, José Marcus Godoy, Ellen K. Silbergeld, Peter S. J. Lees and Bridget A. Bergquist. 2018. Mercury Pollution in Amapá, Brazil: Mercury Amalgamation in Artisanal and Small-Scale Gold Mining or Land-Cover and Land-Use Changes? *ACS Earth and Space Chemistry* 2, no. 5: 441-450.

[33] Male, Yusthinus Thobias, Amanda Jean Reichelt-Brushett, Matt Pocock and Albert Nanlohy. Recent mercury contamination from artisanal gold mining on Buru Island, Indonesia? Potential future risks to environmental health and food safety. *Marine Pollution Bulletin* 77, no. 1/2: 428-433.

- [34] Li, Ping, Xinbin Feng, Lihai Shang, Guangle Qiu, Bo Meng, Peng Liang and Hua Zhang. 2008. ?Mercury pollution from artisanal mercury mining in Tongren, Guizhou, China.? *Applied Geochemistry* 23, no. 8: 2055-2064.
- [35] Murao, Satoshi, Kazuki Naito, Gunchin Dejidmaa and Soey H. Sie. 2006. ?Mercury content in electrum from artisanal mining site of Mongolia.? *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* 249, no. 1/2: 556-560.
- [36] Gibb, Herman and Keri Grace O?Leary. 2014. ?Mercury Exposure and Health Impacts among Individuals in the Artisanal and Small-Scale Gold Mining Community.? *Environmental Health Perspectives*: 667-672.
- [37] Saturday. ?Mercury and its Associated Impacts on Environment and Human Health.?
- [38] Steckling Nadine, Myriam Tobollik, Dietrich Plass, Claudia Hornberg, Bret Ericson, Richard Fuller, Stefan Bose-O?Reilly. 2017. ?Global Burden of Disease of Mercury Used in Artisanal Small-Scale Gold Mining.? *Annales of Global Health* 83, no. 2: 234-247.
- [39] Diring, Sarah E., Axel J. Berky, Marco Marani, Ernesto J. Ortiz, Osman Karatum, Desiree L. Plata, William K. Pan and Heileen Hsu-Kim. 2020. ?Deforestation Due to Artisanal and Small-Scale Gold Mining Exacerbates Soil and Mercury Mobilization in Madre de Dios, Peru.? *Environmental Science and Technology* 54, no. 1: 286-296.
- [40] Green Facts. 2002. Scientific Facts on Mercury. Available from: <https://www.greenfacts.org/en/mercury/mercury-greenfacts-level2.pdf> [accessed November 8, 2021].
- [41] UN Environment Programme. 2020. UNEP-UNITAR Mercury Platform. Available from: <https://mercury.unitar.org/site/document/1272> [accessed November 8, 2021].
- [42] Osei-Tutu, Jonah and Tatek Abebe. 2018. ?Tensions and controversies regarding child labor in small-scale gold mining in Ghana.? *African Geographical Review* 38, no. 4: 361-373. See also, Hilson, Gavin. 2012. ?Family Hardship and Cultural Values: Child Labor in Malian Small-Scale Gold Mining Communities.? *World Development* 40, no. 8: 1663-1674.
- [43] UN Environment Programme. 2014. Minamata Convention on Mercury. Available from: http://www.mercuryconvention.org/Portals/11/documents/conventionText/Minamata%20Convention%20on%20Mercury_e.pdf [accessed November 8, 2021].
- [44] ASM is usually viewed as an alternative, and more attractive source of revenues than other activities such as farming or small businesses. See Hilson, Gavin. 2009. ?Small-scale mining, poverty and economic development in sub-Saharan Africa: An overview.? *Resources Policy* 34, 1: 1-5.
- [45] World Bank. 2020. *2020 State of the Artisanal and Small-Scale Mining Sector*. Washington, D.C.: World Bank.
- [46] UN Environment Programme. 2020. *Improving Access to Formal Finance in Artisanal and Small-Scale Gold Mining*. Issue Brief. Global Environment Facility and planetGOLD.
- [47] Siegel, Shefa and Marcello M. Veiga. 2009. ?Artisanal and small-scale mining as an extralegal economy: De Soto and the redefinition of ?formalization.? *Resources Policy* 34, no. 1/2: 51-56.
- [48] Wilson, Mark L., Elisha Renne, Carla Roncooli, Peter Agyei-Baffour and Emmanul Yamoah Tenkorang. 2015. ?Integrated assessment of artisanal and small-scale gold mining in Ghana ?Part 3: Social sciences and economics.? *International Journal of Environmental Research and Public Health* 12: 8133-8156
- [49] Hirons, Mark. 2014. ?Shifting sand, shifting livelihoods? Reflections on a coastal gold rush in Ghana.? *Resources Policy* 40: 83-89.
- [50] Reichel, Victoria. 2020. ?Financial inclusion for women and men in artisanal gold mining communities: A case study from the Democratic Republic of the Congo.? *The Extractive Industries and Society* 7, no. 2: 412-419.
- [51] United Nations Environmental Programme (UNEP). Global Mercury Assessment.
- [52] Buss, Doris, Blair Rutherford, Jennifer Stewart, Gis?le Eva C?t?, Abby Sebina-Zziwa, Richard Kibombo, Jennifer Hinton and Joanne Lebert. 2019. ?Gender and artisanal and small-scale mining: implications for formalization.? *The Extractive Industries and Society* 6, no. 4: 1101-1112.
- [53] UN Environment Programme. 2021. Gender Equality and Mercury. Available from: <https://www.mercuryconvention.org/en/resources/minamata-convention-publication-gender-and-mercury> [accessed November 8, 2021].

[54] World Health Organisation. 2016. *Artisanal and Small-Scale Gold Mining and Health* Available from: <https://apps.who.int/iris/handle/10665/247195> [accessed November 8, 2021].

[55] UN Environment Programme. Minamata Convention on Mercury.

[56] UN Environment Programme. 2021. Party Profiles. Available from: <https://www.mercuryconvention.org/en/parties/overview> [accessed November 8, 2021].

[57] UN Environment Programme. Minamata Convention on Mercury.

[58] Martinez, Gerardo, Oscar Jaime Restrepo-Baena and Marcello M. Veiga. 2021. 'The myth of gravity concentration to eliminate mercury use in artisanal gold mining.' *The Extractive Industries and Society* 8, no. 1: 477-485.

[59] For a general perspective on the topic in Sub-Saharan Africa, see Hilson, Gavin and Chris Garforth. 2012. 'Agricultural Poverty' and the Expansion of Artisanal Mining in Sub-Saharan Africa: Experiences from Southwest Mali and Southeast Ghana.' *Population Research and Policy Review* 31, no. 3: 435-464.

[60] Human Rights Watch. 2018. 'What do we get out of it?' The Human Rights Impact of Bauxite Mining in Guinea. October 4, 2018. Available from: <https://www.hrw.org/report/2018/10/04/what-do-we-get-out-it/human-rights-impact-bauxite-mining-guinea> [accessed November 15, 2021].

[61] For more on that, see the case of cobalt mining in Deberdt, Raphael. 2021. *Baseline Study of Artisanal and Small-Scale Cobalt Mining in the Democratic Republic of Congo*. Berkeley, CA: Responsible Sourcing Network.

[62] UNIDO-United Nations Industrial Development Organization, 2018. 'Réduire les flux illicites de mercure et d'or en Afrique de l'Ouest : Options pour une approche régionale.'

[63] See for example Stoop, Nik, Marijke Verpoorten and Peter van der Windt. 2019. 'Artisanal or industrial conflict minerals? Evidence from Eastern Congo.' *World Development* 122: 660-674. See also, Katz-Lavigne, Sarah. 2020. 'Distributional impact of corporate extraction and (un)authorised clandestine mining at and around large-scale copper- and cobalt-mining sites in DR Congo.' *Resources Policy* 65: 101584.

[64] UN Environment Programme. *Improving Access to Formal Finance in Artisanal and Small-Scale Gold Mining*.

[65] Ibid.

[66] IMPACT. 2020. *Digging for Equality: Gender Equality and Women's Empowerment in Artisanal Mining*.

[67] Public-Private Alliance for Responsible Minerals Trade. 2019. *The Barriers to Financial Access for the Responsible Minerals Trade in the GLR*.

[68] Deberdt, Raphael and Philippe Le Billon. 2021. 'Conflict minerals and battery materials supply chains: A mapping review of responsible sourcing initiatives.' *The Extractive Industries and Society*, In Press: 100935.

[69] Nowrot, Karsten. 2019. 'The 2017 EU Conflict Minerals Regulation: A Promising European Rite to Remove the Natural Resource Curse?' In Isabel Feichtner (Eds.). *Human Rights in the Extractive Industries Transparency, Participation, Resistance*, 51-75. London: Springer.

[70] Jamasmie, Cecila. 2019. 'More than a third of gold mines in Congo exposed to Ebola?' report. Mining.com. Accessible from: <https://www.mining.com/third-gold-mines-congo-exposed-ebola-report/> [accessed December 6, 2021].

[71] Seguin, Kady. 2020. 'Epidemics, Conflict, and Gold: What We Can Learn from DRC's Ebola Outbreak as we Respond to COVID-19.' Impact. Available from: <https://impacttransform.org/en/gold-drc-ebola-covid19/> [accessed November 8, 2021].

[72] Maonachie, Roy. 2014. 'Ebola's catastrophic consequences on Sierra Leone's small-scale mining sector.' *The Guardian*. Accessible from: <https://www.theguardian.com/sustainable-business/2014/nov/04/ebola-sierra-leone-small-scale-mining-sector-catastrophic-consequences> [accessed December 6, 2021].

[73] Smith-Roberts, Ashley, Kristi Disney Bruckner, Verónica Morelli Bellido, Hugo Frías Ossandón, Meera Nayak, Nicole M. Smith and Linda Jaramillo Urrego. 2021. 'All that glitters is not gold?: the effects of the COVID-19 pandemic on artisanal and small-scale gold mining and supply chains in Peru.' *Journal of Energy and Natural Resources Law*: 1-39.

- [74] International Peace Information Service. 2020. 'IPIS Briefing June 2020 ' Impact of Covid-19 on artisanal miners in DR Congo.' Accessible from: <https://ipisresearch.be/weekly-briefing/ipis-briefing-june-2020/> [accessed December 6, 2021].
- [75] Martin, Alan and Helbig de Balzac. 2017. *The West African El Dorado: Mapping the Illicit Trade of Gold in Côte d'Ivoire, Mali and Burkina Faso*. Partnership Africa Canada.
- [76] Hendus, Barbara. 2020. *Opening the Black Box: Local Insights into the Formal and Informal Global Mercury Trade Revealed*. IUCN, National Committee of the Netherlands.
- [77] Viega M.M ; Blacksmith Institute and UNIDO.(2006). Technical Mission to the Artisanal Gold Mines in Upper Guinea.
- [78] Artisanal Gold Council. N.d. Our Work. Africa. Available from: <https://www.artisanalgold.org/africa/> [accessed November 24, 2021].
- [79] Schultze, Kim Rahel. 2019. The first mercury free gold processing system in Guinea's ASM sector - GIZ and Artisanal Gold Council strengthening responsible mining practices. Available from: <https://goxi.org/blog/strengthening-responsible-economic-social-and-environmental> [accessed November 24, 2021].
- [80] Buss et al., 'Gender and Artisanal and Small-scale Mining.'
- [81] Ibid.
- [82] Hilson, Gavin, Abigail Hilson, Agatha Siwale and Roy Maconachie. 2018. 'Female Faces in Informal 'Spaces': Women and Artisanal and Small-scale Mining in sub-Saharan Africa.' *African Journal of Management* 4, no. 3: 406-446.
- [83] UNEP. Gender Equality and Mercury.
- [84] This is for example the case in Uganda.
- [85] Yakovleva, Natalia. 2007. 'Perspectives on female participation in artisanal and small-scale mining: A case study of Birim North District of Ghana.' *Resources Policy* 32, no. 1: 29-41. See also, Brotten, Leif V. 2019. 'Gendered livelihoods and land tenure: The case of artisanal gold miners in Mali, West Africa.' *Geoforum* 105: 54-62.
- [86] IMPACT, Women in Artisanal and Small-Scale Mining in Central and East Africa: A Snapshot of Challenges and Opportunities for Empowerment, April 2017, <https://impacttransform.org/wp-content/uploads/2017/09/women-mining-snapshot-central-and-east-africa-3.pdf>.
- [87] Bayo, Soumahila. 2017. *Microcrédit et genre dans un contexte de pauvreté en Haute Guinée*. PhD Thesis, University of Toulouse Le Mirail ' Toulouse II.
- [88] Cissoko, Souleymane. 2015. *Rapport national sur les femmes 'volant dans le secteur minier artisanal et ' petite 'chelle*. United Nations Economic Commission for Africa.
- [89] World Bank. 2021. Country Profiles. Guinea. Available from: https://databank.worldbank.org/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbody=y&dd=y&inf=n&zm=n&country=GIN [accessed November 18, 2021].
- [90] African Development Bank. 2021. Guinea Economic Outlook. Available from: <https://www.afdb.org/en/countries/west-africa/guinea/guinea-economic-outlook> [accessed November 18, 2021].
- [91] Veiga et al. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*.
- [92] Veiga, Marcello M., Shefa Siegel, Patrick Schein, Cheick Santigui Camara, Joachim Dejean, Djibril Kamara and Amadou Diouf. 2006. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*. Blacksmith Institute.
- [93] Ibid.
- [94] AngloGold Ashanti. N.d. Siguiri, Guinea. Available from: <https://www.anglogoldashanti.com/portfolio/africa/siguiri/> [accessed November 18, 2021].
- [95] Ibid.
- [96] Veiga et al. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*.
- [97] UN Economic Commission for Africa. N.d. Guinea ASM Profile. Available here: <https://knowledge.uneca.org/ASM/Guinea> [accessed November 18, 2021].
- [98] Government of Guinea. 2018. *Plan d'Action Nationale pour l'Extraction Minière Artisanale et ' Petite Echelle de l'Or*. Environment, Waters, and Forests Ministry.
- [99] Bolay, Matthieu. 2014. 'When miners become 'foreigners': Competing categorizations within gold mining spaces in Guinea.' *Resources Policy* 40: 117-127.

- [100] Lanzano, Cristiano and Luigi Arnaldi di Balme. 2017. 'Des puits burkinabé en Haute Guinée : processus et enjeux de la circulation de savoirs techniques dans le secteur minier artisanal.' *Autrepart* 82, no. 2 : 87-108.
- [101] Mbodj, Faty B. 2009. 'Boom aurifère et dynamiques économiques entre Sénégal, Mali et Guinée.' *EchoGeo* 8 : 1-17.
- [102] Lanzano, Cristiano. 2018. 'Gold digging and the politics of time. Changing timescapes of artisanal mining in West Africa.' *The Extractive Industries and Society* 5: 253-259.
- [103] Ibid.
- [104] Gratz, Tilo. 2003. 'Les chercheurs d'or et la construction d'identités de migrants en Afrique de l'Ouest.' *Politique Africaine* 91: 155-169.
- [105] Gratz Tilo. 2002. 'Gold Mining Communities in Northern Benin as Semi-Autonomous Social Fields.' Working Paper 36. Halle, Max Planck Institute for Social Anthropology.
- [106] Lanzano and Arnaldi di Balme. 'Des puits burkinabé en Haute Guinée?'
- [107] Arnaldi Di Balme, Luigi and Cristiano Lanzano. 2014. *Gouverner l'orphisme. Étude sur l'organisation technique et politique de deux sites d'orpaillage (Bantara et Gombé-dougou, Burkina Faso)*. Ouagadougou, Laboratoire Citoyenneté, Étude RECIT 37.
- [108] This has also been described in Sierra Leone. See Maconachie, Roy and Gavin Hilson. 2018. 'The war whose bullets you don't see': Diamond digging, resilience and Ebola in Sierra Leone.' *Journal of Rural Studies* 61: 110-122.
- [109] BBC. 2021. 'Guinea Coup: Who is Col. Mamady Doumbouya?' October 1, 2021. Available from: <https://www.bbc.com/news/world-africa-58461971> [accessed November 18, 2021].
- [110] Bolay, Matthieu. 2013. 'Professionalisierung des artisanalen Goldabbaus. Formalisierung des Sektors führt zu Widersprüchen.' *Afrika-bulletin* 152: 8-10.
- [111] AlJazeera. 2021. 'Deadly landslide hits gold mine in Guinea.' May 9, 2021. Available from: <https://www.aljazeera.com/news/2021/5/9/at-least-15-killed-in-guinea-gold-mine-landslide> [accessed November 18, 2021].
- [112] Bolay, Matthieu. 2016. 'Artisanal Gold Miners Encountering Large-Scale Mining in Guinea: Expulsion, Tolerance and Interference.' In Thomas Niederberger, Madlen Kobi, Tobias Haller (Eds.). *The Open Cut. Mining, Transnational Corporations and the Commons*, 187-204. London: Taylor Francis.
- [113] Government of Guinea. 2011. Mining Code. Act L/2011/006/CNT. September 9, 2011.
- [114] Government of Guinea. 2011. Law on the Creation and Management of Minerals' Assets. L/2011/005/CNT. August 10, 2011.
- [115] Government of Guinea. 2012. Decree Governing Attribution, Composition, and Functioning of the National Mining Commission. D/2012/041/PRG/SGG. March 26, 2012.
- [116] Government of Guinea. 2014. Decree Governing the Management of Authorizations and Mining Titles. D/2014/012/PRG/SGG. January 17, 2014.
- [117] Government of Guinea. 2014. Decree Governing the Implementation of the Financial Provisions of the Mining Code. D/2014/013/PRG/SGG. January 17, 2014.
- [118] Government of Guinea, Ministry of Mines and Geology, 2017. Arrêté portant régime de l'activité d'exploitation artisanale et procédures d'attribution des partielles. A/2017/6163/MMG/SGG. November 10th 2017
- [119] Government of Guinea. 2014. Decree Governing the Adoption of Directive on the Implementation of an Environmental and Social Impact Assessment of Mining Operations. D/2014/014/PRG/SGG. January 17, 2014.
- [120] Huntington, Heather, and Kate Marple-Cantrell. 2021. 'Customary governance of artisanal and small-scale mining in Guinea: Social and environmental practices and outcomes.' *Land Use Policy* 102: 105229.
- [121] Ministry of the Environment, Water and Forestry. 2019. Processes of formalizing the ASGM sector in Guinea. Project for developing the NAP for reducing mercury in the ASGM sector.
- [122] MEDD, NAP, 2021
- [123] Veiga et al. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*.
- [124] Plan International Guinée. 2016. Village Saving and Loan Groups in Guinea. YouTube. Accessible from: <https://www.youtube.com/watch?v=kPVC7wR6dow> [accessed December 3, 2021].
- [125] Central Bank of the Republic of Guinea. 2018. Liste des Institutions de microfinance agréées en République de Guinée au 31/12/2018. Accessible from: <https://www.bcr-guinee.org/wp-content/uploads/2020/02/Adresses-des-IMF.pdf> [accessed December 3, 2021].

