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

10838

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 Sierra Leone

Countries

Sierra Leone

Agency(ies)

CI

Other Executing Partner(s)

The Environment Protection Agency, Sierra Leone (EPA SL)

Executing Partner Type

Government

GEF Focal Area

Chemicals and Waste

Sector

Taxonomy

Focal Areas, Chemicals and Waste, Mercury, Artisanal and Scale Gold Mining, Stakeholders, Indigenous Peoples, Private Sector, Communications, Public Campaigns, Education, Awareness Raising, Behavior change, Beneficiaries, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Access to benefits and services, Capacity Development, Capacity, Knowledge and Research, Knowledge Exchange, Knowledge Generation, Learning

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

No Contribution 0

Land Degradation

No Contribution 0

Submission Date

11/2/2022

Expected Implementation Start

9/1/2023

Expected Completion Date

8/31/2028

Duration

60In Months

Agency Fee($)

243,338.00

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	2,703,750.00	15,546,671.00
		Total Project Cost($)	**2,703,750.00**	**15,546,671.00**

B. Project description summary

Project Objective

To reduce the use of mercury in the ASGM sector in Sierra Leone through a holistic, multisectoral integrated formalization approach, and increasing access to finance leading to the adoption of sustainable mercury-free technologies and access to traceable gold supply chains.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1: Enhancing formalization in the ASGM Sector	Technical Assistance	Outcome 1.1.: Enhanced formalization in the ASGM sector through multisectoral, integrated approaches and capacity building of actors Outcome Indicator 1.1.a.: Number of ASGM miners with increased formalization (include sex-disaggregated data) Target 1.1.a. All ASGM miners in the project intervention areas have increased formalization by the end of the project, of which 50% are women (i.e. 2,560 miners of which 1,280 are women)	Output 1.1.1.: Technical support to key ASGM institutional-level stakeholders in developing gender-sensitive policies and formalizing the ASGM sector. Output 1.1.2.: ASGM organizations are created and capacitated to ensure gender-sensitivity, and good governance Output 1.1.3: ASGM organizations are capacitated on entrepreneurship, business management, and financial education, with a focus on women. Output 1.1.4.: The jurisdictional approach is piloted with a gender-sensitive lens in selected ASGM areas	GET	570,720.00	4,700,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
			Output 1.1.5: National stakeholders capacitated to ensure compliance with ASGM regulations and gender-sensitivity			
		Outcome Indicator 1.1.b: Number of institutions strengthened to enhance service delivery in the ASGM sector				
		Target 1.1.b: Four (4) institutions with enhanced technical capacity for service delivery in the ASGM sector				

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2: Access to Finance enhanced by Financial inclusion1 and Responsible Supply Chains	Technical Assistance	Outcome 2.1.: Enhanced access to Finance by Financial Inclusion and Responsible Supply Chains Outcome Indicator 2.1.a: Amount of funds made available to targeted ASGM operations through new or existing formal financial mechanisms Target 2.1.a. $500 000 made available to targeted ASGM through financial services Outcome Indicator 2.1.b.: Number of ASGM	Output 2.1.1.: Financial services developed or with improved access for ASGM sector actors, including women, through support to financial institutions Output 2.1.2.: A pilot system for tracing AGM gold trade and mercury use from the mine to the point of export is developed through a multistakeholder approach. Output 2.1.3.: A gender-sensitive Landscape Finance Plan is developed in a pilot jurisdiction	GET	576,007.00	4,700,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		miners with increased access to finance, such as the capacity to open bank accounts, develop savings, and access micro-credit				
			Target 2.1.b.: At least 120 miners (including 50% of women)			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3: Enhancing up-take of Mercury-free technologies	Technical Assistance	Outcome 3.1.: Enhanced up-take of Mercury-free technologies by miners Outcome Indicator 3.1.a: Proportion of ASGM miners adopting mercury-free practices Target 3.1.a. 25% of ASGM miners at pilot sites currently using mercury adopt mercury-free practices.	Output 3.1.1.: Capacity building program on better mining practices and mercury-free technologies is developed and implemented among ASGM stakeholders and miners, including women Output 3.1.2.: Mercury-free processing techniques and equipment are introduced in pilot sites while addressing the differentiated needs of men and women	GET	853,695.00	4,700,000.00

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	Technical Assistance	Outcome 4.1.: Increased sensitization and awareness on the dangers of mercury use and environmental management at the national, regional, and local scale Outcome Indicator 4.1.a. Number of people reached with awareness-raising materials generated through the project/planetGOLD, by mode of communication (e.g., online, in-person, via SMS, WhatsApp, etc.) and by gender Target 4.1.a.: 9,000 (4,500 women and 4,500 men)	Output 4.1.1.: A national gender-sensitive awareness-raising and advocacy strategy on the dangers of mercury use and environmental management is developed and implemented. Output 4.1.2.: Gender-sensitive knowledge products and tools on key ASGM topics are generated and disseminated at the national, regional and international levels Output 4.1.3.: Project is coordinated and aligned with planetGOLD programme objectives and outcomes, through regular coordination activities and reporting	GET	445,828.00	400,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		reached with awareness-raising materials on the dangers of mercury and ways to avoid/eliminate its use in ASGM (by type)				
Component 5: Monitoring and Evaluation	Technical Assistance	Outcome 5.1: A monitoring and evaluation framework for the project Outcome Indicator 5.1.a: Number of M&E frameworks developed for the project Target 5.1.a.: One M&E framework for the project	Output 5.1.1.: Periodic M&E reports generated and submitted to CI-GEF Agency Output 5.1.2.: Mid-term Evaluation and Terminal Evaluation commissioned by CI-GEF	GET	128,750.00	306,000.00
				Sub Total ($)	**2,575,000.00**	**14,806,000.00**

Project Management Cost (PMC)		
GET	128,750.00	740,671.00
Sub Total($)	**128,750.00**	**740,671.00**
Total Project Cost($)	**2,703,750.00**	**15,546,671.00**

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($)
Recipient Country Government	The Environment Protection Agency, Sierra Leone	In-kind	Recurrent expenditures	15,070,000.00
GEF Agency	Conservation International (CI)	In-kind	Recurrent expenditures	476,671.00
			Total Co-Financing($)	**15,546,671.00**

Describe how any "Investment Mobilized" was identified

No Investment mobilized was identified.

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($)
CI	GET	Sierra Leone	Chemicals and Waste	Mercury	2,703,750	243,338	2,947,088.00
			Total Grant Resources($)		**2,703,750.00**	**243,338.00**	**2,947,088.00**

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 ($)

100,000

PPG Agency Fee ($)

9,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
CI	GET	Sierra Leone	Chemicals and Waste	Mercury	100,000	9,000	**109,000.00**
				Total Project Costs($)	**100,000.00**	**9,000.00**	**109,000.00**

Core Indicators

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	450900.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	450,900.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

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

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

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

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	1.41	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)
1.41			

Indicator 9.3 Hydrochloroflurocarbons (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)

Indicator 9.6 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 9.7 Highly Hazardous Pesticides eliminated

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

Indicator 9.8 Avoided residual plastic waste

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

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		5,780		
Male		5,780		
Total	0	11560	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

Core Indicator 4: Area of landscapes under improved practices (Hectares) It is assumed that the Chiefdom of application of the JA will be Kholifa Rowalla, and as a consequence, the totality of its surface area will be considered under improved practices due to the development of its Landscape Action Plan. The target for Core Indicator 4 may be reassessed during project implementation, as the selection of the jurisdiction covered by the Landscape Action Plan is confirmed. This target of 450,900 ha is an increase from the Concept stage as the activities for the application of the JA was defined during PPG which allows this benefit to be realized. Core 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 (thousand metric tons of toxic chemicals reduced) In the NAP for Sierra Leone, a total average estimate of mercury use in its ASGM sector is reported at .352 MT/year. If the government?s objective to eliminate mercury can be achieved during project implementation and using a replication factor of 3 for the reduction achieved after the project ends, the total mercury use reduction achieved by the project is 1.408 tons. There are indications that mercury use in Sierra Leone is on the rise recently, which would mean that higher long-term mercury use reductions can be achieved through the project. Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment. The project is expected to directly benefit 11,560 people (of which 50% are women) through capacity-building support

to ASGM organizations. Based on the data available, it is estimated that the Chiefdoms have variable numbers of ASGM miners. Moreover, at the national scale, women are estimated to represent close to 50% of the workforce and are targeted at this level. Of the ASGM miners, the project intends to directly benefit all those at targeted sites (estimated at 2% of the total targeted Chiefdoms population) , as well as an additional 7% of the remaining local populations through awareness-raising campaigns . Refer to the table below, for details on the population of districts used for estimating Core Indicator 11.

Part II. Project Justification

1a. Project Description

Changes From The Concept

1. The PPG phase allowed for the project to consolidate its approach to tackling mercury use in ASGM. The main changes from Concept are summarized below by Component:

    a. Component 1: This Component was left largely unchanged.

    b. Component 2: This Component was left largely unchanged, apart from the addition of a process for Landscape Finance Plan development and exploring certification schemes within that framework.

    c. Component 3: This Component was left largely unchanged.

    d. Component 4: This Component was left largely unchanged.

    e. Component 5: This component on M&E was added to ensure sufficient focus on this important aspect of project implementation.

2. The main changes to GEF Core Indicators are presented below:

    a. Core Indicator 4: This has been increased to 450,900 ha to reflect the development of a Landscape Action Plan for Kholifa Rowalla Chiefdom.

    b. Core Indicator 9: Mercury reduction in the Concept was a reduction of 0.352 metric tons of mercury over the life of the project. Using a replication factor of 3, this number adds up to a potential reduction of 1.408 metric tons of mercury overall. This number has remained unchanged since the concept.

    c. Core Indicator 11: Based on the selection of sites for project intervention and available demographic data for the areas, the number of direct beneficiaries has decreased from 20,000 (of which 10,000 are women) to 11,560, of which 5,780 are women.

3. There is approximately a 1.5% decrease in the co-financing amount at PPG Phase.

The global environmental and/or adaptation problems, root causes and barriers to be addressed

Environmental Problems

Deforestation

Deforestation is one of the major environmental concerns in the country caused by mining, but also population growth, urban migration, quarrying, and unsustainable farming practices. The preparation of ASGM sites involves the removal of plants and trees, which increases soil erosion, slope instability, and increases risks of landslides. Large areas including swamps and areas of open vegetation are being excavated with hard labor and even heavy machinery to expose underlying alluvial deposits containing gold.

Between 1990-2005, Sierra Leone lost about 9.5 percent of its forest cover, accounting for an estimated 290,000 hectares. This process has been accelerating, and Global Forest Watch shows that from 2001 to 2021, Sierra Leone lost 1.82Mha of tree cover, equivalent to a 32% decrease in tree cover since 2000. This being said, only 1.3% of this tree loss can be considered permanent deforestation, while the rest are reversible changes attributable to wildfires and shifting agriculture primarily. Permanent deforestation, however, is first and foremost commodity-driven (including in large part mining activities), as well as urbanization-driven (to which mining can also contribute indirectly).

The fraction attributable to ASGM specifically has not yet been quantified in Sierra Leone. However, recent advances in remote sensing have shown that deforestation can be attributed to mining processes (generally related to alluvial mines and open pit mines), but also urban growth as influxes of miners occur, and the use of satellite imagery for mapping changes attributed to ASGM activities and as an indication of the use of mercury by ASGM practitioners have been demonstrated in locations such as the Democratic Republic of Congo and Colombia.

Biodiversity loss

The uncontrolled exploitation of mineral resources and the use of mercury have had devastating environmental consequences on flora and fauna throughout the country. According to Sierra Leone?s NBSAP (2017), mining is the second most important threat to biodiversity in Sierra Leone after agriculture, and the degradation is likely to intensify in the next years.

Artisanal mining activities threaten many ecologically important habitats and the riparian ecology of floodplains, rivers, and streams. Other threats include poaching, over-harvesting of fishery resources, pollution issues, and climate change effects. Areas of riparian zones have been destroyed, and observations from field surveys notice the absence of birds depending on riparian ecologies (such as kingfishers, crakes, and ducks) from river systems in the East of the country, where artisanal and industrial mining are predominant.

To restore biodiversity, the Government of Sierra Leone established the National Protected Area Authority with the mission to engage in biodiversity conservation. The rehabilitation and reclamation of mined-out areas are stated in the Mines and Minerals Act, of 2009. However, it is not enforced in practice, and no technical support has been provided to date.

Land degradation

Artisanal and small-scale gold mining operations have resulted in land degradation due to open mining pits and deforestation, in different parts of the country. According to Navigation Message Authentication (NMA) and satellite images, it is estimated that land degradation is advancing at a minimum rate of 500 hectares per year, partly due to ASGM activities, especially in the East and the South of the country. Most of the time, lands are not rehabilitated after ASGM activities, leaving large mining pits which cannot be used for farming anymore, or that involve significant effort and costs to farmers to rehabilitate the land. According to the SEA 2016, more than 80% of the land is abandoned after mining, leaving open pits which are very often left open to have the opportunity to rework the sites. Indeed, there is a ?dream? and constant hope in the mind of miners that some pits still retain unexplored resources.

A recent study in the Tonkolili District showed the interlinkages between iron ore mining, ASGM, and land degradation. From 2011 to 2018, the establishment of industrial iron ore mines resulted in the gradual urban land expansion (average of 7.5%) and exponential population growth (600%) as people migrated in search of employment. The excess influx of labor led to the rapid expansion of alternative livelihood activities of which ASGM, while small-scale agriculture retreated by 48% within the mining concession area, generating several lakes and ponds which polluted fertile swamplands outside the mining areas with negative implications for farming, the dominant livelihood activity in the study area. While the iron ore mining industry directly provided jobs for some people and enhanced livelihoods in its ancillary industries, the study concluded that the negative livelihood impacts of iron ore mining on agricultural productivity and forest products were far higher than the positive impacts.

Land degradation caused by artisanal mining increases the risk of health issues, such as malaria. Many alluvial gold mining pits are being left behind with stagnant water, attracting mosquitoes that spread malaria among people living or working close to mining pits, including vulnerable groups such as women and children.

Another challenge faced by the ASGM sector is the decline of the near-ground surface of mineral deposits. Consequently, artisanal miners are digging deeper to extract gold deposits and cannot mine their plots using local rudimentary mining tools. This drives them to ask supporters who have money to hire heavy-duty machines to excavate and use large washing plants to engage in mining activity, which is a violation of the mining law. The artisanal mining sector is thus actually reaching the depth of

small-scale mining while still holding artisanal licenses. The deeper miners dig, the more environmental damage is done: according to Environmental Protection Agency (EPA) in 2019, the gradual exhaustion of alluvial surface deposits is partly due to the poor mining techniques used by artisanal miners.

Pollution of air, soil, and water resources

Streams and rivers are particularly affected by ASGM activities when gold mining is conducted in or near water. During the PPG Phase Gold+ Field mission, it was observed that waste waters from the gold mines were responsible for the downstream and river pollution, especially in the Panpana/Taiyea river. In particular, the runoff mining waste from tailings represents one of the key issues for all types of mining, as tailings are simply released into soil and water because there is no specific tailings management procedure.

Other ongoing poor mining practices in Sierra Leone are related to the use of mercury, which implies the concentration and burning of mercury in open areas and releases in rivers. ASGM is also commonly associated with mercury use, which has devastating environmental consequences when it is released into the air, soil, and water. It is considered by the WHO to be one of the ten chemicals of very high concern to public health, as it is estimated that nearly 100% of all mercury used in ASGM is released into the environment without any recycling or chemical waste treatment. ASGM is the largest global source of anthropogenic mercury released into the environment with about 1,220 tons of mercury estimated to have been introduced into the terrestrial and freshwater environments in 2015. It is the first source of mercury ahead of other mercury-releasing activities such as the combustion of coal, and non-ferrous metals production. The environmental health impact of ASGM has not been thoroughly studied but it is estimated that 3.3 to 6.5 million miners suffer from moderate chronic metallic mercury vapor intoxication worldwide.

Mercury use leads to important health issues, especially in cases where mercury is burnt near residential areas and communities. Depending on the duration of exposure, mercury intoxication can affect the central nervous, digestive, and immune systems. Neurological symptoms include mental retardation, seizures, vision and hearing loss, delayed development, language disorders, and memory loss. In children, a syndrome characterized by red and painful extremities called acrodynia results from chronic mercury exposure. In addition, methylmercury has a significant impact on women of childbearing age due to the risk of passing it on to their fetuses which can result in congenital defects. These impacts are even more dramatic as they concern approximately 12-15 million people currently involved in the sector, of which 4.5 million are women and 600,000 are children at the global scale. Risks are high for gold miners, traders, and community members, including children and women, especially in situations where no protective equipment is used.

The release of mercury into the water has important consequences for environmental and human health

and agriculture production further away than the sites of gold mining. It bioaccumulates aquatic life in rivers and affects biological diversity in river ecosystems, contaminating fishes on which Sierra Leoneans rely for proteins due to high meat prices. Moreover, according to the 2015 census, rural households, contrary to urban households, are most likely to get their water from a riverbed, or stream (91.5%), where the ASGM is done, then from public taps or protected ordinary wells. This contamination with mercury also affects drinking water used by rural communities and farmers? cattle. In Valunya Chiefdom, the pilot site located in the South of the country, the PPG Phase Gold+ field mission confirmed that rivers near the mining sites are polluted, which are also the ones serving more than ten surrounding villages.

Climate change

All climate scenarios show an increase of 1-2.5?C in the average temperatures by 2060. The country will experience more extreme climatic hazards such as more intense precipitation, strong winds, thunderstorms, and landslides. Under the effects of climate change, crop yields will be reduced, increasing livestock stress and disease outbreaks, resulting in reduced food security. These climate changes will affect rural livelihoods, limiting export earnings and the capacity to pay for food imports. Water quality and availability will also be affected by climate change, especially Sierra Leone?s network of river basins from which 80% of the country?s rural population obtains its water.

Meanwhile, unsustainable mining exacerbates Sierra Leone?s climatic vulnerabilities as it becomes increasingly water and energy-intensive through the use of machines, increasing mining companies? greenhouse gas emissions (GHG). The overall degradation of the socio-economic and ecological environment of miners associated with unsustainable ASGM practices is projected to further compound the effect of climate change, increasing the vulnerability of mining communities. Land degradation, soil and water pollution, forest clearance, and land-use change associated with ASGM practices are likely to diminish communities? adaptative capacities which will exacerbate the negative impacts of climate change.

Root Causes

Poverty

In Sierra Leone, mining is poverty-driven and represents an important source of revenue for many Sierra Leoneans living in poor rural areas, as the sector generates important incomes compared to other activities such as agriculture. Artisanal mining is considered by the government an essential contributor to poverty reduction in rural communities and a driver of development. The low barriers to entering the ASGM sector make it easier to join low-income populations. Working in the ASGM sector does not need a high level of education, any specific skills, or buying equipment, as mining is conducted with rudimentary tools such as picks and shovels or simple machinery. Children are also often working with

their parents on mining sites, instead of going to primary or secondary school. The limited formalization of the sector allows for providing fast cash to artisanal miners, without going through a contracting process. If a job in the ASGM sector remains profitable in the short term by providing immediate cash, the salary is still low paid relative to the level of effort and the dangerous working conditions implied.

Population growth

The pressure on environmental resources, land, and forests, is strengthened by the increasing population, projected to reach 10.3 million in 2030. The population of 6- to 17-year-olds is expected to increase from 2.2 million in 2016 to 2.8 million in 2030 and to represent 28.9% of the total population in 2030. The population will continue to be youthful since those under the age of 15 are projected to represent 41.5% of the population in 2025. Likewise, the urban-rural population will continue to increase: the urban population will increase from 3.3. million in 2020 to 3.7 million in 2025; while the rural population will increase from 4.8 million to 5.3 million in 2025. This population growth represents additional pressure on environmental resources, land degradation, and on the job market.

Unemployment and limited literacy

In this country recovering from a long period of civil war, unemployment is moderate and represents 4.4% of the labour force, but is higher among young people between 15 and 24 and affects 9% of them. Therefore, artisanal mining represents a job opportunity, especially for young unemployed men and single women. One of the reasons for unemployment is the limited literacy rate: among the population 15 years or older, only 43.2% is literate, and 32.7% of the people aged 3 and above living in rural areas have never attended school. In rural areas, primary or secondary schools can be found within an average of a 3 km radius of the demarcated artisanal mining activity. However, it was reported that parents need to pay informal school fees because the respective schools and teachers are not formally approved by the Ministry of Education and hence are not remunerated through official channels. The level of literacy skills is an indirect factor in increased knowledge of sustainable mining practices.

Barriers to addressing Environmental Problems

There are several barriers that the project will need to address in order to achieve mercury use reduction in the pilot sites.

Barrier 1: Weak legislative framework and limited institutional capacities to enforce laws in the ASGM sector

In Sierra Leone, ASGM is increasingly recognized as an opportunity to alleviate poverty and provide

employment for rural communities. However, the sector is loosely regulated, raising concerns about environmental and social implications for artisanal miners and communities. Institutional sets of rules, norms, and operational practices do not ensure the participation, inclusion, or engagement of ASGM stakeholders, the latter having limited knowledge or awareness of the legislative framework.

The limited formalization of the sector impedes the reduction in the use of mercury in gold-mining processes and jeopardizes the health of rural communities and the environment. Laws and regulations related to mining are not being enforced nor meeting the needs of miners, therefore there is a need to develop and strengthen legislation and governance in the sector.

The mining regulatory framework needs to be adjusted to integrate specific regulations relevant to ASGM. The following legislative aspects are to be addressed:

- **Land degradation.** The Mines and Minerals Act require mining operations to restore land following operations, and the National Minerals Agency (NMA) is responsible for monitoring compliance with Artisanal Mining (AM) land rehabilitation provisions in the law. Indeed, licenses are granted for ASGM miners under the condition that they carry out rehabilitation and reclamation of worked-out areas (see below the licensing issues faced by the sector). However, in the case of artisanal mining, the legislation is not enforced and land rehabilitation has very rarely been achieved by the NMA and EPA; neither has the rehabilitation fund prescribed in the Act to defray the cost of rehabilitation and reclamation of mined-out areas. In all, land rehabilitation represents an additional cost after the process of extraction using heavy engineering equipment, making the operation unprofitable. Moreover, NMA charges a fee for land rehabilitation, therefore it does not encourage miners for land rehabilitation.
- **Waste management**. Tailings management is one of the key issues in artisanal mining in the country. The runoff of mining waste from tailings is poorly managed and therefore contaminates streams and rivers. In Baomahun, mining waste and tailings including mercury washed down to the valley during excessive rains in the wet season, affecting water quality and aquatic life, and biological diversity in river ecosystems. If done properly, mining waste from processing is supposed to be collected in sealed tailing ponds, where mining waste is treated in an environmentally sound manner. In Sierra Leone, no such tailings management was seen beyond ponds where mercury amalgamation is conducted.
- **Land tenure**. Multiple foreign SSGM entities operate without any license next to the artisanal miners, and that can lead to conflicts over land use. At least one conflict has been recorded as one of the companies was directly operating in artisanal mining areas. Moreover, the land is often owned by men, thus reflecting gender inequalities as women have more difficulty owning lands.
- **Licensing process.** Licensing is one of the most significant barriers to formalization. Most license holders are community leaders, chiefdom leaders, and leaders of mining gangs, as the licensing process is very bureaucratic, long, and not easily accessible. Only a small portion of the operating ASGM stakeholders hold an active license. Very often, the number of miners on site exceeded the prescribed

number of 50 labourers per license. Consequently, Paramount Chiefs or local authorities would allow work without the legal existence of a license, to allow miners to make a living.

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•The long process for acquiring a license is one of the reasons preventing citizens from acquiring a license. In order to get an artisanal mining license, applicants must go through different intermediaries: pre-license procedures are officially managed by Chiefdom Mining Committee, and then the NMA issues artisanal mining licenses. However, the role of local authorities is not always clear and varies from chiefdom to chiefdom, with each local community implementing different procedures. Then, the high price of a license also acts as a disincentive for applicants. According to a study, full compliance would cost around Le. 2,500,000 (US$450), including license fees, fees for demarcation, surface rent, and ?respect? to chiefs and Mines Monitoring Officers, as well as the cost of traveling to the regional NMA headquarter offices as requested. The licensing process could be streamlined and made more accessible and less expensive to miners.

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•**Occupational health and safety**. ASGM miners face multiple risks of injury, especially in the case of mechanized and underground operations. Moreover, the increasing work of artisanal miners in deeper pits due to the declining near-surface gold which leads miners to dig deeper involves risks of pit collapse. Miners are also exposed to a wide range of health issues: malaria and pneumonia due to long-term exposure to damp air and to mercury vapors released into the air. Their exposure is strengthened by the fact they do not have access to mercury-capturing devices or any respiratory protective measures. In order to reduce health threats from mercury exposure and other ASGM-related health impacts, a public health strategy in line with the Sierra Leone National Health Promotion Strategy (2017-2021), would allow the creation of an enabling environment for the enhanced health of miners. Despite the efforts made to establish a legislative framework for artisanal mining, the regulatory oversight of artisanal mining in Sierra Leone has not been systematic, with regulatory oversight being mainly focused on large-scale mining. Compliance Officers responsible for monitoring Artisanal Mining operations are constrained by a lack of data, transport, technology, and trainings and are often unqualified to carry out the monitoring activities required for the functioning of Artisanal Mining operations; topic areas such as mining, environment, geo-data, lands, forests, labor, human rights, and social protection being insufficiently monitored.

The limited cooperation between regulatory offices, the NMA and EPA, which are the institutions governing the ASGM sector does not allow to support the enforcement of laws. There are currently no mechanisms or funding arrangements for joint monitoring programmes at the district or regional level. ASGM stakeholders are also facing a lack of capacities and resources to enforce laws and move towards formalization, including human resources and equipment.

Limited law enforcement prevents preserving lands after mining operations. As the existing legislation requiring land rehabilitation is not enforced by the NMA and EPA, most lands are left degraded without any recovery measures after the exploitation of the land for mining.

Barrier 2: Limited organization of artisanal miners

Due to limited regulation and a weak institutional framework, ASGM miners heavily rely on informal power relationships. ASGM miners are usually organized in gangs, constituted of 4 to 10 persons, under the supervision of a ?gang leader? and of a ?supporter? who brings financial support, while ?diggers? dig the gravel with shovels and ?washers? wash the ore. ?Supporters? receives cash from the sold gold, and then redistribute the benefits according to the rule of ?50/50? shared between the labourers and the gang leader. The gang leader uses part of the winnings to recover several costs, such as food for the gang, shovels, or fuel.