- [126] Entrepreneurs du Monde. 2020. Wakili: social microfinance in Guinea. Accessible from: <https://www.entrepreneursdumonde.org/en/program/wakili-social-microfinance-guinea/> [accessed December 3, 2021].
- [127] World Bank. 2018. *R?publique de Guin?e : diagnostic et pr?paration d'une strat?gie nationale d'inclusion financi?re*. BCRG and First Initiative.
- [128] Bayo, Soumahila. 2017. *Microcr?dit et genre dans un contexte de pauvret? en Haute Guin?e*. PhD Thesis, University of Toulouse Le Mirail ? Toulouse II.
- [129] MEEF-Minist?re de l'Environnement, des Eaux et Forêts., 2018. *Evaluation Initiale de la Guin?e, Convention de Minamata*.
- [130] UN Industrial Development Organization. 2018. *Curbing Illicit Mercury and Gold Flows in West Africa: Options for a Regional Approach*.
- [131] Ibid.
- [132] World Bank. 2016. *Mercury Trade and Use for Artisanal and Small-Scale Gold Mining in Sub-Saharan Africa*.
- [133] Government of Guinea. Ministry of Environment, Waters and Forests. 2018. *Convention de Minamata sur le Mercure. Evaluation initiale de la Guin?e*.
- [134] United Nations Environment Program, 2013a
- [135] Ibid.
- [136] Ibid.
- [137] UNEP. 2018. *Background Report to the Global Mercury Assessment 2018*.
- [138] Veiga et al. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*.
- [139] Mintek. N.d. IGoli. Available from: <https://www.mintek.co.za/technical-divisions/small-scale-mining-beneficiation/technology-development/igoli/#:~:text=iGoli%20is%20a%20simple%2C%20safe,precipitated%20out%20with%20sodium%20metabisulphate>. [accessed November 24, 2021].
- [140] Pure Earth. N.d. Guinea ? Gold Mining and Mercury Emissions. Available from: <https://www.pureearth.org/project/gold-mining-mercury-emissions-northern-guinea/> [accessed November 24, 2021].
- [141] Schultze, Kim Rahel. 2019. The first mercury free gold processing system in Guinea's ASM sector - GIZ and Artisanal Gold Council strengthening responsible mining practices. Available from: <https://goxi.org/blog/strengthening-responsible-economic-social-and-environmental> [accessed November 24, 2021].
- [142] Artisanal Gold Council. N.d. Our Work. Africa. Available from: <https://www.artisanalgold.org/africa/> [accessed November 24, 2021].
- [143] Minamata Initial Assessment, Ministry of the Environment, Water and Forests, 2018
- [144] Ibid.
- [145] Veiga et al. *Technical Mission to the Artisanal Gold Mines in Upper Guinea*.
- [146] UN Industrial Development Organization. *Curbing Illicit Mercury and Gold Flows in West Africa*.
- [147] In 2021, the average closing price of the ounce of gold USD 1,799., with a year high of USD 1,954. See MacroTrends. N.d. Gold Prices - 100 Year Historical Chart. Available from: <https://www.macrotrends.net/1333/historical-gold-prices-100-year-chart> [accessed November 24, 2021].
- [148] Government of Guinea. N.d. Minist?re des Mines et de la G?ologie. Bureau National d'Expertise de Diamants Or et Autres Mati?res Pr?cieuses. *Proc?dure d'Exportation de l'Or Produit Artisanalement en R?publique de Guin?e*.
- [149] Government of Guinea. *Plan d'Action National pour l'Extraction Mini?re Artisanale et ? Petite Echelle de l'Or*.
- [150] Ibid.
- [151] Guinea. Fair Mined Gold. Republic of Guinea. Available from: <http://www.olimining.com/FMGG.html> [accessed December 24, 2021].
- [152] ?Guin?e: it's the gold rush in the northwest of the country?, Kapital Afrik, June 16th, 2021 <https://www.kapitalafrik.com/2021/06/16/guinee-its-the-gold-rush-in-the-northwest-of-the-country/>
- [153] *Initial Scoping Assessment of Guinea?s Financial Sector*, Enclude: People, Principles, Prosperity, 2017 https://pdf.usaid.gov/pdf_docs/PA00TQBN.pdf

- [154] <https://projects.worldbank.org/en/projects-operations/project-detail/P164283?lang=en>
- [155] Sensibilisation aux risques dans les sites d'orpaillage (Français), IMPACT, 2021
<https://www.youtube.com/watch?v=z7BqDRigX7Y>
- [156] Further information on SAP's RSM platform can be found at:
<https://www.sap.com/canada/products/agriculture-supply-chain-mgmt.html>
- [157] <https://mneguidelines.oecd.org/costs-and-value-of-due-diligence-in-mineral-supply-chains.pdf>
 (page 32)
- [158] *Le mercure : se protéger, protéger sa famille, protéger l'environnement*, IMPACT, 2021
https://www.youtube.com/playlist?list=PLYPOjpBBdDuN5boj9j4vXWY3_tz3WZW-6
- [159] *Training Resources from IMPACT*, IMPACT, 2021
https://www.youtube.com/playlist?list=PLYPOjpBBdDuN5boj9j4vXWY3_tz3WZW-6

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



FIGURE 3: MAP OF GUINEA

Siguri, KanKan zone:

Latitude: 11.419160

Longitude: -9.170080

GPS Coordinates: 11° 25' 8.976" N, 9° 10' 12.288" W

Mandiana, KanKan zone:

Latitude: 10.633660

Longitude: -8.692820

GPS Coordinates: 10° 38' 1.176" N, 8° 41' 34.152" W

Kourroussa, KanKan zone:

Latitude: 10.651400

Longitude: -9.880180

GPS Coordinates: 10° 39' 5.04" N, 9° 52' 48.648" W

Dinguiraye, Farana zone:

Latitude: 11.288630

Longitude: -10.714080

GPS Coordinates: 11° 17' 19.068" N, 10° 42' 50.688" W

Gaoul, Boke zone:

Latitude: 11.754090

Longitude: -13.201420

GPS Coordinates: 11° 45' 14.724" N, 13° 12' 5.112" W

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

This child project is part of the planetGOLD programme. The objective of the programme is to reduce the use of mercury in the ASGM sector in the participating countries through a holistic, multisectoral integrated formalization approach, and increase access to finance leading to adoption of sustainable mercury free technologies and access to traceable gold supply chains.

The Child project's theory of change and objectives are thus aligned with the overall programme and focus on 4 key pathways to achieve the programmatic outcome. These include an emphasis on supporting formalization of the ASGM sector, promoting access to finance for the ASGM sector through making ASGM supply chains more responsible, introducing mercury-free technologies and equipment, and supporting knowledge sharing of best practices and learnings.

Under the first component, the project will support the Guinean government to continue existing efforts to create and implement a formalization framework for the ASGM sector by supporting the development of regulations and policies that will guide formalization efforts across the country. Furthermore, the project will support the piloting of jurisdictional/landscape approaches and will support a broader, multistakeholder approach to formalization. Given that this approach has not been widely used in the ASGM sector, the pilot projects will provide lessons learned and help generate potential best practices for its application in the ASGM sector of other countries both in and external to the global programme.

Under the second component, the project will support improvements to the responsible sourcing practices and engage with various actors involved in access to financing in Guinea (e.g., refiners, banking institutions, credit associations, government-led lending programmes) to promote the expansion of their services or the provision of financing to the ASGM sector. This work will include an initial scoping study to identify potential partners with whom the project can work with and provide guidance or technical expertise. Activities under this component will contribute to increased knowledge, understanding and willingness to provide access to financing to the ASGM sector. Finding sustainable financing solutions for the ASGM sector will be the key objective of this component.

Under the third component, the project will carry out sensitization on the harms of mercury usage and practices to reduce these harms and eliminate the use of mercury altogether. This includes the roll out of mercury-free processing equipment. Transition to mercury-free equipment is necessary to reducing usage of mercury in the sector but has proven difficult for a variety of reasons. The project will consider existing lessons learned from prior efforts to introduce new equipment, and share additional lessons learned throughout the project. This is particularly important as efforts to adapt to the realities of ASGM need to be considered when making any significant changes to the ways in which processing is conducted and mine sites are organized (especially from a gendered perspective). This component will be the main driver on contributing towards mercury reduction and avoidance from the child project towards the programme.

The fourth component will focus on taking lessons learned, knowledge products and tools or resources from the global coordinating project and supporting the dissemination of these amongst Guinean stakeholders. Additionally, the project will also support the development of knowledge products from the project in Guinea and share these with the rest of the programme and the rest of the global ASGM community. This will allow a fluid exchange of ideas, experiences, lessons learned and best practices across a wide range of countries and stakeholders.

At the national level, the project will support the creation of a space in which efforts of multiple stakeholders (including various levels of government, private sector, academia, and civil society)

can better coordinate and streamline their efforts related to mercury reduction, so that both resources and impact can be maximized.

Furthermore, the Government and the various stakeholders to the project will participate in a wide range of initiatives, meetings and events related to responsible natural resource management within the region. These additional forums and events provide additional opportunity for stakeholders in the project to share the lessons learned and promote greater action and collaboration to address mercury reduction efforts in the sector.

And finally, the project will contribute to the overall objectives of the planetGOLD programme by participating in joint communications and planning activities to ensure alignment, efficiency, and effective communication throughout the project's duration

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

STAKEHOLDER ENGAGEMENT PLAN

1. Introduction

This Stakeholder Engagement Plan (SEP) is designed to be an operational tool that will define principles and protocols for effective engagement of a variety of stakeholders throughout the GOLD+ project in Guinea. This will help the project to: (1) enhance Guinea's ownership of/accountability for, project outcomes; (2) address social and economic needs of affected people; (3) build partnerships between stakeholders; (4) make use of skills, experiences and knowledge of communities, local groups and businesses.

The project's stakeholders will be categorized in two groups namely: primary and secondary stakeholders. The stakeholder engagement envisioned will be holistic, aiming to achieve identification of affected, interested, and concerned stakeholders; provision of timely and accessible information; relevant and contextually sensitive consultation; wide participation by all relevant stakeholders. The project, throughout its lifetime, will maintain dialogue between government ministries, directorates and agencies, mining communities, private sector actors, national and in-country international NGOs and development partners.

2. Approach for Engaging Stakeholder Throughout Project Implementation

a. Principles and challenges of Stakeholder Engagement

Stakeholder Engagement shall be guided by the following internationally acceptable principles:

Inclusiveness- the practice or policy of providing equal access to opportunities and resources for people who might otherwise be excluded or marginalized, such as those having physical or mental disabilities or belonging to other minority groups. This will be achieved by encouraging and planning for broad participation.

Trust ? a firm belief in the reliability, truth, or ability of someone or something. Trust will be achieved by providing various platforms for open and respectful dialogue at all levels.

Transparency- operating in such a way that it is easy for others to see what actions are performed. Transparency will be proven by the timeliness of response to affected stakeholders' concerns.

Six key factors are likely to hinder the stakeholder's engagement plan (UNEP, 2002):

- Poverty of some actors (such as miners)
- Remote settings (some stakeholders from remote mining sites may not be able to access Abidjan for important meetings)
- Illiteracy (may limit access of some actors to written documents)
- Local values/culture and legal system (may create confusion on responsibilities)
- Confidentiality (some actors may be willing to keep their needs and interest to themselves, and if the project can't guarantee confidentiality, they may choose to not share them)
- Global supply chain interruptions and inflation have become very unpredictable since the beginning of the Covid-19 pandemic and have been exacerbated by the ongoing conflict in Ukraine (including responsive sanctions against Russia). This has and is likely to continue to lead to rising costs which may reduce the available funds for stakeholder engagement.

b. Definitions

Consultation: Consultation involves information exchanges among the government, the Implementing Agency, the project executing agencies, and other stakeholders. Although decision making authority rests with the government, the Implementing Agencies, and the project executing agencies, periodic consultations throughout the project cycle help managers make informed choices about project activities. More important, it provides opportunities for communities and local groups to contribute to project design, implementation, and evaluation.

Public Involvement: Public involvement consists of three related, and often overlapping, processes: information dissemination, consultation, and stakeholder participation. Stakeholders are the individuals, groups, or institutions which have an interest or "stake" in the outcome of a GEF-financed project or are potentially affected by it. Stakeholders include the recipient country government; project executing agencies; groups contracted to carry out project activities and/or consulted at various stages of the project; project beneficiaries; groups of people who may be affected by project activities; and other groups in the civil society which may have an interest in the project.

Stakeholder: An individual or group that has an interest in the outcome of a GEF-financed activity or is likely to be affected by it, such as local communities, Indigenous Peoples, civil society organizations, and private sector entities, comprising women, men, girls, and boys.^[1]

Stakeholder participation: Where stakeholders collaboratively engage in the identification of project concepts and objectives, selection of sites, design, and implementation of activities, and monitoring and evaluation of project outcomes. Developing strategies for incorporating stakeholder

participation throughout the project cycle is particularly necessary in projects which have impacts on the incomes and livelihoods of local groups, especially disadvantaged populations in and around project sites (e.g., indigenous peoples, women, poor households).

c. **GEF guidelines on stakeholder engagement and participation**

All GEF funded projects are required to meet best international practice and specifically the requirements for stakeholder engagement and public consultations, as specified in the GEF Policy on Public Involvement in GEF Projects^[2].

The project stakeholder engagement activities should be robust and enough disclosure on information should be made in order to promote better awareness and understanding of its strategies, policies and operations. During this disclosure, the project is required to:

- ? Identify people or communities that are or could be affected by the project as well as other interested parties;
- ? Ensure that such stakeholders are appropriately engaged on environmental and social issues that could potentially affect them, through a process of information disclosure and meaningful consultation; and
- ? Maintain a constructive relationship with stakeholders on an on-going basis through meaningful engagement during project implementation.

3. Stakeholder Identification, Interests and Roles

In order to ensure inclusive participation and consultation, the following stakeholders have been identified for consultation through the lifetime of the programme. The list includes the identified social groups and persons that are associated with the programme in different ways at all stages as follows:

- ? persons and social groups affected directly or indirectly by the outcomes of the programme's implementation.
- ? persons and social groups who can influence and decide the outcomes and the manner of the programme's implementation or make decisions based on the outputs of the programme,
- ? persons and social groups that participate in the program implementation directly.

Particular effort will be taken to ensure that women and representatives of other vulnerable groups (e.g. ethnic or religious minorities, youth, etc.) are adequately represented and able to fully participate in the consultation and engagement that will take place throughout the duration of the programme.

TABLE 1: STAKEHOLDER IDENTIFICATION, ROLES AND INTERESTS

<u>Type of stakeholders</u>	<u>Examples</u>	<u>Role</u>
<u>Affected by the program</u>		
<u>Miners</u>	1. Diggers 2. Transporters 3. Processors	Provide information and perspectives on their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities

<u>Miners? cooperatives and associations</u>	<ol style="list-style-type: none"> 1. Union National des Orpailleurs de Guinee (UNOG) 2. Cooperative des Orpailleurs d'Or de Kouroussa 3. SANIMUSO Rural Gold Producer 	Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities
<u>Gold traders</u>		Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use
<u>Land owners / investors</u>		Provide input and engaged in good faith discussions related to land use and planning for ASGM actors
<u>Non land owners</u>		Provide their perspective and views on the ASGM sector, including positive and negative impacts, challenges and opportunities, and ideas for responding to them.
<u>Community leaders</u>		Assisting in the development and implementation of the project within ASGM communities, and in monitoring and evaluating progress and impact
<u>Marginalized groups (indigenous communities if any)</u>		Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; provide input regarding potential positive and negative impacts of the ASGM sector on their lives
<u>Women association in ASGM</u>	<ol style="list-style-type: none"> 1. Women in Mining Guine 	Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities
<u>Traditional leaders</u>		Traditional leaders play a somewhat informal governance role in the ASGM sector, having significant influence in their communities. Provide public support to the project and encouragement for all stakeholders to participate.
<u>Local government and administration</u>		Provide overall support and buy-in for the project; participate in project activities
<u>Downstream buyers</u>		Provide financial and in-kind support; engage in supply chain relationships with relevant and appropriate actors; provide mentorship and capacity building.
<u>Affecting the program</u>		

<u>Universities</u>	<ol style="list-style-type: none"> 1. Universit? Mahatma Ghandi 2. Universit? Kofi Annan de Guin?e 3. Universit? Utad-Guin?e[2] 4. Universit? G?n?ral Lansana Cont? de Sonfonia 5. Universit? Nongo Conakry 6. Universit? Al-Eamar de Guin?e 7. Universit? La Source 8. Universit? Fran?aise de Guin?e 9. Universit? Catholique de l?Afrique de l?Ouest 10. Universit? Jeluis Nyerere de Kankan 11. Universit? libre de Guin?e 12. Institut Sup?rieur des Mines et G?ologie de Bok? 13. Institut universitaire des Hautes ?tudes de Guin?e 	<p>Conduct research and shar knowledge with stakeholders on relevant issues; Provide trainings and knowledge transfer to miners/cooperatives; incorporate ASGM into university programming and curriculum; participate in data collection and monitoring, where possible.</p>
<u>Ministries</u>	<ol style="list-style-type: none"> 1. Ministry of Mines and Geology 2. Ministry of Health and Public Hygiene 3. Ministry of Environment and Sustainable Development 4. Ministry of Commerce, Industry and Small and medium enterprises 5. Ministry of Labour 	<p>-</p>

<u>Public services</u>	<ol style="list-style-type: none"> 1. Direction Nationale des Mines 2. Direction Nationale de Faune et Flore 3. Bureau de strat?gie et de d?veloppement 4. Laboratoire d?analyse environnementale 5. Chambre des mines de Guin?e 6. Cadastre minier 7. Direction G?n?rale des Projets Miniers 8. Office Guin?en des Mines 9. Soci?t? Nationale des Infrastructures Mini?res 10. Brigade Anti-Fraude des Mati?res Pr?cieuses 	-
<u>ONGs</u>	<ol style="list-style-type: none"> 1. Carbon Guinee 2. Action Mines Guin?e 3. Mines sans pauvrt? 4. Centre d?Etudes et de Coop?ration Internationale 5. Centre d?Appui au D?veloppement 6. Centre de Promotion et de D?veloppement Minier 	Provide sensitization and awareness-raising on the impacts of mercury usage; promote alternatives; conduct research; facilitate dialogue.
<u>Industrial mining</u>	<ol style="list-style-type: none"> 1. Soci?t? Ashanti Goldfields (Koron / Siguiri) 2. Soci?t? Mini?re de Dinguiraye (Lero / Farayala) 3. Soci?t? d?Exploitation Mini?re de l?Afrique de l?Ouest (SEMAFO) (Kini?ro) 	Engage in discussion regarding land use with ASGM actors, explore models for co-existence (where relevant) and opportunities for providing support for ASGM (e.g. technical support, buying programs, etc.)

<u>Banks and microfinance institutions</u>	<ol style="list-style-type: none"> 1. Banque Centrale de la R?publique de Guin?e (BCRG) 2. International Agency for Economic Developpement 3. Mutuelle Financi?re des Femmes Africaine de Guin?e 4. R?seau d?Assistance Financi?re aux Organisations communautaires 	Provide financing for ASGM; provide financial support to the project. Provide insight into risk perception of ASGM sector and perspectives on ASGM related issues and proposed solutions.
<u>Media</u> -	<ol style="list-style-type: none"> 1. Agence guin?enne de presse (AGP) 2. Radio T?levision Guin?ene 3. Guineenews 4. Guinee360 5. FIM Guin?e 6. Djomo media 7. Djomo Logistique, Mining 	Share information regarding the issues (impacts of mercury on health and environment, for example) and on the project.
<u>Implementing agency</u>	<u>UNEP</u>	Implementing Agency of the planetGOLD project in Guinea
<u>Executing agency (PPG Phase)</u>	<u>IMPACT, with support from CASE</u>	To develop the PPG document in accordance with international guidelines; to identify all key sources of information; to collect, analyze and summarize all data for the development of the PPG; and finally, to produce documents that reflect the national expectations for the future of ASGM.
<u>Executing Agency (project implementation)</u>	<u>CASE</u>	Coordination of implementation of the planetGOLD project in Guinea; support to stakeholders in Guinea to execute the project; project planning, reporting, activity implementation, etc. (see institutional arrangements in Annex 4 for more information)

4. Stakeholder Concerns Analysis

The programme implementation will be underpinned by collection and analysis of stakeholder expectations and concerns with the aim of taking appropriate responsive measures throughout the programme's lifetime. This will ensure buy-in of the programme. Some priorities and concerns had been raised by different stakeholders at the launch workshop with regards to the project and the ASGM sector more broadly, which included:

- measures and actions to be taken to significantly mitigate the negative impacts of mercury use on vulnerable groups of the population (women and children);
- the development synergy with other organizations throughout the project;
- the level of involvement of national ASGM actors (community leaders, miners, private mining companies, relevant deconcentrated services, etc.) for better management of health aspects; especially in terms of awareness raising;
- dissemination of good practice and personal protective equipment for miners;
- the need for easy access to finance;
- the mechanisms for accessing finance for artisanal miners and groups of miners, combined with the role of the Ministry of the Environment in the formalization process;
- the strategy for considering synergies between projects and national and international structures to achieve better coordination of activities on the ground during the project implementation phase;
- the measures to be implemented for the respect of the environment by artisanal miners in addition to the elimination of mercury in the practice of ASGM;
- the availability and need for support from the *Union Nationale des Orpailleurs de Guinée* (National Union of Artisanal Gold Miners of Guinea - UNOG); improving relations between mining supervisors and goldpanners;
- the choice of project implementation sites to cover the major ASGM areas with priority given to the areas that emit the most mercury;
- the development and implementation of awareness raising campaigns on both health and the high gains obtained through the production of mercury-free gold;
- updating mercury inventory data and impacts associated with mercury use in the new ASGM areas; and
- better involvement of all national stakeholders in the preparation and implementation of the project.

Thus, at the end of this launch workshop, the discussions arising from the various concerns of the stakeholders led to the following recommendations

1. That the new gold mining sites that have been the subject of a rush in the last two years (2020, 2021) be subject to a mercury inventory and health and socio-economic impacts in order to update the NAP data and guide the actions to be carried out in these areas when they are included in the GEF GOLD plus programme.
2. That the choice of implementation areas be guided by objective and transparent criteria allowing for national distribution in the main ASGM practice areas in Guinea.
3. That the activities of the GEF GOLD plus programme take into consideration IEC campaigns based on the health impacts of mercury used in EMAPE, safety in the practice of EMAPE, the development of a responsible gold EMAPE and the protection of nature by artisanal miners.
4. That mechanisms for better involvement of all relevant national stakeholders and ensuring sustained access to finance for artisanal miners be implemented in the course of the GEF GOLD plus programme.
5. That UNOG takes responsibility for supporting government entities in the entire process of formalising the artisanal mining sector and improving relations between the deconcentrated and decentralised structures of the administration, the managers of EMAPE sites, industrial mining companies and artisanal miners.
6. That the implementation and execution mechanisms as carried out during the development of the National Action Plan for the reduction of mercury in EMAPE in Guinea be renewed, this time with a steering committee co-chaired by the ministries in charge of the environment and mines.
7. That CASE, because of the quality of the results obtained during the development of the NAP and its experience in West Africa in EMAPE, be retained as the implementing agency for the Gold+ programme in the Republic of Guinea.

5. Stakeholder Limitations during the PPG Phase

During the PPG Phase, there were some challenges encountered with respect to carrying out meaningful stakeholder engagement within the design of the project. Administrative delays in approving the inception workshops for the PPG phase led to lags in introducing the project and the executing agency and its partner CASE to effectively reach out to different stakeholders. Further, technological difficulties often impeded effective outreach (e.g. dropping connections, poor sound quality, etc.). Respective government officials were often very busy with other priorities or traveling, which at times led to delays or a lack of responsiveness. There is also a culture of centralization through the government and respective agencies that can also make it difficult to conduct broader outreach and consultations in an efficient manner. The project has budgeted for a stakeholder engagement officer within the project team in order to help facilitate greater stakeholder engagement throughout the life of the project.

6. Roles and Responsibilities for Stakeholder Engagement

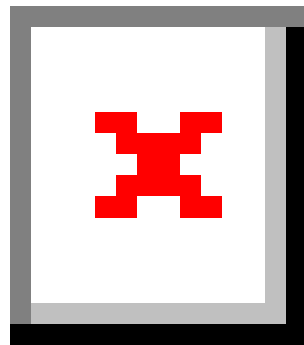
The following table outlines the key responsibilities for each of the various institutions responsible for implementing the GOLD++ project in Guinea (specific to stakeholder engagement).

Organization	Responsibilities
Ministry of Environment and Sustainable Development	Facilitation of regular stakeholder engagement meetings; provide input and approval for various communications materials for the project, as needed; host, lead and/or participate in consultative meetings with various stakeholders; lead and/or support the implementation of specific stakeholder engagement activities and sensitization, such as community meetings, popular theatre, etc.
UNEP/CI	Responsible for overall project supervision, including adequate and appropriate stakeholder engagement throughout the project; sharing information on stakeholder engagement related to the global programme (e.g. global programme grievance mechanisms, best practice, etc.); member of the Project Steering Committee (PSC)
CASE	Coordinating regular stakeholder meetings (preparing agenda, invitations, logistics, etc.); support the drafting of various communication materials (e.g. brochures, etc.); support the implementation of specific stakeholder engagement activities and sensitization, such as community meetings, popular theatre, etc.

The Project Steering Committee will review, adapt as necessary and finalize this stakeholder engagement plan at the onset of the project. The Project Manager will have overall responsibility for ensuring the implementation of the stakeholder engagement plan throughout the span of the project. Given that multistakeholder engagement, coordination amongst stakeholders, and knowledge sharing are all pivotal components of this project, the project team will include a Government and Stakeholder Engagement Coordinator. This person will help to execute the stakeholder engagement plan and will work in close collaboration with the Ministry of Environment and Sustainable Development as the Chair of the Project Steering Committee and lead government agency for the GOLD++ project in Guinea. The Government and Stakeholder Engagement Coordinator will be responsible for supporting regular updates and information sharing with stakeholders via various communications mediums designed for each particular stakeholder group (e.g. email updates, webinars, community meetings, etc.). The Gender and Inclusion Officer will also play a role in supporting the Stakeholder Engagement Coordinator to ensure that women and other potentially vulnerable or disenfranchised groups are provided with the support needed to effectively participate in the stakeholder engagement process.

The Ministry of Environment and Sustainable Development will be responsible for facilitating regular stakeholder engagement meetings ? primarily via an annual stakeholder workshop ? with the support of the executing agency. The Ministry of Environment and Sustainable Development will be responsible for coordinating and communicating with other government ministries and departments using official communication and information dissemination channels, supported by the Government and Stakeholder Engagement Coordinator.

7. Stakeholder Engagement Cycle



The programme will engage and communicate with various identified stakeholders as outlined below.

Stakeholder	Means of Engagement	Occurrence
Miners, traders, associations/cooperatives, community-based organizations, traditional leaders, local governments	Local stakeholder meetings	Quarterly
	Direct participation in project activities	Ongoing
	Popular theatre	As needed
	Media (print, radio)	As needed
	Ad-hoc meetings/focus group sessions	As needed
	Brochures/signs	As needed
	Participation in PSC-hosted meetings (as needed)	As needed
Government agencies and departments	Official communication channels	As needed
	Regular project updates (e.g. listserv)	Semi-annually
	Participation in PSC-hosted meetings (as needed)	Annual
NGOs (national level)	Participation in PSC-hosted meetings (as needed)	Annual
	Regular project updates (e.g. listserv)	Semi-annually
	Participate in specific activities	As needed/relevant

Private sector	Participation in PSC-hosted meetings (as needed)	Annual
	Regular project updates (e.g. listserv)	Semi-annually

8. Budget and Resources

The project budget makes provisions for supporting stakeholder engagement throughout implementation vis-?-vis the following:

- ? A dedicated staff person from the project management unit (PMU) to supporting and coordinating stakeholder engagement with the government and stakeholders.
- ? An annual planning meeting where stakeholder representatives can participate and share their views and experiences.
- ? Regular site-level engagement sessions, where project beneficiaries and other stakeholders can share progress, challenges, concerns and any other information.
- ? Communications materials (e.g. pamphlets, community theatre, radio, etc.)

9. Monitoring and Evaluation

Effective stakeholder engagement and coordination is key to the overall success and ultimate sustainability of the project. In order to monitor the effectiveness of the stakeholder engagement conducted throughout the project, the following indicators will be used for monitoring and reporting purposes. The executing agency will be responsible for collecting the necessary information to monitor and report on the effectiveness of the stakeholder engagement conducted throughout the project.

No.	Indicator	Target	Source	Reporting period
1.	Number of stakeholders participating in Annual Project Workshop	TBD	Participant list	Annually
2.	Percentage of stakeholders who rate as satisfactory the level at which their views and concerns are considered by the programme	70%	Evaluation survey at Annual Workshop	Annually
3.	Number of engagement/consultation sessions held (meetings, workshops, trainings, consultations, etc.) with stakeholders throughout the programme	Based on final activity plan	Activity monitoring reports	Annually
4.	Number of participants (women and men) at project information/sensitization sessions at the mine site or prefecture level	TBD, location specific	Participant list and/or session report	Annually
5.	Percentage of stakeholder concerns resolved	70%	Log of stakeholder concerns received	Annually

6.	Number of project updates (e.g. newsletter, e-update or in-person updates at Annual Stakeholder Workshop) shared with stakeholders (bi-annually)	2 per year	Newsletters	Annually
7.	Number of partnerships formalized between the project and stakeholders	TBD	Partnership announcements, programme reports	Annually

^[1] Global Environment Facility, Policy on Stakeholder Engagement, 2017. Page 7

https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.53.05.Rev_.01_Stakeholder_Policy_4.pdf

^[2] Ibid

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

In order to ensure inclusive participation and consultation, the following stakeholders have been identified for consultation through the lifetime of the programme. The list includes the identified social groups and persons that are associated with the programme in different ways at all stages as follows:

- ? persons and social groups affected directly or indirectly by the outcomes of the programme's implementation.
- ? persons and social groups who can influence and decide the outcomes and the manner of the programme's implementation or make decisions based on the outputs of the programme,
- ? persons and social groups that participate in the programme implementation directly.

Particular effort will be taken to ensure that women and representatives of other vulnerable groups (e.g. ethnic or religious minorities, youth, etc.) are adequately represented and able to fully participate in the consultation and engagement that will take place throughout the duration of the programme.

Table 3: M&E Summary

Type of stakeholders	Examples	Role
<u>Affected by the programme</u>		
<u>Miners</u>	Diggers Transporters Processors	Provide information and perspectives on their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities
<u>Miners' cooperatives and associations</u>	Union National des Orpailleurs de Guinee (UNOG) Cooperative des Orpailleurs d'Or de Kouroussa SANIMUSO Rural Gold Producer	Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities
<u>Gold traders</u>		Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use

<u>Land owners / investors</u>		Provide input and engaged in good faith discussions related to land use and planning for ASGM actors
<u>Non land owners</u>		Provide their perspective and views on the ASGM sector, including positive and negative impacts, challenges and opportunities, and ideas for responding to them.
<u>Community leaders</u>		Assisting in the development and implementation of the project within ASGM communities, and in monitoring and evaluating progress and impact
<u>Marginalized groups (indigenous communities if any)</u>		Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; provide input regarding potential positive and negative impacts of the ASGM sector on their lives
<u>Women association in ASGM</u>	1. Women in Mining Guin?e	Provide information and perspectives regarding their needs, realities, concerns, risks and incentives/ideas related to formalization and addressing mercury use; participate directly in project activities
<u>Traditional leaders</u>		Traditional leaders play a somewhat informal governance role in the ASGM sector, having significant influence in their communities. Provide public support to the project and encouragement for all stakeholders to participate.
<u>Local government and administration</u>		Provide overall support and buy-in for the project; participate in project activities
<u>Downstream buyers</u>		Provide financial and in-kind support; engage in supply chain relationships with relevant and appropriate actors; provide mentorship and capacity building.
<u>Affecting the program me</u>		
<u>Universities</u>	<p>Universit? Mahatma Ghandi</p> <p>Universit? Kofi Annan de Guin?e</p> <p>Universit? Utad-Guin?e[2]</p> <p>Universit? G?n?ral Lansana Cont? de Sonfonia</p> <p>Universit? Nongo Conakry</p> <p>Universit? Al-Eamar de Guin?e</p> <p>Universit? La Source</p> <p>Universit? Fran?aise de Guin?e</p> <p>Universit? Catholique de l?Afrique de l?Ouest</p> <p>Universit? Jeluis Nyerere de Kankan</p> <p>Universit? libre de Guin?e</p> <p>Institut Sup?rieur des Mines et G?ologie de Bok?</p> <p>Institut universitaire des Hautes ?tudes de Guin?e</p>	Conduct research and shar knowledge with stakeholders on relevant issues; Provide trainings and knowledge transfer to miners/cooperatives; incorporate ASGM into university programming and curriculum; participate in data collection and monitoring, where possible.

<u>Ministries</u>	Ministry of Mines and Geology Ministry of Health and Public Hygiene Ministry of Environment and Sustainable Development Ministry of Commerce, Industry and Small and medium enterprises Ministry of Labour	
<u>Public services</u>	Direction Nationale des Mines Direction Nationale de Faune et Flore Bureau de strat?gie et de d?veloppement Laboratoire d?analyse environnementale Chambre des mines de Guin?e Cadastre minier Direction G?n?rale des Projets Miniers Office Guin?en des Mines Soci?t? Nationale des Infrastructures Mini?res Brigade Anti-Fraude des Mati?res Pr?cieuses	
<u>ONGs</u>	Carbon Guinee Action Mines Guin?e Mines sans pauvr?t? Centre d?Etudes et de Coop?ration Internationale Centre d?Appui au D?veloppement Centre de Promotion et de D?veloppement Minier	Provide sensitization and awareness-raising on the impacts of mercury usage; promote alternatives; conduct research; facilitate dialogue.
<u>Industrial mining</u>	Soci?t? Ashanti Goldfields (Koron / Siguiri) Soci?t? Mini?re de Dinguiraye (Lero / Farayala) Soci?t? d?Exploitation Mini?re de l?Afrique de l?Ouest (SEMAFO) (Kini?ro)	Engage in discussion regarding land use with ASGM actors, explore models for co-existence (where relevant) and opportunities for providing support for ASGM (e.g. technical support, buying programems, etc.)
<u>Banks and microfinance institutions</u>	Banque Centrale de la R?publique de Guin?e (BCRG) International Agency for Economic Development Mutuelle Financi?re des Femmes Africaine de Guin?e R?seau d?Assistance Financi?re aux Organisations communautaires	Provide financing for ASGM; provide financial support to the project. Provide insight into risk perception of ASGM sector and perspectives on ASGM related issues and proposed solutions.
<u>Media</u>	Agence guin?enne de presse (AGP) Radio T?levision Guin?ene Guineenews Guinee360 FIM Guin?e Djomo media Djomo Logistique, Minning	Share information regarding the issues (impacts of mercury on health and environment, for example) and on the project.

<u>Implementing agency</u>	UNEP	Implementing Agency of the planetGOLD project in Guinea
<u>Executing agency (PPG Phase)</u>	IMPACT, with support from CASE	To develop the PPG document in accordance with international guidelines; to identify all key sources of information; to collect, analyze and summarize all data for the development of the PPG; and finally, to produce documents that reflect the national expectations for the future of ASGM.
<u>Executing Agency (project implementation)</u>	CASE	Coordination of implementation of the planetGOLD project in Guinea; support to stakeholders in Guinea to execute the project; project planning, reporting, activity implementation, etc. (see institutional arrangements in Annex 4 for more information)

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Guinea's artisanal mining sector has received little attention when it comes to gender-related issues. This is an issue found across West Africa and is described in the Gender Analysis and Action Plan (see Appendix 6). As for men miners, women miners are also highly migratory and originate for the most part from neighboring countries. They reached the northeastern parts of Guinea to explore gold riches, pushed by poverty. Inequality in terms of access to mine sites, economic benefits, and recognition of the role of women has shaped the industry and are driven by cultural taboos and stigmatization. While some initiatives have taken place, they are generally infusion, misinformed, and male-driven, questioning both their feasibility and adequacy.

Women play a critical role in the industry as they take the ore out of the pit, clean it and process it, and establish support systems to the extractive process in the form of small businesses. Women's activities at the mine site are particularly exposed to mercury as they process minerals contaminated with toxic agents.

Research has highlighted the beneficial role of the ASGM sector to provide economic benefits for women as they can earn a much higher income than in other livelihoods. The notion of economic empowerment is critical to understand changes in the social sphere. As women earn increased income, their status in society evolves and often translates in increased social standing. The contributions of women to the household and the community more broadly can also trickle down to the political representation of women in the regions where ASGM operates.

As the Gender Annex in this document highlights, changes need to be made to efficiently address the gender inequalities in the ASGM industry. Administrative, legislative, regulatory, and policy changes need to be informed by in-depth engagement with women in the mine sites and reflect their position and needs. In many cases, we have seen interventions implemented without proper consideration to on-the-ground realities having significant negative impacts and perpetuate of increased gender inequality.