The remoteness of mining sites and difficulty to access the sites also represent a barrier to the organization of miners. The artisanal mining population, especially in the alluvial AGM sector, is very mobile due to the exhaustion of gold deposits within a few months after the beginning of gold exploitation. Therefore, creating sustainable and formal miners? organizations, monitoring operations, enforcing the law, and providing assistance represent a serious challenge.

Facilitating ASGM organizations of miners into legitimate and official entities would bring several benefits for miners. First, ASGM miners? needs are made visible, and easier to access by external institutions in order to provide them with technical assistance such as training on better mining practices. Secondly, if capacitated sufficiently, such miners? entities can institutionalize newly acquired knowledge and replicate training activities among miners. Finally, the organization of miners can facilitate access to important information relative to artisanal gold mining regulatory framework, market information, and finance. It can facilitate the pooling of financial resources through membership fees to provide social security for members and for creating economies of scale: this can allow them to buy new technologies and adopt more sustainable mining practices in the long term. Miners? associations can present those benefits only under the condition that they are in line with customary arrangements, pre-existing informal organizations of miners, or historical power relations, and that they receive adequate assistance during their establishment to achieve their goals.

Barrier 3: Limited transparency of the gold supply chain

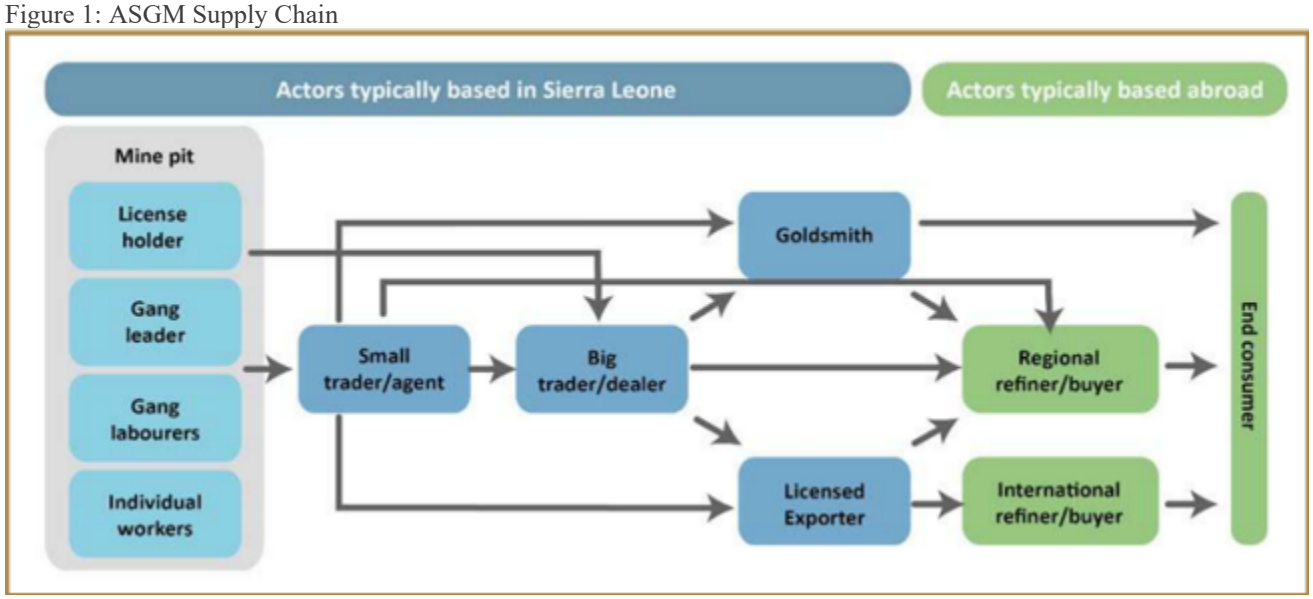
Only a small fraction of the gold produced is exported through official channels (only 142kg in 2017), and the majority of the estimated gold produced annually in Sierra Leone is smuggled to Guinea and to Liberia. According to EPA in 2019, illegal ASM operations might be employing between 100,000 and 300,000 individual miners, not making any difference between minerals being mined. The gold is usually sold by gang labourers and gang leaders to gold traders, usually based in the capital, or in one of the country?s regional or district capitals (Makeni, Magburaka, Koidu), to sell the gold either to neighboring countries, to domestic exporters who sell the gold to international buyers, or domestic

goldsmiths who come to Sierra Leone to buy the gold products (see attached Agency Project Document Figure 4).

The limited formalization of the sector and limited incentives to trade gold through official channels, associated with the existence of more attractive taxation regimes in other countries, has caused the development of gold smuggling and illegal gold trade. Due to the high value of gold, there is a high risk of money laundering by smuggling, during exploration, production, processing, and final export phases. Illicit financial flows (IFF) from Africa?s extractive sector represented USD 1 trillion between 1970 and 2008, ASM being a large source of IFFs and money-laundering. These flows are notably enabled by loose regulation of the financial system and limited governance.

The gold value chain presented in Figure 1, reflects the informality of social relationships and the limited transparency of the supply chain, which represents a barrier to the formalization of the sector. The formalization process of the supply chain will therefore imply different levels of supply chain actors, both at the domestic and international levels.

Figure 1: ASGM Supply Chain



Mercury trade goes along illegal gold trade and reflects the informality of the supply chain. Mercury tends to enter Sierra Leone through illicit supply chains, over which the government has very little control. Interviewed mercury users during the NAP reported buying mercury from Liberia, Guinea, Ivory Coast, Ghana, and Dubai. Mercury used in Baomahun village, for example, is known to be imported from Guinea and Liberia. There is an increasing concern that strong cultural, linguistic, and migratory links with Guinea, in particular, could amplify the use of mercury in ASGM. Very few people have been involved in mercury trade, as it is very expensive: it was reported in Kumaru (in early February 2018) to cost Le80,000 and Le100,000 for a small cup, which is equivalent to 1 oz (US$0.37-0.64/g). In contrast, in December 2017, the same amount of mercury would only cost Le40,000/ oz (i.e. US$0.19/gram); the price has thus more than doubled in only a matter of two months

Figure 2: Mercury and gold flows

In order to formalize the mercury and gold supply chain, standards promoting responsible practices will be followed, in particular, the OECD Due Diligence Guidance, which provides detailed guidance for implementing responsible supply chains, helps companies respect human rights, and avoids contributing to conflicts through their mineral purchasing decisions and practices. This standard ensures that international gold buyers can better manage risks throughout the supply chain.

Barrier 4: Limited access to finance for ASGM activities

ASGM miners have low access to financial services such as credit and liquidity, and formal gold markets. Due to the long and costly licensing process, artisanal miners often do not have an interest in obtaining licenses to manage their activities, and then seek supporters or informal arrangements to finance their needs in equipment and sell their gold. They thus become indebted to the supporters, who take advantage of this relationship to determine the price of gold recovered by the miners, very often at prices under the market rate.

Without a structure or legal entity such as cooperatives, or any supervising authority, miners start pre-financing their operations through limited financing options, traditionally the following operational modes: Supporters? financing, self-financing, or ?Gado gang? financing.

Supporters? financing. Very often, ?Supporters? pre-finance mining operations, pay for the equipment or supplies it and obtain the license to access the land, allowing miners to start mining operations. The supporter then subtracts the value of his expenses from the gold obtained from the operation; the rest is shared with the miners. A sense of trust, built over many years, strongly influences relationships between miners and supporters.

Self-financing. Miners can also start their own operations through other sources of income, often small-scale general merchandise trades. For few of them, might access credit from a gold buyer to self-finance machines and equipment.

?Gado gang.? Miners also organize into small groups known as ?gado gang?. The members rely entirely on their own labour and equipment, not holding a mining license but having obtained permission access from a landowner or a chief for accessing the land. They then sell their products to any buyer of their choice.

The limited financial literacy of miners, both men, and women, represent a barrier to their access to finance. Most of them come from remote rural communities in which literacy rates and banking knowledge are low. It is especially the case for women, who have less cultural capital and financial education than men and experience gender-biased treatment. They are confronted with more difficulties than men to start their own businesses in the cases where some of them envisioned being independent as an economic alternative to mining. In the absence of technical assistance supporting artisanal miners to increase their knowledge or capacities relative to accessing finance, miners have to find solutions to finance themselves or to depend financially on informal ?supporters?.

On the other hand, formal financial institutions tend to perceive mistrust of ASGM activities due to the limited transparency and accountability of the sector and its implication with informal financial channels. Local financial and banking entities refuse to consider or extend credits or micro-loans to artisanal miners. It is the case even for small-scale mining companies, to which local banks experienced lending money and voiced that the sector is too risky. Consequently, it is nearly impossible to access credit or pre-financing for any ASGM activity from the formal sector. Financial institutions also set specific requirements for business investments, which artisanal miners often cannot meet. Therefore, there is a need to develop an institutionalized and systematic approach for financing artisanal mining operations, as current financing practices legitimize the participation of ?supporters? in the Artisanal Mining market.

Being a challenge at both individual and institutional levels, accessing finance can lead to significant environmental benefits for miners: they would be able to undertake responsible mining practices and use mercury-free tools and technologies.

Barrier 5: Limited knowledge of the dangers of mercury, alternative mining practices, and limited access to sustainable mining practices and equipment

Unsustainable practices have been identified in the ASGM sector, firstly due to the limited access of miners to appropriate equipment. Most ASGM activities are conducted with limited material means, being executed in remote areas of the country, that sometimes do not have formalized grid system for power generation or appropriate access to water. Moreover, as mills are not routinely used, the sluices are typically fed with too coarse material full of rocks which block the sluice, fill the carpet with excess material and cause turbulences. All this together causes fine gold particles to be washed away which leads to poor recovery and eventually to poor daily income for artisanal miners. If simple tools such as sieves could be used and sluices adjusted, it would contribute to improved mining practices and slow down the decline of alluvial surface deposits which is partly due to the poor techniques. Introducing milling, teaching miners to use sieves, and adjusting the sluices with good carpet materials, would make a difference in current practices and revive the sector.

Secondly, unsustainable mining practices are related to the use of mercury, which is highly toxic to human health and the environment. Two dangerous practices in mining have been observed in terms of mercury use: open burning of amalgams and burning of amalgam in a residential area. Used by both men and women, without having awareness of mercury?s environmental and health impacts, mercury-gold amalgams are burnt openly without the use of mercury-capturing devices, leading to inhalation and intoxication risks. It has been observed that mercury amalgams could sometimes even be burned near communities and mining camps hosting local residents.

According to the Gold+ field mission conducted in May 2022; mercury use in gold processing has been identified at Baomahun in the Bo district. In that village, mining waste and tailings including mercury washed down to the valley during excessive rains in the wet season. The miners of the village, including women, are broadly exposed to mercury and have experienced irritation when using the chemical, but do not have access to adequate equipment or alternative gold extraction techniques. Some of the miners are handling the mercury with bear hands without the necessary protective equipment, although some studies have shown the presence of lead in some gold mines.

Several factors hinder the transition to mercury-free technologies. Having limited awareness and knowledge of mercury-free techniques and in limited possession of the equipment that could allow the transition to mercury-free techniques[[1], miners keep on using mercury in the gold mining process. Some miners also have traditional preferences for their techniques such as gravity-only methods, even though those mining techniques are not very efficient for total gold recovery. At last, ASGM miners are unable to finance initial investments that would allow them to shift to low or no mercury techniques and technologies.

Miners often have limited knowledge and education about environmental management, gold supply chain sustainability, or on the dangers of using mercury in mining, as most of them are also farmers and have started an ASGM activity without any training. Channels of communication at the national,

regional, and local levels do not allow miners to have access to relevant knowledge on these aspects. Improved awareness raising and coordination between institutional bodies governing mercury use could support the transition to mercury-free techniques and to the formalization of the sector.

The baseline scenario and any associated baseline projects

Under the Business-as-Usual scenario, the ASGM sector will remain poorly regulated, and formalization will lag; artisanal and small-scale miners will continue to have limited knowledge and awareness of good mining practices, of the impact of mercury on human and environmental health, and alternative livelihoods; and access to formal, transparent gold supply chains will remain difficult for small-scale and artisanal miners. In addition, there will be a continued limitation to accessing finance, hence the existing challenges and barriers will persist. As a result, the current trend of increase in ASGM will continue through ?gold rushes?, leading to devastating environmental and human health impacts, as ASGM miners will increase the use of mercury to extract gold, expand mining areas without consideration for sustainable forest, land and water management, ultimately causing more land degradation, deforestation, and adverse health and environmental impacts in Sierra Leonean communities. As such, efforts toward achieving the objectives of the National Action Plan for Artisanal and Small-Scale Gold Mining in Sierra Leone will fail without the GEF?s intervention.

Institutional and legal framework remaining weak

Without this project, institutional capacities to implement the ASGM NAP, formalize the sector, and manage mercury use will remain limited. In the NAP, a National Inter-sectoral Committee on Chemicals Management (NICCM) was established with the mandate of making strategic decisions for the NAP and for supporting both the MIA and the NAP development. However, to date, its effective implementation and support provided to the formalization of the sector remain limited. In parallel, Ministries, Departments, and Agencies (MDAs)?s capacities to carry out their mandates in NAP implementation at the national, chiefdom, and district levels will remain low.

The absence of revision of the legislative framework will maintain the ASGM sector in informality. institutional and policy framework will not be revised and include formalization aspects of the ASGM sector. Artisanal and small-scale mining activities will therefore remain informal, and unlicensed. The social and environmental impact of ASGM and mercury use will continue, as well as its related impacts on health, air, soil, and water.

Mercury use

The use of mercury in ASGM is a recent phenomenon, and its use is likely to be on the rise without this project and this GEF-funded intervention. The precise amount of mercury used in Sierra Leone is hardly documented, partly because mercury is often illegally imported into Sierra Leone from neighboring

countries. Moreover, miners and related ASGM stakeholders are often reluctant to confess the use of mercury to authorities.

Currently, the level of mercury in ASGM seems relatively low compared to other countries in the region. Most of the gold deposits available for artisanal miners have been alluvial and could be recovered with the rudimentary gravity concentration methods by sluicing and panning. Moreover, mercury is expensive in Sierra Leone compared to miners? daily earnings ((Le3,500/g or 0.5 USD/g). According to the NAP, mercury use has been observed in two AGM communities. In Kumaru, mercury was used only for processing mine tailings, which were re-processed once or twice (with sluices and pans, no whole ore amalgamation was observed) because they still contained gold which was not recovered in the first treatment. In Baomahun, analyses revealed the presence of mercury in the neighboring swamps. Mercury was used for the primary ore recovered from hard rocks. The miners in those two sites have been estimated in the NAP (2020) to use on average 188kg of mercury per year, over a total average estimate of mercury use in the ASGM sector of 352 kg per year at the national scale. In addition to mercury use in artisanal mines, mercury has also been likely used by SSGM and LSM companies in the localities of Masumbiri, Maranda, Laminaya, and Kampala. A foreign SSGM company (M&S Ventures) operating with a 15-meter-long dredge on a river has been reported by its own workers to use mercury for treating ore tailings. On that site, the roughly estimated average annual mercury use is 165kg/year

Without this project, mercury use will be increasing in Sierra Leone due to the tendency of the ASGM sector to be mobile, especially alluvial AGM, and to the gradual decline of the near-surface gold deposits. Without a legislative framework and effective measures regulating mercury use, the illegal trading of mercury from neighboring countries in Liberia, Guinea, Ivory Coast, Ghana, and Dubai, might continue and facilitate the introduction of mercury in ASGM operations without any intervention from the regulating agencies.

Mining methods and mercury-free methods and technologies

Gravity concentration methods are the mercury-free techniques most used and are based on the density of gold. For instance, they include panning and sluicing. Most ASGM in Sierra Leone is alluvial, occurring around riverbeds or at the bottom of hills. In most sites, ASGM activities are characterized by the use of rudimentary tools. Gravel is extracted with the use of shovels in open pits or some areas in vertical shafts called ?Malian pits? or ?Damas? supported by tree branches. Gold occurs as free gold particles in the form of sands or ?nuggets?, which can be recovered and concentrated by simple gravimetrical processes, including sluice boxes and panning. However, the situation might change in the future, as near-surface gold deposits are gradually declining. In hard rock mining sites (Dakakuru, Kumaru, Masumbirie, Maranda, Baomahun, and Makong), gold is hosted by quartz veins in primary gold deposits and ore is extracted with the use of hammers and wedges in open pits or in tunnels. The ore is then crushed, using a mallet or a hammer, milled using a mortar or a stick, and it is then sluiced and panned.

The following tools, most of them being rudimentary are used on AGSM sites:

- Panning: Panning allows the separation of gold from other particles with water. Gold particles stay at the bottom of the pan, while lighter particles are ejected by the process. It is cheap, but a time-consuming method, requiring experience to be effective, and only processes small amounts.

- Sluice boxes. Sluicing can be fast, and more effective to process the largest amounts of ore than panning. Gold as ?nuggets? are washed by the use of a sluice box: water flows through the ore along the sluice, and gold particles get trapped in the material on the sluice (often carpets). Sluices are one of the most common mercury-free alternatives in the sector.

- Sieves. After the use of sluice boxes, the ground material is passed through a sieve or screens, before it is panned to separate the gold. Though observed in some of Sierra Leon?s AGM areas during the NAP study, the use of those tools could be scaled up to other AGM sites.

- Magnets. Other concentration methods rely on the magnetic proprieties of minerals. Magnets can be used on the concentrated material to remove metallic materials.

The current challenge is to improve current mining practices (e.g. sluices, use of sieves and magnets) and to decrease miners? reliance on mercury through the introduction of new technologies (e.g. jaw crushers, ball mills). These interventions will allow improving gold production at minimal cost, to be uptaken by miners as they will see the benefits of changing mining practices. Among the mercury-free techniques, the use of retorts and other mercury-capturing devices such as fume hoods were considered inappropriate in Sierra Leone?s ASGM sector since they could be easily mishandled.

The introduction of new mercury-free technologies such as jaw crushers and ball mills will allow to an increase in miners? productivity and reduce the use of mercury in mining processes. UNEP?s Practical Guide to Reducing Mercury Use in Artisanal and Small-scale Gold Mining (2012), aimed at policy-makers, miners, and civil society, describes in detail several technologies and approaches for reducing and eliminating mercury use in ASGM.

? Jaw crushers to improve the crushing process. The improvement of the crushing process can be done through the introduction of mechanized crushers, as in most areas, manual crushing is performed. Hammer mills are also currently already used in some of Sierra Leone?s hard rock AGM areas. Crushers will allow the crushing of important quantities of materials, leading toward proven recovery.

? Ball mills to improve the grinding process. Grinding on crushed ore allows for achieving an adequately fine particle size to liberate the most gold possible. Ball mills can be used to grind the gold ore-bearing material obtained from the jaw crusher, producing fine particles, enough to liberate the gold. The grain size obtained in many AGM operations is up to 2mm. However, 0.5mm can be targeted for the effective liberation of gold from ore.

However, ball mills are costly and not easily accessible to the ASGM sector, is typically used in industrial mining operations. Therefore, the NAP identified a less advanced variant that may be appropriate for Sierra Leone?s context that is currently used in several Sub-Saharan African countries: the ?Tanzanian ball mill?. Those smaller ball mills operate according to the same principle as the ball mill, but in a small size, being easier to manipulate, though with a lower production capacity. Palm kelner mills (for extracting oil from palm fruits) could also be used for AGM.

Without GEF intervention allowing for improve mining practices, health and environmental impacts of ASGM operations and mercury use will continue to affect miners and communities, accelerating the decline of near-surface gold deposits and the informality of the sector.

Gold supply chain and illicit financial flows

Without this GEF-funded project, illegal gold smuggling and the cycle of ASGM illicit financial flows is likely to continue. In the absence of strengthened control and monitoring of gold trade, ASGM miners will continue to rely on gold intermediaries located outside of the mine sites to sell their gold production, and investors, or ?Supporters?, will keep on pre-financing and benefiting from mining operations, to then transfer the revenues to local stakeholders involved, such as gold buyers, and indirectly, traditional and local authorities. A portion of the value is thus reinvested back into ASGM, perpetuating IFFs in the absence of miners? access to formal financial services, particularly credit and liquidity. Due to the absence of a regulatory framework, illicit actors will continue to take advantage of the sector for personal gain and to deviate gold production to neighboring countries. As a result, the government will continue to be prevented from collecting taxes that could fund social services or economic development investments.

Instead of eradicating informal practices, the challenge is rather to propose attractive alternatives which make the formal sector competitive with the informal sector. Innovative programmes such as state gold-buying schemes could support such initiatives, as well as facilitate access to finance for ASGM operators, especially in terms of credit or pre-financing for gold mining activities. Moreover, contrary to diamond mining operations, artisanal mining (AM) seems to deliver regular returns, which makes ASGM operators potentially viable candidates for micro-financing.

Awareness raising on mercury-free techniques

There have been several initiatives from government agencies to sensitize ASM miners about adopting good mining practices. The NMA has engaged in several workshops to sensitize ASM miners about mining laws, the importance of obtaining a mining license, as well as adopting good mining practices, and protecting occupational health and safety. The MMOs have also reported sensitizing miners about the importance of obtaining a mining license in their interactions with them. Finally, the EPA has

conducted several sensitization activities about environmental issues in which artisanal gold and diamond miners have been involved, including rehabilitation of the land as well as the use of mercury.

However, at the time of the NAP in 2020, limited interventions had taken place that targeted artisanal miners and aimed at providing ASGM miners with technical assistance to improve their mining practices. Without the establishment of a formalization process through this project, ASGM miners will continue to be left out of the formal gold market, as their financial, legal, or technical education will remain limited, hindering their access to financial services or the adoption of sustainable mining practices. The miners? dependence on informal buyers will be enhanced and exacerbate the exhaustion of gold deposits because the ore is currently processed with relatively inefficient methods. Under this BAU, the ASGM miners will continue to have limited awareness of sustainable mining practices, perpetuating the environmental damages and their limited access to formal gold markets.

Associated Baseline Projects

The project will be supported through a set of baseline initiatives, such as government strategies and policies, legislative frameworks, and other investments as described below.

Government-endorsed strategies and policies

The government has formulated a range of strategies and policies related to mining, environmental protection, natural resource management, and health, as listed below:

? National Environmental Policy (NEP) and National Environment Protection Act (NEPA) (approved in 1990 and revised in 1994): those texts are guiding documents aiming at the effective protection and management of the environment and natural resources. The NEP contains policies on land tenure, land use and soil conservation; forests and wildlife, biological diversity and cultural heritage; mining and mineral resources. One of the main strategies pursued by the Government is to make Environmental Impact Assessments (EIA) a must for all proposed activities that might affect the environment and the use of resources. Therefore, that led to the Environmental Protection Agency Sierra Leone Act of 2008 which states the projects requiring EIA licenses.

? Sierra Leone Trade Policy (2010): this policy was established with the commitment to enable the economic and social development of the country and to promote sustainable growth, notably by fostering sustainable consumption patterns that do not damage the environment.

? National Industrial Policy (2011): this policy aims at creating the enabling environment for industrialization and the transformation of an agricultural economy to a modern industrial economy. The policy cites mining and quarrying as one of essential components of the industrial sector of Sierra Leone, with gold as one of the major minerals that contribute significantly to the economy.

? National Environmental Health Policy (2012): this policy sets out measures covering basic sanitation, especially the supply of safe and adequate drinking water and improved sanitation in rural and urban communities.

? Artisanal Mining Policy (2018): this policy has been prepared by the Ministry of Mines and Mineral Resources in collaboration with the NMA in order to provide a clear framework that will improve the AM sector in aspects of governance, management, and environmental protection. The Artisanal Mining Policy covers the governance and management of artisanal mining and related value chain aspects, but not large-scale, small-scale mining of minerals, quarrying, and groundwater resources. One of its objectives is to formalize artisanal mining operations to be legally compliant, to reduce incentives for illegal AM operations, and to introduce and promote the use of mine safety practices. The policy acknowledges that there is the need to revise the Mines and Minerals Act 2009 to precisely define artisanal mining governance.

The policy also sets out that GoSL will work with international development partners to develop one or more gold pilots through which modern artisanal gold mining methodologies can be introduced to promote good mining practices, including formalized operations, exclusion of child labour, maintenance of good health and safety standards and reduce the use of toxic chemicals in gold mining.

? The Minerals Policy (2018): this policy sets out a framework through which the government manages the minerals sector to become a key driver of economic development for the country.

? Minamata Convention on Mercury Initial Assessment (MIA) (2019): The MIA provides an overview of the country?s use, emissions, and releases of mercury and mercury compounds. It identifies and quantifies flows of mercury and proposes an analysis of the legal and institutional frameworks that may guide the implementation of the Convention at the national level. This led to the identification of strategies for effective advocacy and the identification of national priorities.

? Sierra Leone?s Medium Term National Development Plan (MTNDP) (2019-2023) aims at achieving four goals by 2023: i) to build a diversified, resilient green economy, ii) improve public health, empowerment, and education, iii) improve fairness, cohesiveness, security, and peacefulness, and iv) build a competitive economy with sound infrastructure. The MTNDP highlights the importance of creating jobs for the youth, with a view to maintaining social stability, empowering women and children, scaling up efforts to manage revenues from extractive activities, and enforcing mechanisms to curb illicit financial flows. The MTNDP sets out the pathway for the country and outlines strategies for reducing mercury use in ASGM by 30% in 2022, and 50% in 2024, and eliminating mercury use in 2029.

? The National Action Plan for Reducing Mercury Use in the Artisanal and Small-scale Gold Mining Sector in Sierra Leone (2020): Under the Minamata Convention, the development of NAP is an obligation for each country that determines that ASGM in its territory is more than insignificant. The NAP sets out the baseline situation (ASGM gold production, mercury release?), serves as a roadmap for the formalization of the sector, and establishes the strategy to reduce mercury in the AM sector. Its overall goal is: ?To formalize, sensitize and assist miners, traders, their communities and other relevant stakeholders in an inclusive and comprehensive manner, in order to mitigate the sector?s negative social, environmental and health impacts and to unlock the sector?s full development potential?. Under this goal, various objectives have been formulated, including the objective to eliminate the use of mercury in ASGM.

? Sierra Leone?s National Strategy for Financial Inclusion (NSFI) (2022-2026). The strategy builds on the implementation of the first NSFI (2017-2020) to achieve greater levels of financial inclusion. The NSFI-2 aims to take a more focused approach to increase access to, and enhance the quality, of financial products and services, by prioritizing strategic interventions, toward women, youth, rural populations, and MSMEs. Under this project, it will be important to require the integration of ASGM in the policy to enhance the miners? access to financial services.