Throughout this project, gender will be given full consideration and an assessment will be conducted at the onset of the project to better understand gender dynamics in the sector. Existing tools may be used for this, such as *IMPACT's Toolkit: Gender Impact Assessments for Projects and Policies Related to Artisanal and Small-Scale Mining*. The toolkit, released in 2020, provides a set of resources and guidance to policymakers and project implementers on meaningfully considering the gender implications of particular policies or projects.

Please, refer to Appendix 6 "Gender Analysis and Action Plan" for more detailed information (French).

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services for women Yes

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

Private sector engagement is pivotal to the success of mercury reduction projects, including in Guinea. Addressing this challenge necessitates a coordinated approach between artisanal miners, traders, service providers, ASGM association and cooperatives, refiners, and large-scale miners. Mercury use is the result of complex socio-economic root causes that can only be tackled using an inclusive and holistic approach. Hence, the private sector will be actively engaged during this project.

As primary users, miners and their association and cooperatives are the primary group to be engaged with for behavioral change. To ensure the long-term sustainability of the project, miners were at the core of the design and development of the project and were actively consulted in the PPG phase. During the project itself, the stakeholder engagement plan will provide the necessary avenue for miners to provide feedback, informing the subsequent actions implemented. While miners will inform the on-the-ground implementation of the project, their associations and cooperatives will also provide important learnings regarding institutional, administrative, and legal aspects of ASGM.

To better understand the supply chain component of gold mining, the project will engage with traders. Creating a legal supply of artisanally mined gold will not only need the formalization of the mine sites, but also the streamlining and legalization of gold trading. This will also avoid smuggling and the loss of significant tax revenues for the country. Beyond the gold trade, as we have discussed in the national baseline, many of the mercury inputs are brought in Guinea by gold traders from Burkina Faso and Mali.

Hence, understanding the gold trading system will allow us to understand the mercury trade as well. The knowledge created by this engagement will inform potential evolutions of the legal instruments that govern artisanal gold mining. In particular, in the context of the ECOWAS, the diversity of tax systems is a significant obstacle promoting smuggling. Guinea's very low taxation often creates incentives for smuggling that could be addressed with a common tax system.

Developing a clean supply of artisanal gold from Guinea is also dependent on the ability to sell the production on global markets. Hence, the project will engage refiners located abroad to develop sourcing relationships with artisanal miners. As one of the main challenges to economically sustainable artisanal mining, the project will seek to support financing relationships via refiners and other downstream actors or financial institutions, such as through the provision of inventory funding to traders and cooperatives. Considering the risks in artisanal sourcing, most of the internationally accredited refiners (LBMA, RJC and RMI) are hesitant to source from the sector.

However, preliminary engagement with Swiss-based refiner Argor Heraeus to source from artisanal sites while supporting progressive improvements (the approach outlined in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD DDG), and eventually raising expectations to meet those defined in the planetGOLD criteria. Specifically focused on mercury, this will include exploration of a sustainable business model in which toxic processes are reduced to a minimum through an incentive-based structure, while maintaining equilibrium for both the miners and the refiner.

Large-scale miners also play a significant role in addressing the formalization of their ASM counterparts. In particular, the LSM sector necessitates wide swath of land that are traditionally used by artisanal miners. In the case of Guinea, AngloGold Ashanti owns 85 percent of the Siguiri mine, a large-scale gold extraction site. The company has shown interest in supporting the planetGOLD project with neighboring ASGM operators which could provide avenues to facilitate the exportation of artisanal and responsibly produced gold.

Finally, the banking and micro loans sector will be an important interlocutor. As discussed in the National Baseline, the banking sector is not currently appropriately equipped to support artisanal mining operations. First, trust in ASGM operators is lacking, excluding them from loans. Second, banks are often implanted in urban areas with very few branches in rural parts. Third, the structure of micro lending agencies does not allow them to positively support artisanal mining as their loans are too little for a capital-intensive industry.

While artisanal mining does not necessitate immense financing inputs, the current structure of micro lending agencies is based on agricultural work, which consumes less capital than mining. The project will serve as an opportunity for sensitizing the finance sector (both large, institutional actors as well as microfinance actors) to the ASGM sector in order to increase their capacity and willingness to engage with the sector.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Please, refer to Appendix 9 "Risk Mitigation Plan" for more detailed information. See below a summary of the main findings:

Table 4: Risk Mitigation Plan

Risk	Risk rating	Proposed mitigation measures
Covid-19 related risks		
Covid-19 restrictions (movement, large gatherings, travel, etc.) continue to be in place	Low-Medium	The Covid-19 pandemic and potential new developments, such as those relating to emerging variants continue to pose a challenge and could result in the application of various measures, such as lockdowns and restrictions on gatherings. The project team will closely monitor the Covid-19 case numbers and analysis in order to shift activities as needed. Activities will either be postponed to a later date post-lockdown, or may be adapted to account for restrictions (i.e. small meetings, outdoors, online events, etc.). Covid-19 precautions will be followed (e.g. working from home when needed, wearing face masks, hand sanitizing, etc.).
Shifting priorities due to Covid-19 pandemic or other international events	Low-Medium	It is possible that national and local government authorities are preoccupied with combatting Covid-19 and future recovery efforts. The project will rely on its stakeholder engagement plan in order to ensure that adequate consultation and engagement is had to validate project interventions and adapt as needed. Given the economic importance of the ASGM sector to many local communities, the project may be in a position to link its activities to local development plans in order to support economic recovery post-covid.
Political / Governance-Related Risks		

Lack Political Stability	Medum-High	There has been significant political instability in Guinea over the past year, with a military coup that took place in September 2021. This saw certain political repercussions, such as the suspension of Guinea from the African Union and ECOWAS, and follows a regional trend that has emerged across West Africa. This is the case in Mali, where there were two coups in less than a year, in August 2020 and May 2021. During the same month of May 2021, Chad also experienced a coup d'état. As a result of these political repercussions, which undermine the security of the population, only Mali has had the sanction of being suspended from the African Union and ECOWAS. ^[1] This type of political transition can create challenges for the project in terms of Government buy-in, stability of public representatives and prioritization of activities. However, as a primarily technical project, these risks can in part be mitigated via strong working relationships at the bureaucratic and technical level, as well as at the international level via UNEP and the planetGOLD programme.
Staff turnover within government ministries/departments	Medium	The project is emphasizing institutional capacity building across a number of ministries and departments, as well as levels of government (national and local) in order to maximize the impact of the project. This will help mitigate against potential shifts in key personnel that are trained. Furthermore, the identification and partnership with other training institutions or partners (e.g. universities, NGOs) will also help to mitigate this risk.
Environmental / Climate Risks		
Miners do not trust or buy-in to mercury-free technologies	Medium	Miners in Guinea have demonstrated that they do not always trust that mercury-free technology captures gold as efficiently as mercury amalgamation. This can present a risk to the project in promoting uptake of mercury-free technologies. This risk will be mitigated via effective trainings that include demonstrations and clear communication (as well as the provision of equipment), as well as a number of sensitization sessions that continue to highlight the harms of mercury usage.
Lack of prioritization of reducing mercury usage by miners, including when financing is available (or miners simply do not endorse mercury-free processing methods)	Medium	Poverty often prevents miners from prioritizing health and environmental impacts, as they often are more focused on addressing basic needs (food, housing, school fees, etc.). The project will mitigate these risks by engaging with ASGM associations supported by the project on expectations and goals, focusing on identifying incentives that can encourage miners to prioritize mercury reduction, as well as on securing access to the financing needed to invest in mercury-free technologies. Project activities on sensitization on the harmful effects of mercury, and a broad-based approach to sensitization (i.e. multistakeholder) will help to mitigate the potential for miners or ASGM associations to reject mercury-free processing.

Climate change impacts, such as increased flooding or droughts, have a negative impact on the project activities and project beneficiaries (e.g. increased poverty related to climate change impacts)	Medium	Increased rain or changes in rainfall patterns can negatively impact artisanal mining production as well as agricultural productivity (which is often carried out by many artisanal miners as an additional subsistence or income source). It is possible that these changes negatively affect the project by impacting production or serving as an impetus for migration to other areas. The project will work with a new application being tested in Guinea called Climate Genius in order to test its application to supporting miners to better predict the potential impacts of climate change on their production. Further, the project will also ensure that its security plan takes into account potential natural disaster risks or travel risks (e.g. flooded roads impeding travel).
Programmatic / Other Risks		
Risk-aversion of LBMA/reputable gold refiners	Medium	Some LBMA/reputable gold refiners have been hesitant to source from artisanal gold supply chains, or are actively avoiding them, due to perceived human rights, social, labour and environmental risks. This has contributed to the difficulty the sector has had to access formal markets (formal and transparent supply chains with formal financing). The project has sought to mitigate this through early engagement with the LBMA and a member refinery, as well as ongoing engagement throughout the project. Furthermore, the progressive implementation of the planetGOLD criteria will also serve to build confidence of refiners and other actors further downstream.
Supply chain partners are unable to establish commercial terms (or, competitive commercial terms compared to the informal market)	Medium	It is possible that the ASGM associations and supply chain actors further downstream (trader, refiner, etc.) are unable to agree to commercial terms (e.g. price, timing of payments, etc.) that are comparable with the informal market, or competitors in the formal market that do not promote responsible or mercury-free gold production. To help mitigate this risk, the project plans to carry out engagement with supply chain actors and conduct a supply chain mapping to identify the incentive structures, pricing dynamics, relationships and other dynamics (e.g. logistics, services, etc.) to support the establishment of an economically feasible model that benefits all actors in the supply chain and promotes improved practices.
Low risk threshold by financial institutions / other potential providers of access to credit	Medium	Like gold refiners, financial institutions and other lenders have been hesitant to provide access to financing for the ASGM sector due to reputational risks and financial risks. The project proposes activities that include specific engagement of financial institutions in order to help build trust and understanding of the needs and demands of both the ASGM sector and the finance sector, so that both can work collaboratively to further access to finance in the sector. Additional technical support will be provided to specific cooperatives/associations that enter discussions and negotiations with financial institutions, to help build confidence. The sensitization and support for progressive improvement (e.g. OECD Due Diligence, planetGOLD criteria, etc.) will also help build the confidence and lower risk for financial institutions.

Land conflict / Social tension	Low	The lack of an effective formalization framework for the ASGM sector coupled with the prioritization of large-scale mining has led to some conflict over access to land in some parts of Guinea. Additionally, disputes can arise between local communities and external actors (from both within or outside of Guinea) who come to capitalize on gold rushes.
Efficient and lucrative alternative mercury-free gold processing techniques are not appropriate (or not available) for ASGM	Medium	There is a challenge with respect to mercury-free technologies that relates to the very small quantities that are generally produced by ASGM miners. This is reflective of a significant portion of the ASGM workforce, and therefore is critical to addressing mercury usage in the sector writ large. Technical assessments carried out by the project will help to identify the presence of this risk, and experts in the field will be called on to help mitigate to the extent feasible.
Interference by mercury traders	Medium	Informal gold traders are often the suppliers of mercury, and can have complex economic and/or social relationships with miners which can be difficult to break. These traders can become spoilers to the project by acting in direct competition to formal and legal sales channels. The project will engage these actors when presenting and discussing the project, in order for their views and perspectives to be taken into consideration, as well as to help inform them of the harms of mercury and potential transition to other alternatives to which they could potentially play a role (and possibly benefit from, i.e. sales of alternative mechanisms).
Inability to identify a gold exporter that meets minimum due diligence expectations of refiners	Medium	Identifying a gold trader with whom the artisanal gold mining associations selected for the project can work with to supply gold to the international market, will be important. However, the informality and general secrecy that characterizes the artisanal gold trade in Guinea could make this difficult, and traders/exporters may not be willing to participate in minimum due diligence processes. The project's inclusion of a large group of stakeholders ? including exporters and traders ? from the onset will help to support early relationships and trust-building that can promote collaboration. This will also present an opportunity to carry out progressive due diligence on these actors, and ensure there is meaningful buy-in for the project and its goals.
ASGM associations and miners are unable to meet the standards established by planetGOLD	High	ASGM associations have had limited capacity to implement or demonstrate implementation of responsible sourcing standards and criteria. The project will mitigate this risk by providing technical support and accompaniment to the ASGM associations to meet these criteria, as well as identifying incentives to do so (i.e. access to finance). Emphasis will be made on supporting the management of the cooperatives to increasingly take on more responsibility, building from the minimum baseline (i.e. adherence to OECD DDG) to progressively meeting the more stringent criteria outlined by planetGOLD.

ISS-Institut d'Etudes de Sécurité., 2021. Les coups d'Etat sont de retour en Afrique. <https://issafrika.org/fr/iss-today/les-coups-detat-sont-de-retour-en-afrique>

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

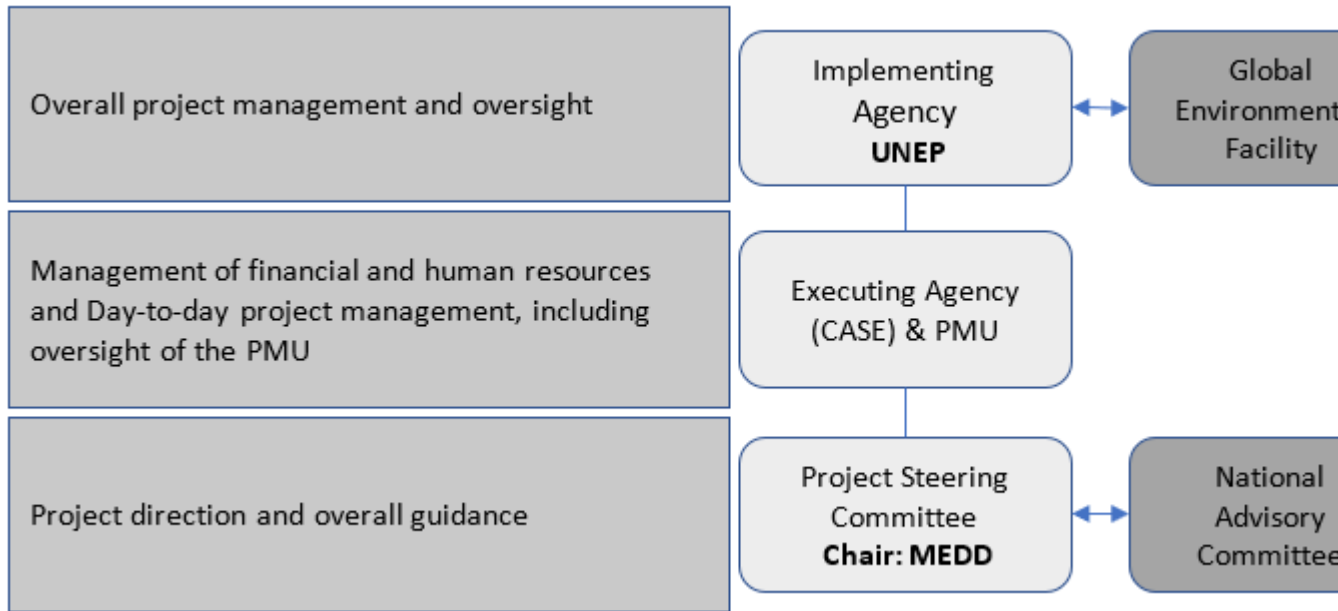


Figure 4: Project Governance Structure

Below is a general description of each management body:

Implementing Agency (IA): UNEP will serve as the IA. The IA will be responsible for the overall project supervision, overseeing the project progress through the monitoring and evaluation of activities and progress reports of the established components. It will be responsible for quality assurance procedures, organize contracting, in coordination with MEDD and the Executing Agency (EA), approve progress reports and clear disbursement. The IA will also monitor progress to ensure the proper quality of outputs. UNEP will report project implementing progress to GEF. The IA will also take part in the Project Steering Committee (PSC) and can request PSC to meet outside of the planned schedule as deemed necessary.

Executing Agency (EA): CASE will serve as the EA. With the guidance of the PSC, the EA is responsible for the overall management of the financial and human resources directly related to project execution in the country. It will function as the general oversight for the project and will be accountable to the implementing agency for the achievement of project outputs and outcomes. The EA will take guidance from the GEF implementing agency and the PSC in all matters concerning the project.

In the delivery of its functions, it will participate in PSC and National Advisory Committee meetings. A Project Management Unit (PMU) will be embedded within the Executing Agency, and will be in charge of the day-to-day management of the project. This will be composed of a Country Project Manager and other project staff who will be directly under the Executing Agency's supervision, and who will have access to a wide range of experts and specialists throughout the execution of project activities. The PMU will regularly provide updates to the PSC and will submit quarterly progress

reports. Annual workplans and progress reports will be submitted to the PSC for endorsement. The PMU will also be responsible for the daily project finances with approval from the EA. The PMU will:

- ? be responsible for the efficient and timely preparation and execution of project activities;
- ? provide on-the-ground coordination to facilitate project execution; prepare concept notes, plans, summaries, and reports as required by the project in a timely manner; facilitate coordination meetings and other related dialogues
- ? with the guidance of the PSC;
- ? form part of any technical working group that may be established by the project;
- ? identify, develop, and foster contacts and relationships that will be beneficial for the project;
- ? execute the project communication strategy including information dissemination with the guidance of the PSC;
- ? apply the project's knowledge management approach
- ? execute a regular project monitoring plan
- ? functions as secretariat of the PSC

Project Steering Committee (PSC): The PSC will be chaired by the MEDD and provide project direction and overall guidance to project implementation, making critical decisions on strategic matters. The three members of the PSC will include MEDD, MEEF, and UNEP. The PMU (functionally the Executing Agency) will serve as the Secretariat and provide annual workplans for endorsement and regular progress reports. The PSC will consist of representatives of the beneficiary country, the IA, and the EA.

It will also ensure the timely delivery of project outputs and the eventual achievement of the project outcomes by reviewing workplan and progress reports. Additional stakeholder representatives from academia, NGOs and other relevant areas may be invited to join the PSC during the project execution as experts or observers, including members of the National Advisory Committee (see below). At all times, the PSC and its activities will comply with the policies, conditions and regulations of the UN and the GEF.

National Advisory Committee (NAC): The project will support the MEDD to establish a multistakeholder national advisory committee to advise the PSC and support efficient project delivery with all relevant national and local stakeholders. The NAC will periodically participate in PSC meetings, as needed, and may be relied on for bilateral meetings to provide input into project planning and implementation.

The PSC and National Advisory Committee will also facilitate collaboration of the project with other country initiatives, stakeholders and institutions. The composition of the NAC will be confirmed by the PSC at the beginning of the project, and will be drawn from the following:

The National Miners Union of Guinea (Union Nationale des Orpailleurs en Guinee ? UNOG)

Community leaders and local authorities from ASGM areas

Indigenous groups - members from the local community

Environmental and human health organisations

Academic and research organisations - universities and research institutions

Representatives from large scale mining (e.g. AngloGoldAshanti, other LSM companies)

Gold buying agents, gold traders, mercury traders
Waste management specialists - environmental and public health officials
Private sector partners such as large-scale mining companies or equipment providers
Financial/banking sector - micro finance, Sacco groups
Representatives of the United Nations country teams
Women-based organisations working in the ASM/mining sector

Roles of the key stakeholders:

The MEDD, as the project counterpart and Minamata Convention Focal Point will have the following specific roles:

- ? Chair the Project Steering Committee
- ? Coordinate the Government's efforts through communication and information dissemination to relevant government stakeholders to support effective implementation of the project;
- ? Serve as the main convening body of the government;
- ? Guide the Executing Agency during the implementation process of the project
- ? Take an active role in applying and disseminating the lessons derived from the Project in the ongoing development of policies and regulations in or related to the extractive sector in Guinea.
- ? Provide advice, information, and other relevant data on the appropriate policy frameworks and legislation at the national level that must guide the implementation of the project;
- ? Provide guidance to the Executing Agency and local partners organization/s in collecting, documenting, analysing and sharing with appropriate stakeholders for possible adaptation and/or replication, information on successful models, best practices and lessons learned from the Project;
- ? Facilitate communication and information dissemination within the ministry and with other stakeholders as appropriate.

UNEP as implementing agency will have the following role:

- ? Participate to project Steering Committee Meetings and ensure decisions are compliant with GEF and UNEP's rules
- ? Participate to project Steering Committee Meetings and ensure project is implemented as planned
- ? Communicate with the GEF on project implementation
- ? Validate quarterly reports received from the Executing Agency in coordination with the MEDD
- ? Validate and finalise PIR and forward to the GEF
- ? Organise Mid-Term Review
- ? Organise independent Terminal Evaluation

The executing agency will have the following role:

- ? Coordinate the PMU
- ? Report quarterly to UNEP and the MEDD on expenditure and progress
- ? Prepare annual Project Implementation report
- ? Provide independent financial audit to UNEP in coordination with the MEDD
- ? Recruit staff/consultants and contract sub-contractors as per TORs and budget

The Project Management Unit will:

- ? Manage the day-to-day management of the project according to workplan and budget approved by Steering Committee;
- ? Review reports from consultants and sub-contractors against TORs.
- ? Act as secretariat to the Steering Committee;
- ? Prepare documents for the Project Steering Committee (state of expenditures, work plan, TORs for consultants and sub-contractors, agenda);
- ? Take Steering Committee minutes and circulate for approbation.

The Project Steering Committee will, under the chairmanship of the MEDD:

- ? Approve TORs for PMU (only at beginning of project);
- ? Discuss and approve work and budget plan (annually);
- ? Discuss and approve TORs for consultants and subcontractors;
- ? Guide communication and information dissemination;
- ? If needed, propose adjustments to project plan;
- ? Host an annual stakeholder workshop (with logistical support and organization provided by the PMU).

The National Advisory Committee will:

- ? Attend PSC meetings, when needed;
- ? Assist in the selection of the national consultants and experts;
- ? Advise on the development of the project progress, and ensuring alignment with other national priorities, projects and programming;
- ? Provide technical expertise and experiences, as needed.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

ASGM National Action Plan (NAP)

Minamata Initial Assessment (MIA) under Minamata Convention

UNDAF

Detailed below are the national priorities, plans, policies, and legal frameworks in Guinea that are consistent with the objectives of the planetGOLD programme.

Minamata Convention on Mercury: National Action Plan

Guinea signed the Minamata Convention in September 2014 and ratified it in October 2018. The text entered into force on August 16th, 2017. To align its policies with the Convention, the country developed a National Action Plan (NAP) in 2021.

The Minamata Convention Initial Assessment (MIA) was published in 2018 and underlined the lack of information regarding the sector and in particular the use of mercury. To address this gap, the MIA

supports additional research in the field to address appropriately the issue of mercury. This is in line with the objectives of the planetGOLD project.

The National Action Plan (NAP) for the Artisanal and Small-Scale Mining of Gold (ASGM) addresses the needs of the sector and establishes a baseline regarding the social, economic, environmental, and political role of mercury in the ASGM. The NAP allowed for an assessment of the infrastructural and legislative tools in place to address mercury usage in the sector. Additionally, it provides an avenue for improvement and identifies gaps. In particular, the NAP identified activities to undertake capacity building and training to support parties to facilitate the development, review and constant updating of the NAP. Additionally, it produced effective strategies to prevent a resurgence of mercury use in ASGM by supporting educational, outreach and capacity building initiatives; the promotion of research into sustainable mercury alternative practices; the provision of technical and financial assistance; and fostering partnerships to assist in the implementation of Guinea's commitments.

All of the activities proposed in the planetGOLD project in Guinea are either identical to those that were proposed in the NAP, or will serve to further advance and build off of the objectives set out in the NAP (e.g. access to finance).

Plan National de Développement Economique et Social (PNDES) 2016-2020 (Economic and Social National Development Plan (ESNDP) 2016-2020)

The ESNDP 2016-2020 follows the first version of the plan (2011-2015) that highlights the will of the Guinean government to integrate social and economic development at the core of its policies and reach emerging economy status by 2040. The plan is the result of a participative process that included the presidency, the ministries, private sector, and civil society. The ESNDP intends to adopt a three-pillar approach that aims at promoting the development of a strong and redistributive economy in Guinea.

The pillars are as follows, (1) developing the agricultural, forestry, and fishery industries to address poverty and food insecurity, (2) promoting a manufacturing industry supported by primary sectors such as mining – allowing to develop all value chains and their respective sectors, (3) integrating the mining sector to the remaining of the economy through the development of SMEs to provide services to the mines, and the investment of mining proceeds in the agricultural, pastoral and forestry sectors.

The planetGOLD programme, through the formalization of ASGM production and the reduction in mercury emissions aligns with the 2016-2020 ESNDP. In particular, while the ESNDP focuses mainly on industrial mines, the planetGOLD programme will highlight the potential of the ASGM as development strategy, and the create benefits that trickle down to the rest of the communities. Additionally, the project will also contribute to an increased focus on creating positive ASM/LSM relations, which is key to maximizing the benefits of both sectors to local communities and the country as a whole.

Plan-cadre des Nations Unies pour l'aide au développement (PNUAD 2018-2022) (United Nations Framework for Development Aid – 2018-2022)

The framework of the United Nations with the government of Guinea follows a four-pillar approach: (1) reinforcing national institutions, democracy, security, social peace, and an efficient institutional governance; (2) enhancing food security, sustainable use of the environment, and the resilience of populations toward global warming; (3) promoting equal access to quality social services; and (4) enhancing employment and women, youths, migrants and people with disabilities entrepreneurs.

The planetGOLD programme directly answers to some of the priorities defined by the United Nations in partnership with the Guinean government. In particular, the environmental pillar of the framework will benefit from addressing the mercury issue in the ASGM sector. Beyond the anthropogenic emissions of toxins, the planetGOLD programme integrates a pillar promoting social equality (promotion of gender equality) which will support pillar four and the participation of women in critical economic sectors.

Strat?gie Nationale sur la Diversit? Biologique pour la Mise en ?uvre en Guin?e du Plan Strat?gique 2011 ? 2020 (SPANB) (National Strategy on Biological Diversity for the Implementation of the Strategic Plan 2011-2020 in Guinea)

The SPANB answers to the Aichi development goals as the Guinean government selected 18 of the 20 goals. Five strategic goals have been devised by the government: (A) identifying and tackling the roots causes of the decrease in biological diversity by integrating it in the programming of the government and the society, (B) reduction of the direct pressures on biological diversity and promoting sustainable uses, (C) enhancing the state of biological diversity by safeguarding ecosystems, species and genetic diversity, (D) reinforcing the advantages for all of biological diversity and the services provided by the ecosystems, and (E) reinforcing the implementation of knowledge generation and capacity building.

Hence, the planetGOLD project also supports the SPANB?s objectives and the broader Aichi development goals by ensuring that anthropogenic emissions of mercury are reduced to a minimum, decreasing the impacts on ecosystems and biodiversity. The programme environmental impact will address the main source of toxin emissions in the country that contaminates water sources, air, and soils.

Plan d?Action National d?Adaptation aux Changements Climatiques de la Guin?e (National Action Plan for Adapting to Climate Change in Guinea)

The 2007 plan is intended to address climate change in Guinea as it lies at the contact point between the Sahara Desert and equatorial Africa. The document identifies the weaknesses and needs of the Guinean response to climate change and droughts. It also defines the answer and future actions the country will take to address this issue. The planetGOLD programme is aligned with this plan as it aims at promoting the environmental sustainability needed to mitigate climate change impacts.

Poverty Reduction Strategy Paper. PRS III. 2013-2015.

The third poverty reduction strategy (PRS III) is the frame of reference for the overall development planning process that will be reoriented to the 2011-2015 Five-Year Plan. It presents a medium-term development framework to achieve Millennium Development Goals (MDGs). To meet these challenges, government economic policy over the medium term (2013-2015) essentially aimed to build and consolidate the bases for the future emergence of Guinea. Accordingly, the third poverty reduction strategy implemented new policy priorities: (i) Restoration of the Rule of Law and Reform of the Public Administration; (ii) Acceleration and diversification of growth; (iii) Development of social sectors; and (iv) Reduction of regional disparities and promotion of development based on decentralization.

The planetGOLD programme integrates itself in the poverty reduction strategy of Guinea by strengthening a core economic sector providing jobs and incomes to thousands, and indirectly supporting their families and communities. The ASGM is at the core of poverty reduction in the Upper Guinea region and will support responsible production through the reduction of anthropogenic emissions of mercury. Further, the project will have positive health impacts on women and men in the ASGM sector by decreasing the negative health impacts of mercury usage which have a direct relationship with economic productivity and output (and hence, poverty).

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Under the GEF planetGOLD Programmatic knowledge management approach, each national project includes a component dedicated to Knowledge management and Communications (Component 4). This component is expected to lead to the outcome of planetGOLD?s experiences being available not

only to direct and indirect project stakeholders in-country, but also to other national projects and the Global Project.

In parallel, the Knowledge Management Strategy for the project will be closely linked to the Monitoring and Evaluation plan (coordinated by the EA) as well as the Stakeholder Engagement Plan, which identifies a series of project stakeholders interested in participating in the project and being engaged throughout its implementation.

At the country level, the project will develop knowledge products and tools and make them available nationally to all GEF planetGOLD project stakeholders in Guinea. It will develop and build on existing country-specific communication and knowledge management plans or platforms to ensure efficient cascading of information down to the community level and to ensure sustainability of interventions. These mechanisms will be embedded in existing federal, local government or academic institutions facilitating use of knowledge products after the end of the project. In alignment with the Global Project, the Guinean child project will facilitate the localization and distribution of GEF planetGOLD programme Education, Information and Communication (EIC) materials to local stakeholder in Guinea.

On the global level, the child project will be closely aligned with the global coordination, knowledge management and outreach project of the programme. Knowledge products and lessons learned at the local and national level will be shared with the global project, which will make these experiences available through the planetGOLD platform and other outreach strategies. This will foster a community of practice among participating countries and will allow for the sharing of successful models with a wide range of global actors and stakeholders.

Sharing of the Guinean experience with the Global Component, will in addition take place through the participation of representatives of the Guinean child project to the Global Forum (GF) and each Annual Stakeholder Workshop. Country project subject matter consultants (finance, gender, technology, etc.) will also participate in regular knowledge exchange meetings/networks organized by the Global Component. This way, the facilitated exchange between ASGM experts and practitioners, governments, gold buyers and miners will support an ongoing exchange of experiences, as well as development of global expertise and capacity building on ASGM issues and networking and learning, to influence the global ASGM dialogue agenda and policy development. More concretely, three knowledge products will be produced which are each aligned with the essence of each of the three components of the GEF planetGOLD programme: Formalization, Access to Finance and Mercury-free technologies. The EA will ensure that all public facing documents produced by the country project are either uploaded to the planetGOLD website or link is provided if the document is housed elsewhere.

Strategic Approach and Objectives

The first step to undertake will be the development of a country-level communication and knowledge management strategy. While mirroring the content of the 2020 planetGOLD communication strategy, the project team will adapt its tools and dissemination platforms to the national context.

The general knowledge management objective is to ensure access to best practices, technical knowledge, insights, lessons learned and success stories by all national stakeholders, whose profiles and interests are detailed in the Stakeholders' Engagement Plan presented in Appendix 7, and by all stakeholders of the planetGOLD programme.

The specific objectives of the communication and knowledge management approach will be to:

- Build solid communications foundations, which can exceed the duration of the project. To achieve an effective and sustainable change of mentalities and practices among miners, supply chain actors and government officials require that these stakeholders are aware of the changes undertaken and can replicate them. Change and adaptation is a long-term goal, which often spreads through imitation. It is

thus very important that the new practices adopted by the initial risk-taking 'change agents' in the pilot areas spread to the more hesitant actors. It is also critical that the content of the knowledge management/communication approach is simple and unequivocal to allow appropriation.

- Support widespread knowledge uptake. The general project strategy is rooted in innovative technical experimentation, so knowledge management is the foundation for a change of practices. Awareness is often driven by technical knowledge, whether on health impacts of mercury, innovative finance solutions, mining environmental practices or other themes. Such technical knowledge must be driven by facts, data, and individual experiences.

- Positive public perceptions influence. The generally adopted cliché of a semi-clandestine poverty-stricken or squandering gold panner does not support formalization. The project will seek to replace this damaging perception with the vision of a responsible, environmentally conscious, professionally aligned with international best practices which bring positive aspects to the national and local ASGM sector while fostering its productivity.

- Change perceptions of the finance sector. As explained in the Alternative Scenario, under-investment is one strong constraint to straightening out the ASGM sector. Access to legal documentation and to mercury-free technologies must be facilitated by new national and international investments. The perception of a high-risk informal supply chain among potential investors, especially in the banking and micro-banking sector, limits the scope of possible changes. To change such perception is a requisite for bringing new equity into the ASGM sector and triggering the adoption of new mining practices.

- Fully integrate the child project in the global planetGOLD programme knowledge exchange strategy. The importance of sharing knowledge and disseminating positive solutions as well as lessons learned is a key factor for the success of the planetGOLD programme and will increase the visibility of the results obtained in the Guinea child project. By the same token obtaining adequate support from other projects will foster the technical and financial approaches developed in the components.

Management and Dissemination Platforms

Communications and knowledge management will be the direct responsibility of a Communications Officer in support to the Project Manager. Moreover, the terms of reference of this Communications Officer could include monitoring and evaluation as well as knowledge management tasks, which propose related content and objectives, including the support of the Project Manager in the institutional communication activities. As such, the Project Manager and Communications Manager will attend the planetGOLD Global Forums (GF) and Annual Programme Meetings (APM).

Given the multiple partners involved in the project, the project team will coordinate daily with the communications, M&E and knowledge management professionals working for partner agencies, especially UNEP, UNDP, CI and the GEF Secretariat. Coordination will ensure consistency in the content, for both the country-specific and the global communication strategy.

The documentation and progress sharing with other child projects will be done through the planetGOLD programme website and knowledge repository. The project will make sure that the main project documents are publicly available. If needed, assessments and solutions could be shared on other ASGM online platforms such as Delve.

The main online knowledge management platform (www.planetgold.org) contains multiple storytelling, training, and awareness-raising tools from other child projects. The themes developed in the global platform cover the areas of cleaner production techniques, pathways toward formalization, pilot access to finance options, and access to international responsible gold markets, among others. The project's progress on activities related to financial tools development, technical results, gender issues and topics of interest for the Global programme level will be shared through quarterly knowledge exchange meetings. The Guinea child project will liberally adapt, translate, and contextualize these resources to build its initial toolkit and trigger theme-specific conversations among national stakeholders.

Conversely, the Guinea child project will also record its tools and stories on the global platform after proper vetting by the national partner agencies and counterparts, with the goal of contributing to the global environmental benefits of the entire planetGOLD programme. The project will follow the guidelines developed in the 2020 planetGOLD communications strategy.

For further information on Communications Plan at the programmatic level, please refer to Appendix 12.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project will follow UNEP standard monitoring, reporting and evaluation process procedures and include Reporting requirements and templates, which are an integral part of the UNEP legal instrument to be signed by CASE, as the **executing agency (EA)** and UNEP, who acts as the **implementing agency (IA)**.

Project monitoring and evaluation (M&E) activities will be a shared responsibility between IA and EA, and will be conducted in accordance with established UNEP and GEF procedures. The M&E plan includes inception report, annual review and final evaluations. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop.

The **EA** will be responsible for stakeholder engagement, gender monitoring, and outreach to the broader community in the country. Day-to-day project monitoring is the responsibility of the PMU but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the PMU to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or correlative measures can be adopted in a timely fashion.

The **Project Steering Committee (PSC)** will receive **quarterly progress reports** and will make recommendations to UNEP concerning the need to revise any aspects of the Project Logical Framework or the M&E plan.

Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility of the **Task Manager** (Implementing Agency). The Task Manager will also review the quality of draft projects outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring.

Progress vis-a-vis delivering the agreed project global environmental benefits will be assessed with the PSC on a quarterly basis, via the quarterly progress reports. Project risks and assumptions will be regularly monitored both by project partners and UNEP and updates documented in the **Annual Project Implementation Report**. Risk assessment and rating is an integral part of the Project Implementation Review (PIR), undertaken by the IA. The quality of the project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources (**Quarterly financial reports**).

A **mid-term evaluation** will take place after 2 years of project execution and will include all parameters recommended by the GEF Evaluation Office for evaluations. It will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified during the stakeholder analysis (see appendix 6).

The Project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

In line with the GEF Evaluation requirements and UNEP's Evaluation Policy, GEF Full-Sized Projects and any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project's operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to

senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

M&E Plan and associated budget

TABLE 5: M&E PLAN AND ASSOCIATED BUDGET

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Inception Meeting	EA	\$10,000		Within 2 months of project start-up
Inception Report	EA			1 month after project inception meeting
Measurement of project progress and performance indicators	EA			Annually
Baseline measurement of project outcome indicators, GEF Core indicators (Tracking tools?)	EA (Tracking Tools not applicable in C&W focal area)			Project inception
Mid-point measurement of project outcome indicators, GEF Core indicators (Tracking tools?)	EA			Mid Point
End-point measurement of project outcome indicators, GEF Core indicators (Tracking tools?)	EA			End Point
Quarterly Progress/ Operational Reports to UNEP	EA	\$20,000		Within 1 month of the end of reporting period (quarterly)
Project Steering Committee (PSC) meetings and National Steering Committee meetings	EA	\$40,000		Once a year minimum
Reports of PSC meetings	EA			Annually
Project Implementation Review (PIR) report	EA and IA	\$10,000		Annually, part of reporting routine
Monitoring visits to field sites	EA			As appropriate
Mid Term Review/Evaluation	IA	\$30,000		At mid-point of project implementation
Terminal Review/Evaluation <i>(whether a project requires a management-led review or an independent evaluation is determined annually by UNEP's Evaluation Office)</i>	IA	\$30,000		Typically initiated after the project's operational completion
Audit	EA	\$40,000		Typically initiated after the project's operational completion
Project Operational Completion Report	EA			Within 2 months of the project completion date

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Co-financing report (including supporting evidence for in-kind co-finance)	EA			Within 1 month of the PIR reporting period, i.e. on or before 31 July
Publication of Lessons Learnt and other project documents	EA			Annually, part of quarterly reports & Project Final Report

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?