? In Vision 2035, Sierra Leone aspires to become an inclusive, green, middle-income country by 2035. This would be accomplished by the creation of a stable, export-led economy; the mobilization of government revenues; the alleviation of poverty and creation of employment; the enhancement of life expectancy and access to housing and service delivery; and the creation of a peaceful and cohesive nation, among others.

Legislative frameworks in relation to chemicals, environmental protection, and health aspects

The section below presents the current legislation related to ASGM in Sierra Leone. It regulates the mining sector, supports national economic and social development, and is key to the future of sustainable mining in the country.

? The Environmental Protection Agency Sierra Leone Act (2008, amended in 2010): it is the principal legislation in Sierra Leone on environmental management and pollution prevention and control. The law inhibits the introduction, transportation, or importation of toxic or hazardous wastes into Sierra Leone for storage or disposal.

? The Mines and Minerals Act (2009): provides the legislative framework for the exploitation, management, and marketing of the mining industry and gives authority and guidelines for artisanal miners to operate. The Act establishes a system for issuing, registering, and surveying mining operations, and includes three types of mining licenses: artisanal (issued by the Director of Mines), small-scale, and large-scale operations (issued by the Minister of Mines and Mineral Resources). The Act also defines small-scale mining, eligibility, and application provisions for artisanal and small-scale mining licenses.

Regarding artisanal and small-scale mining, the Act requires license document evidence showing the owner, rightful occupier, or Chiefdom Mining Allocation Committee of the land has consented for mining purposes; however it remains unclear who constitutes the Committee as the Act does not define it. It, therefore, opens a window of conflict in governing the sector.

In 2019, the government initiated the review process on MMA 2009. In April 2020, the stakeholders ASGM stakeholders were invited by the NMA to review the document and proposed some changes. However, concern was raised that some of the proposed changes related to the governance and institutional arrangement in the sector were not in line with established best practices.

? Local Government Act (2004): This Act provides an integrated local government system, giving effect to the decentralization of functions, responsibilities, and services at all levels of local government, with the aim of broadening local participation in national development.

? Public Health Act (2004): This Act provides regulates all matters of public health in Sierra Leone, including among others, water supply, drainage, water pollution, sanitation, hygiene, and nuisances. The Minister of Health is the principal authority for this Act.

? Child Rights Act (2007): This Act provides for the promotion of the rights of the child compatible with the Convention on the Rights of the Child, adopted by the General Assembly of the UN.

? The National Minerals Agency Act (2012): establishes the NMA to promote the development of the mineral sector. The NMA is required to formulate and implement plans and systems for the development of the mining sector and promote the rights of communities.

? Right to Access Information Act (2013): This Act offers the right to Sierra Leoneans citizens and interested persons free access to information primarily in the hands of government and non-state actors, with the aim to promote proactive disclosure of information held by public authorities and enforce measures to promote openness of information and data by forging multi-stakeholder partnerships.

? Environmental and Social Regulations for Minerals Sector (2012): These regulations aim at explaining in detail the EIA process for the mining sector.

? The Finance Act (2016 and 2019): Sierra Leone?s fiscal regime is known to be particularly advantageous for companies, leading to a series of problems related, among others, to weak transfer pricing, thin capitalization, and the absence of ring-fencing. These two acts

? National Water Resources Management Agency Act (2017): This Act establishes the National Water Resources Management Agency (NWRMA) to protect, manage and regulate surface and groundwater resources management agencies in West Africa. The Agency is responsible for granting water rights, formulation of regulatory measures, and sharing water resources with a view to controlling pollution. Transboundary water resource issues fall under its mandate.

? The Extractive Industries Revenue Act (2018): This Act is required to regulate the management of revenue, especially with reference to the granting of tax incentives to companies operating in Sierra Leone. It requires the government to publish a statement of its tax expenditure, detailing all tax exemptions, the beneficiaries, and the revenue.

The project is aligned with a number of initiatives also contributing to addressing different aspects of the Global Environmental Problem that the GOLD+ project seeks to address. The project will build upon the baseline projects achievements, learn from their success and challenges, in order to avoid duplication.

Table 1: Associated Baseline Projects

Name of Projects	Timeline	Funding	Objective	Contribution to the Baseline

Extractive Industries Technical Assistance Project Phase 2 (P160719) (EITAP 2) in Sierra Leone Donor: World Bank IA: Ministry of Mines and Mineral Resources, National Minerals Agency, Ministry of Finance and Economic Development	2017-2022	USD 20 million equivalent	This project aims to strengthen governance, knowledge, and sustainability of the extractives sector in Sierra Leone. It follows the EITAP-1 project, during which the NMA was established to work as a semiautonomous regulator and to implement all Government geological survey, mining cadastre and inspectorate functions as the lead technical agency. The components of this project include: 1. Improve mineral sector governance (US$2.99 million) 2. Enhance geologic al knowledge (US$11.52) 3. Artisanal mining (US$3.18 million) 4. Project management (US$1.96 million) 5. Contingency for disaster risk response	The project will build on the work ongoing on artisanal mining, in particular under Component 3. The baseline assessment which will be conducted to inform AGM miners? needs and existing social arrangements (Output 1.1.2). Under Output 2.1.2., it will coordinate with the work done by the EITAP 2 project on establishing ?green gold pilotes? seeking to establish mercury-free ASGM supply chains and facilitate its access to the market through the creation of cooperatives.

Piloting NAP Implementation in Sierra Leone Donors: German Corporation for International Cooperation (GIZ) and the EU IA: Pact NGO	2020- 2022	USD 500,000	The Project aims to support the Government of Sierra Leone in implementing its NAP for reducing mercury use and improving the governance of Sierra Leone?s ASGM sector, which has been developed by Sierra Leone?s EPA. Pact?s Project is designed to support ASGM miners and traders in Tonkolili district through organizational and technical strengthening, to improve the sector?s productivity and mitigate environmental and health impacts in ASGM communities	The Gold+ project will build on Pact achievements in Tonkolili district, notably the creation and registration of the first miners? association, which was an important step towards formalization process in the country. Gold+ will learn from Pact?s experience in discussing gold trade with government, private sector and civil society, in obtaining three artisanal mining licenses and land use agreements with NMA, and engaging gold dealers in Freetown to understand their needs and gain their interest in transparent gold trade.

Enhancing Efficiency and Sustainability of Artisanal and Small-Scale Mining through Climate Smart Actions Donor: the African Development Bank	2020-2022	USD 1.5 million	The overall goal of this project funded by the African Development Bank, is to improve formalization, efficiency and environmental management practices in the ASM sub sector in those three countries. The key expected project impact and outcomes are: (i) ASM related data available for natural resource policy development; (ii) Improved regulation of the ASM sector; (iii) Strengthened institutional capacity to manage the ASM sub sector; (iv) Enhanced capacity of ASMs for efficient and sustainable mining and processing practices; (v) ASMs integrated into the formal economy in targeted areas; (vi) Improved health, safety & security issues in ASM and (vii) reduction in environmental degradation, especially deforestation, pollution and siltation of water courses and mercury emissions from mining operations.	This project addresses the lack of information on the impact of climate change in the mining sector through climate vulnerability assessment of ASM assorted with climate-resilient actions plan. The project is based on a Climate Smart Mining (CSM) approach, which is a concept supporting the sustainable extraction and processing of minerals and metals while minimizing the environmental and climate footprints throughout the value chain. Therefore, the Gold+ project will build on this project to inform climate-related aspects during the project.

Regional resource governance in West Africa, in C?te d?Ivoire, Guinea, Liberia, and Sierra Leone Donors: GIZ, co-financing from the EU	2019-2022	16,342,000 BMZ + 3,000,000 EUR	This project aims to provide the advises and assistance to key actors in the partner countries on managing mineral resources efficiently and sustainably by transforming the political, economic and statutory frameworks in line with the principles of social, ecological and economic sustainability and the Sustainable Development Goals (SDGs).	The Gold+ project will build on the achievements of the project ?Enabling and Growing Artisanal Gold Enterprises? (EnGAGE) conducted in Sierra Leone, in particular in relation with good practices in the promotion of responsible ASGM practices at the national level. The EnGAGE project aims to promote responsible ASGM practices amongst stakeholders at the national level and comply to international best practices in terms of legality, environment, gender equality, occupational health, safety and human rights. This project also aims to install innovative mercury-free gold processing facility and hands-on training to informal miners and government officials.

Regional Resource Governance in West Africa Donor: GIZ, co-financing from the EU	2019-2022	EUR 19.3M	The core objective is to build a model for responsible artisanal and small-scale gold production and to reduce mercury in AGM sector by building a pilot gold processing facility, supporting the implementation of the 2018 artisanal mining policy and the ASGM NAP.	The Gold+ project will build on the work ongoing with mining communities and draw lessons learned from improved responsible gold production and increased access financial support to better facilitate access to formal mineral markets. It will benefit from the electronic system to manage mining licences, which is linked to the tax authorities and discloses revenues from the sector developed through the program. It covers the majority of industrial and artisanal mining licences and increases transparency in licence management.

Women and Civil Society Groups Education Donor: BMZ through Terra Tech Germany	2019-2022	EUR 586,712	The project?s output is to strengthen women?s collective voice, knowledge, capacity on gender and participation in the decision-making process within families, the community and the government; increase capacity of civil society groups in organization and advocacy; and increase literacy rates of teachers and citizens, especially independent reading skills. This project is located in Malegohun, Kenema, Kissi Tongi, and Kailahun.	The Gold+ project will capitalize on the results achieved on women empowerment and capacity-building.

MoPADA project: ??Stand Up, Speak Out: Breaking the silence around gender based violence in Sierra Leone?	2019-2022	EUR 500,000.00	The objective of this project is to reduce the prevalence of gender-based violence by engaging men and women as supporters and promoters of gender equality; to increase the capacity of national CSOs to participate effectively in the formulation and implementation of development policies and strategies. It aims to break the silence on rape, early marriage, teen pregnancy, child labour and other forms of violence and support social protection mechanisms to prevent and response to sexual and gender-based violence, including provide the support to survivors in Kailahun and Bonthe district, such as psychosocial support, health services, and economic empowerment through the establishment of an endowment fund.	The Gold+ project will seek for synergies with this project in Kailahun district, in particular regarding the support provided to women to reduce GBV. The support provided in economic empowerment through the establishment of an endowment fund will be particularly fostered.

The proposed alternative scenario, with a brief description of expected outcomes and components of the project

The cost-effectiveness of the project will be ensured by building on other initiatives and bridging gaps identified. It will coordinate closely with other initiatives on the ground to ensure the efficient use of financial resources, avoid duplication of efforts, and scale up impact.

First, the project will support the NAP implementation through technical support provided to key ASGM institutional-level stakeholders in revising and developing policies related to the ASGM sector, which will contribute to appropriate formalization activities and allocation of resources. Through the formalization of miners? organizations under the first component, ASGM miners will be provided with information relative to artisanal gold mining regulatory framework, market information, and finance, which will facilitate their access to social security; and provide an enabling environment to buy new and cost-effective mercury-free technologies.

Secondly, the project will support access to finance for ASGM miners and the setting of a state-regulated mechanism in the ASGM sector, allowing for the reduction of the use of mercury and establishing responsible supply chains. The improved access to finance will benefit financial institutions which will be less reluctant to invest in the ASGM sector, and on the other hand, miners will be able to invest in more efficient equipment and move out from poverty. The revised gold trade routes and gold buying processes will enable the reduction of the quantity of illicit financial flows and therefore benefit formalized institutions. If the gold sector is effectively governed, it will help address the underpinned problems of unemployment and poverty across the sub-region as miners would benefit more from their gold in a regularized framework, and the government will also gain more in taxation and export returns.

Thirdly, the adoption of mercury-free technologies will have several benefits for miners in the short and long term. In the short term, the introduction of improved and effective tools and technologies for

current mining practices will be cost-effective, allowing for an increase in miners? productivity and the production of gold without mercury. In order to provide cost-effective tools to improve the current ones, tools such as ball mills will be introduced. However, ball mills are costly and not easily accessible to the AGSM sector because they are used in industrial mining operations, an equivalent to ball mills namely the ?Tanzanian ball mill? will be introduced. Those smaller ball mills operate according to the same principle as the ball mill, but in a small size, being easier to manipulate, at a lower cost, though with a lower production capacity.

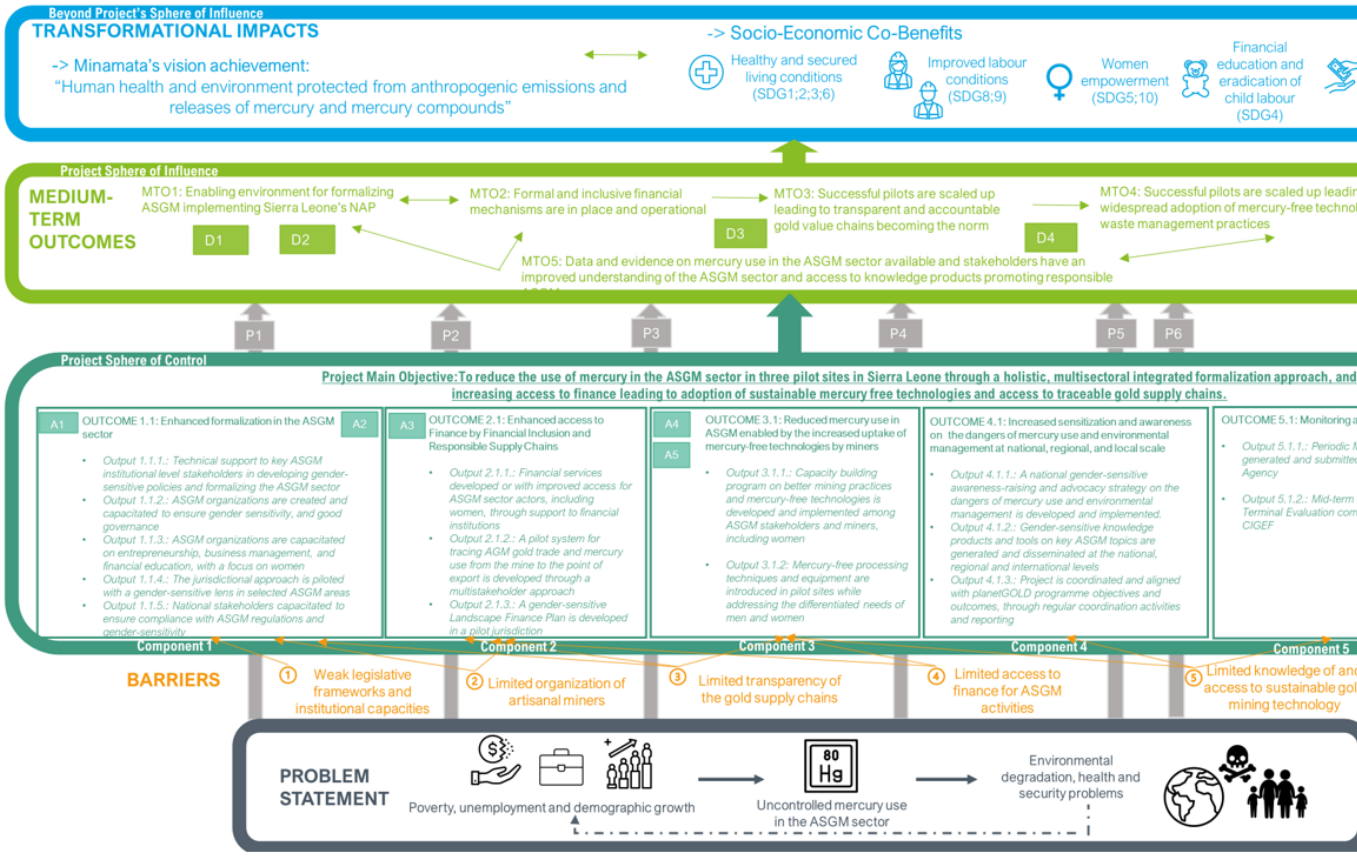
In the long-term, once they will be trained on new technologies, the latter will allow improving their productivity through an increased amount of gold extracted, and therefore contribute to alleviating poverty and generating additional revenues. Indeed, when used properly, mercury-free technologies can extract a greater amount of gold than traditional methods using mercury amalgamation. The use of mercury will be importantly reduced along with its related consequences on human health and the environment. Globally, more than 2,000 tons of mercury use per year could be prevented, by shifting ASGM to cleaner technologies. Throughout the 5-years project, 1.408 tons of mercury will be eliminated.

Finally, as part of the GOLD+ Program, this project will contribute to resolving knowledge gaps on ASGM formalization and mercury-use reduction strategies at the global scale. The project will support the communication and knowledge-sharing strategy developed by the program to create an enabling environment for cross-learning and information sharing in order to build collectively a wider understanding of the issues related to ASGM. This implies organizing coordination events with other GOLD+ child projects as well as disseminating emerging good practices and the project?s lessons learned through knowledge products and communication events aiming at informing any relevant related initiative.

Project Theory of Change

The following diagram presents the Theory of Change of the project. It graphically explains how the project will lead to an alternative scenario to the baseline situation experienced by the sector at the national level. For this purpose, the project?s strategy is formulated showing how the combination of outputs will lead to the desired outcomes which all together will eventually lead to the achievement of the main project?s objective.

Figure 3: Theory of Change, Sierra Leone



The proposed Theory of Change (ToC) of the project highlights the relationships between activities, outputs, and outcomes (project?s sphere of control), medium-term outcomes (project?s sphere of influence), and transformational impacts (beyond the project?s sphere of influence) that the project seeks to contribute to.

The problem that the project is aiming to solve is stated at the bottom of the diagram. It represents the main environmental problem associated with the use of mercury in ASGM, its consequences, and the related underlying root causes.

To solve the stated problem, several barriers have been identified and need to be addressed:

? Barrier 1: Weak legislative frameworks and institutional capacities

? Barrier 2: Limited organization of artisanal miners

? Barrier 3: Limited transparency of the gold supply chain

? Barrier 4: Limited access to finance for ASGM miners

? Barrier 5: Limited knowledge of the dangers of mercury, alternative mining practices, and limited access to sustainable mining practices and equipment

The project objective is intended to be achieved through the five components, complemented by a component dedicated to monitoring and evaluation. Within these components, a range of activities are supporting outputs and project-level outcomes.

To achieve these outcomes, the project will follow several interlinked pathways, as illustrated in the diagram by the grey arrows.

- Pathway 1: Through capacity-building of institutional stakeholders on better coordination and education/sharing knowledge on responsible ASGM, governance bodies legislate, coordinate, and implement holistic formalization of the ASGM sector and mercury management;
- Pathway 2: Capacity-building of miners, gold buyers, and financial institutions leads to greater financial inclusion of miners, thereby giving them access to capital to finance sustainable ASGM activities
- Pathway 3: Successful pilots lead to behavioral changes and wider participation in transparent and accountable gold value chains
- Pathway 4: Successful pilots of mercury-free technologies and sustainable mining practices foster a broader behavioral change in local populations toward the widespread adoption of sustainable ASGM
- Pathway 5: Capacity-building at the local level leads to increased uptake of formalization strategies and mercury-free technologies;
- Pathway 6: Knowledge products developed and disseminated through the project lead to responsible ASGM-related decision-making processes across scales

Underlying the ToC are several assumptions (represented with dark green stickers), which must be fulfilled for the project to successfully achieve its objective. These are:

- A1: Key institutional stakeholders take charge and lead the improvement of the enabling environment for ASGM formalization
- A2: The jurisdictional approach is supported by significant local buy-in from all local actors and leads to conclusive results
- A3: Formal gold market is stable and more profitable for ASGM actors than the informal/illegal market
- A4: Financial institutions and ASGM sector stakeholders are willing to participate in the project
- A5: Relevant tools and equipment are available locally/on time

Consistent with the GEF Policy on Gender Mainstreaming, the proposed project recognizes the gender dimensions of mercury use and exposure risks in ASGM. The project will mainstream gender equality

and women?s empowerment throughout its components by ensuring that formalization efforts, access to finance and responsible markets, and access to mercury-free technologies benefit both men and women

In the medium term and within the project?s sphere of influence, the interventions foreseen in this GOLD+ project will contribute to the establishment of an enabling environment for the formalization of the sector at a national scale, thereby achieving the ASGM NAP objectives. The enhanced formalization is expected to increase financial institutions? trust in artisanal and small-scale miners, therefore facilitating their access to financial services. Pilot site lessons learnt from the project will be used as models to develop scale-up initiatives aiming at establishing and standardizing: i) transparent and accountable gold value chains; and ii) mercury-free technologies and best mining practices. Finally, knowledge products developed throughout the project allow for a wider understanding and a better image of the sector eventually virtuously feeding back into all the previously mentioned outcomes.

These MTOs are enabled by several impact drivers, including but not limited to:

? D1: International legal obligations, including SDGs (13;14; 15; 9) and the Minamata convention

? D2: Benefits accompanying formalization

? D3: Providing access to sustainable investment, financial inclusion, and responsible supply chains

? D4: Participatory/community-based/gender-inclusive development

Overall, the project contributes to achieving the objectives of the Minamata Convention and aims at attaining its vision: ?Human health and the environment protected from anthropogenic emissions and releases of mercury and mercury compounds?. At the same time, as the project has been developed through a holistic approach aiming at producing multiple co-benefits, all its components will significantly contribute to the achievement of the United Nations Sustainable Development Goals (SDG). The SDGs? contributions targeted by the project are:

- Healthy and secure living conditions: through SDG 1 (No poverty), SDG 3 (Good Health and well-being), SDG 6 (Clean Water and Sanitation);

- Improved labor conditions: through SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation, and Infrastructure)

- Women empowerment: through SDG 5 (Gender equality)

- Eradication of child labor: through SDG 4 (Quality education)

- Fair land-use and profitable gold trade for all: through SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced inequalities), SDG 15 (Life on land)

Objective, Components, Expected Outcomes, Targets, Outputs

Project objective

The objective of the project is to reduce the use of mercury in the ASGM sector in Sierra Leone through a holistic, multisectoral integrated formalization approach, and increase access to finance, leading to the adoption of sustainable mercury-free technologies and access to traceable gold supply chains. The Results Framework detailing the project strategy is provided in Appendix I.

Description of Project Components, Outcomes, and Outputs

Component 1: Enhancing formalization in the ASGM Sector

As stated in the NAP, the formalization of the ASGM sector in Sierra Leone is a precondition for effectively addressing mercury use in the ASGM sector. Some progress has been made in formalizing the sector, in particular in issuing licenses to several gold miners, and to existing gold dealers and exporters to a lesser extent. However, the sector remains informal at different nodes of the gold supply chain, and different actions are required to address mercury use in the sector, facilitate miners? and traders? organization, and regulate of gold and mercury trade.

According to the Handbook for Developing National ASGM Formalization Strategies within National Action Plans developed by UNEP (2018), formalization is ?a process that seeks to integrate the ASGM sector into the formal economy, society, and regulatory system?. This means that formalization is not just only about regulating the ASGM sector and ensuring that miners perform their activities under license; the formalization process is broader and seeks to ensure that the activity is organized so that miners? interests and rights are recognized in dedicated and appropriate policies. The process aims to support miners? organizations through technical, administrative, and financial support that empowers them to comply and engage with the requirements prescribed by the national legislation.

Formalization is also considered by experts as a pre-condition to the effective reduction of mercury use as it allows for i) the organization, education, and support of miners; and ii) the regulation of the mercury and gold trade. Beyond reducing mercury use, formalization creates an enabling environment for addressing the ?economic, social, health, safety and environmental protection issues arising from the artisanal mining sector?, as stated in the Artisanal Mining Policy 2018. It will respond to challenges that threaten the viability of the sector, allowing enhanced economic diversification, sustainable community livelihood, and local economic development.

The Ministry of Mines and Mineral Resources (MMMR), NMA, and the EPA are the key institutions mandated with regulating, governing, and supporting Sierra Leone?s mining sector and will lead the

country?s efforts in formalizing the sector. Besides, MDAs and stakeholders from civil society and the private sector will also have a role to play in the formalization process.

Component 1 of this project will focus on creating national-scale conditions and systems that improve ASGM formalization. The strategy thereafter proposed is thoroughly based on the UNEP Formalization Handbook, the Artisanal Mining Policy for Sierra Leone, and the NAP.

The project will support the development of an updated baseline study on the state of ASGM and mercury in Sierra Leone, which will form the basis from which the remaining project activities will be refined during implementation and help inform formalization efforts throughout. It will identify and map the existing ASGM miners (men and women), gold mining technologies used, mercury use, gaps and challenges, and recommendations for entry points of project interventions.

The project will facilitate the formalization of the sector first through strengthening EPA, NMA and MMMR, and other MDA's capacities in ASGM issues via capacity-building events. Then, the review of the national legal framework will strengthen the basis of the regulatory environment for the formalization process. Indeed, the legal dimension of ASGM formalization is a key element as it will, among other things, strengthen the official recognition and clarification of the duties and rights of ASGM operators. This will be done by using a highly consultative and inclusive approach to efficiently respond to the unique conditions and capacities of the sector. Particular attention will be given thereafter to communicate properly and to build the capacities of ASGM stakeholders with regard to the reviewed legal framework ? this will ensure enhanced compliance and reinforce ownership.

The formalization process will also consist in facilitating the organization of artisanal miners into formal and legitimate organizations. As described above, artisanal miners are mostly organized in small informal groups and do not benefit from a structured work division allowing equal distribution of benefits. According to the NAP, there is no single entity of registered entity of gold miners in Sierra Leone. Creating an official representation of miners will unite them on common interests and allow enhanced access to sustainable mining practices and other information related to governance, gold mining regulatory framework, and the gold market. Women's participation and empowerment through organizations? governance and decision-making will be ensured.

The formalization of ASGM organizations will then be fostered by strengthening miners? capacities in entrepreneurship, business management, and financial education. These specific trainings will aim at enhancing ASGM miners? access to finance and at improving their integration into the formal economy. Ultimately, the increased financial literacy will facilitate their access to credits or funding.

Formalization of the sector will be further fostered by the integration of the ASGM sector into broader dimensions of landscape management, such as local development plans and land-use planning. This integration will be done through the innovative jurisdictional approach. The Jurisdictional Approach (JA) is ?an integrated landscape approach which aims to reconcile competing for social, economic, and environmental objectives through participation by a full range of stakeholders across sectors, implemented within government administrative boundaries, and with a form of government involvement?. In other words, it is an innovative implementation tool aiming at maximizing policy-based interventions? impact on the ground. The jurisdictional approach uses primarily subnational

government administrative boundaries to define the scope of action and involvement of stakeholders, rather than social (e.g. indigenous community) or environmental (e.g. ecosystems, watershed) boundaries.

This includes encouraging governments, businesses, local communities, and NGOs to work together towards common goals, such as improving local livelihoods, eliminating mercury use, and maintaining natural ecosystems through coordinated strategies across the landscape. By involving and educating all the relevant actors across the 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.

Formalization cannot be achieved without ensuring that ASGM regulations are applied. Compliance officers from NMA, MMMR, EPA, and local Chiefdom Mining Committees will be capacitated to ensure the compliance of miners and traders with the law, with a focus on ?worst practices?, the occurrence of child labor, and ASGM activity in environmentally sensitive areas. The mercury supply and trade will also be monitored. The compliance officers will do the work in coordination with relevant MDAs, the National Revenue Authority (NRA), the Ministry of Labour and Social Security (MLSS), and the National Protected Area Authority (NPAA).

The overall outcome of this component will be to create an enabling institutional and governance environment, across scales, that enables the formalization of the ASGM sector. This implies fostering a multi-stakeholder commitment and ownership of the proposed strategy through innovative, consultative, and gender-inclusive approaches. Expected outcomes, outputs, indicators, and targets for this component are outlined below.

Outcome 1.1. Enhanced formalization in the ASGM sector through multisectoral, integrated approaches and capacity building of actors

To achieve this Outcome, the project will rely on a set of interrelated Outputs supporting the formalization in the ASGM sector. The project intends to review AM laws and regulations in Sierra Leone and to include ASGM in the regulation with respect to ASGM formalization and the elimination of the use of mercury in the sector. One miners? organization will be constituted at each site, bringing miners economic and social benefits and a formalized representation. They will be trained in business management and gender equality to enhance their access to finance. In that sense, the Jurisdictional Approach constitutes an innovative tool for landscape management in support of ASGM formalization and of stakeholder capacities. At last, to ensure compliance with ASGM regulations, national and local authorities will be capacitated in monitoring compliance.

Outcome Indicator 1.1.a.: Number of ASGM miners formalized (include sex-disaggregated data)

Target 1.1.a. All ASGM miners in the project intervention areas have increased formalization by the end of the project, of which 50% are women (i.e., 2,560 miners of which 1,280 are women)

Outcome Indicator 1.1.b.: Number of institutions strengthened to enhance service delivery in the ASGM sector

Target 1.1.b. Four (4) institutions with enhanced technical capacity for service delivery in the ASGM sector

Outcome 1.1 will be delivered by the following outputs:

Output 1.1.1.: Technical support to key ASGM institutional-level stakeholders in developing gender-sensitive policies and formalizing the ASGM sector

Indicator 1.1.1.a: Number of gender-sensitive policies and policy instruments updated with contributions from the project to improve ASGM formalization at the national/local level developed

Target 1.1.1.a.: Two gender-sensitive policies, policy instruments, or regulatory frameworks with contributions from the project to improve ASGM formalization at the national/local level developed created/improved (i.e. 1 ASGM policy document and Revision of Mines and Minerals Act to effectively capture ASGM issues including formalization and mercury reduction)

Indicator 1.1.1.b: Number of baseline assessments updated at project intervention sites

Target 1.1.1.b: One (1) baseline assessment updated to identify and map the existing ASGM miners (men and women), gold mining technologies used, gaps and challenges, recommendations for entry points of project interventions

Under this output, technical support to institutional actors will be provided to support the revision of the legislative framework in order to better integrate the ASGM sector into AM policies. First, an assessment of the existing ASGM policies, including license processes, land rehabilitation, and gender equality, will be conducted to inform revisions of the legislative framework.

Two experts will be recruited to work with key ASGM stakeholders to review and prepare the new regulations on ASGM. They will conduct consultations with key local authorities and CSOs at the pilot sites level to receive their inputs and needs related to the revision of the legislative framework regarding the challenges on the ground.

Technical support for formalization will be provided to key ASGM stakeholders working on AM issues, through training workshops, including training on gender equality, as mentioned in the NAP. Training workshops will be the opportunity to discuss issues to be addressed regarding AM limitations and ASGM formalization and to review the main legislative challenges for the sector. Those training

workshops will engage institutional actors at the national level, including the Ministry of Environment, EPA, NMA, MMMR, Gender and Children?s Affairs, Ministry of Internal Affairs, Ministry of Labour and Social Security, Trade and Industry, and other relevant MDAs. In particular, a new definition of AM will be redefined in the ongoing amendment of the 2009 Miners and Minerals Act, to allow for a larger scale of operation in view of gradually declining near-surface gold deposits. The new definition will allow for a greater depth, surface area, and use of more advanced machinery and a larger number of miners per mining license. In particular, the following issues will be discussed during the training workshops, as listed in the NAP:

- Redesign of AM licenses, which will be reflecting the new definition of AM in the amendment of the Mines and Minerals Act. They will be modified to become more practical in use. As indicated in the NAP, the sector would gain from recognizing the responsibility of several stakeholders of the gold supply chain: the role of the license holder and of gang leaders in supervising mining activities; and one of the Supporters in financing gold production.

- Harmonization of the rates paid in the licensing process. In particular, the fees paid to chiefdom mining committees and local authorities (e.g. surface rent?) vary from one chiefdom to another, causing limited accountability among such authorities. The establishment of clear guidelines and procedures to be applied for license fees throughout the country would enhance the transparency and accountability of the sector.

- Negotiations about harmonizing tax and royalty rates with Guinea and Liberia, which have significantly lower rates, will be continued by the Mano River Union in order to discourage smuggling and increase government revenues from the sector. The taxation system implemented by NRA will need to be strengthened, and NRA?s staff members will be trained on taxing ASGM miners and traders.

- Mine safety and worker health standards and regulations will be enhanced.

- Measures for environmental protection will be included in the new regulations, in compliance with the Minamata convention on mercury. It will be clear that ASGM activity in NPAs is forbidden. Practical and regulatory guidelines on land rehabilitation and mine closure will be designed specifically for AGM and SSGM in consultation with the operators.

- Gender equality. The MMA Act will be amended to acknowledge the role of women in AGM and include specific provisions to ensure women?s inclusion in the formalization process and improve gender equality in the sector.

A policy on ASGM will also be defined. Other policies will be reviewed to include ASGM, such as Sierra Leone?s National Strategy for Financial Inclusion (2022-2026), as recommended in the NAP. This strategy aims to increase access to and increase usage of financial products to women, youth rural populations, and MSMEs but does not include specifically the ASGM sector's financial needs, therefore it will be fundamental to further include the sector in the financial inclusion strategy.

Relevant national and local stakeholders will be thereafter informed and trained regarding the concrete implications linked to the new framework through capacity-building events that will target 100 national officials and 20 local authorities in each pilot site. Those events will allow key stakeholders to become familiar with the regulations and to transfer their knowledge to other stakeholders.

Once a year, a workshop will be organized at a national level to gather national and local officials to discuss the progress made and challenges encountered in the implementation of the policies. Those workshops will be solutions-oriented and aim at exchanging lessons learnt to improve the implementation of the legislative framework and enhance compliance with it.

Indicative activities under Output 1.1.1.:

1.1.1.1. Baseline assessment of the state of ASGM activities and mercury use in the pilot sites for advocacy and policy interventions throughout the project implementation.

1.1.1.2. Assess the state of formalization of the sector, and existing ASGM policies, including license process, land tenure, gender equality, mine safety, and worker health to inform revisions of the legislative framework, the creation of a policy, and identify priority actions.

1.1.1.3. Engage experts to work with key national stakeholders (Ministry of Environment, EPA, NMA, MMMR, and other MDAs) to develop gender-sensitive ASGM formalization policies.

1.1.1.4. Capacity building to key ASGM stakeholders at the national level, including the Ministry of Environment, EPA, NMA, MMMR, and other MDAs to develop and implement gender-sensitive ASGM policies.

1.1.1.5. Support the coordination of national stakeholders on policy implementation through capacity building

1.1.1.6. Monitor the implementation of the policies and regulations through an annual workshop at the national level

Output 1.1.2.: ASGM organizations are created and capacitated to ensure gender sensitivity, and good governance

Indicator 1.1.2.a: Number of ASGM organizations created and capacitated

Target 1.1.2.a.: Three (3) ASGM organizations (1 per pilot site)

This second output targets miners on the three pilot sites. The first step will be to gather more information about AGM miners? needs and existing social arrangements, including the gangs organization, Supporters? role mode of operation, and share of proceeds. The needs, willingness, and expectations of miners related to the formalization of organization and the type of organization they envision to benefit them the most will be analysed. The assessment will build on the information collected during the Extractive Industries Technical Assistance Project (EITAP 2), funded by the World Bank aiming at strengthening governance, knowledge, and sustainability of extractive activities

in Sierra Leone, and has a strong component focusing on AGM, most notably under component C1b ?Baseline Study on Artisanal Mining.

Miners, small traders, Supporters, and their communities will be engaged in workshops in each pilot to be educated about the formalization process, the various legal forms of organizations, and their associated rights and duties, requirements, and benefits. The participants will be encouraged to further discuss the most appropriate form of organization and functioning the most relevant to their area, workshops will be constituted of 50% of women.

To formalize the establishment of the organizations, the EPA, MMMR, NMA and local community and chiefdom authorities will supervise democratic elections for appointing leadership and management roles among the selected entities. Strategic plans for the organization, running of the secretariat, registration, and administrative aspects will be defined with the support of local authorities. The mining organizations will then acquire surface rights and mining licenses. It will be important that the process includes women, to mitigate the risk that the formalization excludes women or disadvantages them. The leaders of AGM entities, along with women, will be specifically targeted with a Train-The-Trainers (TTT) approach, who will then be able to replicate such trainings in their own communities.

Once the mining organizations are created and registered, miners will be trained on basic organizational logistics, governance, and gender equality. Miners will be educated on participatory governance, inclusive of women and youth. Training will recognize the importance of women in ASGM and sensitize them on the greater role they can play in the sector, as group leaders. 90 miners in ASGM organizations of which 50% of women will be trained. Among basic tools, ledgers, registers, and membership cards will be needed and provided.

Indicative Activities under Output 1.1.2.

1.1.2.1. Assess AM needs, expectations, and willingness to formalize their organization, and analyze existing informal organizations

1.1.2.2. Engage ASGM stakeholders (miners, gold traders, supporters, local government) in each pilot site, to structure ASGM organization and to discuss various types of organization and associated rights, duties, requirements, and benefits (at least 50% of women)

1.1.2.3. Facilitate the establishment of at least three formal ASGM organizations in each of the three locations, appoint leadership and management roles and provide assistance through the Train-The-Trainers approach.

1.1.2.4. Train ASGM organizations on basic governance management and gender equality in each pilot site

Output 1.1.3: ASGM organizations are capacitated on entrepreneurship, business management, and financial education, with a focus on women

Indicator 1.1.3.a: Number of trainings on financial literacy, alternative livelihoods entrepreneurship, including targeted trainings for women miners, conducted (disaggregated by gender)

Target 1.1.3.a: Nine (9) trainings targeting at least 50% women miners

Once miners? organizations are created, it allows them to further engage in dialogue with institutions and to address miner's limited access to finance. An assessment of miners? financial needs will be conducted in each of the three sites to identify the challenges and issues related to access to finance that need to be addressed, including financial literacy, economic alternative livelihoods, and women empowerment. To that end, a specific focus on women miners? needs will be given, considering that they face disproportionate barriers in accessing finance and have a lower level of financial education. The assessment will investigate the preferences for financial products, the levels of financial literacy, and the ability to adhere to requirements set by financial institutions.

Trainings on financial literacy will be provided to miners? organizations, with three trainings per pilot site, two targeting exclusively women miners. The trainings will educate them on financial literacy, financial products, and on the processes for accessing them.

Specific trainings on alternative livelihoods entrepreneurship targeting women miners will be conducted. They will allow strengthening their capacities in shifting to other economic activities than ASGM. Many women want to eventually leave AGM to pursue other livelihoods, such as petty trading, business establishment, or agriculture. To help women to make this transition, trainings will focus on the livelihoods they want to pursue relative to their level of knowledge and skills, to eventually close the gaps to enable them to pursue such livelihoods.

Indicative Activities under Output 1.1.3.

1.1.3.1. Conduct a financial needs assessment among miners and small traders, specifically targeting women miners? needs in each of the three sites

1.1.3.2. Conduct nine trainings on financial literacy, of which at least 50 percent are women miners

1.1.3.3. Conduct capacity building on alternative livelihoods entrepreneurship targeting women miners

Output 1.1.4.: The jurisdictional approach is piloted with a gender-sensitive lens in selected ASGM areas

Indicator 1.1.4.a: Number of gender-sensitive Landscape Action Plans developed

Target 1.1.4.a: One (1)

Indicator 1.1.4.b: Number of target sites/Surface of mining jurisdictional landscapes delineated

Target 1.1.4.b: TBD (between 1 and 950ha)

As a first step in the piloting process, CI and its partners on the Jurisdictional Approach through the planetGOLD Global project will provide the PMU with eight 90-minute sessions. In Sierra Leone, 4 trainings of which 3 at the chiefdom level and 1 for all chiefdoms, will be conducted. The trainings will cover the following themes:

1. Underlying drivers assessments: Analyses of policy and economics that identify the root causes and levers that must be changed to facilitate the systemic transformation to sustainability (Conservation International);

2. Governance assessments: Evaluation of how decisions are made and implemented so that improvements can be made to ensure full stakeholder participation, transparency, and accountability in the pursuit of a sustainability vision (EcoAgriculture Partners);

3. Impact assessments and ecosystem service valuation: Understanding the dependencies between productive activities and the surrounding environment in order to fully cost, and in some cases, compensate for negative environmental impacts (Conservation Strategy Fund);

4. Multistakeholder coalition creation and function: Building an inclusive, well-informed, cooperative body of all relevant stakeholders to build a vision for sustainability and a roadmap to pursue it (EcoAgriculture Partners);

5. Negotiation training: Empowering marginalized groups, often local communities, indigenous people, women, and youth to be able to play a proactive role in defining their future (Conservation International);

6. Landscape action plans: Building out the specific interventions required to strike a balance between production and protection in a way that allows people to meet their needs without cashing out natural life support systems (EcoAgriculture Partners);

7. Landscape finance plans: Identifying scalable revenue streams that can be knit together in blended financial mechanism to bear the cost of transitioning to a sustainable system (EcoAgriculture Partners), and;

8. Comprehensive monitoring and evaluation frameworks: A system of tracking progress across the key dimensions of sustainability, including human wellbeing, ecosystem health, governance, and sustainable production (Rainforest Alliance).

During these sessions, global experts will provide 45-minute presentations on each theme and answer questions that help each country team determine whether the additional expert support on each theme and associated tools will be relevant to their ASGM program of work and would be helpful in beginning to build the foundations for embedding their work in a jurisdictional approach.

Participants will subsequently be asked to pick and choose the most relevant topics to implement ASGM into district or chiefdom development plans. The team will have the opportunity to take deep

dives into the themes and tools of greatest interest to them. Tier 2 trainings will involve advanced interviews and surveys by global landscape experts to identify priority interests, needs, and opportunities so tailored curricula can be developed. Trainings will take place over 4-6 hours using virtual platforms. Following these trainings, experts will prepare reports with recommendations regarding how to advance on the respective theme. Based on a set of political, technical, administrative, environmental, and social criteria, Mining Jurisdictional Landscapes (MJL) will be defined. Then, the JA involves the following steps: i) Landscape characterization; ii) Landscape Action Plan; iii) Landscape Finance Plan; iv) Implementation and Monitoring, and v) Learning and Adaptive Management. Component 1 of this project will therefore take over parts i), ii), iv) and v) of the JA, while part iii) of the JA (Landscape Finance Plan) will be supported under Component 2.

Indicative Activities under Output 1.1.4

1.1.4.1. Provide at least eight 90-minute sessions, one for each of the JA themes

1.1.4.2. Deliver advanced capacity building on the most relevant themes in JA

1.1.4.3. Develop or review in a participative manner the selected MLJ?s development plans

Output 1.1.5: National stakeholders are capacitated to ensure compliance with ASGM regulations and gender-sensitivity

Indicator 1.1.5.a.: Number of capacity-building events provided to national stakeholders

Target 1.1.5.a.: Two (2)

Indicator 1.1.5.b: Number of coordination events carried out with national counterparts about enhancing compliance with ASGM Policies

Target 1.1.5.b.: Two (2)

In order to monitor and enforce ASGM regulations among miners, the capacities of national stakeholders need to be reinforced, including NMA compliance officers, and EPA amongst others. Two workshops will be organized at the national level, with a specific emphasis on ?worst practices?, the occurrence of child labor, and ASGM activity in environmentally sensitive areas.

Dialogue with regional counterparts, once every other year, will enable discussion of the eventual harmonization of price and tariff in the Mano River Union, and to a wider extent, the ECOWAS states, in order to discourage smuggling. It would also indirectly address the smuggling of mercury across neighboring borders. The collaboration between the NMA, NRA, and counterparts in Guinea and Liberia will be strengthened.

Indicative Activities under Output 1.1.5

1.1.5.1. Strengthen the capacity of national stakeholders to ensure compliance with ASGM policies,

1.1.5.2. EPA, NMA, MMMR, and other relevant MDAs meets to review the compliance with ASGM policies and regulations

Component 2: Access to Finance enhanced by Financial inclusion and Responsible Supply Chains

As described above in Barrier 4, ASGM miners have limited access to financial services, hindering them from investing in their equipment to start their mining activities. Indeed, there is financial institution mistrust and the ASGM sector is considered a risky investment. As a result, miners often use illegal value chains to i) get start-up capital for their activities; ii) sell their gold to Supporters and rely on them to be provided with adequate equipment; iii) get mercury, and iv) maintain or bail out their cash flow.

The purpose of this component is to enhance miners? access to financial services while developing a sustainable and formal gold value chain. One of the goals underlying this component is to reassure financial institutions that ASGM operators and related investments in the sector are viable. Enhanced access to finance will allow to decrease in miners? reliance on Supporters and give them more economic autonomy that would allow them to invest in better mining equipment.

Responsible gold value chains will be fostered under this component. GoSL has recognized the need to provide gold traders with more attractive alternatives to smuggling the gold to neighboring countries that maintain more attractive fiscal regimes. Establishing a financial mechanism that values gold without mercury and ensures gold traceability will contribute to the control of gold smuggling and tax evasion. It is expected to reduce the illegality related to the sector and to result in greater economic and social benefits for miners? communities on the local and national scale.

Outcome 2.1: Enhanced access to Finance through Financial Inclusion and Responsible Supply Chains

In complementarity with Output 1.1.3. which enabled ASGM organizations to be trained on financial literacy and entrepreneurship, the project will engage financial institutions in the process of enhancing the ASGM sector?s access to finance. Partnerships and consultation workshops will be organized in order to meet the needs of both ASGM operators (including the differentiated needs of women) and financial institutions, as well as dissipate the mistrust and misunderstanding between the two parties. As recommended in the NAP, the project will also support the establishment of a State-Gold Buying Programme (SGBP), supported by a gold-buying station in close proximity to an AGM zone that buys, processes and valuates gold without mercury and sells it to the Central Bank. If effective, the SGBP could be scaled up with the establishment of other gold-buying stations in other areas.

Establishing a transparent, traceable, and responsible gold supply chain involves improved gold traceability and certification. For that purpose, the creation of a tracing system to trace gold trade from the mine to the point of export, in full compliance with the OECD Due Diligence Guidance standard,

will be supported by the project. A certification system for gold produced without mercury will be complementing the tracing process, through the creation of a ?responsibly-produced gold? label.

As a follow-on step to the piloting of the Jurisdictional Approach under Component 1, the project will work within the same jurisdiction to develop a Landscape Finance Plan, to enable the sustainable financing of the actions outlined in the Landscape Action Plan. This will once again rely on a highly participatory process, and be supported by the improved traceability and certification systems piloted.

Outcome Indicator 2.1.a: Amount of funds made available to targeted ASGM operations through new or existing formal financial mechanisms

Target 2.1.a. $500 000 made available to targeted ASGM through financial services

Outcome Indicator 2.1.b.: Number of ASGM miners with increased access to finance, such as the capacity to open bank accounts, develop savings, and access micro-credit

Target 2.1.b.: At least 120 miners (including 50% of women)

Outcome 2.1 will be delivered by the following outputs:

Output 2.1.1.: Financial services developed or with improved access for ASGM sector actors, including women, through support to financial institutions

Indicator 2.1.1.a: Number of financial institutions supported to facilitate access to finance through improved services for ASGM

Target 2.1.1.a.: Ten (10)

Indicator 2.1.1.b: Number of ASGM actors participating in forums linking ASGM and Financial Institutions

Target 2.1.1.b.: 480, of which 240 women

Institutions involved in enhancing financial inclusion for the ASGM sector, such as the Ministry of Finance (MoF), the Central Bank, commercial banks, and rural development banks, will be identified and engaged in workshops about the importance of facilitating artisanal miners? access to finance. Selected members of 10 financial organizations will be engaged according to their role in developing financial products for the ASGM sector, including the financial secretary.

The workshops will build on the miners? needs assessment conducted under output 1.1.3. Such workshops will contribute to transforming the negative perceptions about the AGM sector by raising

awareness about the specifics of AGM, as financial institutions have doubts about the financial viability of the ASGM sector. For instance, it will be pointed out that the sector is not as risky as artisanal diamond mining because the returns from gold are more stable and therefore more likely to pay back loans. The financial products provided by the financial institutions that do not meet miners? needs and capacities will also be a topic of discussion: miners usually need small loans that they pay back in the long term, and they typically have no collateral to make available. Therefore, solutions to make loans more accessible while keeping miners? and institutions? interests, will be discussed. In that sense, the creation of miners? organizations in Component 1 (under output 1.1.2.) allowing them the opening bank accounts, will contribute to satisfying some of the financial institutions? needs; as well as the increased knowledge of miners on financial management through trainings provided under output 1.1.3.

Once a year, a forum gathering the financial institutions, and ASGM key stakeholders (NMA, small gold traders, miners? organization's representatives) will be organized. It will enable us to continuously engage stakeholders to ensure that artisanal miners and small traders are provided with improved access to financial services, share lessons learnt, and discuss challenges encountered by both financial institutions and the ASGM sector.

Indicative activities under Output 2.1.1.

2.1.1.1. Map out existing financial institutions in the pilot districts and national level with interest in the ASGM sector.

2.1.1.2. Build the capacity of financial institutions on the financial viability of the ASGM sector and the importance of facilitating miners with access to finance through improved financial mechanisms

2.1.1.3. Organize four forums (1 per pilot site and 1 at the national level) linking financial institutions and ASGM key stakeholders (small gold traders and miners organizations representatives) to explore viable business relations

Output 2.1.2.: A pilot system for tracing AGM gold trade and mercury use from the mine to the point of export is developed through a multistakeholder approach

Indicator 2.1.2.a.: Number of systems tracing AGM gold trade from the mine to the point of export piloted

Target 2.1.2.a: One (1) system

Indicator 2.1.2.b: Number of ASGM mining entities/miners trained on planetGOLD Environmentally and Socially responsible Criteria

Target 2.1.2.b: 90 people, of which 45 women

Indicator 2.1.2.c: Number of completed planetGOLD Environmental and Social Risk Assessment Reports and Mitigation Reports

Target 2.1.2.c: One (1)

The project will investigate the domestic and regional ASGM supply chain, including the structure of gold trade in the three pilot sites. The project will coordinate with the work done by the EITAP 2 project, which is establishing ?green gold pilots? seeking to establish mercury-free ASGM supply chains and facilitate its access to the market through the creation of cooperatives, among other things.

An emphasis will be first put on further exploring gold trade routes, distribution of financial flows, and new trade arrangements. A workshop gathering dealers, exporters, and other relevant ASGM stakeholders will be conducted to discuss arrangements. The findings of the study will inform the establishment of a transparent supply chain and new ways of structuring gold trade without trading or using mercury, which will be discussed during the workshop gathering exporters, and goldsmiths, among others. The workshops will be the opportunity for local businessmen trading gold as a secondary business to consider the awarding of ?entrepreneur export licenses?[1][2]. Creating this type of license could allow them to register as gold exporters at a preferential rate and support the formalization of the gold supply chain.

A State-Gold Buying Programme (SGBP) will be supported and established, in coordination with gold traders and key ASGM stakeholders attending the workshop. As recommended in the NAP, the financial mechanism will take the form of a regional gold-buying station created near an ASGM site allowing it to process and valuate gold without mercury. Specific staff trained will be trained in mercury-free gold processing and gold valuation and employed in the gold-buying station. The established AGM entities can therefore directly sell their gold or gold concentrate to the gold-buying stations, under the condition that no mercury has been used for gold extraction. They will receive a guaranteed percentage of the world market price and where no taxes or royalties will be levied. Once the gold concentrate has been processed, they will sell it to the Central Bank of Sierra Leone. The Central Bank will use this to build up national gold reserves and sell it for hard currency on the international market when the international gold price is high. When the mining entities are strengthened, further requirements will be included. In line with the objective of the programme, the project will apply the planetGOLD Criteria for Environmental and Socially Responsible Operations. Throughout the process, it will be important to ensure that women and youth will participate in the establishment and functioning of the gold-buying station.

A system tracing ASGM gold trade from the mine to the point of export in full compliance with the OECD Due Diligence Guidance Standard will be established. The traceability system will be two-fold: physical and digital. In the first stage, physical traceability will be ensured by using appropriate transport and logistical means that ensure segregation and security, as well as tagging and tracing bags

of gold that are transported between the established mining entities and regional gold-buying stations. As a part of physical traceability, benefit sharing will also be traced with the use of receipt books. In the meantime, digital traceability will be explored by NMA, which may, in a second stage take the form of a blockchain-enabled traceability solution.

Certification will then be piloted, along with the traceability system, as part of the establishment of a responsible gold supply chain. Gold that has been produced without mercury will be labeled as ?responsibly-produced gold? and follow a similar to Kimberley Process Certification Scheme (KPCS) that is in place for diamonds. The certification process will benefit certified ASGM entities that will receive a fair price and an additional premium. Ultimately, producing and trading certified gold without mercury will therefore generate more revenues for miners and traders than trading gold informally.

Indicative activities under Output 2.1.2.

2.1.2.1. Undertake desk review of mercury and gold trade in Sierra Leone.

2.1.2.2. Conduct three workshops to engage stakeholders (e.g. dealers, exporters, goldsmiths, and other relevant ASGM stakeholders) to discuss gold trade routes and new ways of structuring gold trade

2.1.2.3. Support the establishment of the regional gold buying stations which process and valuate gold produced without mercury

2.1.2.4. Pilot a system tracing artisanal gold trade from the mine to the point of export in full compliance with the OECD Due Diligence Guidance standard

2.1.2.5. Pilot a certification system that certifies ?responsibly-produced gold?

Output 2.1.3.: A gender-sensitive Landscape Finance Plan is developed in a pilot jurisdiction

Indicator 2.1.3.1: Number of gender-sensitive Landscape Finance Plans produced

Target 2.1.3.1.: One (1)

Improved traceability and certification schemes can improve investors? confidence in ASGM investments, thereby providing an entry point for sustainable financing of the sector. As such, Output 2.1.2 will be an additional building block toward the participatory development of a gender-sensitive Landscape Finance Plan at the district or chiefdom level (appropriate jurisdiction to be confirmed during implementation through stakeholder engagements under Component 1).