As the largest contributor of mercury emissions in Guinea, the support and interventions of the planetGOLD programme and subsequent reduction in mercury usage will have considerable direct and indirect health benefits from the local to the global level. Reducing the impact of negative health consequences from mercury usage and exposure can have a number of indirect positive socioeconomic benefits for local population, including less disruption to livelihood and income generating activities (e.g. loss of productivity, absence from wage-earning work, etc.).

In addition positive spin-off effects, such as increased economic productivity (either in the ASGM sector or elsewhere) that may be achieved as women and men experience better overall health. Improved health will also reduce potential costs associated with health services required following mercury exposure (e.g. doctor visits, travel costs to health services, etc.).

The introduction of mercury-free technologies or safer technologies (e.g. that reduce exposure, minimize open-air burning, etc. will also reduce contamination of waterways near project sites, decreasing negative harms to aquatic animals and terrestrial animals that live and depend on these waterways. Environmental assessments conducted at pilot sites will also identify additional risks and remediation strategies for the partners supported by the project.

It is expected that increases in formalization in the ASGM sector can have positive socioeconomic benefits for miners as they may increase their access to government services and financing services, which can in turn reduce dependency on more predatory forms of lending that can be common in the sector.

In addition to providing capital for investing in mercury-free technologies, increasing access to financing for ASGM miners may also positively contribute to investments in improved productivity (and hence increased income), improved health and safety measures, and the ability of miners to reduce dependence on child labour (i.e. by having money to pay for school fees).

The project's emphasis on women's leadership, professional development and gender equality will have the positive benefit of contributing to women's empowerment in the sector and a reduction in gender inequality that is pervasive throughout the sector in many of the project locations. This is especially important in Guinea, where women are well represented in the sector.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification *

PIF	CEO Endorsement/Approval	MTR	TE
Low			

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Section 1: Project Overview

Identification	
Project Title	<i>GEF ID10844 ?Global Opportunities for Long-term Development of the ASGM Sector (GEF planetGOLD) in Guinea?</i>
Managing Division	<i>Economy Division</i>
Type/Location	
Region	<i>Africa</i>
List Countries	<i>The Republic of Guinea</i>

Project Description	<p><i>The project is a child project of the planetGOLD programme, second phase (GOLD+).</i></p> <p><i>The project plans to: To reduce the use of mercury in the ASGM sector in Guinea through a holistic, multisectoral, integrated formalization approach, and increase access to traceable gold supply chains and finance for adoption of sustainable mercury free technologies</i></p>
Relevant Subprogrammes	<i>N/A</i>
Estimated duration of project	<i>60 months</i>
Estimated cost of the project	<i>USD\$5,302,000</i>
Name of the UNEP project manager responsible	Mr. Ludovic Bernaudat
Funding Source(s)	GEF
Executing/Implementing partner(s)	CASE ? Centre Africain pour la Sant? et l'Environnement (Ivorian NGO)
SRIF submission version	<i>N/A</i>
Safeguard-related reports prepared so far <i>(Please attach the documents or provide the hyperlinks)</i>	? <i>Feasibility report []</i> ? <i>Gender Action Plan [X]</i> ? <i>Stakeholder Engagement Plan/Mapping Exercise [X]</i> ? <i>Safeguard risk assessment or impact assessment [..]</i> ? <i>ES Management Plan or Framework []</i> ? <i>Indigenous Peoples Plan []</i> ? <i>Cultural Heritage Plan []</i> ? <i>Others _____</i>

Section 2: Safeguards Risk Summary

A. Summary of the Safeguards Risk Triggered

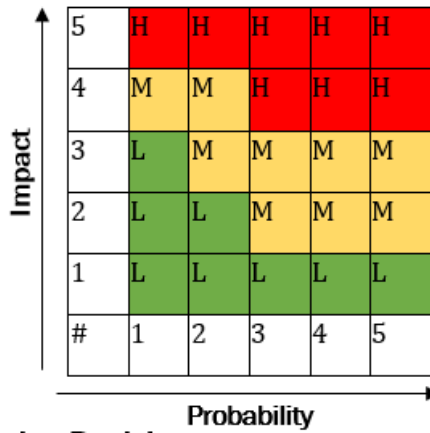
Safeguard Standards Triggered by the Project	Impact of Risk (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H) <i>Please refer to the matrix below</i>
SS 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management	2	2	L
SS 2: Climate Change and Disaster Risks	1	1	L
SS 3: Pollution Prevention and Resource Efficiency	2	2	L
SS 4: Community Health, Safety and Security	2	2	L
SS 5: Cultural Heritage	1	1	L
SS 6: Displacement and Involuntary Resettlement	1	1	L

SS 7: Indigenous Peoples	1	1	L
SS 8: Labor and working conditions	1	1	L

B. ESS Risk Level -

Refer to the UNEP ESSF (Chapter IV) and the UNEP's ESSF Guidelines.

- Low risk
- Moderate risk
- High risk
- Additional information required



C. Development of ESS Review Note and Screening Decision

- No specific safeguard action required
- Take Good Practice approach⁴
- Carry out further assessments (e.g., site visits, experts' inputs, consult affected communities, etc.)
- Carry out impact assessments (by relevant experts) in the risk areas and develop management framework/plan
- Consult Safeguards Advisor early during the full project development phase
- Other _____

Prepared by

Name: Ludovic Bernaudat Date: May 11th 2022

Screening review by

Name: Alexandra Mutungi Date: 25 May 2022

Cleared

D. Safeguard Review Summary (by the safeguard team)

This is a low-risk project. However, the UNEP ESSF guiding principles as highlighted in section 3 still apply to these types of projects. Closely monitor and respond to any potential SS1, 3 and 4 risks. Ensure FPIC is obtained in the event the project engages Indigenous Peoples. The financial tools should be designed in a manner that supports the most vulnerable and marginalized in the community.

E. Safeguard Recommendations (by the safeguard team)

Section 3: Safeguard Risk Checklist

Screening checklist	Y/N/ Maybe	Justification for the response (please provide answers to each question)
Guiding Principles (these questions should be considered during the project development phase)		
GP1 Has the project analyzed and stated those who are interested and may be affected positively or negatively around the project activities, approaches or results?	Y	The project will make an effort to include any potentially affected stakeholders in the decision making process, in particular vulnerable and marginalized groups
GP2 Has the project identified and engaged vulnerable, marginalized people, including disabled people, through the informed, inclusive, transparent and equal manner on potential positive or negative implication of the proposed approach and their roles in the project implementation?	N	The project has not yet engaged with vulnerable or marginalized people in the project development process
GP3 Have local communities or individuals raised human rights or gender equality concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	N	No issues have been raised during the PPG phase (project's preparatory phase)
GP4 Does the proposed project consider gender-balanced representation in the design and implementation?	Y	A gender action plan has been designed and will be implemented
GP5 Did the proposed project analyze relevant gender issues and develop a gender responsive project approach?	Y	See above
GP6 Does the project include a project-specific grievance redress mechanism? If yes, state the specific location of such information.	Y	Yes, the grievance mechanism is included at the planetGOLD global programme level.

GP7 Will or did the project disclose project information, including the safeguard documents? If yes, please list all the webpages where the information is (or will be) disclosed.	N	This decision will be made during the project's inception workshop. So far, general information about the planetGOLD programme can be found at: www.planetgold.org
GP8 Were the stakeholders (including affected communities) informed of the projects and grievance redress mechanism? If yes, describe how they were informed.	Y	Local mining communities were informed during planned field visits. Other stakeholders such as public officials and national associations were informed at the inception and validation workshops
GP9 Does the project consider potential negative impacts from short-term net gain to the local communities or countries at the risk of generating long-term social or economic burden?	Y	The project will aim to improve and social and economic conditions of artisanal miners through better environmental practices
GP10 Does the project consider potential partial economic benefits while excluding marginalized or vulnerable groups, including women in poverty?	Y	The project will ensure that the adoption costs of changing to mercury free technologies or to the formal economy will not drastically increase for the ASGM workers
Safeguard Standard 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management		
<i>Would the project potentially involve or lead to:</i>		
1.1 conversion or degradation of habitats (including modified habitat, natural habitat and critical natural habitat), or losses and threats to biodiversity and/or ecosystems and ecosystem services?	N	No, the project will have no impact on unspoil natural habitat, it will only work in lands with mining permits.
1.2 adverse impacts specifically to habitats that are legally protected, officially proposed for protection, or recognized as protected by traditional local communities and/or authoritative sources (e.g. National Park, Nature Conservancy, Indigenous Community Conserved Area, (ICCA); etc.)?	No	The targeted mining communities are not located in any environmentally protected area at the national level

1.3 conversion or degradation of habitats that are identified by authoritative sources for their high conservation and biodiversity value?	N	The project will not convert or degrade any natural habitats
1.4 activities that are not legally permitted or are inconsistent with any officially recognized management plans for the area?	N	No such activities are planned under the project
1.5 risks to endangered species (e.g. reduction, encroachment on habitat)?	N	The project poses no risks to endangered species
1.6 activities that may result in soil erosion, deterioration and/or land degradation?	N	The project will not result in soil erosion, deterioration and/or land degradation. The project is trying to improve the mining areas through better practices in the ASGM national sector
1.7 reduced quality or quantity of ground water or water in rivers, ponds, lakes, other wetlands?	N	The project will not reduce quality or quantity of ground water or other water bodies; on the contrary, the project will introduce best practices to prevent mercury entering waterways
1.8 reforestation, plantation development and/or forest harvesting?	N	The project will not involve reforestation, plantation development and/or forest harvesting
1.9 support for agricultural production, animal/fish production and harvesting	N	The project will not involve agricultural production, animal/fish production and harvesting
1.10 introduction or utilization of any invasive alien species of flora and fauna, whether accidental or intentional?	N	The project will not involve introduction or utilization of any invasive alien species of flora and fauna
1.11 handling or utilization of genetically modified organisms?	N	The project will not handle or utilize genetically modified organisms
1.12 collection and utilization of genetic resources?	N	The project will not collect or utilize genetic resources

Safeguard Standard 2: Climate Change and Disaster Risks		
<i>Would the project potentially involve or lead to:</i>		
2.1 improving resilience against potential climate change impact beyond the project intervention period?	N	The project will not improve resilience against potential climate change impact beyond the project intervention period
2.2 areas that are now or are projected to be subject to natural hazards such as extreme temperatures, earthquakes, extreme precipitation and flooding, landslides, droughts, severe winds, sea level rise, storm surges, tsunami or volcanic eruptions in the next 30 years?	N	The project will not involve areas that are now or are projected to be subject to natural hazards
2.3 outputs and outcomes sensitive or vulnerable to potential impacts of climate change (e.g. changes in precipitation, temperature, salinity, extreme events)?	N	The project will not lead to outputs and outcomes sensitive or vulnerable to potential impacts of climate change
2.4 local communities vulnerable to the impacts of climate change and disaster risks (e.g. considering level of exposure and adaptive capacity)?	N	The project will not involve local communities vulnerable to the impact of climate change and disaster risks
2.5 increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	N	The project will not increase GHG emissions
2.6 Carbon sequestration and reduction of greenhouse emissions, resource-efficient and low carbon development, other measures for mitigating climate change	N	The project will not involve carbon sequestration and reduction of GHG emissions
Safeguard Standard 3: Pollution Prevention and Resource Efficiency		
<i>Would the project potentially involve or lead to:</i>		
3.1 the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or <u>transboundary impacts</u> ?	N	The project will not release any pollutants to the environment, it is actually trying revert that by preventing further releases of mercury into the environment
3.2 the generation of waste (both hazardous and non-hazardous)?	Y	The project will aim to reduce the use of mercury wastes
3.3 the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	Y	The project will aim to reduce the uses and releases of mercury through ASGM at the national level

3.4 the use of chemicals or materials subject to international bans or phase-outs? (e.g. DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol , Minamata Convention , Basel Convention , Rotterdam Convention , Stockholm Convention)	N	The Minamata Convention Article 7 includes the reduction of mercury use in the ASGM sector. This project is aligned with the above.
3.5 the application of pesticides or fertilizers that may have a negative effect on the environment (including non-target species) or human health?	N	The project will not involve application of pesticides or fertilizers
3.6 significant consumption of energy, water, or other material inputs?	N	The project will not have significant consumption of energy, water, or other material inputs
Safeguard Standard 4: Community Health, Safety and Security		
<i>Would the project potentially involve or lead to:</i>		
4.1 the design, construction, operation and/or decommissioning of structural elements such as new buildings or structures (including those accessed by the public)?	N	The project will not involve the design, construction, operations and /or decommissioning of structure elements
4.2 air pollution, noise, vibration, traffic, physical hazards, water runoff?	N	The project will not lead to air pollution, noise, vibration, traffic, physical hazards nor water runoff
4.3 exposure to water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable or noncommunicable diseases?	N	The project will not lead to exposure of water borne or other vector borne diseases
4.4 adverse impacts on natural resources and/or ecosystem services relevant to the communities? health and safety (e.g. food, surface water purification, natural buffers from flooding)?	N	The project will not have adverse impacts on natural resources
4.5 transport, storage use and/or disposal of hazardous or dangerous materials (e.g. fuel, explosives, other chemicals that may cause an emergency event)?	N	The project will not involve transport, storage use and or disposal of hazardous or dangerous materials.
4.6 engagement of security personnel to support project activities (e.g. protection of property or personnel, patrolling of protected areas)?	N	The project will not engage security personnel.

4.7 an influx of workers to the project area or security personnel (e.g. police, military, other)?	Maybe	The ASGM workforce usually tends to move between different mining areas following the profitability of the mining sites. However, the project doesn't seek to attract any influx of workers to the targeted areas.
Safeguard Standard 5: Cultural Heritage		
<i>Would the project potentially involve or lead to:</i>		
5.1 activities adjacent to or within a Cultural Heritage site?	N	The project is not involved with cultural heritage sites
5.2 adverse impacts to sites, structures or objects with historical, cultural, artistic, traditional or religious values or to intangible forms of cultural heritage (e.g. knowledge, innovations, practices)?	N	The project does not have adverse impacts to sites, structures or objects with historical, cultural, artistic, traditional or religious values
5.3 utilization of Cultural Heritage for commercial or other purposes (e.g. use of objects, practices, traditional knowledge, tourism)?	N	The project does not utilize cultural heritage or commercial or other purposes
5.4 alterations to landscapes and natural features with cultural significance?	N	The project does not alter landscapes and natural features with cultural significance
5.5 significant land clearing, demolitions, excavations, flooding?	N	The project does not lead to significant land clearing, demolitions, excavations, flooding
5.6 identification and protection of cultural heritage sites or intangible forms of cultural heritage		
Safeguard Standard 6: Displacement and Involuntary Resettlement		
<i>Would the project potentially involve or lead to:</i>		
6.1 full or partial physical displacement or relocation of people (whether temporary or permanent)?	N	The project does not involve physical displacement or relocation of people
6.2 economic displacement (e.g. loss of assets or access to assets affecting for example crops, businesses, income generation sources)?	N	The project does not lead to economic displacement
6.2 involuntary restrictions on land/water use that deny a community the use of resources to which they have traditional or recognizable use rights?	N	The project will not lead to involuntary restrictions on land/water use

6.3	risk of forced evictions?	N	The project will have no risk of forced evictions
6.4	changes in land tenure arrangements, including communal and/or customary/traditional land tenure patterns (including temporary/permanent loss of land)?	N	The project will not lead to change in land tenure arrangements
Safeguard Standard 7: Indigenous Peoples			
<i>Would the project potentially involve or lead to:</i>			
7.1	areas where indigenous peoples are present or uncontacted or isolated indigenous peoples inhabit or where it is believed these peoples may inhabit?	N	The project does not target any region where indigenous people are present
7.2	activities located on lands and territories claimed by indigenous peoples?	N	The project will not involve activities located on lands and territories claimed by indigenous people
7.3	impacts to the human rights of indigenous peoples or to the lands, territories and resources claimed by them?	N	The project will not involve indigenous people
7.4	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	N	The project will not involve indigenous people
7.5	adverse effects on the development priorities, decision making mechanisms, and forms of self-government of indigenous peoples as defined by them?	N	The project will not involve indigenous people
7.6	risks to the traditional livelihoods, physical and cultural survival of indigenous peoples?	N	The project will not involve indigenous people
7.7	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	N	The project will not involve indigenous people
Safeguard Standard 8: Labor and working conditions			
8.1	Will the proposed project involve hiring or contracting project staff?	Y	The project will hire many national and international experts for the execution of the project
<i>If the answer to 8.1 is yes, would the project potentially involve or lead to:</i>			
8.2	working conditions that do not meet national labour laws or international commitments (e.g. ILO conventions)?	N	The project will provide working conditions that meet national and international labor laws
8.3	the use of forced labor and child labor?	N	The project will not involve forced labor nor child labor
8.4	occupational health and safety risks (including violence and harassment)?	N	The project will not have any occupational health and safety risks

8.5 the increase of local or regional unemployment?	N	The project will not increase local or regional unemployment
8.6 suppliers of goods and services who may have high risk of significant safety issues related to their own workers?	N	The suppliers and services providers to the project will not have high risk of significant safety issues related to their own workers
8.7 unequal working opportunities and conditions for women and men	N	The project will not lead to unequal working opportunities and conditions for women and men

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
10844 - Appendix 8b - Covid-19 Questionnaire	CEO Endorsement ESS	
10844 - Appendix 8a - SRIF_am	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project: Global Opportunities for Long-term Development of Artisanal and small-scale Gold Mining (ASGM) Sector Plus Guinea - GEF GOLD + Guinea							
Project Objective	Objective level Indicators	Unit	Baseline	Mid-Point Target	End-Point Target	Means of Verification	Assumptions (A) & Risks (R)
To reduce the use of mercury in the ASGM sector in Guinea through a holistic, multisectoral, integrated formalization approach, and increase access to traceable gold supply chains and finance for adoption of sustainable mercury free technologies	Quantity of mercury reduced and avoided locally at participating mine sites, and nationally by replication (GEF Core Indicator 9.2)	kg	TBD during Baseline	n.d.	275.54	Processing plant records	<ul style="list-style-type: none"> • (R) Change in the political and economic situation during the lifetime of the program impacts its implementation • (R) Avoided mercury volumes from targeted areas could be displaced to neighbouring areas as mercury traders would like to compensate for losses
		(t/year)	TBD during Baseline	n.d.	12.15 (48.60 through the global project and with the replication factor)	Country level reporting	
	Quantity of gold produced without mercury, locally at participating mine sites, and nationally by replication	kg	TBD during Baseline	n.d.	211.96	Processing plant records	
		(t/year)	TBD during Baseline	n.d.	9.35	Country level reporting	
	Quantity of gold produced fulfilling planetGOLD	kg	0	n.d.	211.96	Processing plant records	