The Landscape Finance Plan will work towards identifying scalable revenue streams that can be knit together in a blended financial mechanism to bear the cost of transitioning to a sustainable system. The project will partner with leaders in this space and leverage existing tools such as the Landscape Investment and Finance Tool (LIFT). LIFT comprises a three-module process and materials that help landscape initiatives define, develop and find finance for their landscape priorities, as identified in the Landscape Action Plan. The tool guides you through a process to find the types of investors that might

be interested in your landscape-specific business cases, and develop pitch materials to successfully acquire that finance.

ASGM organizations supported in business development under Component 1 may in this framework be good primary candidates for investment.

Indicative activities under Output 2.1.3.

2.1.3.1. Conduct multistakeholder consultations in support of a Landscape Finance Plan

2.1.3.2. Identify scalable revenue streams for the sustainable exploitation of the ASGM pilot sites

2.1.3.3. Develop participatory gender-sensitive Landscape Finance Plan

Component 3: Enhancing up-take of Mercury-free technologies

ASGM miners are often working with rudimentary tools such as picks and shovels or simple machinery in dangerous working conditions, which sometimes leads to work accidents and in the areas of intervention also entails exposure to toxic mercury. For those starting work in the ASGM sector, those rudimentary tools are the most accessible and cheapest option. Due to their limited knowledge of mercury-free techniques and their reliance on Supporters to finance their equipment, a majority of ASGM miners do not have access to improved mining techniques and tools.

Under this component, the project will conduct activities in pilot sites with the aim of reducing the use of unsustainable mining practices and eliminating mercury use. Promoting and introducing alternative mercury-free technologies on the pilot sites is expected to contribute directly to eliminating 1.408 tons of mercury within the 5 years of the project implementation.

This Component is related to a broader strategy aiming at reducing mercury use in the ASGM sector and mitigating wider impacts, in compliance with the Minamata Convention and the NAP. To date, only a few initiatives have been conducted to implement mercury-reduction activities in ASGM sites.

Adopting mercury-free techniques will provide economic, environmental, and health benefits to both women and men in pilot sites. First, once the techniques most relevant to miners? needs are taken up, there will be an enhanced gold production, through a greater amount of gold extracted at minimal cost, which will thus generate additional revenues for miners. The reduction of mercury use in mining will also reduce the amount of mercury dispersed in the air, water, and soil, and reduce the exposure of humans and ecosystems to toxic mercury. At last, the awareness raising and trainings on better mining practices will bring an enhanced knowledge of sustainable mining practices among miners, increase uptake of good mining practices, decrease dependence on mercury, and result in improved health for miners and local communities living near ASGM sites.

The piloting of activities undertaken under this component presents a potential for scaling up and will pave the way to further integration of mercury-free techniques on other ASGM sites across Sierra Leone, taking into consideration lessons learnt from the implementation of this component.

Outcome 3.1.: Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by ASGM miners

To achieve this Outcome, the project will focus on training miners on better mining practices and mercury-free technologies, contributing to the enabling environment to foster the adoption of the latter technologies. These will be introduced in Output 3.1.2. to take place before the introduction of new technologies on-site. Both women and men will be sensitized to different types of mercury-free processing techniques, as recommended in the NAP, and then the distribution of equipment will be facilitated.

Outcome Indicator 3.1.a: Proportion of ASGM miners adopting mercury-free practices

Target 3.1.a. 25% of ASGM miners at pilot sites currently using mercury adopt mercury-free practices

Outcome 3.1 will be delivered by the following outputs:

Output 3.1.1.: Capacity building program on better mining practices and mercury-free technologies is developed and implemented among ASGM stakeholders and miners, including women

Indicator 3.1.1.a.: Number of capacity-building activities on mercury-free technologies and better mining practices organized

Target 3.1.1.a.: Four (4) as follows: One (1) Capacity building programme for national stakeholders and one (1) per site on the use of new technologies

Indicator 3.1.1.b.: Number of miners trained on improved mining practices and mercury-free processes (sex-disaggregated)

Target 3.1.1.b.: 480, of which 240 women trained on improved mining practices and mercury-free processes

This Output will first require conducting a baseline assessment of the current mining practices, the gold production, the use of mercury, and the needs and challenges encountered regarding mercury-free technologies. This will allow us to identify the most urgent miners? needs, tailor the content of the trainings to be provided, and prepare the adequate equipment to be introduced on-site. This assessment will include information on miners? expectations and availability for the program trainings and identify

key ASGM actors playing an important role in providing the trainings and facilitating the provision of equipment and new technologies. It will also estimate the potential of trainings and different technologies for enhancing productivity and mitigating environmental health impacts, highlighting the best practices and mitigation measures that should be included in the interventions (in coordination with Component 4). Beyond collecting information, this participatory baseline assessment will allow to engage miners and stimulate their participation in the trainings.

Based on the assessment and needs identified, a training program on better mining practices and cleaner technologies will be conducted in each of the pilot sites, with a focus on land rehabilitation and forest-smart mining. The economic and environmental benefits that will derive from the adoption of such practices will be specifically highlighted (in line with other aspects of the Jurisdictional Approach adopted by the project).

A first round of trainings on short-term improvements to mining methods (e.g. sluices, use of sieves and magnets) will be provided to miners, to reduce mercury use and mitigate worst practices. During this training, various practices will be tested and discussed with miners, to see which practices work the best and are the most preferred. The second round of trainings will be conducted, during which the progress made after the first training will be evaluated by miners. Those trainings will focus on long-term improvements of mining practices, landscape restoration, and elimination of mercury use.

Indicative activities under Output 3.1.1.

3.1.1.1. Assess miners' equipment, gold production, and access to mercury-free technologies, and estimate mercury use in each pilot site

3.1.1.2. Capacity building on mercury-free technologies and better mining practices, including land rehabilitation.

3.1.1.3. Continuous monitoring of the uptake of mercury-free practices/technologies, better mining practices, and the state of mercury in the environment as a result of project activities.

Output 3.1.2.: Mercury-free processing techniques and equipment are introduced in pilot sites while addressing the differentiated needs of men and women

Indicator 3.1.2.a. Number of mercury-free techniques/technologies introduced in pilot sites

Target 3.1.2.a. 1 short-term intervention (e.g. sluices, use of sieves and magnets) and 1 long-term intervention (e.g. jaw crushers, ball mills) per pilot site

Once the training program sessions are conducted, the relevant mercury-free processing techniques and equipment will be introduced in pilot sites, in accordance with the miner's needs identified in the baseline assessment and feedback provided during trainings. To introduce better mining practices with the adjusted measures, the following parameters will be taken into consideration: costs and energy requirements; ease of use; relative amount of time used; effects on gold recovery; scalability; environmental and health impacts; suitability to the local ore geology; and local availability of tools and capacity for developing and introducing new tools.

In compliance with the NAP, mercury-free processing techniques will be introduced in each of the three pilot sites following two stages. Each of the interventions requires to be conducted according to the specific needs identified in the baseline assessment. First, one short-term intervention, aiming at improving the current methods and technology (e.g. sluices, use of sieves and magnets) will be introduced. This will enable miners to work with appropriate tools, reducing occupational health risks and increasing the amount of gold extracted. In the second phase, the introduction of new technologies (e.g. jaw crushers, and ball mills) will be facilitated. These low-cost interventions are expected to improve gold production at a minimal cost and to be accepted by miners as they allow them to augment their earnings.

The identified partners, such as NGOs and SMEs, will provide their expertise and operational support to facilitate the procurement of equipment in a timely and efficient manner.

Once the miners have adopted the mercury-free technologies, demonstration sessions involving professionals will be held to showcase the use of mercury-free technologies by ASGM miners and explain the technologies used. This will be presented to key local stakeholders, and a professional video will be made to reach a wider audience amongst ASGM stakeholders and communities, as part of the scale-up and replication strategy of the project.

Indicative activities under Output 3.1.2.

3.1.2.1. Introduce 1 short-term mercury-free technique (e.g. sluices, use of sieves and magnets) per pilot site

3.1.2.2. Introduce 1 long-term mercury-free technique/technology (e.g. jaw crushers, ball mills) per pilot site

3.1.2.3. Organize demonstration sessions with professionals to showcase the use of mercury-free technologies by ASGM miners

3.1.2.4. Mercury detection/measurement equipment (e.g. tabletop mercury analyzers etc) purchased and used for monitoring of the state of mercury in the pilot sites.

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

Component 4 of this project will seek to ensure great communication and knowledge sharing about all the capacity-building contents and lessons learnt produced from the previously described components of this project, across scales and stakeholders. The purpose is to create a solid basis for the sustainability of the project outcomes. This communication strategy aims at maximizing its outreach by creating knowledge products targeting local, national, and international stakeholders including under the umbrella of the GOLD+ program.

In this respect, the project aims at achieving the GOLD+ program objectives on knowledge sharing thus contributing to collectively building an improved understanding of the ASGM sector amongst project-participating countries and the wider ASGM community, including governments, mining communities, and the general public. Lessons learned from the interventions of this child project will be made available through the GOLD+ knowledge management platform. This will allow non-participating countries to identify the management and technical options that best fit their local conditions.

Building on the lessons learnt from past GEF projects, the GOLD+ project will ensure early and sustainable commitment of stakeholders throughout both: i) an early starting of the communication with relevant stakeholders about the project and the activities proposed, including developing an awareness raising campaign about the dangers related to the use of mercury; ii) the presentation and dissemination of results of the project to the stakeholders involved after the completion of activities.

This component will focus on developing knowledge products that are relevant, adapted, and highly usable by the different groups of targeted stakeholders. Gender will be mainstreamed across these knowledge products, taking into account the differentiated needs of women. Moreover, the specific skills and capacities of women will be leveraged to ensure they can also be agents of change in decision-making processes and will be actively engaged as effective communicators. This approach will apply, amongst others, to training materials developed by the project, and will be used in the project?s capacity-building activities undertaken under all the three first components of this project.

Outcome 4.1 Increased sensitization and awareness on the dangers of mercury use and environmental management at the national, regional, and local scale

Outcome Indicator 4.1.a. Number of people reached with awareness-raising materials generated through the project/planetGOLD, by mode of communication (e.g. online, in-person, via SMS, WhatsApp, etc) and by gender

Target 4.1.a.: 9,000 (4,500 women and 4,500 men) reached with awareness-raising materials on the dangers of mercury and ways to avoid/eliminate its use in ASGM (by type)

Outcome 4.1 will be delivered by the following outputs:

Output 4.1.1.: A national gender-sensitive awareness-raising and advocacy strategy on the dangers of mercury use and environmental management is developed and implemented.

Indicator 4.1.1.a.: Number of Knowledge, Attitude, and Practices (KAP) assessments for ASGM at the national level completed

Target 4.1.1.a.: One (1) KAP for ASGM at national level completed

Indicator 4.1.1.b.: Number of awareness-raising and advocacy strategies developed

Target 4.1.1.b.: Two (2) strategies (local and national level)

Indicator 4.1.1.c.: Number of communication tools produced on mercury use and other ASGM-related hazards disseminated to ASGM communities and a wider audience

Target 4.1.1.c.: Six (6) communication tools developed, among which posters/billboards, television and radio jingles, street shows, town hall meetings

Indicator 4.1.1.d.: Number of capacity-building events conducted on sound management of chemicals for relevant national stakeholders and ASGM stakeholders

Target 4.1.1.d.: At least one (1) capacity-building activity for national stakeholders, especially EPA, MMMR, NRA, and NMA, on detection of chemical control and detection of mercury

Limited knowledge and access to information about the dangers of mercury have been identified as a major barrier to the withdrawal of mercury in the gold process. The project will therefore develop an awareness-raising campaign and advocacy strategy at the local and national scale to further disseminate and share information related to ASGM in Sierra Leone.

To make sure to properly capture the level of knowledge and capacities regarding mercury management, a prior Knowledge, Attitudes, and Practices (KAP) assessment of the targeted stakeholders will be conducted. A KAP assessment will allow an understanding of the level of knowledge, attitudes, and practices of stakeholders related to ASGM, including an assessment of the capacities and level of knowledge of different stakeholders regarding mercury use and mercury waste disposal. It will also include a mapping of the different sources of information on ASGM at the national level. Once the KAP assessment is conducted, a knowledge management strategy will be elaborated to identify and define knowledge products to be produced and disseminated. It will identify the lessons learned from ongoing and prior initiatives to inform project interventions; support the learning and training of MDAs and ASGM miners and other stakeholders to strengthen awareness raising on safe ASGM practices.

Two campaigns will then be developed and unfold towards government ministries, local authorities, ASGM communities, the private sector, academia, CSOs, and the media, both at the national and local levels. In this view, specific communication products and documentation alerting mercury use and other ASGM-related hazards will be disseminated.

Specific attention will be given to the capacity building of stakeholders concerning sound management of chemicals and mercury waste disposal and contamination. In-person or online training programs for government ministries will be conducted to support the institutionalization of sustainable mining methods. Potential synergies with other institutions will be explored, e.g. with the International Sustainable Chemistry Collaborative Centre (ISC3) in Bonn, as well as with German educational institutions like Beuth University of Applied Sciences, Berlin. The latter offers online education/capacity building (in English and Spanish language) in the field of the Minamata convention including ASGM, which is crisis resilient even in times of coronavirus lock-downs and travel restrictions.

Indicative activities under Output 4.1.1.

4.1.1.1. Conduct one KAP assessment to inform the knowledge management strategy

4.1.1.2. Develop awareness-raising and advocacy strategy on safe ASGM mercury-free technologies (one in each pilot site and one at the national level)

4.1.1.3 Awareness raising and advocacy using posters/billboards, television and radio jingles, street shows, and town hall meetings on mercury use and other ASGM-related hazards disseminated to ASGM communities and a wider audience

4.1.1.4. National capacity building on mercury waste disposal and mercury contamination detection

Output 4.1.2.: Gender-sensitive knowledge products and tools on key ASGM topics are generated and disseminated at the national, regional, and international levels

Indicator 4.1.2.a.: Number of knowledge products produced on good practices on formalization, financial inclusion, and mercury-free transition and published on planetGOLD digital platforms

Target 4.1.2.a.: Five (5) publications and at least three (3) knowledge products from the project will be available to the platform

The project will develop knowledge products on emerging good practices and lessons learned throughout the process of formalization, financial inclusion, and mercury-free transition. Those knowledge products will be aligned with the global communication strategy, logo, and communication style and will develop complementary knowledge products in order to avoid duplication. Knowledge products such as infographics, videos, and publications will be shared on planetGOLD digital platforms to communicate with other GOLD projects, government agencies, and key ASGM stakeholders on the project results and lessons learnt. The project will therefore leverage the PlanetGOLD platform for the wider dissemination of knowledge products at the regional and international levels, to support ownership of the project among other countries of the programme. At the international level, the project will explore opportunities to partner with the multi-stakeholder working group on Women and Mining (www.womenandmining.org) as a global knowledge-sharing partner on gender aspects.

Indicative activities under Output 4.1.2

4.1.2.1. Produce five knowledge products on good practices on formalization, financial inclusion, and mercury-free transition and publish it on planetGOLD digital platforms

4.1.2.2. Develop and publish national-level policy briefs and related knowledge products.

Output 4.1.3.: Project is coordinated and aligned with planetGOLD programme objectives and outcomes, through regular coordination activities and reporting

Indicator 4.1.3.a: Number of representatives participating in each planetGOLD global forum and annual programme meetings

Target 4.1.3.a: 3 representatives for the global forum, including: one from EPA, MMA, Gold+ Project for Sierra Leone Project Manager, and 2 representatives for annual programme meetings

Indicator 4.1.3.b: Number of learning and sharing exposure trips undertaken to best case practice Gold+ Child Project countries and International/Regional Mercury conventions

Target 4.1.3.b: At least 2 exposure trips to best case practice Gold+ Child Project countries and at least 2 trips to International/Regional Mercury conventions

This Child Project will ensure close coordination and alignment with the planetGOLD programme. As such, it will undertake a number of activities to ensure knowledge exchanges are taken part in regularly, including ensuring the Project Manager takes part in all bimonthly programme coordination calls.

At last, the project will support various stakeholders participating in the planetGOLD global forum and global events related to the GOLD+ global project, such as the Global Fora or the Annual Programme Meeting (APM). This will allow stakeholders to share lessons learned with peers in other countries while giving greater visibility of the project results outside of Sierra Leone. Three representatives of the project will be participating, including one from EPA, MMA, and the Gold+ Project for Sierra Leone Coordinator.

Indicative activities under Output 4.1.3

4.1.3.1. Share country-level lessons learnt at PlanetGOLD global forum and annual programme meetings, by sending three representatives of the project to the events (including one each from EPA, NMA, Gold+ Project for Sierra Leone Coordinator, and two representatives (1 man and 1 woman) from ASGM pilot sites.

4.1.3.2. Two exposure trips to best case practice Gold+ Child Project countries

4.1.3.3. Two trips to International/Regional Mercury conventions

Component 5: Monitoring and Evaluation

Component 5 of this project is a cross-cutting work to monitor and evaluate project progress and ensure timely deliverables of outputs and outcomes of Components 1, 2, 3, and 4. Work in this component includes following the M&E guidelines of CI-GEF to report progress.

Outcome 5.1: A monitoring and evaluation framework for the project

Outcome Indicator 5.1.a: Number of M&E frameworks developed for the project

Target 5.1.a: One M&E framework for the project

Outcome 5.1 will be delivered by the following outputs:

Output 5.1.1: Periodic M&E reports generated and submitted to CIGEF Agency

Indicator 5.1.1.a.: Number of Annual and Quarterly M&E Reports submitted to CIGEF for review and approval.

Target 5.1.1.a.: 20 Quarterly Technical and Financial Reports; 5 Annual Progress Implementation Reports (PIRs)

Once a year, PIRs will be produced and submitted to CI-GEF for review and approval, along with other M&E reports, such as quarterly technical and financial reports.

Indicative activities under Output 5.1.1.

5.1.1.1. Host Inception Meeting and produce report

5.1.1.2. Analyze project progress and ensure adaptive management measures are implemented if needed for the project to continue execution smoothly and achieve indicators and targets as planned.

Output 5.1.2: Mid-term Evaluation and Terminal Evaluation commissioned by CI-GEF

Indicator 5.1.2.a: Number of mid-term Evaluation Reports generated by the project

Target 5.1.2.a: One mid-term Evaluation Report by the project

Indicator 5.1.2.b: Number of Terminal Evaluation Reports generated by the project

Target 5.1.2.b: One Terminal Evaluation Report

Indicative activities under Output 5.1.2
5.1.2.1. Mid-term evaluation conducted
5.1.2.2. Terminal Evaluation conducted

Alignment with GEF Focal Area and/or Impact Program Strategy

Consistency with GEF Focal Area and/or Fund(s) Strategies

The project primarily supports the GEF Chemicals and Waste Focal area, with multiple co-benefits for local ecosystems. Therefore, it is well aligned the GEF?s focus on facilitating the reduction of chemicals through stronger alignment with the shift to sustainable production and consumption and through stronger private sector engagement, through the JA Approach as well as the project?s Component 2 which also supports sustainable financing, a key GEF priority. It is also supporting the enabling environments for the ASGM sector to adopt better technologies and practices aimed at becoming more environmentally sustainable, eliminating mercury. The project is further aligned with the following GEF priorities:

? Eliminate emissions and releases of mercury in activities and processes listed in Annexes A, B, C and D of the Minamata Convention on Mercury, particularly those activities that emit or uses the highest level of mercury as well as support the control of supply and trade, waste and sound management and storage of mercury and mercury containing waste;

? Reduction and elimination of mercury from the Artisanal and Small-Scale Gold Mining Sector;

? Elimination of primary mercury mining, along with controls on use of mercury from primary mining

? Support government efforts to develop and promote best practices for the environmentally sound interim storage of mercury from ASGM sector and products, etc.;

Linkages with other GEF Projects and Relevant Initiatives

A number of GEF and non-GEF projects are currently being implemented in Sierra Leone and in the region. The GEF-funded project will build on, coordinate with and collate lessons learned from the following projects to avoid duplication of efforts.

Table 2: Linkages with other GEF Projects

GEF Projects Other Projects/Initiatives	Linkages and Coordination
The Planet Gold Program Countries: Global, Burkina Faso, Colombia, Guyana, Indonesia, Kenya, Mongolia, Peru, the Philippines (Phase 1), Bolivia, Congo, Ghana, Honduras, Madagascar, Nigeria, Suriname, Uganda, C?te d?Ivoire, Guinea, Mali, Nicaragua, Zambia, Sierra Leone (Phase 2) Agency(ies): CI, UNDP, UNIDO, UNEP Total Program Cost ($) GEF amount: 43,832,830 ; Co fin amount : 202,668,755	The Gold+ project in Sierra Leone will coordinated with the Phase 1 (2019-2024) and Phase 2 (2022-2027) projects, under Component 4 of the project. The planetGOLD Program aims to support the countries to fulfil their commitments under the Minamata Convention on mercury by responding to the concrete target to contribute to the direct reduction of the emissions and release of mercury into the environment over the period of implementation. Phase 1 of planetGOLD Program is currently being implemented in eight countries in three major global regions: Burkina Faso, Colombia, Guyana, Indonesia, Kenya, Mongolia, Peru, the Philippines. Under Component 4, a dedicated planetGOLD website has been developed, hosting a knowledge repository which has materials in the knowledge areas of formalization, technical solutions, awareness raising and access to finance, to which the project in Sierra Leone will contribute through the elaboration of products to be published on the website. Throjectct will also be coordinating with the phase 2 of the Program (implemented in Bolivia, Republic of the Congo, Ghana, Honduras, Madagascar, Nigeria, Suriname, Uganda, C?te d?Ivoire, Guinea, Mali, Nicaragua, Zambia), in particular on the holistic approach, multisectoral approach of the projects, such as the Jurisdictional approach and the finance and investment dimension.

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SSC, CBIT and co-financing

The GEF investment will contribute to the capitalization of the existing initiatives to reduce mercury use in the country and build upon them to ensure continuity and expand the activities. With the support of the GEF, the project will provide incremental funding for the formalization of the ASGM sector and pave the way for the enforcement of an updated legislative framework adjusted to ASGM miners? needs and MDA?s capacities, the formalization of miners? organizations allowing their improved access to finance, and the reduction of mercury use in the sector by fostering the uptake of improved and new mercury-free technologies.

The project will provide support to a more coordinated effort between various government ministries, financial institutions, non-government representatives, and ASGM stakeholders, in particular through the annual forums linking financial institutions and ASGM key stakeholders such as NMA, gold traders, and miners? organizations. This project is proposed a cost-effective way of linking together stakeholders that do not have opportunities to meet often.

More specifically, the relationships between ASGM organizations and financial institutions will be strengthened in order to provide enhanced access to finance to miners and to support their inclusion in the formal gold market. The workshop trainings on financial literacy for ASGM miners and on AGSM sector viability for financial institutions will enable both sides to increase their knowledge of gold trade.

The project will bring a strong added value in establishing a financial mechanism supporting a more traceable and responsible gold supply chain, that could be upscaled and replicated in other areas based on the lessons learned from the project implementation.

The project will also support knowledge sharing, lessons learned, and capacity-building materials under Component 4. The project will build on lessons learnt from other projects (see Annex X) on the formalization of the ASGM sector, financing of sustainable supply chains, and mercury reduction. The project will thus provide opportunities for upscale and replication by building on lessons learned on the reduction of mercury use.

Table 3: Summary of incremental benefits of the project intervention

Business as Usual **(without project)**	**Incremental Benefits** **(With project ? contributions to the baseline)**
1. Continued mining along riverbeds and tributary systems, land degradation, mining in and around National Parks, and pollution from mercury use in gold amalgamation	The project will support the adoption of mercury-free technologies hence reducing mercury contamination of the environment. In addition, the Jurisdictional Approach pilot will showcase the benefit of land-use planning and demarcation for ASGM.
2. Mercury use contributes to significant releases into soil and water. Exposure to inorganic mercury is reported to be high in ASGM communities. ASGM encroaches on natural forests and causes deforestation and land degradation.	Through the project, Sierra Leone will have fewer mercury releases as a result of ASGM through the adoption of new technologies.
3. Lack of awareness of the impacts of mercury use in the ASGM sector will continue promoting the use of mercury	Through awareness raising, the project will ensure a more aware populace of the impacts/dangers of mercury use hence reducing the use of mercury and reporting any illegal smuggling of mercury into the mining zones.

Business as Usual (without project)	Incremental Benefits (With project ? contributions to the baseline)
4. The lack of finance for alternative mercury-free technologies continues to encourage the use of mercury in the ASGM sector in Sierra Leone.	More access to knowledge of financing mechanisms available to the artisanal and small-scale miners will encourage the adoption of mercury-free technologies hence reducing the use of mercury in the ASGM sector in Sierra Leone.

Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

Chemicals and Waste: Aligned with the Minamata convention?s vision, the main purpose of this project is to eliminate the use of mercury in the ASGM sector. This project will therefore directly contribute to the GEF Global Environment Benefit related to Chemicals and Waste by protecting the environment while contributing to the reduction and elimination of mercury use and prevention of anthropogenic emissions and releases of mercury and mercury compounds. Together with the sound management of chemicals and waste of global concern, the project will support Sierra Leone?s ASGM sector in reducing water, air, soil, and ocean contamination as well as limiting bioaccumulation in organisms related to the use of mercury in artisanal gold processing. In the NAP for Sierra Leone, a total average estimate of mercury use in its ASGM sector is reported at .352 MT/year. If the government's objective to eliminate mercury can be achieved during project implementation and using a replication factor of 3 for the reduction achieved after the project ends, the total mercury use reduction achieved by the project is 1.408 tons.

Land degradation: By creating an enabling environment for the adoption of sustainable gold mining practices, the project will support GEF Global Environment Benefit related to Land degradation. In fact, beyond the reduction of mercury emissions, the project will contribute to the reduction of the impacts associated with artisanal gold mining such as deforestation or abandoned mining pits. The formalization of the ASGM sector through updating mine closure and land rehabilitation guidelines and procedures, for instance, will encourage ASGM miners to adopt better practices that comply with environmental protection. This will in turn improve the forest ecosystem goods and services while promoting the conservation and sustainable use of biodiversity, including forested ecosystems. Within the project, the surface of land under better management practices (excluding protected areas) is based on the area contained within the administrative border of chiefdom piloting the jurisdictional approach. All three chiefdoms of the pilot sites reunited, the area amounts to 1,486,800 ha. However, at this time, it is expected that JA will only be piloted in one of the three chiefdoms. Based on current knowledge during the PPG phase, it is assumed Kholifa Rowalla chiefdom will be the most likely candidate, based on past engagement levels in the area.

Table 4: Area of landscapes under improved practices (excluding protected areas)

Area	Surface area (Hectares)
Kholifa Rowalla chiefdom (N 8?40?25? W 11?56?39?)	***450,900 ha***
Valunia chiefdom (N 8?18?42? W 11?41?09?)	823,700 ha
Penguia chiefdom (N 8?19?53? W 10?44?24?)	212,200 ha
Total	1,486,800

Sustainable Forest Management: Similarly, the introduction and adoption of forest smart mining practices will contribute to the GEF Global Environment Benefit related to Sustainable Forest Management. Indeed, those sustainable practices will help reduce the forest loss and forest degradation associated with unsustainable mining practices while maintaining the range of environmental services and products derived from forests; and enhancing sustainable livelihoods for local communities and forest-dependent peoples.

Biodiversity: Adopting mercury-free technologies will enable ASGM miners to limit the release of mercury into the environment, therefore, preserving biodiversity, habitats, and species.

Climate change mitigation: Reduced environmental degradation and better mining practices will increase the resilience of local communities to the impact of climate change. They will offer diversified livelihood opportunities as well as ensure the preservation of ecosystem services to the adverse impact of climate change and natural hazards. Conservation and enhanced carbon stocks in agriculture, forest, and other land use

Innovativeness, sustainability, and potential for scaling up

Sustainability

The project takes a multi-pronged approach to ensuring effective contributions to the intended project impacts beyond the timeframe of implementation. Through its Component 1, the project will tackle the governance issues and the poor coordination at institutional level to address ASGM formalization by building capacity for ASGM formalization in a number of ways. In terms of coordination mechanisms, as members will be leading the ASGM NAP implementation within their respective jurisdictions, their effective engagement from the onset will be adopted to ensure that they take full ownership of the process. The project will further develop capacity-building activities to provide stakeholders with

knowledge and skills necessary for long-term implementation. For example, Train-The-Trainers approach will allow to build miners? leaders capacity building on the long-term, by targeting AGM leaders and women for trainings, who will then be able to replicate such trainings within their own communities.

Component 1 will also support the organization of miners by supporting the creation of miners? organizations, which will give multiple incentives (financial, legal, technical, knowledge sharing, etc) to work in a formalized fashion in the long-run. The project will further develop capacity-building activities to provide stakeholders with knowledge and skills necessary for long-term implementation, and a Train-the-Trainers approach will ensure that capacity built for miners? organizations can be scaled out and sustained over time. Guidelines and training tools used for the purpose of these workshops will also be developed within the scope of this project.

The project will adopt the cross-cutting principle whereby a highly participatory approach to the process of reducing and eliminating mercury use in ASGM is necessary to ensure long-term sustainability. It will provide platforms, such as workshops gathering key ASGM stakeholders to discuss alternative gold trade routes; or financial institutions to increase miners? access to finance. Therefore, stakeholders will be engaged in meaningful ways, ensuring that all voices are heard (including the most vulnerable groups, such as women) and that project beneficiaries are driven become agents of change. The participatory approach, through a strong awareness raising and communication strategy, will build ownership by the beneficiaries of the project results, and create an incentive to sustain behavioural change away from environmentally detrimental practices and towards the continued use and scale up of the adoption of the clean technologies and approaches promoted by the project (Component 3).

Also central to the sustainability of the interventions is the focus on creating the enabling environment for the implementation of the jurisdictional approach, which will ultimately ensure that not only ASGM has dedicated spaces to operate within the landscape (Component 1), but also promote the adoption of better mining practices by embedding the process into the development of transparent value chains that value sustainable exploitation of gold (Component 2). The Landscape Finance plan conducted at the national level and at pilot sites level to investigate domestic and regional ASGM supply chain, on the structure of gold trade in the three pilot sites, will therefore allow to identify the process to establish a more responsible gold supply chain and elaborate gold-buying stations. Component 1 and 2 will address some of the key financial barriers to the long-term sustainability of initiatives, by establishing and capacitating ASGM miners? organizations, and engaging financial institutions in increasing miners? access to finance.

The Executing Agency for the project will also have a key role in ensuring the sustainability of project results. Indeed, it is the government body in charge of ensuring the compliance of the country with the Minamata Convention on Mercury, has developed the National Action Plan (NAP) to transform the ASGM sector in a sustainable and an inclusive manner, and has the incentive to continue delivering on its commitments to the Convention beyond the completion of the project.

Innovativeness

There are several elements of the project which are innovative, starting with addressing the issues associated with the ASGM sector in a holistic way, with the aim of ultimately eliminating mercury use in the sector entirely. To achieve this, the project will work towards the formalization of the sector, including through the Jurisdictional Approach. As such, the project will foster the integration of the ASGM sector into broader dimensions of landscape management. It will initially assess the context comprehensively, and identify key entry points for JA in the ASGM context of the country. Then, it will work on developing Landscape Action Plans, which will, through a highly participatory approach, try to reconcile competing social, economic and environmental objectives, with the government as a central stakeholder. It will encourage all stakeholders, from governments, ASGM actors across the gold value chain, businesses, local communities, and NGOs to work together towards the common objectives of eliminating mercury and securing natural capital through coordinated strategies across the sector. This will take place mainly under Component 1 of the project.

However, the JA approach will have implications for Component 2 of the project as well, in terms of the approach to financial inclusion and traceability of the gold supply chain. First, it will enable the sourcing of sustainable gold from the areas where the JA is being piloted, as it will be inclusive of the ASGM sector, and create an incentive for ASGM actors to sell gold in the formal market where better prices may be obtained. This will be one of many aspects to be integrated into the Landscape Finance Plan for the pilot areas. Other opportunities will be sought, based on the priorities identified in the Finance Plan, to provide greater access to financing for ASGM actors. This will be key in enabling greater access to clean technologies and sustain good practices in the long-term.

The project will also introduce novel technology to the areas of intervention, which will be mercury-free, and more efficient than traditional mercury-based methods. It will partner with research institutions to ensure that the technologies are indeed well adapted to the local geological characteristics, as well as miner personal preferences, while simultaneously improving productivity and protecting human and environmental health.

Replicability and Potential for Scaling Up

The project interventions will contribute to the establishment of an enabling environment for the formalization of the sector at national scale, setting the scene for the replication of activities further piloted through the project. Indeed, the project will take a pilot approach to its intervention on the Jurisdictional Approach and the introduction of innovative and mercury-free technologies for ASGM. Where immediately successful, the project will be able to adapt and replicate activities across the country and abroad. More importantly, however, lessons learnt from the project (successes and failures alike) will be used to inform the development of scale up initiatives aiming at establishing and standardizing: i) transparent and accountable gold value chains; and ii) mercury-free technologies and best mining practices.

Train-the-Trainers, awareness raising campaigns, and effective communication of project results will all contribute to the replicability and scaling up strategy of the project. For instance, following the adoption of mercury-free technologies by miners at pilot sites, demonstration sessions will be held to showcase the use of mercury-free technologies by ASGM miners and explain the technologies used. Professionals will be on hand to support the events, and a professional video will be made to reach a

wider audience amongst ASGM stakeholders and communities. Combined with other measures, awareness raising campaigns on the impacts of mercury are expected to contribute to broader adoption of mercury-free technologies, as long as it makes financial sense for miners. As such, supporting sustainable financing plans will also be key to adoption and scaling up.

1b. Project Map and Coordinates

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

The project will be executed in Sierra Leone specifically in Kholifa Rowalla chiefdom (N 8?40?25? W 11?56?39?); Valunia chiefdom (N 8?18?42? W 11?41?09?); and Penguia chiefdom (N 8?19?53? W 10?44?24?). The map of Sierra Leone showing the location of these Chiefdoms is provided below, with a white star placed next to the name of the targeted Chiefdoms (Note: the star does not represent the specific project site locations, which have yet to be determined).

Figure 4: Political map of Sierra Leone with districts and chiefdoms

(Source: Statistics Sierra Leone).

1c. Child Project?

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

The GOLD+ programme has been developed around four components to be executed through child projects. The components are intended to comprise a holistic approach to addressing root causes while enabling miners to improve their livelihoods and reduce mercury emissions. The four components are as follows:

Component 1: Enhancing formalisation in the ASGM sector

As a policy priority in Sierra Leone, this project will introduce distinct approaches for formalizing the ASGM sector in ?artisanal mining zones? throughout the country. One of the strategy?s components includes a market-based mechanism for encouraging mercury-free gold. Jurisdictional and landscape approaches will be used to strengthen formalization. This involves a holistic multi-stakeholder approach across sectors, support for and by local governments, and a focus on responsible sourcing.

Component 2: Access to Finance enhanced by Financial Inclusion and Responsible Supply Chains;

Pre-financing arrangements and investments from informal gold buyers, compounded by a lack of access to formal finance, sometimes result in exploitative situations and undermine the formalization process and the transition to mercury-free technology. To aid in financial inclusion and responsible supply chains this project will conduct financial needs assessments among miners, educate financial institutions about the ASGM sector and assist miners with financial literacy. The government has also proposed to reserve a dedicated budget of at least $5,000,000 to assist ASGM miners and small traders by 2024.

Component 3: Enhancing uptake of Mercury-free technologies;

This project will deploy several actions for eliminating worst practices. These will be part of a strategy for improved mining methods that can be tested and introduced in each of Sierra Leone?s ASGM subsectors to gradually reduce mercury use and mitigate wider impacts. This component will:

- Train ASGM miners on better practices, including land rehabilitation.
- Organize demonstration sessions to showcase the use of mercury-free technology.
- Introduce mercury-free processing techniques in selected pilot sites.
- Short-term interventions aim to reduce mercury use through the improvement of current methods and technology (e.g. sluices, use of sieves and magnets)
- Long-term interventions aim to (eventually) eliminate mercury use through the introduction of new technology (e.g. jaw crushers, ball mills)
- Based on gradual, low-cost interventions that are expected to improve gold production at minimal cost, to increase the likelihood of scaling up and increasing the acceptance by miners.

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

This component presents mechanisms for institutionalizing stakeholder engagement at both the national and local levels.

•Develop and implement awareness strategies on the dangers of mercury use. This calls for wide stakeholder participation including government departments, the private sector, academia, CSOs, and the media.

•

Enhance the capacity of stakeholders in understanding sound management of chemicals and sources of mercury releases and their effects on human health and the environment in order to take necessary precautions and support the availability of mercury-free alternatives.

Provide documentation of emerging good practices on formalization, financial inclusion, and mercury-free transition to provide a balanced narrative on ASGM's potential for development.

Assist in capacity building for relevant State agencies to provide technical assistance on formalization and mercury-free technologies.

Share lessons learned across government agencies, and key actors nationally and through the knowledge management child project globally.

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

To ensure that the project complies with the GEF?s Stakeholders? Engagement Policy, the EA supported by the PPG consultants developed a Stakeholder Engagement Plan (SEP). The PMU will monitor and report on the following minimum stakeholder engagement indicators: (i) Number of people (sex disaggregated) that have been involved in project implementation phase (on an annual basis). (ii) Number of stakeholder groups (government agencies, civil society organizations, private sector, indigenous peoples and others) that have been involved in the project implementation phase (on an annual basis); and (iii) Number of engagements (meetings, workshops, consultations, etc.) with stakeholders during the project implementation phase (on an annual basis).

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

The Stakeholder Engagement Plan (SEP) outlines the differentiated measures that the Executing Agency will implement to ensure the effective participation of key project stakeholders, including both men and women and those identified as disadvantaged or vulnerable stakeholders. The SEP includes a **Stakeholder Analysis** (Section III) to identify all actors who directly or indirectly may affect or be affected by a project and their varying interests. The SEP also outlines stakeholder engagement throughout the project lifecycle, including **Stakeholder Engagement in PPG/PPF Phase** (Section IV), **Stakeholder Engagement in Implementation Phase** (Section V), and **Monitoring and Reporting** (Section VI). The following is a summary of the project?s SEP.

The Environment Protection Agency (EPA) in conjunction with Conservation International (CI) and the Human Right Advancement Development and Advocacy Centre (HURIDAC) carried out a stakeholders? mapping and stakeholder consultations at PPG phase. As a result, they identified 8 Government institutions (of which 4 are envisioned to have high influence and 3 medium influences in the project). They also identified CSOs (4) and private sector stakeholders (4) relevant to the ASGM sector. Indigenous peoples and local communities were also identified as having high influence in the project, especially the traditional authorities and representatives of 3 communities. Despite academia stakeholders not being identified as having high influence on the project, they do have potential to contribute to knowledge generation. Finally, disadvantaged groups such as women in mining sites, were also identified.

At PPG phase, the project engaged with 20 stakeholder entities, ranging from key Ministries to local chiefdoms. A total of 116 persons (70 men and 46 women) participated in consultations linked to project design and preparation, through a total of 18 engagements. This allowed the project to consider the views and needs of government authorities, CSOs, miners? associations (including 3 women miners groups), the paramount chiefs of the prioritized sites, at project design. Consultations at PPG phase provided key insights for both the technical design of the project and of the safeguard plans. A summary of these engagements can be found in Section IV of the SEP.

Both the stakeholders mapping exercise and the consultations described above were key to developing a stakeholder engagement action plan for implementation phase. Government stakeholders with high influence in the project (for example the Ministries of Environment and the Ministry of Mines) will be engaged monthly, through technical meetings, workshops, and training. Actions to engage CSOs are also in place, including workshops, training, and the development of communicational materials to use in different communication channels. A similar approach is applied to the traditional authorities, that are anticipated to be the main point of communication with the mining communities. Finally, the project is also planning to engage financing institutions to support the development of financial mechanisms to support mercury free ASGM. The SEP will monitor 3 indicators at implementation phase and will be the responsibility of the Environmental and Social Safeguards Specialist of the project. For the detailed planning for stakeholder engagement at implementation phase, refer to section V of the SEP.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

To ensure that the project complies with the GEF?s Gender Policy, a Gender Mainstreaming Plan (GMP) was prepared during the PPG process. Sex disaggregated data and gender information will be collected and analyzed to inform gender responsive monitoring and evaluation. The following minimum gender indicators will be monitored and reported on: (i) Number of men and women who participated in project activities (e.g., meetings, workshops, consultations). (ii) Number of men and women who received benefits (e.g., employment, income generating activities, training, access to natural resources, land tenure or resource rights, equipment, leadership roles). (iii) Number of strategies, plans (e.g., management plans and land use plans) and policies derived from the project that include gender considerations.

The **Gender Mainstreaming Plan** provides information, analysis, and specific actions to ensure that gender dimensions are fully integrated into the project. This consists of 3 parts: (1) a Gender Analysis/Assessment, (2) a Gender Action Plan, and (3) Monitoring and Reporting which also defines the gender targets.? The **Gender Action Plan** details any corresponding gender-responsive measures to address those differences, impacts, risks, and opportunities. The following is a summary of the key aspects of the GMP.

In Sierra Leone, and specifically in the project areas, the ASGM sector, together with agriculture, are central to the local economy. Women are estimated to form approximately 35% of the ASGM workforce in the project intervention sites. Despite their importance in ASGM, mainly in their role of transportation and severing (separation of the gold from the muddy gravel), their work is often undervalued. In addition to this, in the ASGM sector, women miners must balance the very busy day at the mines with their

domestic chores (unpaid care work), including food preparation, care of children or elders in their households, among others. Their non-fulfilment of any of their prescribed roles has caused cases of gender-based violence. Overall, women in the ASGM sector, face challenges in pursuing associative efforts, accessing credits and around land ownership, that directly impact their possibilities to access better livelihood opportunities.

The key findings of the gender analysis described above, supported the design of a gender action plan (see section III of the GMP) in which gender-responsive and gender-sensitive actions were proposed for each project component. For Component 1 ?Enhancing formalization in the ASGM sector? the project will first assess women miners? needs in each of the 3 pilot sites, in-depth. With that as a starting point it will support integrating gender equality considerations in organizations? bylaws, including provisions for fair pay for women miners**,** ensure fair representation of women in miners? organizations, include existing women?s miners? groups, designing trainings and capacity building that responds to women?s identified needs. Also, in Component 1, the project will work towards integrating gender considerations into the Landscape Action Plan efforts.

For Component 2 ?Access to Finance enhanced by financial inclusion and responsible supply chain? the project will invest efforts in supporting the development of financial products tailored to the needs of women. To promote a responsible supply chain, the project will also advance a study to understand the occurrence of GBV in the ASGM sector and the gold supply chain, that can be used by decision-makers with better knowledge to advance measures to control violence in the AGM sector. Component 3 ?Enhancing uptake of Mercury-free technologies? will follow a similar logic to activities planned for Component 1, but specifically focused on promoting the uptake of mercury-free technology. In addition to designing and implementing, tailored capacity building for women and men, the selection of the technologies will also acknowledge the specific needs of women and men. Finally, activities related to Component 4 are focused on ensuring that the national awareness raising and advocacy strategy, incorporates gender considerations. Also, actions will ensure that knowledge products and tools are gender-sensitive, both in terms of contents and dissemination strategies.

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 or 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 will also be key to the success of the project. On the one hand, early engagement with financial institutions will be essential to raise awareness of the needs of ASGM actors, as well as increase their confidence in the sector. The latter will be further supported through the project?s approach to formalization, which should reduce the risks to be taken up by those financial institutions. Secondly, building on good practices associated with the JA process, the project will engage private sector actors along the gold value chain through the different planning processes. They will be key stakeholders to be engaged in both the Landscape Action Plans, and the Landscape Finance Plans. It will work towards identifying opportunities for aligning with OECD Due Diligence Guidance.

Private sector engagement will also be key to the success of the project. Private sector actors include, but are not limited to: ASGMminers; gold buyers; and financial institutions. Engagement with ASGM miners is at the center of the project, with a focus on supporting the formalization of ASGM miners and the creation of ASGM organizations; enhancing access to financial services through participation in forums linking them to financial institutions, and capacity-building on better mining practices amongst others.

Early engagement with financial institutions will be essential to raise awareness of the needs of ASGM actors, as well as increase their confidence in the sector. The latter will be further supported through the project?s approach to formalization, which should reduce the risks to be taken up by those financial institutions. Amongst those, the Lift above Poverty Organisation (LAPO) and BRAC Microfinance Sierra Leone Limited have been identified as key private sector stakeholders to be engaged in the project. They are pro-poor financial institutions committed to the social and economic empowerment of low-income households through the provision of access to financial services on a sustainable basis and can provide loans to individuals and Small and Medium Enterprises (SMEs). These institutions can serve as a financial bridge between the project and the beneficiaries in terms of any financial support planned to enhance the living condition of miners and can be partners in providing education on financial literacy tailored to the artisanal mining sector.

Private sector actors along the gold value chain will also be engaged, in particular as part of the implementation of the Jurisdictional Approach and the interventions relating to traceability and certification of sustainable gold. Indeed, the buy-in of gold buyers and gold users in the project is essential to ensure its success, and as such need to be consulted throughout. Moreover, these private sector actors can be direct beneficiaries of GOLD+ data and other insights as they increase implementation of gold sourcing due diligence programs, and as such it is essential that the project take into consideration ongoing private sector due diligence policies and programs, as well as identifying opportunities for aligning with OECD Due Diligence Guidance. An added benefit of improved traceability and certification schemes can potentially be improved investors? confidence in ASGM investments, thereby providing an entry point for sustainable financing of the sector and playing an important role in the long-term sustainability of project interventions. Eventually, funding for these types of projects, and demand for responsible mercury-free gold, will come from the downstream

supply chain. Hence, these actors will need to be engaged in both the Landscape Action Plans and the Landscape Finance Plans.

Finally, the project will also engage large-scale mining companies (e.g. Wanga Mining of the Nimikoro Chiefdom), to the extent possible, in project activities related to Component 4 on Knowledge sharing, communication, and local capacity-building support, but also Output 2.1.2 related to piloting a tracing system AGM gold trade. While not AGM actors per se, larger mining companies may be interested in learning from the project?s experience in terms of tracing systems, or share experience in this area.

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):

Table 5: Risk Assessment and Mitigation Planning

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
Financial Management Risks		
Mitigation measures proposed at PPG Phase are obsolete	Risk: High Impact: High	? CIGEF will review the Financial Due Diligence report that was prepared at the PPG Phase to ensure the information is up to date and the mitigation measures are still applicable. If needed, institutions receiving funds will be requested by CIGEF to share any missing information. ? CIGEF will work with the Executing Agency to put in place the mitigation measures. ? CIGEF will update the mitigation measures as needed
Operational Risks		
Lack of coordination between ASGM national stakeholders	Risk: Substantial Impact: Substantial	The project will ensure close coordination among national stakeholders to ensure acceptance and project ownership by demonstrating the importance of mercury-free mining practices. This will be achieved through a multistakeholder approach and evidence on the state of mercury use in the ASGM sector by ensuring the Stakeholder Engagement Plan (SEP) is implemented. Other approaches will include; 1.1.1. Regular communication and project updates

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
		1.1.2. Inclusion of relevant stakeholders in the project decision-making through the Project Steering Committee (PSC) and National Technical Committee. Moreover, the project will work through its Component 1 on forming coordination mechanisms for ASGM formalization, which will contribute in itself to better cross-sectoral coordination.
Change in the governance system including staff turnover and transfer of government staff	Risk: High Impact: Substantial	Staff changes could be a risk to the sustainability of the capacity-building outcomes. The project management unit (PMU) will incorporate a sustainable mechanism to strengthen political buy-in and technical stability and coordinate with relevant ministries to address this issue. A Train-the-Trainers approach will be used in relevant contexts to ensure that the capacity-building activity results are sustainable and can be scaled out.
Inability of formalized ASGM Organization to acquire mining licenses from the NMA and mercury free technologies	Risk: Substantial Impact: High	The project will provide resources, capacity building and support to acquire licences and equipment to ensure the adoption of mercury free technologies. To ensure the sustainability of the project outcomes, partnership with financial institutions will be addressed through Component 2 hence ensuring continued access to finance to acquire mercury free mining equipment.
Political unrest, armed conflict, armed groups and/or tax-seeking behavior impeding the planned interventions. This can translate into (i) movement restrictions for staff and executing partners, (ii) staff, implementing partner or service provider injuries, and (iii) damages to infrastructure and equipment, impacting the project delivery plan.	Risk: Low Impact: Low	The pilot projects will be undertaken in areas with low security risk. The Project Team will also develop a security plan and related procedures and keep a close watch on the situation to predict as much as possible when and where there could be unrest and prevent impacts on project implementation. Local law enforcement at pilot sites will be involved in the design of mitigation measures. Compliance with CI procedures for safety and security planning is key. Particular focus will be placed on road safety (road cuts, traffic accidents), and mining site security (illegal gold and mercury trade, conflicts with local communities).
Lack of trust of local ASGM actors towards government leads to additional conflict and low engagement in project activities	Risk: Substantial Impact: Substantial	The project activities relating to enforcement of environmental laws have the potential to raise tensions with local communities, who already mistrust authorities. To mitigate this risk, the project will take a highly participatory approach to the process, and provide a safe space for enhancing trust between stakeholders. It will also ensure that viable alternatives to mercury use are

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
		provided, before laws can be effectively enforced, and that those laws are well communicated. The project will rely of significant awareness raising on the risks of mercury as well to foster long-term behavioral change, in parallel to law enforcement efforts.
Lack of political will and inadequate allocation/availability of funds	Risk: Substantial Impact: Substantial	Lack of long-term commitment from donors and countries on the monitoring of mercury reduction may influence the sustainability and the progress towards achieving the goals of the project. A mitigating strategy could be integrating the project (including monitoring and evaluation after the project closure) into the government program to secure co-financing and to ensure its sustainability.
Difficulty to identify locally based and qualified consultants and to conduct recruitment leading to project delays	Risk: Substantial Impact: Substantial	Where needed, CIGEF will seek recommendations of capable consultants from the Lead Planet Gold+ GEF Agency and other Agencies with Gold child projects
Ineffective communication and flow of information between the Executing Agency and PMU	Risk: Low Impact: Low	Flow of information and communication between the Executing agency and PMU will be strengthened by regular and continuous communication, as well as ensuring through the institutional arrangements that the EA is hosting the PMU and clarifying reporting requirements.
Technical Risks		
Slow adoption of mercury free technology because miners who have been trained to use mercury free technology moved to other places.	Risk: High Impact: High	Mercury free technology adoption is an integral part of this project?s strategy to ensure mercury reduction in ASGM. The project will develop criteria to select the miners that will be participated in the training, including for instance their role in the community, and their level of commitment to the project. Train-the-Trainers will be conducted, where locally trained miners can help to train other miners. This method can be an effective way to ensure ownership, scaling out, and ultimately sustainability of the project results.
Lack of maintenance training for mercury free technology and difficulty to find the spare-parts or replacement parts interrupting the adoption of mercury free technology	Risk: Substantial Impact: Substantial	Maintenance training and materials will be provided to several operators in the pilot sites, creating some redundancies in case an operator moves out of the pilot area. The project will carefully consider promoting only mercury free technology with spare parts (budgeted for), or where spare parts are affordable and easily accessible in the pilot area. Partnerships with academic institutions and private sector actors

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
		will be explored to provide the trainings and equipment maintenance, if relevant.
Unsuccessful adoption of mercury free method promoted by project as the miners preferred the cyanidation process	Risk: Modest Impact: Substantial	In several past projects, the mercury use was observed to be replaced by cyanide in gold processing. However, cyanide also generates problem such as contamination due to the lack of proper tailing facilities and dumping of toxic sediments. In this respect, the use of cyanide in the pilot sites will not be promoted. The project will ensure to promote cost- efficient environmentally sustainable technology to reduce mercury use, improve production, as well as accessible and easily replicated.
The reluctance of miners to use retort method for mercury use reduction due to its complexity	Risk: Low Impact: Low	The project will promote mercury use reduction methods that are easily replicated and affordable for the miners. In addition, the training of the ASGM operators will include practical demonstrations of the low efficiency of the whole ore amalgamation process and its consequences on profitability of the ASGM operations. Particular attention will be given to focusing the demonstrations on the enhanced productivity offered by the new technologies proposed.
Mercury reduction technology cannot be replicated outside pilot sites due to a lack of government enforcement of mercury bans	Risk: Modest Impact: Modest	The replication of free-mercury method outside the pilot sites can be achieved by increasing government enforcement, both at national and regional level to ban the mercury that is followed by effective monitoring and evaluation. The project will in part support creating this enabling environment.
Lack of interest of intermediary financial institutions to provide financial support targeting ASGM	Risk: Substantial Impact: Substantial	The project will target intermediary financial institutions in the stakeholder engagement process. They will be involved in awareness raising activities presenting the importance of these mechanisms to support the objective of the project and the potential to benefit from this scheme for their business.
Language barrier/low education among mining communities in communicating the project or conducting training workshops	Risk: Low Impact: Low	Communication, trainings, and knowledge products targeting local communities will be conducted in local language by local specialists. Communication materials will be delivered with the understandable and easy access. PMU staff visit the pilot project sites regularly and maintain close communication with local communities in order to facilitate and bridge the communication between central level of the project and its field site locations.
Social Risks		

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
Project results are not well disseminated to project beneficiaries	Risk: Modest Impact: Modest	The project result will be disseminated nationally and locally through various communication means (such as poster, flyer, documentary film, social media, website, etc), including achievement and lesson-learned to ensure the replication in other areas. The EA (government) will be involved In monitoring and evaluation phase to have better understanding about the results and to increase the ownership of the project output and outcomes.
Limited participation of women in project activities and/or limited access to its benefits for women, leads to limited impact of the project.	Risk: Modest Impact: Substantial	A Gender Analysis and associated Gender Action Plan were developed during the project preparation phase. Women will be involved in all components of the projects and all phases to ensure their active participation and involvement in decision making processes. Moreover, the active engagement of local actors in trainings and awareness raising activities will contribute towards gender responsive local contexts addressing gender barriers.[1] Furthermore, the GAP ensures corresponding funds allocation in the project budget to meet women needs and ambitions in the context of the project.
The areas of work located in natural reserves or indigenous people (IP) territories	Risk: Low Impact: Low	The selection of pilot site locations has considered the social and environmental safeguards, including as exclusion criteria interventions in indigenous people territories.
Pandemic Risks (mainly COVID19)		
Restrictions on mobility impact recruitment of personnel and delay administrative documents and permits from the government as a result of office closure.	Risk: medium Impact: medium	The project will also plan from the onset for possible delays in obtaining administrative documents and permits from the government, will limit activities which may require such documentation, and coordinate closely with the EA to facilitate the processes. Similarly, it will consider possible supply chain issues affecting access to materials and equipment and will plan for accordingly. Locally acquired equipment with availability of parts will be considered, and budgeted for. Procurement of materials/equipment will be planned well in advance of proposed implementation of related activities.
Outbreaks at mining sites threaten the deployment of project team	Risk: medium Impact: low	Where physical meetings are preferred, the project will ensure to minimize risk by hosting meetings and workshops outdoors (if feasible), in smaller groups (while still engaging the same total number of beneficiaries), and with strict social distancing and hygiene measures. If

Risks	Rating High (H), Substantial (S), Modest (M) Low (L))	Risk Mitigation Measures
		necessary, the project will adopt approaches to engaging with stakeholders without explicit requirement for physical meetings (virtual consultations, surveys, social media, web-based communication platforms etc.). Virtual activities (awareness raising, capacity building and training workshops) may suffer from issues such as limited internet access or lack of facilities, where engagement of some beneficiaries may be difficult, and as such alternative options will be prioritized if available. Project staff will conduct field works in accordance with local sanitary protocols, and ensure they will be strictly implemented by all participants during the activities to limit exposure and transmission potential.
Climate change risks		
Vulnerability to extreme weather events (floods, droughts, landslide, etc.) affect mining operations and project activities	Risk: medium Impact: high	The selection of pilot sites has considered the impact of climate change and it will be closely monitored during the implementation. The project pilot areas were selected through exclusion of high risk of disaster due to unsafe mine conditions. The project activities will take into account the dry/rainy season in the planning and its impact on mining operations, as well as impact on critical infrastructure and access to pilot sites.
Water shortage as a result of climate variability impacting mining communities	Risk: high Impact: high	The project will conduct the analysis on water availability in the pilot sites and areas of mining operations. The project will introduce and will train local community about water recycling technology and technique in order to avoid water loss and associated conflict over water scarcity as well as other related environmental footprints under Components 3 and 4.