Component 1: Promoting institutional strengthening and a regulatory framework for improved ASGM practices and governance							
Outcome 1	Outcome Indicators	Unit	Baseline	Mid-Point Target	End-Point Target	Means of Verification	Assumptions & Risks
Outcome 1: Strengthened government agencies and national stakeholders update current regulations to promote formalization of ASGM miners.	Number of prefectures sustainably adopting JA (Chemicals and Health Branch Impact Class 4)	Number (#)	0	0	1	<ul style="list-style-type: none"> - Workshop and meeting reports - Official government publications 	<ul style="list-style-type: none"> • (A) National, regional and district governments work cohesively, ensure transfer of knowledge and utilize capacity to facilitate development of formalization strategies.
	Number of regulations updated and adopted by government.	Number (#)	0	14	14	<ul style="list-style-type: none"> - Workshop and meeting reports - Official government publications 	
	Number of ASGM miners formalized	Number (#)	0	2,500	5,020	<ul style="list-style-type: none"> - Workshop and meeting reports - Official government publications 	

Component Outputs	Output Indicators	Unit	Baseline	Mid-Point Target	End-Point Target	Means of Verification	Assumptions & Risks
Output 1.1 Update regulations relating to formalization of the artisanal gold mining sector in order to adapt them to the current ASM context and create a corresponding formalization guide	Number of consultations sessions held with Guinean government representatives to outline the provisions to be incorporated into the various legislative texts to be adopted and/or improved (Chemicals and Health Branch Output Indicator 10.3)	(# of women/men)	0	5	5	- Workshop and meeting reports - Final deliverable approved by stakeholders - Participant lists	• (A) Guinean government is willing and able to provide adequate support services to update the regulations and create the guide.
	Number of individuals trained in conducting sensitization (Chemicals and Health Branch Output Indicator 10.1)	(# of women/men)	0	30 (15 men, 15 women)	30 (15 men, 15 women)		
	Number of guides created (Chemicals and Health Branch Output Indicator 4.1)	(#)	0	1	1		
	Number of individuals sensitized (Chemicals and Health Branch Output Indicator 10.1)	(#)	0	0	300 (150 men, 150 women)		
Output 1.2 Sensitization campaign to reinforce women's leadership and professional	Number of women trained (Chemicals and Health Branch Output Indicator 7.2)	(# of women/men)	0	25 (25 women)	25 (25 women)	Participants List Final Deliverables approved by the Government	(R) Some stigma related to women's empowerment in ASGM continue to hinder the role and engagement of women in the sector

development in ASGM	Number of sensitization tools develop (Chemicals and Health Branch Output Indicator 7.1)	Number (#)	0	3	6		
	Number of women sensitized on leadership (Chemicals and Health Branch Output Indicator 7.2)	(# of women/men)	0	150	150		
Output 1.3 Piloting the Jurisdictional Approach in Siguiré	Nb of training workshops on JA (Chemicals and Health Branch Output Indicator 10.1)	(#)	0	5	10	- Workshop report - Final deliverable approved by stakeholders - Participant lists	(A) Guinean government open to innovative governance approaches.
	Nb of knowledge products produced on JA/LA to strengthen formalization in ASGM sector (Chemicals and Health Branch Output Indicator 4.1)	(#)	0	0	1		
	Nb of relevant stakeholders participating in multi-stakeholder group for JA (Chemicals and Health Branch Output Indicator 10.1)	(# of women/men)	0	n.d.	20 (10 men, 10 women)		

Component 2: Access to finance							
Outcome 2	Outcome Indicators	Unit	Baseline	Mid-Point Target	End-Point Target	Means of Verification	Assumptions and Risks
Outcome2: A financial mechanism for ASGM sector adopted by financial institutions and cooperatives.	Number of secured financing between ASGM producer/ exporter and financial institutions or buyers (e.g. refiners) (Chemicals and Health Branch Impact Class 12)	(#)	0	1	2	- Relevant commercial documentation (contract) -Transaction records of refiners	• (R) Financial sector actors are not able to overcome (perceived and real) barriers to providing finance.
	Number of secured responsible sourcing relationships between ASGM producer/ exporter and downstream actors (Chemicals and Health Branch Impact Class 12)	(#)	0	1	2		
Component 2 outputs	Output Indicators	Unit	Baseline	Mid-point Target	End-point Target	Means of Verification	Assumptions and Risks
Output 2.1 Facilitate dialogue between financial institutions and	Mapping of existing financial structures and solutions for ASGM actors completed (Chemicals and Health Branch Output Indicator 12.2)	(#)	0	0	1	- Surveys and interview - Sector report	(A) Private Sector considers ASGM an investment opportunity with managed risks

other finance actors to encourage engagement with the ASGM sector	Number of national and regional workshops to sensitize financial actors (Chemicals and Health Branch Output Indicator 10.1)	(#)	0	0	4		
Output 2.2. Provide technical support to a cooperative and/or exporter	Number of responsible sourcing plans developed (Chemicals and Health Branch Output Indicator 12.3)	(#)	0	1	2	- Workshop reports	(A) ASGM operations/governance structure mature enough to host new measures
Output 2.3 Support cooperatives/exporters to prepare for and negotiate purchasing and financing contracts with supply chain actors (e.g. refiners)	Number of investment portfolios promoted (Chemicals and Health Branch Output Indicator 12.3)	(#)	0	2	2	- Responsible sourcing Plans - Investment portfolios	(A) Miners are willing to access formal finance and use funds to transition to mercury free processes.

Component 3: Enhancing uptake of Mercury-free technologies							
Outcome 3	Outcome Indicators	Unit	Baseline	Mid-point Target	End-point Target	Means of Verification	Assumptions & Risks
Miners in Guinea adopted mercury-free technologies	Number of miners in targeted ASGM associations adopted mercury-free technologies via the project (Chemicals and Health Branch Impact Class 3)	(# of women/men)	0	0	910 (319 men, 592 women)	- progress reports - planetGOLD compliance assessment	<ul style="list-style-type: none"> (A) Miners endorse the conversion to mercury-free gold processing methods. (A) Efficient and lucrative alternative mercury-free gold processing techniques are available and appropriate for ASM miners (A) Mercury suppliers (informal gold traders) are willing to engage with formal financial markets
	# of targeted ASGM associations that have implemented the planetGOLD environmental and social standard (Chemicals and Health Branch Impact Class 3)	(#)	0	0	2	-Knowledge assessment reports	
	% increase in awareness of mercury risks amongst miners (Chemicals and Health Branch Impact Class 3)		0	30%	50%		

Component 3 outputs	Output Indicators	Unit	Baseline	Mid-point Target	End-point Target	Means of Verification	Assumptions & Risks
Output 3.1 Sensitize ASGM miners and communities on the health and environmental risks of mercury usage	Mercury inventory in Boke region completed (Chemicals and Health Branch Output Indicator 2.1)	(#)	0	1	1	- Assessment report - Final sensitization tools	<ul style="list-style-type: none"> (R) Varying levels of education and literacy amongst mineworkers causing differences in the ability to enhance knowledge and capacity
	Number of sensitization tools developed (Chemicals and Health Branch Output Indicator 2.2)	(#)	0	5	5	- Finalized curricula and training materials - Participant lists	
	Number of health and environment officials trained (Chemicals and Health Branch Output Indicator 10.3)	(# of women/men)	0	15 (7 men, 8 women)	15 (7 men, 8 women)	- Participant lists	
	Number of people sensitized on health and environmental risks (Chemicals and Health Branch Output Indicator 10.1)	(# of women/men)	0	0	250 (125 men, 125 women)		
Output 3.2 Mercury-free technologies available to miners	Number of technical and environmental assessments completed (Chemicals and Health Branch Output Indicator 4.1)	(#)	0	2	2	Assessment reports Progress reports	<ul style="list-style-type: none"> (R) ASGM associations and miners don't perceive value in meeting planetGOLD standards (R) Better practices are adopted during the project and then abandoned by miner groups once the project support stops.
	Number of mine sites benefitting from test equipment (Chemicals and Health Branch Output Indicator 3.1)	(#)	0	2	2	Assesment reports Progress reports	

Component 4: Knowledge sharing, communication and local capacity building support

Outcome 4	Outcome Indicators	Unit	Baseline	Mid-point target	End-point target	Means of Verification	Assumptions & Risks
Increased adoption of mercury free technologies, responsible sourcing plans and financing by ASGM miners beyond pilot sites through sharing of lessons learned and peer to peer exchange.	# of beneficiaries changing their practices as a result of improved awareness (Chemicals and Health Branch Impact Class 8)	(# of women/men)	0	n.d.	2,225 (of which 65% are women)	<ul style="list-style-type: none"> - Distribution list of IEC materials - Communication strategy/plan - Knowledge assessment results - Surveys and interviews 	<ul style="list-style-type: none"> • A) Interest by the ASGM stakeholders at the local, national, and international levels remain high. (R) Lack of political will to communicate continued commitment
Component 4 outputs	Output Indicators	Unit	Baseline	Mid-point target	End-point target	Means of Verification	Assumptions & Risks
<u>Output 4.1.</u> Knowledge products and tools developed through the project are made available	# of communications materials produced and disseminated that follow planetGOLD branding, style guide and messaging guide (Chemicals and Health	(#)	0	3	6	<ul style="list-style-type: none"> - Communication strategy/plan - IEC Materials developed 	

nationally to all GEF planetGOLD project stakeholders in Guinea	Branch Output Indicator 8.2)						
	# of Guinean project institutional/corporate stakeholders reached with information, education, and communication (IEC) materials (Chemicals and Health Branch Output Indicator 10.1)	(#)	0	15	30	<ul style="list-style-type: none"> - Distribution list of IEC materials - Communication strategy/plan 	
	# blogs, news articles, events, photo essays, videos, etc published on planetgold.org or on other planetGOLD digital communication platforms (Chemicals and Health Branch Output Indicator 9.3)	(#)	0	5	10	<ul style="list-style-type: none"> - Website - Distribution list of IEC materials 	
	# staff participating in global comms network activities (Chemicals and Health Branch Output Indicator 10.1)	(# of women/men)	0	1	1	<ul style="list-style-type: none"> - Participant lists - Workshop reports 	
<u>Output 4.2</u> Knowledge products and tools	# of project representatives participate in each planetGOLD global forum and annual	(# of women/men)	0	2	2	<ul style="list-style-type: none"> - Participant lists - Workshop reports 	

developed through the project are available globally through the GEF planetGOLD programme	programme meeting (Chemicals and Health Branch Output Indicator 10.1)					
	# of project experts that participate in regular (~quarterly) knowledge exchange meetings to share relevant approaches and information with other country projects (Chemicals and Health Branch Output Indicator 10.1)	(# of women/men)	0	3	3	- Workshop reports
	# of knowledge products produced and disseminated (in relation to components 1, 2 and 3) (Chemicals and Health Branch Output Indicator 10.1)	(#)	0	n.d.	3	

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

USA		
Project (Country)	Comment	Agency Response
Suriname	Within the Suriname child project, we would like clarity on the significant discrepancy between the cited amount of total annual mercury release from ASGM (0.086 MT) and the project target of reducing Hg use by 6 MT over 4 years.	

Suriname	Also, in Suriname project, in the next iteration of the child project we would like to see coordination with the U.S. Department of State project also working on ASGM and mercury-free technologies.	
Republic of Congo	<p>Within the Republic of Congo child project, the executing agency is the Basel Convention Regional Center in Dakar, Senegal, justified by its expertise in implementation of chemical conventions. We are concerned that the proposed executing agency is not in-country, and additionally has very little experience with Minamata Convention nor with ASGM, or with biodiversity, the other focus of this program. We would like to understand better the choice of this executing agency, and what alternatives exist.</p>	<p>After consultation with the National Counterparts, The Republic of Congo child project will be executed by the Centre Africain pour la Sante Environnementale (CASE) based in Abidjan, Cote d'Ivoire. CASE will set up an office in Brazzaville. CASE has the required expertise and experience as it is already an executing agency for UNEP on ASGM project and it has supported the development of the NAP in the Republic of Congo (contracted by the executing agency).</p>

<p>Nigeria</p>	<p>Within the Nigeria child project, the executing agency is also the Basel Convention Coordination Center for Africa Region. While they are at least based in Nigeria, we have similar concerns as above about their suitability for these issues, including if they have the contacts or substantive understanding of the ASGM sector to effectively manage the projects. We understand the EU is supporting an effort across Africa to build capacity in the small-scale mining sectors, especially of the geological survey agencies. This may be a more effective way to make progress on mercury in ASGM.</p>	<p>The comment is acknowledged, and the team would like to clarify that the execution arrangements involving the Basel Convention Coordination Center for Africa Region (BCCC-Nigeria) considered and endorsed at the concept stage were discussed during the project preparatory phase.</p> <p>The project decision-making committee (incl. relevant Ministries, private sector stakeholders, representatives of the mining sector and UNIDO) concluded during the preparatory phase that a combination involving national executing partners (Federal Ministry of Environmental FMENV and Federal Ministry of Mines and Steel Development FMMSD) and the BCCC-Nigeria would be the most appropriate approach.</p> <p>The BCCC-Nigeria will be involved as a co-executing partner in particular regarding their specific international experience on jurisdictional approaches.</p> <p>The proposed institutional and execution arrangements are explained in the CEO Endorsement Document.</p>
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Mada gasca r	Within the Madagascar child project, the project includes \$2 million of recurring expenses from the MEDD. It is our understanding that their budget has recently been significantly downsized, and we would request confirmation of this support in the next iteration of project development.	The MEDD has confirmed \$3 million co-financing contribution for the GOLD+ Madagascar project.
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<p>Madagascar</p>	<p>Also, within the Madagascar child project, we would like further information in the next iteration of the project on the justification for selecting GIZ as a basis to build on. They are mentioned as an excellent basis for the proposed GOLD+ Madagascar project to build on?, since GIZ has a very small-scale mining component under their Programme d'Appui à la Gestion de l'Environnement or PAGE Programme. However, we understand that GIZ does not cover all the areas that will be covered by this project and have a distinct domain of expertise and experience than this project, namely in fair-trade affiliated very small-scale mining.</p>	<p>At the time of project submission, the PAGE Programme delivered outputs that have systemic importance for the GOLD+ Madagascar Project: a) Support to the Ministry of Mines and Strategic Resources? five-year sustainable development strategy for the ASGM sector (SDEEMAPE); b) Roadmap for responsible ASGM in Madagascar, including an action plan for the professionalization of artisanal miners through the implementation of a Fairmined Malagasy? certification and traceability system; and c) Introduction of practices that could lead to Fairtrade certification in ASGM pilot sites.</p> <p>While the GOLD+ Madagascar project has a broader scope, the SDEEMAPE strategy and ASGM roadmap have been included in the project design.</p> <p>During the GOLD+ Madagascar inception phase, the project team will explore whether the activities carried out by the PAGE programme can be replicated and/or scale up across the GOLD+ Project sites.</p>
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<p>Madagascar</p>	<p>We look forward to greater clarity on CSO involvement in the next iteration. This will also be critical, given ongoing efforts at mining code reform in Madagascar. CSOs were very active during the government's efforts to reform the mining code at the end of 2019. Related, are there planned contributions from this project to ongoing efforts for mining code reform, and/or considerations for the potential implications of reform for the implementation of this project?</p>	<p>CSOs will be involved in the following areas: a) improvement of gold supply chain; b) waste management in ASGM sites; c) advocacy and awareness raising on the extractive sector in Madagascar and health and environmental risks related to the use of mercury; d) development of skills at the national level; e) development and implementation of education strategy for ASG miners; and f) awareness raising on good governance of natural resources.</p> <p>The GOLD+ Madagascar project, under its component 1, will work jointly with national authorities and ASGM stakeholders to identify gaps and opportunities across policy and regulatory framework (incl. the Mining Code). Where appropriate, the Project will provide technical support to strengthen legislative and capacity gaps in relation to formalization.</p>
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Mada gasca r	Finally, in the next proposal iteration, we would like to better understand the relationship between the proposed activities and the MECIE (Mise en Compatibilit? des Investissements avec l'Environnement). We understand that the proposed activities are subject to environmental impact study and approval of an environmental commitment program, subject to this decree, but did not see this referenced within the project documents.	The project has allocated funds in the budget plan and developed the ToR to carry out an Environmental and Social Impact Assessment (ESIA) of the proposed activities in the selected mining sites as required by the Mining Code No. 99-022 of 19 August 1999 and as amended by Law No. 2005-021 of 17 October 2005.
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<p>Congo & Uganda</p>	<p>The child projects for Congo and Uganda should coordinate with current gold formalization and supply chain efforts by the International Conference on the Great Lakes Region (ICGLR), of which both Uganda and Congo are members.</p> <p>http://www.icglr-rinr.org/index.php/en/. The ICGLR was also instrumental in the establishment of the OECD Due Diligence Guidance, which is a key supply chain component for this program. Up to this point, there has not been much focus on mercury in the PPA, mostly due to lack of funding for the specific issue. We strongly encourage coordination with this strong Partnership working on ASGM in this region of Africa, and further encourage coordination with USG partners (State, USAID, DOL) that fund and participate in a Public-Private Alliance (PPA) for Responsible Minerals Trade in the ICGLR.</p>	<p>In Uganda, the Executing Agency has a strong relationship with and significant work experience with the ICGLR. IMPACT has been a technical partner to the ICGLR for a decade. IMPACT is also a member of the PPA, and a staff member of IMPACT (who will be a team member of the project) is currently a member of the Governance Committee of the PPA. This offers an excellent opportunity to support the Ugandan government and other stakeholders in the project to create greater linkages with these various initiatives and bodies (note that the Ugandan government has already been active in both the ICGLR and the OECD through the Ministry of Mines (notably DGSM)</p> <p>In the Republic of Congo, the Ministry of Environment as chair of the project's steering committee will ensure that the development of the project benefits and shares synergies from the ICGLR experiences, not only in the field of ASGM formalization but also in terms for forest resources management as it has been identified as feature of importance in the Congo child project. Links with the Congo Basin Programme have also been established.</p> <p>Finally, OECD is a strong partner and co-financer of the global project of planetGOLD.</p>
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<p>Global</p>	<p>Overall, for Program component 6, Global coordination, knowledge management and outreach, there seems to be a lack of focus on the private sector gold buyers and users. Large companies (refiners, jewelers, electronics) can benefit from GOLD+ data and other insights as they increase implementation of gold sourcing due diligence programs. If this program can better consider and be sensitive to ongoing private sector due diligence policies and programs, then the program's sustainability can be greatly amplified. Eventually, funding for these types of projects, and demand for responsible mercury free gold, will come from the downstream supply chain.</p>	<p>Refiners and jewelers are active members of the Programme Advisory Group of the current planetGOLD which will be continued under GOLD+. Private sector has been fully involved in the development of the planetGOLD criteria.</p>
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<p>Globa 1</p>	<p>A related supply chain concern is that in our view, the current program potentially hides supply chain issues under the ?lack of access to finance? heading. While they are related, lack of access to finance is not completely a supply chain question, and vice versa. Critical supply chain issues that should be considered include transparency, customs and trade, consumer demand (how do we mainstream responsible gold for the final consumer), responsible production, and coordination with company due diligence measures (OECD DDG). To couple these supply chain issues with another large issue like access to finance dilutes the importance of both of these barriers.</p>	<p>The comment is duly noted and will be taken into consideration where applicable.</p>
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<p>Madagascar</p>	<p>In Madagascar, apart from the BMZ/GIZ PAGE project already mentioned further synergies could be generated with the ProD?CID project. The ProD?CID project works on anti-corruption at national scale as well as on community development (community service, finance and local economic development) in the regions Analamanga, Boeny and DIANA in Madagascar. GER therefore kindly asks to consult the PAGE and the ProD?CID project during the further project preparation phase.</p>	<p>The ProD?CID project has been identified as a potential partner for piloting jurisdictional approaches within the Malagasy ASGM sector. During the inception phase, ProD?CID staff (national and DIANA-based) will be involved.</p> <p>BMZ/GIZ PAGE project staff and other relevant stakeholders (Focal Point, Gender Officer and Head of DIANA) were consulted during the project preparatory phase and will be involved in the implementation phase as well.</p> <p>Formal collaboration agreements with both initiatives will be explored, and synergies between the GOLD+ Project and the activities planned under both ProD?CID and PAGE Phase 2 will be pursued.</p>
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Mada gasca r	<p>In addition, the project proposal points out on page 9 that there is a Co-Finance/ grant investment of 8,631,495 USD from GIZ?s PAGE project. This information is incorrect. GIZ PAGE is not a donor of the upcoming project, but the implementing agency. Therefore, GER kindly asks to list the Federal German Ministry for Economic Cooperation and Development (BMZ) as the donor agency with the GIZ as the implementing agency.</p>	The comment is duly noted, and changes will be done where applicable.
Hond uras	<p>In Honduras, the German Civil Peace Service (CPS) works on environmental conflicts and might be a relevant stakeholder/partner for cooperation.</p>	
Ugan da	<p>In Uganda, the BMZ/GIZ project Responsible Fisheries Business Chains Project (RFBC) is interested in cooperating around the issue of tracing mercury in fish in Lake Victoria.</p>	<p>Outreach with BMZ/GIZ will be carried out to identify potential synergies and opportunities for collaboration. The Executing Agency has already engaged representatives from GIZ who are responsible for supporting the ICGLR to share information about the project and will broaden this engagement to those involved in the RFBC.</p>