Additionally, the project team will ensure that all PlanetGOLD beneficiary mining entities conform with the PlanetGOLD Criteria for Environmentally and Socially Responsible Operations through the review of the PlanetGOLD Environmental and Social Risk Assessment Report and the Mitigation Report.

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.

Project duration, Implementation, and Execution Arrangements

This Child Project is conducted under the GOLD+ Program. Conservation International GEF (CI-GEF) will act as Implementing Agency (IA) and Environment Protection Agency (EPA) Sierra Leone as Executing Agency (EA). CI-GEF will support the project implementation through technical and financial management and supervision, assuring compliance with GEF policies and procedures as well as monitoring and evaluation, and providing the recommendation. EPA will be responsible for the overall execution and management of all project components and ensure the achievement of project outcomes and outputs.

A. Execution Arrangements and Partners

The project will be implemented over a five-year period (see Appendix II for the Project Timeline).

At the start of the project, the following will take place: (i) organization of the inception workshop to inform key stakeholders of the project, the Safeguards Plans, and to identify or confirm the roles of each stakeholder during the implementation phase (including Project Steering Committee composition); and (ii) the launch of the baseline study at the pilot sites to measure the baseline values of the indicators selected for the project Results Framework (see Appendix III for the Project Results Monitoring Plan).

The Implementing Agency

Conservation International (CI-GEF) is the GEF Implementing Agency for this project. The overall role of the CI-GEF Implementing Agency includes technical and financial project oversight and supervision, assuring compliance of the project with GEF policies and procedures as well as monitoring and evaluation.

Specifically, CI-GEF will undertake the following tasks:

- Facilitate interactions with the GEF.
- Provide technical and financial oversight to the Executing Agency (Environment Protection Agency? EPA)
- Oversee and monitor implementation of the project including reviewing annual and quarterly technical and financial project reports, undertaking annual project site visits/desk reviews, and monitoring the implementation of and compliance with safeguards.
- Ensure that project management practices (technical, financial, and administration) comply with GEF requirements.
- Monitor the project?s implementation and achievement of the project outputs.
- Ensure proper use of GEF funds.
- Review, and approve any changes in budgets or work plans.
- Sit on procurement committees and approve procurement packages as defined in the Grant agreement

- Quality assurance including ensuring that audits are undertaken by external auditors.
- Oversee the preparation of the annual project implementation report (PIR) for submission to the GEF Secretariat (GEFSEC).
- Commission the project?s Mid-Term Review and Terminal evaluation.

The Executing Agency

The Environment Protection Agency (EPA) is the Executing Agency (EA). The EPA will guide and lead the day-to-day implementation, administration, and monitoring of the project, facilitate meetings, and information flow, and coordinate executing partners and stakeholders including Government Ministries Departments and Agencies (MDAs), research institutions, and universities. The guidance provided by EPA will be in line with the GEF?s and the Implementing Agency?s policies and guidelines (CI-GEF). In addition, EPA will be responsible for managing project-related activities directly, managing sub-contracts, project staffing, and the use of project funds.

The EPA (through the Project Management Unit-PMU) will report technically and financially to CI-GEF by preparing and submitting the annual budget and work plan; quarterly financial and technical progress reports, the annual Project Implementation Report (PIR), and the Final Project Report. The specific tasks of the EPA include:

- Hire and host the Project Management Unit (PMU) including the provision of technical input across components and guidance on operations.
- If the project sub-grants funds, conduct due diligence in line with the GEF Minimum Fiduciary Standards on partner institutions.
- Ensure outputs are delivered and management of Consultants' contracts.
- Guiding reporting, monitoring, and evaluation of the Project through the following:
    - ? Guide the preparation of technical and financial periodic reports to CIGEF for review and approval e.g., annual work plans and budgets, technical and financial progress reports at a reporting frequency required by the GEF Agency.
    - ? Guide gender, safeguards monitoring, and reporting to CIGEF.
    - ? Chair the Project Steering Committee (PSC)
    - ? Chair the National Technical Committee (NTC)
- Guide the preparation of procurement plans.
- Guide the preparation of the Terms of reference and procurement packages.
- Maintenance of records of all project-related documentation
- Guide the preparation and dissemination of knowledge management products.
- Ensure financial auditing of the project is undertaken and the auditors are approved by CI-GEF.

The Project Management Unit (PMU)

The Project Management Unit (PMU) will be recruited and hosted within the EPA. The PMU will be responsible for overall project management, supervising consultants, ensuring project success, and

liaising with and reporting to the Executing Agency, which in turn will report to the CI-GEF Project Agency. The Project Lead will coordinate directly as needed with CI-GEF but will report to the EA.

External consultants will be hired for specific tasks requiring expertise that cannot be undertaken by PMU staff. International technical assistance will be provided for specialized tasks only where existing national capacities are insufficient and where the procurement threshold for international tender is reached.

The Project Management Unit (PMU) will consist of the personnel listed below. The Project Positions ToRs are presented in Appendix IX. The EA will support the work of the PMU by providing office space and other logistical support during the implementation phase.

a. Project Lead (Full-time): The Project Technical Lead will lead the project team and provide overall technical and operational management for the successful execution and implementation of the project. This includes the daily responsibility to manage, coordinate and supervise the implementation of the project and the delivery of results in accordance with the project document and agreed on work plans. Furthermore, the PL will be responsible for financial management and disbursements, with accountability to the government and CI-GEF. The PL is located and works administratively under the supervision of the Execution Agency (EPA) and will report to the PSC.

b. Finance and Administration Officer (Full-time): Under the guidance and supervision of the Project Lead, the Finance and Administration Officer will have overall responsibility to build capacity of PMU staff, EPA staff, consultants, and in-kind beneficiaries by ensuring understanding of GEF policies and procedures. They will support the overall delivery of Components 1, 2, 3, 4 and fundamentally contribute to PMC.

In general, the PMU will be responsible for day-to-day monitoring and reporting on the project and receive overall guidance and support from EPA. In addition, the PMU will be responsible for project implementation and management, administration, and performance against set plans and budgets and reporting. The PMU will also provide any support required to the Project Steering Committee (PSC), The National Technical Committee (NTC), and the project partners. Additionally, the PMU will be responsible for:

- Acting as the secretariat for the Project Steering Committee (PSC)
- Acting as the secretariat for the National Technical Committee (NTC)
- Procurement of all services, goods, and equipment
- Handling and safeguarding of the equipment
- Financial record-keeping
- Reporting and disbursements (financial)
- Project monitoring and reporting (technical)
- Preparation and submission of all technical and financial reports to the CI-GEF Agency
- Monitoring and reporting materialization of co-financing to CIGEF

- Actively coordinate the flow of inputs, procurement, outputs, and work streams to ensure the project runs smoothly and delivers the specified outputs and overall objectives
- Facilitating workshops and travel
- Identification of potential risks to project activities and implementation of mitigation measures to overcome them.
- Knowledge Management
- Setting up, monitoring, and reporting implementation progress of environmental and social safeguards.
- Ensure the smooth running of the project through continuous monitoring, coordination and communication among partners, PSC members, consultants, stakeholders, etc.
- Share information on the Planet GOLD Platforms
- Share project progress with the GEF Operational Focal Point (OFP) e.g., via email, a copy of the bi-annual published reports and policy briefs detailing lessons learnt, best case practices, challenges, and opportunities.

The Technical Support Unit

The Project Management Unit (PMU) will be supported by a Technical Support Unit composed of the personnel listed below.

a. Environmental and Social Safeguards Officer: will lead the execution and monitoring of environmental and social safeguards including gender monitoring as a key indicator.

Executing Partners not receiving GEF funding

Other executing partners identified include.

- National Mineral Agency (NMA)
- Ministry of Mines

The Project Steering Committee (PSC)

Role of the PSC: To provide overall strategic guidance for the project.

Frequency of meetings: Annually

A Project Steering Committee (PSC) will be established, and its composition will be defined during the inception phase of project implementation. In practice, it is expected to include a Chair (other than the EA); relevant governmental actors TBD; relevant NGOs TBD; relevant CSOs, miners? associations, as well as representatives of targeted local communities and community leaders; the Project lead; and CI-GEF (as an observer). The Chair will facilitate the PSC meetings, and the Project Lead will organize the meetings and sit on the PSC without voting rights.

The PSC will meet once a year, and virtually at least every six months with additional ad hoc meetings, if necessary, to discuss key project performance indicators and to provide guidance on project direction. The PSC will be responsible for undertaking management-related and technical decisions for the project and providing guidance and direction for the project on a regular basis. Specifically, the PSC will review and approve the Annual Work Plans (AWPs) and reports produced by national and international consultants, as well as oversee the M&E plan for the project.

Additionally, it is required to authorize any substantive deviation from the agreed AWP budget lines to be included in budget revisions submitted to CI-GEF. The PSC will also ensure that necessary resources are committed and will arbitrate on any conflicts within the project or negotiate a solution to any problems between the project and external bodies. Lastly, the PSC will approve the responsibilities of the PL. Specific responsibilities of the PSC are described below.

? Ensure that project objectives are fulfilled in an effective and efficient manner.

? Ensure institutional coordination and facilitate an effective communication and decision-making process between government, execution partners, civil society, CI-GEF, and other key actors.

? Monitor and evaluate project implementation to ensure consistency with the approved work plans and results framework of the project.

? Facilitate interactions between the project management team, particularly the PL, and the relevant ministries or government agencies to optimize collaboration and sharing of experiences.

National Technical Committee
Role of the NTC: Day-to-day guidance and coordination of the PMU
Frequency of meetings: Quarterly

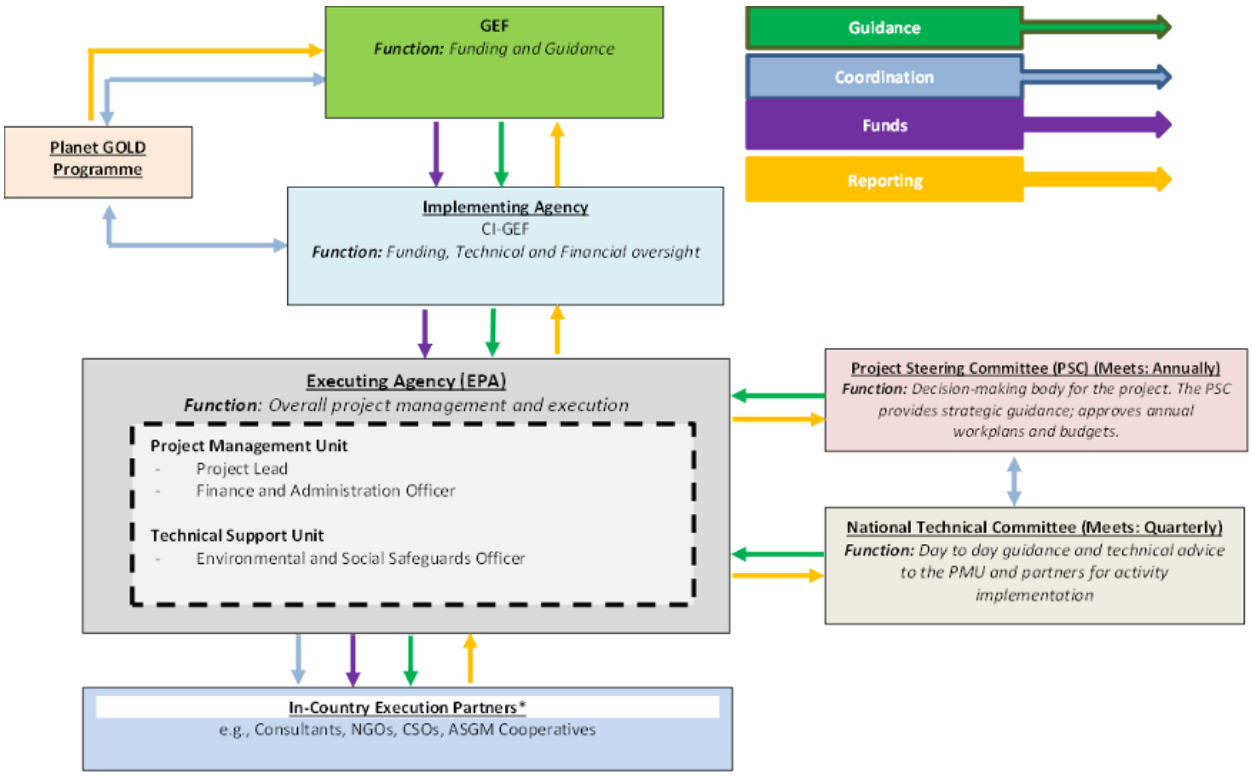
The National Technical Committee will meet quarterly and consist of the following institutions: TBD (could include e.g. academic institutions; geological surveys; technical services of the State; etc.)

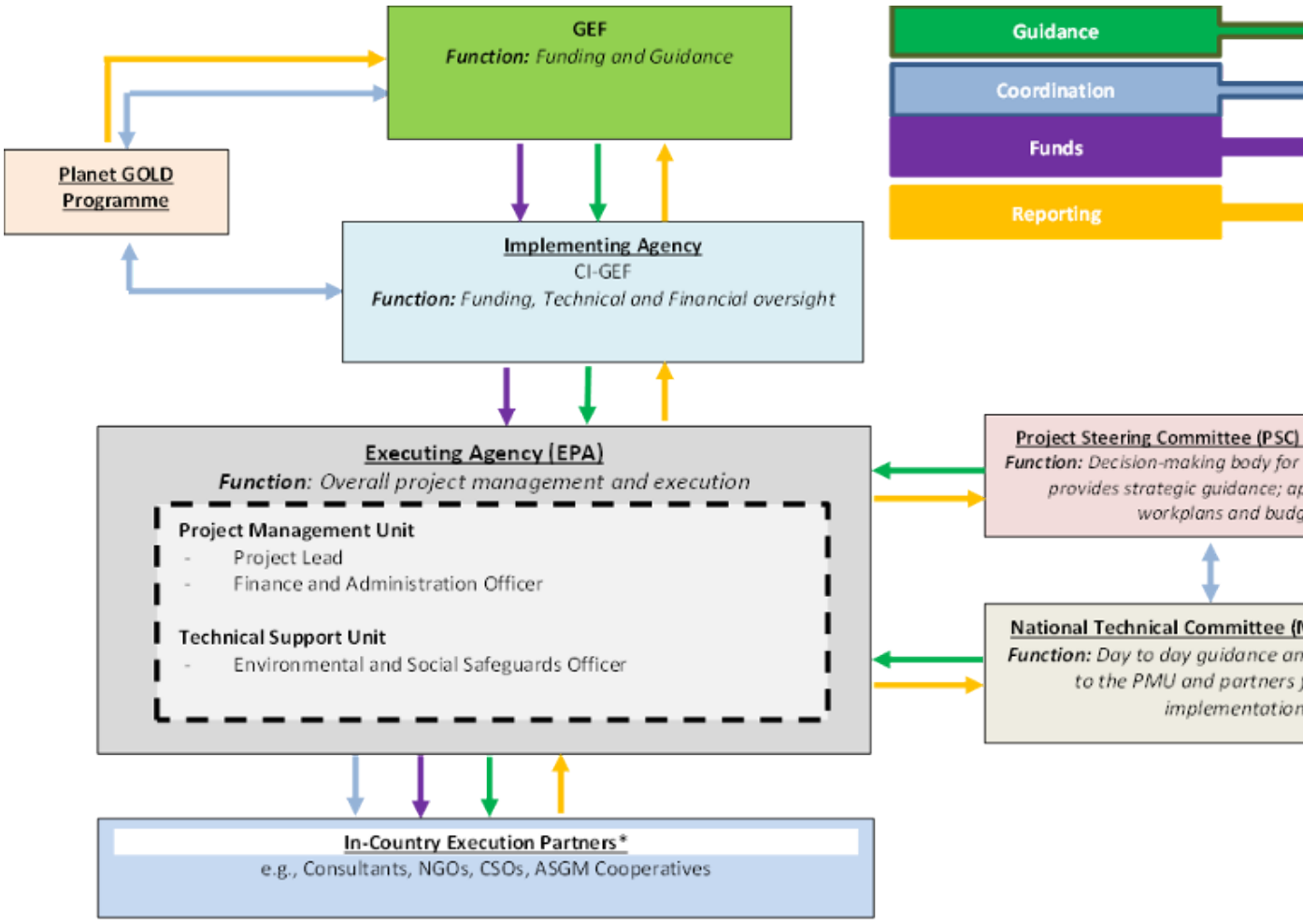
The Technical Committee, coordinated by the EA, will support and advise the PMU for the detailed planning of certain actions and the effective mobilization of relevant actors. The technical committee will be able to call upon the services of any person whose skills and expertise in the fields related to ASGM and mercury management are recognized.

B. Project Execution Organizational Chart

The Project structure depicting roles and responsibilities is presented in the diagram below.

Figure 8: Project Governance Arrangements


GEF
Function: Funding and Guidance
Guidance
Coordination
Funds
Reporting
Planet GOLD Programme
Implementing Agency
CI-GEF
Function: Funding, Technical and Financial oversight
Executing Agency (EPA)
Function: Overall project management and execution
Project Management Unit
- Project Lead
- Finance and Administration Officer
Technical Support Unit
- Environmental and Social Safeguards Officer
Project Steering Committee (PSC) (Meets: Annually)
Function: Decision-making body for the project. The PSC provides strategic guidance; approves annual workplans and budgets.
National Technical Committee (Meets: Quarterly)
Function: Day to day guidance and technical advice to the PMU and partners for activity implementation
In-Country Execution Partners*
e.g., Consultants, NGOs, CSOs, ASGM Cooperatives



Note: There are no sub grantees, however any flow of funds to in country execution partners will be through competitive procurement of services only. Once formalized (component 1), ASGM cooperatives will receive in-kind equipment to support mercury-free refining (component 3).

7. Consistency with National Priorities

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

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

The project is in line with the international, regional and national priorities and strategies to prevent environmental and health issues related to the use of mercury in Sierra Leone.

Table 6: Consistency with National Priorities, Plans and Policies

Priorities, plans and policies	Project Consistency
International level	
Basel convention on Control of Transboundary Movement of Hazardous Waste and their Disposal	The Basel convention focuses on transboundary movements and management of hazardous wastes and other wastes, and addresses mercury in the form of mercury waste and mercury-containing pesticides. Sierra Leone ratified the Basel convention on November 1st, 2016. This project is consistent with Basel convention to support the reduction of the amount of mercury use and its release to the nature especially in ASGM sector.
Rotterdam convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides and International Trade	Sierra Leone ratified the Rotterdam Convention that aims to promote cooperative among parties in the international trade of certain hazardous chemicals that covers pesticides and industrial chemicals for health and environmental reason. Sierra Leone ratified this convention in 2016. GOLD+ project will support the implementation of this convention, especially to address the reduction or elimination of chemicals as of mercury compounds.
2030 Agenda for Sustainable Development	By supporting the formalization of the ASGM sector and the reduction of mercury use, this project will contribute to multiple SDG targets, including: - Healthy and secured living conditions (SDG 1; 2; 3; 6) - Improved labour conditions (SDG 8; 9) - Women empowerment (SDG 5; 10) - Financial education and eradication of child labour (SDG 4) - Fair land-use and profitable gold trade for all (SDG 8; 10; 12; 15)

Priorities, plans and policies	Project Consistency
Minamata Convention on mercury	Sierra Leone has signed the Minamata Convention on Mercury on the 12th August 2014 and ratified the Convention on November 1st, 2016. The Convention requires signatory countries with more than insignificant ASGM to develop and implement NAPs to reduce, and where feasible eliminate, the use of mercury in the sector. To date, out of the 70 countries with ASGM activities, 41 have begun developing their NAP with funding from the GEF. As a roadmap to ensure the compliance of Sierra Leone with the Minamata Convention on Mercury, GoSL has developed its NAP to transform the ASGM sector in a sustainable and an inclusive manner. GOLD+ project will directly support Minamata convention target on mercury in the ASGM sector.
The Stockholm convention on Persistent Organic Pollutants	The Stockholm convention aims to reduce and eliminate the production, use and release of persistent organic pollutants (POPs), alternatives to persistent organic pollutants, including to share information relating to their risks as well as to their economic and social cost. Sierra Leone has ratified Stockholm convention since 2003 and has completed the National Implementation Plan (NIP). Under this convention, Sierra Leone is required to prohibit and/or take legal and administrative measures necessary to eliminate the production and use of chemicals, to import or export the chemicals and restrict the production and use of chemicals.
NDC	The NDC under the UNFCCC aims to guide the country?s climate actions of the various adaptation and mitigation options in reducing GHG emission and tackle climate change challenges. The mining sector has caused flooding of alluvial lowlands, deforestation, and the creation of tailings and stockpiles over mined-out portions of the lease. Thus, responsible mining practice is urgently needed to mitigate these risks and to reduce greenhouse gas emissions. In addition, this document also suggests the enhancement of waste management systems at all levels to reduce pollution to improve health of both humans and animals. This project is relevant with Sierra Leone?s NDC as it emphasizes on sustainable and responsible management and practices in ASGM sector in order to address climate-related problem including to reduce pollution caused by hazardous chemicals and to avoid land degradation and deforestation.

Priorities, plans and policies	Project Consistency
Sierra Leone?s Second National Biodiversity Strategy and Action Plan 2017-2026	The NBSAP identifies destruction and degradation of biodiversity due to poor mining practices, inappropriate use of agrochemicals, and pollution impacts. Mining and mineral exploitation is identified as the second largest relative effects of threats to biodiversity after agriculture, mining activities not being followed by appropriate land restoration measures. Unregulated artisanal gold mining is destroying viable habitats and riparian ecology of a number of floodplains, estuarine, river and streams systems around the country. Thus, biodiversity strategy and action plan has put into account the intervention on mining sector in its action plan to preserve biodiversity. Strategic output A3 of the NBSAP focuses on both large scale and artisanal mining projects, including the review of the mining policy and legislation with the view to ensure biodiversity conservation, the further strengthening of the monitoring of extractive mining activities, and the enforcement mechanisms of the existing regulations under the Environmental Impact Assessment (EIA) guidelines. GOLD+ project is well-aligned with this Action Plan by developing the sustainable and responsible management in mining sector that will incorporate biodiversity protection, including to increase the capacity of miners and government to restore the mining sites and reduce the pollution and land degradation that negatively impacts biodiversity.
Regional level	
AU Agenda 2063	African Union Agenda 2063 is a shared framework for inclusive growth and sustainable development for Africa to be realized in the next fifty years. One of the goals in this agenda is aiming at African people to have a high standard of living, and quality of life, sound health and well-being. This objective can be achieved by considering health and well-being of people, including the elimination of hazardous waste that is addressed by GOLD+ project. In addition, artisanal and small-scale gold mining sector is an important source of livelihood for communities in Sierra Leone. Improvement in management and technology in ASGM sector that is targeted by GOLD+ project will help to reduce poverty and achieve sustainable development for local communities in order to achieve AU Agenda 2063.