Global	To include the international multi-stakeholder working group on Women and Mining (www.womenandmining.org) as a global knowledge-sharing partner on gender aspects of the proposal.	Noted and included.
Global	Education institutions appear in the Sources of Co-financing but are not specifically mentioned as stakeholders. Please include them.	Noted and updated.

Global 1	<p>Monitor the outcome additional environmental parameters could be added such as monitoring the mercury concentrations in fish and/or along the food chain in the affected areas. The evaluation of the GEF GOLD program has noted that other issues (apart from mercury pollution) caused by ASGM (e.g. deforestation, harmful replacement technologies, child labour, indigenous peoples rights) could have been better addressed. While they cannot be accurately assessed before sites have been selected, Germany asks the project to fully consider these risks and to ensure co-benefits once possible.</p>	<p>The comment is duly noted, and changes will be made where applicable. All country level projects have been instructed to analyze co-benefits. Please see individual country level comments for details.</p>
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Global 1	<p>According to the evaluation of the GEF GOLD program the reduction of mercury use after project completion varies significantly in different project regions. In light of these results, Germany appreciates further clarification on whether the application of a uniform replication factor for all countries is appropriate. In the current proposal the replication factor after project completion is 3. The final project proposal should state how obstacles for replication identified in the evaluation (e.g. lack of government enforcement of mercury bans, lack of training and lack of availability of replacement parts for nonmercury technology) will be tackled by the project.</p>	<p>Since each country has their own reduction target, in-country replication through component 4 and continuation/replication of project interventions at project sites would lead to doubling of the target. Furthermore, dissemination to neighboring countries and global knowledge sharing efforts through the global project would lead to another level of reduction equivalent to the original target. Therefore, in sum, the programme target is 3 times the country's specific reduction target.</p>
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Global	<p>We welcome this program, but it is unclear to us, how the lessons learned from the GEF GOLD Program were included in the design of the GEF GOLD+ Program. Institutional Learning is key to us, so could you clarify how this program builds on the lessons learnt on ASGM in particular from the GEF GOLD Program so far?</p>	<p>The GEF GOLD agencies have been fully involved in the development of the CEO endorsement document.</p>
Global	<p>Page 16, Para 41: It is estimated that nearly 100% of all mercury used in ASGM is released into the environment (Global Mercury Project, UNIDO 2007). Is there no more recent literature you could quote for this?</p>	<p>Response Pending</p>

Global 1	Page 17, Para 44: the access to finance for the transition to mercury free practices in the ASGM sector is a key challenge in particular in the informal sector, but it is unclear to us how GEF GOLD+ will tackle this challenge after the GEF GOLD program has already addressed this challenge and was not fully successful.	Comment is duly noted. Please see country level ProDocs for details on country specific financial mechanisms.
Global 1	Component 2: Please further clarify more specifically which concrete measures will be taken to include responsible supply chains and traceability in the program, since we consider them as key.	PlanetGOLD criteria was designed to guide traceability and supply chain criteria for the program. The criteria can be found here: https://www.planetgold.org/sites/default/files/planetGOLD_Criteria_for_Environmentally_and_Socially_Responsible_Operations_Feb21.pdf

Global 1	<p>Please further elaborate how you will ensure the sustainability of the program. The information contained is very limited. Please e.g. add an element on institutional strengthening, since we consider this to be crucial for the sustainability of the program. Governments often do not issue any regulation for ASGM or issue last minute regulations which often leads to an even larger illegal / informal ASGM sector. Institutional intermediary steps and well thought through policies are key for the long-term success.</p>	Response Pending
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Global 1	<p>Could you clarify what will happen with the mercury still in use at this stage and the various mercury waste stocks in the ASGM areas of the recipient countries of the program? Where will the mercury waste be treated and by whom? Who will transport it? The treatment of the waste is key to ensure that the mercury intake to the environment will be avoided / limited as much as possible.</p>	<p>The comment is duly noted. Please reference individual country ProDocs for details regarding in country mercury protocols.</p>
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STAP

Global 1	<p>Section B of the PIF indicates that the project will have six components. However, Section 3 of the PIF (the proposed alternative scenario) only presents four components. The components on "monitoring and evaluation of country-level child projects" and that on "global coordination, knowledge management, and outreach" are not described. These are essential parts of the project and should be fully presented.</p>	<p>To clarify, the country level child projects have 4 components, while the Global child project has 2, totaling 6 components. The Global child project will focus on global coordination and knowledge management. Each country level project has reporting requirements at the global level as well as individual M&E resources for the respective projects.</p>
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Global 1	<p>The project will adopt the jurisdictional approach (JA) as a framework for structuring interventions. The second paragraph on page 28, however, highlights some of the challenges associated with the JA, including unrealistic expectations, political turnover, limited public sector capacity, and lack of broader support and incentives. Yet, the PIF is silent on how the project will overcome these challenges to ensure success. STAP recommends that this should be done.</p>	<p>This comment is duly noted and additional information regarding how the JA approach will be piloted is included in the ProDoc. Through the jurisdictional approach, the market- and policy-based interventions could be bridged for greater impact on the ground. This includes encouraging governments, businesses, local communities, and NGOs to work together towards common goals, such as improving local livelihood, eliminating mercury and maintaining natural ecosystems through coordinated strategies across the sector. By involving and educating all the relevant actors across the ASGM landscape, the efforts to improve the perception of the ASGM sector, including raising awareness about the challenges and opportunities the miners are facing, can be magnified.</p>
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Global 1	Component 4 will support capacity building, knowledge sharing, and communication, including "using online education and digital marketing tools to support the traditional participatory workshop and training model to help institutionalize sustainable mining methods at the community level." It is, however, unclear how online education and digital marketing tools will be used given the remoteness of ASGM operations. Does this project intend to provide digital access to ASGM miners? The details of how this component will be achieved need to be elaborated.	Response Pending
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Further clarification is needed on replication estimates of the global environmental benefits. A reduction of 70 metric tons in mercury use is expected in the participating countries. Another 210 metric tons is expected via replication. It is, however, unclear if the replication will occur in the participating countries or whether it will occur indirectly through the transfer of knowledge from this project to other countries (given the global nature of the project). This needs to be clarified. Also, how was the replication factor of 3 determined?

GEF investments are predicated on the delivery of global environmental benefits in biodiversity, climate change mitigation, international waters, land degradation and chemicals and waste. The global project will support child project countries in their efforts to achieve an aggregate of more than 129.138 metric tonnes reduction in mercury and engage more than 202,500 direct beneficiaries over a 5-year period through sharing lessons. It is expected that mercury use reduction will be replicated through sharing lessons on the planetGOLD platform, webinars at national and global level. As such, it is anticipated that through technology replication, additional mercury will be reduced attributed to lessons learned. After 10 years following the project, it is anticipated that a replication by a factor of 3 will be achieved, representing an additional 387.414 metric tonnes reduction in mercury globally. These activities in the reduction of mercury use are directly aligned with GEF's long term goal of curbing the exposure of humans and the environment to harmful chemicals through a significant reduction in the use and release of mercury. Since each country has their own reduction target, in-country replication through component 4 and continuation/replication of project interventions at project sites would lead to doubling of the target. Furthermore, dissemination to neighboring countries and global knowledge sharing efforts through the global project would lead to another level of reduction equivalent to the original target. Therefore, in sum, the programme target is 3 times the country's specific reduction target.

It is good that the PIF acknowledged that the project would contribute to other GEF core indicators, including the area of land restored, area of landscapes under improved practices, and greenhouse gas emission reduction. The PIF did not, however, present clearly how the interventions will lead to these benefits. We encourage that the project proponent elaborates further on this and provide a detailed estimation of all expected GEBs at the PPG stage.

The comment is duly noted, and changes will be made where applicable. All country level projects have been instructed to analyze co-benefits. Please see individual country level comments for details.

	<p>For a project that will depend on significant multi-stakeholder engagement for its success, the stakeholder section of the PIF is inadequate. Please provide a detailed analysis of stakeholders expected to be engaged in the project in the participating countries. Please, also highlight how they will be engaged, their expected role in the project, and whether they have been engaged already or if this is ongoing.</p>	<p>The comment is duly noted, and a detailed stakeholder engagement plan has been included in CEO endorsement submission.</p>
	<p>It is good that the PIF acknowledges the potential impacts of projected climate change, for example, desertification on achieving project objectives. The effects of climate change may also influence decisions on ASGM sites? We recommend that a detailed analysis of climate risk and management strategy should be presented for the project.</p>	<p>The comment is duly noted. Please reference country level ProDocs for respective climate risks analysis.</p>

ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing
status in the table below:

<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Int Consultants	103,146	83,851	19,295
Field visits and data gathering	21,354	17,500	3,854
Inception Workshop	5,250	5250	0
Validation Workshop	5,250	5250	0
Total	135,000	111,851	23,149

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



Map No. 4164 Rev. 4 UNITED NATIONS
August 2014

Department of Field Support
Cartographic Section

Siguri, KanKan zone:

Latitude: 11.419160

Longitude: -9.170080

GPS Coordinates: 11° 25' 8.976" N, 9° 10' 12.288" W

Mandiana, KanKan zone:

Latitude: 10.633660

Longitude: -8.692820

GPS Coordinates: 10° 38' 1.176" N, 8° 41' 34.152" W

Kourroussa, KanKan zone:

Latitude: 10.651400

Longitude: -9.880180

GPS Coordinates: 10° 39' 5.04" N, 9° 52' 48.648" W

Dinguiraye, Farana zone:

Latitude: 11.288630

Longitude: -10.714080

GPS Coordinates: 11° 17' 19.068" N, 10° 42' 50.688" W

Gaoul, Boke zone:

Latitude: 11.754090

Longitude: -13.201420

GPS Coordinates: 11° 45' 14.724" N, 13° 12' 5.112" W

ANNEX E: Project Budget Table

Please attach a project budget table.

BUDGET ALLOCATION BY PROJECT COMPONENT/ACTIVITY *								
		Project Component 1: Formalization	Project Component 2: Market Access	Project Component 3: Improved practices	Project Component 4: Communication			
		Component 1	Component 2	Component 3	Component 4	PMC	M&E	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE								Total
								US\$
10	PROJECT PERSONNEL COMPONENT							0
1100	Project Personnel							0
1101	Project Coordinator	-	-	-	-	100,000		100,000
1102	Capacity Building Expert	109,501	89,592	59,728	59,728			318,548
1103	Stakeholder Engagement Officer	102,201	61,321	40,880	77,427			281,829
1104	Gender Officer	112,353	53,357	35,571	35,571			236,853
1105	Responsible Sourcing and Market Engagement Officer	-	296,184	-	2,883			299,066
1106	Procurement and Logistics Expert	47,782	63,710	31,855	31,855			175,201
1107	Communications & Knowledge Sharing Manager	18,082	-	-	127,419			145,502
1108	Training Coordinator	75,467	99,599	46,243	35,571			256,880
1200	Consultants							0
1201	Senior Gender Specialist	75,000	-	-	-			75,000
1202	Access to Finance Specialist (s)	-	70,000	-	-			70,000
1203	Geologist (s)	-	28,000	-	-			28,000
1204	ASGM Technical Expert (s)	-	-	60,000	-			60,000
1205	Facilitators (JA Approach)	45,000	-	-	-			45,000
1206	Environmental consultant (s)	-	-	40,000	-			40,000
1207	Legal and Regulatory Expert (s)	15,000	-	-	-			15,000
1208	Formalization Expert (s)	81,000	108,000	-	-			189,000
1209	Technical Expert(s)	-	-	30,000	-			30,000
1210	Cooperative Development	-	62,500	-	-			62,500
1299	Sub-Total	681,387	932,262	344,277	370,454	100,000		2,428,380
1300	Administrative support							0
1301	Finance, Admin, HR Support					55,000		55,000
1399	Sub-Total	-	-	-	-	55,000		55,000
1600	Travel on official business (above staff)							0
1601	Travel	156,940	133,850	101,965	41,750			434,505
1699	Sub-Total	156,940	133,850	101,965	41,750			434,505
1999	Component Total	838,327	1,066,112	446,242	412,204	155,000		2,917,885
20	SUB-CONTRACT COMPONENT							0
21	Subcontract (UN organization)							0
2199	Sub-Total							0
22	Sub-contracts (SSFA, PCA, non-UN)							0
2201	Communications (formatting, layout, design, illustrations, etc.)	15,000	8,000	20,000	32,465			75,465
2202	Local consultants (1 per zone)	80,000	-	25,000	-			105,000
2203	Local community-based consultants/organizations (NGOs, universities, etc.)	113,000	24,000	85,000	-			222,000
2204	JALA assessment (SWOT Analysis)	225,000	-	-	-			225,000
2205	Responsible Sourcing Assessment & Expertise	-	50,000	-	-			50,000
2299	Sub-Total	433,000	82,000	130,000	32,465			677,465
2999	Component Total	433,000	82,000	130,000	32,465			677,465
30	TRAINING COMPONENT							0
3200	Group training (field trips, WS, etc.)							0
3201	Expert group training (formalization)	117,500	-	-	-			117,500
3202	Expert group training (market access)	-	60,050	-	-			60,050
3203	Expert group training (improved practices)	-	6,800	96,400	-			103,200
3299	Sub-Total	117,500	66,850	96,400	-			280,750
3300	Meetings/conferences							0
3301	Meetings (Formalization Guide)	88,450	-	-	-			88,450
3302	Sensitization campaign for women miners	56,500	-	-	-			56,500
3303	Jurisdictional Approach	69,200	-	-	-			69,200
3303	Financial Inclusion/Responsible ASGM	-	120,800	-	-			120,800
3304	Improved mercury-free practices	-	-	15,600	-			15,600
3305	Communication / Knowledge sharing meetings/workshops (including annual project workshops, project steering committee meetings, and inception workshop)	-	-	-	249,000			249,000
3306	Regional Knowledge Sharing Workshops	-	-	-	66,000			66,000
3307	International meetings, conferences, events (GEF, planetGOLD, UNEP, etc.)	-	-	-	34,000			34,000
3399	Sub-Total	214,150	120,800	15,600	349,000			699,550
3999	Component Total	331,650	187,650	112,000	349,000			980,300

40	EQUIPMENT & PREMISES COMPONENT												0	
4100	Expendable equipment (under 1,500 \$)												0	
4102	Technical equipment support for pilot sites implementation							-	15,000	60,000	-		75,000	
4103	Equipment support for communications software and remote operation on implementation of components							47,805	50,055	33,370	31,120		162,350	
4199	Sub-Total							47,805	65,055	93,370	31,120		237,350	
4200	Nonexpendable equipment (beyond 1,500\$)												0	
4201	Hg Free Systems (including pilot equipment, customs fees, transportation and delivery cost)							-	-	300,000	-		300,000	
4202	Local transportation and fuel							13,500	13,500	9,000	8,100		44,100	
4299	Sub-Total							13,500	13,500	309,000	8,100		344,100	
4999	Component Total							61,305	78,555	402,370	39,220		591,450	
50	MISCELLANEOUS COMPONENT												0	
5200	Reporting costs (publications, maps, NL)												0	
5201	Translation of essential documents							-	-	-	15,000		15,000	
5299	Sub-Total							-	-	-	15,000		15,000	
5300	Sundry (communications, postage, etc)												0	
5301	Office support goods, services, postage, freight, etc.											10,100	10,100	
5303	Computer software, anti-virus, cloud storage, conference call licenses, etc.							5,400	7,200	3,600	3,600		19,800	
5399	Sub-Total							5,400	7,200	3,600	3,600	10,100	29,900	
5500	Evaluation												0	
5501	Mid-term evaluation (UNEP)							-	-	-	-		30,000	
5502	Final Evaluation (UNEP)							-	-	-	-		30,000	
5503	Final Audit							-	-	-	-	40,000	40,000	
5599	Sub-Total							-	-	-	-	40,000	100,000	
5999	Component Total							5,400	7,200	3,600	18,600	50,100	144,900	
	TOTAL							1,669,682	1,421,617	1,094,212	851,489	205,100	60,000	5,302,000

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).