Priorities, plans and policies	Project Consistency
Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Waste within Africa	The purpose of the Convention is to prohibit the import of all hazardous and radioactive wastes into the African continent for any reason; minimize and control transboundary movements of hazardous wastes within the African continent; prohibit all ocean and inland water dumping or incineration of hazardous wastes; ensure that disposal of wastes is conducted in an ?environmentally sound manner?; promote cleaner production over the pursuit of a permissible emissions approach based on assimilative capacity assumptions; and establish the precautionary principle. Sierra Leone has signed but not ratified this convention, and attended the Third Conference of the Parties (COP3) to the Bamako Convention in 2020.
Africa Mining Vision	Africa Mining vision has been published in 2009 by the African Union and aims at proposing a shared vision of the African Mining Sector. Sierra Leone is aligned with the African Mining Vision, which recognizes ASM as an important sector for socio-economic development, the need to formalize ASM, to upgrade knowledge skills and technology in the sector, and the need to strengthen ASM associations.
National level	
National Action Plan	Established in 2020, the NAP on the use of mercury in the ASGM sector sets out the baseline situation (ASGM gold production, mercury release?), serves as a roadmap for the formalization of the sector and establishes the strategy to reduce mercury in the AM sector. The NAP focuses on the gold mining sector. The NAP?s general goal was formulated as follows: ?To formalize, sensitize and assist miners, traders, their communities and other relevant stakeholders in an inclusive and comprehensive manner, in order to mitigate the sector?s negative social, environmental and health impacts and to unlock the sector?s full development potential?. The GOLD+ project is directly supporting the implementation of the NAP in Sierra Leone.

Priorities, plans and policies	Project Consistency
The Medium-Term National Development Plan (2019-2023)	ASGM is listed in the development priorities identified in Sierra Leone?s Medium-Term National Development Plan (2019-2023). GoSL points out the importance of ASGM as an important source for job creation, poverty alleviation and socio-economic development in Sierra Leone. In particular, The MTNDP lists formalization of the AM sector as the second priority for policy action in the mining sector. One of key policy action is this MTNDP is to review the Environmental Protection Agency Act and other legislation to strengthen and enhance the legal framework for enforcement and compliance, as well as control land degradation and minimize pollution. They highlight the risk on development related to land management and use, and unregulated use of chemicals by industries and mining operations and agricultural entities that impact human casualties, land degradation, erosion, food insecurity, and pollution. This strategy outlines the strategies for reducing mercury use in ASGM by 30% in 2022, 50% in 2024, and to completely eliminate mercury use in 2029, to which this GOLD+ project contributes.
Vision 2035	Sierra Leone 2035 Vision envisions Sierra Leone as an inclusive, green, middle-income country by 2035. In this agenda, Sierra Leone identifies natural resources endowment potential to generate rapid growth and transformation by responsible management of natural resource endowments to ensure its positive impact on livelihoods, human well-being and human security, and aims at the regional peace and stability. To achieve these priorities, strategic activities including the amendment of the Mines and Mineral Act, the support to small scale entrepreneurs in the mining sector, the improvement of government capacities to reduce smuggling, the promotion of different forms of cooperatives, the participation of women in mining sector, and the mitigation of adverse impacts of mining operations on health, communities and the environment are described. The key strategic activities in this document are well-aligned with GOLD+ project.

The project will be aligned with other national strategies and policies, as follows:

- National Environmental Policy and National Environment Protection Act (NEPA) (approved in 1990 and revised in 1994)
- Sierra Leone Trade Policy (2010)
- NPAA Act (2012)
- National Environmental Health Policy (2012)
- Artisanal Mining policy of Sierra Leone (2018)

- The Minerals Policy (2018)

The following legislative framework will be aligned with the project:

- Mines and Minerals Act (2009)
- National Minerals Agency Act (2012)

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.

The ASGM sector is poorly known and understood by the general public as well as by financial institutions and governments. It also often carries a negative image to these same stakeholders being associated with informality, illegality, and smuggling. One of this project objectives is to tackle these issues by building a common and mainstream understanding of the sector across stakeholders while encouraging the uptake of a diversity of good practices (technical, financial, managerial). To this end, knowledge generation and management will be systematically integrated across the project. To make sure to properly capture the level of knowledge and capacities regarding mercury management, a KAP assessment of the ASGM stakeholders will be conducted, allowing to understand the level of knowledge, attitudes and practices of stakeholders related to ASGM, including an assessment of the capacities and level of knowledge of different stakeholders regarding mercury use and mercury waste disposal.

The project will also develop a Knowledge Management and Communication Strategy (KM&CS) to ensure: i) in the short term, a great uptake of the interventions proposed throughout the project; ii) in the medium-term, the sustainability, replicability, and complementarity with other initiatives, of the positive impacts generated by this GOLD+ project securing also that the associated lessons learnt are available?-thus paving the way to reproduce or scale-up nationally or abroad the project?s success stories; iii) in the long-term, improve the overall image of the sector and foster its economic sustainable development.

The project?s KM&CS shall be aligned with the GEF Knowledge Management Guidelines and the PlanetGOLD knowledge management strategy.

The first aspect of the KM&CS for the project is to identify lessons learnt from recently completed interventions and integrate them in project design during the PPG phase. The compilation of these lessons learnt by project, extracted from evaluation and other documents, can be found in Appendix X, alongside the identification of key Knowledge Products already generated through these past initiatives.

During the early stages of implementation, key stakeholders, ASGM communities and financial institutions, will be approached to ensure their voluntary and proactive participation in the activities of the project.

Then, following the achievement of the different assessments and baselines performed within the framework of the different component, all the interested stakeholders will be invited to share their materials and communicate results to the concerned participants thus contributing to the generation of knowledge at the local to national level while ensuring communities enrolment in the process.

As part of the capacity building activities of this project, numerous training sessions will be organized on relevant topics to a diversity of stakeholders: ASGM formalization, cooperative organization and license application, financial literacy, access to finance, ASGM legal implication, jurisdictional approach, mercury-free technologies.

Awareness-raising campaigns will be developed as well to sensitize on the dangers of mercury and the benefits of mercury-free technologies. Online and physical workshops will be organized, and posters will be displayed in strategic areas to sustain the key messages of these campaigns.

Lessons learned and information produced as a result of the pilot experiences implemented within the project will be documented and disseminated. The project will leverage existing platforms for the wider dissemination of knowledge products, in particular the PlanetGOLD website, which will ensure lessons learnt and knowledge products can continue to be accessed by the wider public beyond the timeframe of project implementation and support a wider appropriation of its results by other child projects or ASGM stakeholder. Regarding knowledge management also contributing the PlanetGOLD program, representatives of this GOLD+ project will be sent to Global Forum and Annual Programme Meeting.

At last, the KM&C Strategy will focus on developing knowledge products which are relevant, adapted, and highly usable by the different groups of targeted stakeholders. Gender will be mainstreamed across these knowledge products, and the KM&C Strategy will take into account the differentiated needs of women. Moreover, the specific skills and capacities of women will be leveraged to ensure they can also be agents of change in decision-making processes, and will be actively engaged as effective communicators. This approach will apply, amongst others, to training materials developed by the project, and will be used in the project?s capacity-building activities undertaken under all three project Components.

Table 7: Knowledge management outputs

Output	Expected timeline	Indicative budget
Component 4		
Output 4.1.1.: A national gender-sensitive awareness raising and advocacy strategy on the dangers of mercury use and environmental management is developed and implemented	PY2-3-4-5	135,636
Output 4.1.2.: Gender-sensitive knowledge products and tools on key ASGM topics are generated and disseminated at the national, regional and international levels	PY1-2-3-4-5	135,637

Output 4.1.3.: Project is coordinated and aligned with planetGOLD programme objectives and outcomes, through regular coordination activities and reporting	PY1-2-3-4-5	135,637
Total	PY1-2-3-4-5	406,910

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Project monitoring and evaluation will be conducted in accordance with established Conservation International and GEF procedures by the project team and the CI-GEF Project Agency. The project?s M&E plan will be presented and finalized at the project inception workshop, including a review of indicators, means of verification, and the full definition of project staff M&E responsibilities.

A. Monitoring and Evaluation Roles and Responsibilities

The Project Management Unit on the ground will be responsible for initiating and organizing key monitoring and evaluation tasks. This includes the project inception workshop and report, quarterly progress reporting, annual progress and implementation reporting, documentation of lessons learned, and support for and cooperation with the independent external evaluation exercises.

The project Executing Agency is responsible for ensuring the monitoring and evaluation activities are carried out in a timely and comprehensive manner, and for initiating key monitoring and evaluation activities, such as the independent evaluation exercises.

Key project executing partners are responsible for providing any and all required information and data necessary for timely and comprehensive project reporting, including results and financial data, as necessary and appropriate.

The Project Steering Committee plays a key oversight role for the project, with regular meetings to receive updates on project implementation progress and approve annual workplans. The Project Steering Committee also provides continuous ad-hoc oversight and feedback on project activities, responding to inquiries or requests for approval from the Project Management Unit or Executing Agency.

The CI-GEF Project Agency plays an overall assurance, backstopping, and oversight role with respect to monitoring and evaluation activities.

The CI General Counsel?s Office with the Grants and Contracts Unit are responsible for contracting and oversight of the planned independent external evaluation exercises at the mid-point and end of the project.

B. Monitoring, Evaluation and Project Management Costs Activities

The Project M&E and PMC Plan should include the following components (see Tables 8 and 9 for details):

a. Inception workshop

Project inception workshop will be held within the first three months of project start with the project stakeholders. An overarching objective of the inception workshop is to assist the project team in understanding and taking ownership of the project?s objectives and outcomes. The inception workshop will be used to detail the roles, support services and complementary responsibilities of the CI-GEF Project Agency and the Executing Agency.

b. Inception workshop Report

The Executing Agency should produce an inception report documenting all changes and decisions made during the inception workshop to the project planned activities, budget, results framework, and any other key aspects of the project. The inception report should be produced within one month of the inception workshop, as it will serve as a key input to the timely planning and execution of project start-up and activities.

c. Project Results Monitoring Plan (Objective, Outcomes, and Outputs)

A Project Results Monitoring Plan will be developed by the Project Agency, which will include objective, outcome and output indicators, metrics to be collected for each indicator, methodology for data collection and analysis, baseline information, location of data gathering, frequency of data collection, responsible parties, and indicative resources needed to complete the plan. Appendix IV provides the Project Results Monitoring Plan table that will help complete this M&E component.

In addition to the objective, outcome, and output indicators, the Project Results Monitoring Plan table will also include all indicators identified in the Safeguard Plans prepared for the project, thus they will be consistently and timely monitored.

The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results.

Baseline Establishment: in the case that all necessary baseline data has not been collected during the PPG phase, it will be collected and documented by the relevant project partners within the first year of project implementation.

d. GEF Core Indicator Worksheet

The relevant section of the GEF Core Indicator Worksheet was updated for the CEO endorsement submission. This worksheet will also be updated i) prior to mid-term review, and ii) prior to the terminal evaluation.

e. Project Steering Committee Meetings

Project Steering Committee (PSC) meetings will be held annually, semi-annually, or quarterly, as appropriate. Meetings shall be held to review and approve project annual budget and work plans, discuss implementation issues and identify solutions, and to increase coordination and communication between key project partners. The meetings held by the PSC will be monitored and results adequately reported.

f. CI-GEF Project Agency Field Supervision Missions

The CI-GEF PA will conduct annual visits to the project country and potentially to project field sites based on the agreed schedule in the project?s Inception Report/Annual Work Plan to assess first-hand project progress. Oversight visits will most likely be conducted to coincide with the timing of PSC meetings. Other members of the PSC may also join field visits. A Field Visit Report will be prepared by the CI-GEF PA staff participating in the oversight mission and will be circulated to the project team and PSC members within one month of the visit.

g. Quarterly Progress Reporting

The Executing Agency will submit quarterly progress reports to the CI-GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures.

h. Annual Project Implementation Report (PIR)

The Executing Agency will prepare an annual PIR to monitor progress made since project start and in particular for the reporting period (July 1st to June 30th). The PIR will summarize the annual project result and progress. A summary of the report will be shared with the Project Steering Committee.

i. Final Project Report

The Executing Agency will draft a final report at the end of the project.

j. Independent External Mid-term Review

The project will undergo an independent Mid-term Review within 30 days of the mid-point of the grant term. The Mid-term Review will determine progress being made toward the achievement of outcomes and will identify course correction if needed. The Mid-term Review will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings and recommendations of the Mid-term Review will be incorporated to secure maximum project results and sustainability during the second half of project implementation.

k. Independent Terminal Evaluation

An independent Terminal Evaluation will take place within six months after project completion and will be undertaken in accordance with CI and GEF guidance. The terminal evaluation will focus on the delivery of the project?s results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The Executing Agency in collaboration with the PSC will provide a formal management answer to the findings and recommendations of the terminal evaluation.

l. Financial Statements Audit

Annual Financial reports submitted by the Executing Agency will be audited annually by external auditors appointed by the Executing Agency and approved by CI-GEF Agency. This is part of the PMC budget.

The Terms of References for the evaluations will be drafted by the CI-GEF PA in accordance with GEF requirements. The procurement and contracting for the independent evaluations will handled by CI?s General Counsel?s Office. The funding for the evaluations will come from the project budget, as indicated at project approval.

Table 8: M&E Plan Summary

Type of M&E	Reporting Frequency	Responsible Parties	Indicative Budget from GEF (USD)
Inception Workshop	Within three months of signing of CI Grant Agreement for GEF Projects	Project Team Executing Agency CI-GEF PA	7045
Inception workshop Report	Within one month of inception workshop	Project Team CI-GEF PA	622
Project Results Monitoring Plan (Objective, Outcomes and Outputs)	Annually (data on indicators will be gathered according to monitoring plan schedule shown on Appendix IV)	Project Team CI-GEF PA	15, 558
GEF Indicator Tracker	Project development phase; ii) prior to project mid-term evaluation; and iii) project completion	Project Team Executing Agency CI-GEF PA	1,245
CI-GEF Project Agency Field Supervision Missions	Approximately annual visits by CI-GEF Team*	CI-GEF PA	4,057
Annual Project Implementation Report (PIR)	Annually for year ending June 30	Project Team Executing Agency CI-GEF PA	5,601
Final Project Report	Upon project operational closure	Project Team Executing Agency	622
Independent External Mid-term Review	Approximate mid-point of project implementation period	CI Evaluation Office Project Team CI-GEF PA	46,000

Type of M&E	Reporting Frequency	Responsible Parties	Indicative Budget from GEF (USD)
Independent Terminal Evaluation	Evaluation field mission within three months prior to project completion.	CI Evaluation Office Project Team CI-GEF PA	46,000
	Summary M&E total		**128,750**

Table 9: Project Management Costs (PMC) Summary

Type of PMC	Reporting Frequency	Responsible Parties	Indicative Budget from GEF (USD)
Project Steering Committee Meetings	Annually	Project Team Executing Agency CI-GEF PA	23,696
Quarterly Progress Reporting	Quarterly	Project Team Executing Agency	56,754
Financial Statements Audit	Annually	Executing Agency CI-GEF PA	48,300

Summary PMC total	**128,750**

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 (LDCF/SCCF)?

ASGM is characterized by the use of mercury, which has heavy environmental consequences on the environment and local communities. It is used to extract gold by putting it into contact with sediments containing gold, or crushed ore. The amalgam formed (a mixture of 50% mercury and 50% gold) is then heated through rudimentary methods to evaporate the mercury and leave the gold behind. During mining and processing activities by ASGM, mercury losses to the environment occur at two stages, the amalgamation process, and the amalgam roasting process.

Sustainable livelihoods

The improved gold processing and enhanced formalization of the ASGM sector will serve to alleviate poverty, improve living conditions, and stimulate job creation. The use of free-mercury technology can not only reduce the amount of mercury used but can also significantly reduce the time required to process ores, and increase gold capture and gold recovery, leading to higher income and improvement of livelihoods. Improving the gold mining sector can be a solution for job creation, particularly for young people. Furthermore, livelihood improvement will strengthen the existing positive economic spillover effect by creating demand for other goods and services in the area.

Formalization of the sector will contribute to strengthening the regulation of the gold and mercury trade in order to reduce the illicit trade of mercury and gold smuggling that in most cases is traded by informal actors. Furthermore, it will improve gold trade transparency at a national scale, promote the formal market transaction and enhance the opportunity for the miners? and traders? organizations to access assistance, financial education, as well as financial support to expand their business. The formalization also contributes to the rise of the government?s revenue from the tax resulting in higher financial resources to support the development programs.

Improvement of health conditions

Enhancing the responsible gold mining process and promoting mercury free technologies will lead to the improvement of the health of ASGM miners as a result of the reduction of diseases associated with mercury exposure. The reduction of mercury will lower the mercury contamination in soil, river, and air which will benefit communities living near mining sites. Through awareness raising campaign, it is expected to increase the knowledge and change their behavior towards the danger of mercury use in gold processing. It will reduce the incidence of water-borne diseases that can be triggered by open mining pits. The mercury burnt in the open air that was observed in AGM activities in Baomahun village in Valunia chiefdom, for example, can be avoided through mercury-free technology use and awareness raising among miners.

Biodiversity and climate security

Improvement of gold mining practices promoted by ASGM formalization, and improved mining regulation and monitoring from relevant authorities will engage miners to comply with environmental standards in their operations, including conducting an environmental impact assessment on the site before the exploitation and restoration of lands after the mining is completed.

This project will enhance the capacities of relevant stakeholders, particularly ASGM miners and MDAs, on environmental challenges, such as land rehabilitation, mercury use, and forest-smart mining. Mining practices using heavy-duty machinery such as excavators and caterpillars, as observed in Kholifa Rowalla chiefdom and the mining site in Nemima village, located close to a stream that supplies the site with water, can bring detrimental consequences to the environment, such as land degradation and mercury-contaminated river, threatening human health and freshwater ecosystems.

Responsible mining practices are closely related to land, freshwater, and forest conservation. Avoiding mining practices in the forest and areas with high conservation value, maintaining the forest cover around the riverbanks, as well as eliminate the mercury contamination in the water, soil, and air will lead to long-term impacts on biodiversity conservation, including emission reduction, and mitigate the climate-related disaster (flood, landslides, fire, etc.) that could be exacerbated by unresponsible mining practices.

Gender equality

This project emphasizes gender equality and women empowerment throughout all its components. It seeks to improve the equal participation of women in the mining sector, including decision-making process, leadership position, active involvement in gold value chains, an improvement in working conditions, equal wages, and safety for women in mining practice, encourage women?s mining association, as well as access to mercury-free technology, market, and financial services. It has to be promoted through legislation or traditional regulation at the district or sub-district level to pull down the traditional barriers reflected in gender and relationship norms.

Child Labour

By promoting the formalization of the ASGM sector and better mining practices, child labour, which is a practice often found on gold mining sites, will be prevented. Eliminating child labor in the ASGM sector will have long-term outcomes as it will ensure the children's right to seek education, reduce the threat of mercury-related diseases, and avoid heavy labor, and a dangerous environment for children.

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
	Medium/Moderate		

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.

During the Project Preparation Grant (PPG) phase of the project, the proposed project activities were screened using the CI-GEF?s Safeguard Screening Form. The screening forms were submitted to the CI-GEF Project Agency, after which the recommended safeguard plans were developed. The summary of the screening results is presented in Table 10. The detailed Safeguard screening results report is provided in Appendix V.

Table 10: Safeguard Screening Results

Safeguard Triggered	Yes	No	TBD	Justification/Mitigation
ESS 1: Environmental & Social Impact Assessment		X		*The project does not propose activities that will have significant adverse environmental and social impacts*
ESS 2: Protection of Natural Habitats and Biodiversity Conservation		X		*The project does not propose activities that will involve adverse impacts on Natural Habitats and their associated biodiversity and ecosystem functions and services.*
ESS 3: Resettlement and Physical and Economic Displacement		X		*The project does not anticipate economic and social displacement.*
ESS 4: Indigenous Peoples	X			*The project plans to work in areas owned/operated by Traditional Peoples*
ESS 5: Resource Efficiency and Pollution Prevention	X			*Miners typically engage in alluvial mining and tailings mining. In addition, miners use a harmful chemical, Mercury.*
ESS 6: Cultural Heritage		X		*The project does not propose activities that affect cultural heritage.*
ESS 7: Labor and Working Conditions		X		*The EA indicated that they have in place the necessary policies, procedures, systems, and capabilities to ensure that the fundamental rights of workers are consistent with ILO.*
ESS 8: Community Health, Safety, and Security	X			*The project identified common disasters such as flooding, mudslide, squall, and earthquake as well as historical civil conflict, Ebola Virus Disease, and mining-related deaths. There are also concerns about mercury exposure in gold amalgamation and the ongoing COVID-19 pandemic.*
ESS 9: Private Sector Direct Investments and Financial Intermediaries		X		*The project does not plan to make either direct investments in private sector firms or channels funds through Financial Intermediaries.*
ESS 10: Climate Risk and Related Disasters		X		*The project identified disasters related to climate change and that disasters occurring in one project site may affect the implementation in that location. As such, the project selected sites that are far apart to reduce the chance of all three sites being impacted and sites where the pit is within the permitted 10m depth. The project will also take into consideration the impacts of climate change and integrate concerns through the Landscape Planning process. Moreover, it will work towards promoting climate-resilient alternative livelihoods.*

Table 11: Safeguard Categorization

PROJECT CATEGORY	Category A	Category B	Category C
		X	
Justification: The proposed project has the potential to cause adverse environmental and social impacts but these impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be readily designed and implemented.			

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
20221013 Gold+ Sierra Leone Resource Efficiency and Pollution Prevention Plan Approved	CEO Endorsement ESS	
20221013 GOLD+ Sierra Leone Community Health Safety and Security Plan Approved	CEO Endorsement ESS	
20221013 GOLD+ Sierra Leone Accountability and Grievance Mechanism Approved	CEO Endorsement ESS	
220906 CI GCF_GEF Safeguard Screening Form SL Revised	CEO Endorsement ESS	
20221011 GOLD+ Sierra Leone Safeguard Screening Report second	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).

Objective:	To reduce the use of mercury in the ASGM sector in Sierra Leone through a holistic, multisectoral integrated formalization approach, and increasing access to finance leading to the adoption of sustainable mercury-free technologies and access to traceable gold supply chains
Indicator(s):	a. (GEF Core indicator 4): Area of landscapes under improved practices (Target: 450,900 hectares; excluding protected areas) b. (GEF Core indicator 9): Reduction, elimination, phase-out, elimination, and avoidance of chemicals of global concern and their residues in the environment and in processes, materials and products (Indicator 9.2 Quantity of mercury reduced; Target: 1.408 tons) c. (GEF Core indicator 11): Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment (Target: 11,560 direct beneficiaries, of which 50% are women) d. Amount of responsible gold produced (kg) (Target: 297.6kg responsible gold produced over the project lifetime) e. Amount of gold sold through formal markets (Target: TBD)

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Component 1: Enhancing formalization in the ASGM Sector			

Outcome 1.1.: Enhanced formalization in the ASGM sector through multisectoral, integrated approaches and capacity building of actors *Outcome Indicator 1.1.a.: Number of ASGM miners formalized (include sex-disaggregated data)* *Outcome Indicator 1.1.b: Number of institutions strengthened to enhance service delivery in the ASGM sector*	**Baseline Indicator 1.1a.** Currently, the formalization level at the national scale is thought to be low (exact number TBD during baseline study at project inception), with limited capacity-building activities for ASGM actors, the ASGM actors are disorganized and are not using gender-inclusive formalization models and sustainable practices **Baseline Indicator 1.1b.** There is an inadequate institutional technical capacity for service delivery in the ASGM sector	**Target 1.1.a.** All ASGM miners in the project intervention areas have increased formalization by the end of the project, of which 50% are women (i.e. 2,560 miners of which 1,280 are women) **Target 1.1.b:** Four (4) institutions with enhanced technical capacity for service delivery in the ASGM sector	**Output 1.1.1.:** Technical support to key ASGM institutional-level stakeholders in developing gender-sensitive policies and formalizing the ASGM sector *Indicator 1.1.1.a: Number of gender-sensitive policies and policy instruments updated with contributions from the project to improve ASGM formalization at the national/local level developed* *Target 1.1.1.a.: Two gender-sensitive policies, policy instruments, or regulatory frameworks with contributions from the project to improve ASGM formalization at the national/local level developed created/improved (i.e. 1 ASGM policy document and Revision of Mines and Minerals Act to effectively capture ASGM issues including formalization and mercury reduction)* *Indicator 1.1.1.b: Number of baseline assessments updated at project intervention sites* *Target 1.1.1.b: One (1) baseline assessment updated to identify and map the existing ASGM miners (men and women), gold mining technologies used, gaps and challenges, recommendations for entry points of project interventions* **Output 1.1.2.:** ASGM organizations are created and capacitated to ensure gender

			sensitivity, and good governance *Indicator 1.1.2.a: Number of ASGM organizations created and capacitated* *Target 1.1.2.a.: Three (3) ASGM organizations (1 per pilot site)* **Output 1.1.3**: ASGM organizations are capacitated on entrepreneurship, business management, and financial education, with a focus on women *Indicator 1.1.3.a: Number of trainings on financial literacy, alternative livelihoods entrepreneurship, including targeted trainings for women miners, conducted (disaggregated by gender)* *Target 1.1.3.a: Nine (9) trainings targeting at least 50% women miners* **Output 1.1.4.:** *The jurisdictional approach is piloted with a gender-sensitive lens in selected ASGM areas* *Indicator 1.1.4.a: Number of gender-sensitive Landscape Action Plans developed* *Target 1.1.4.a: One (1)* *Indicator 1.1.4.b: Number of target sites/Surface of mining jurisdictional landscapes delineated*

			Target 1.1.4.b: *TBD (between 1 and 950ha)* **Output 1.1.5:** National stakeholders capacitated to ensure compliance with ASGM regulations and gender-sensitivity *Indicator 1.1.5.a.: Number of capacity-building events provided to national stakeholders* *Target 1.1.5.a.: Two (2)* *Indicator 1.1.5.b: Number of coordination events carried out with national counterparts about enhancing compliance with ASGM Policies* *Target 1.1.5.b.: Two (2)*
Component 2: Access to Finance enhanced by Financial inclusion[3][2] and Responsible Supply Chains			

Outcome 2.1.: Enhanced access to Finance by Financial Inclusion and Responsible Supply Chains *Outcome Indicator 2.1.a:* Amount of funds made available to targeted ASGM operations through new or existing formal financial mechanisms *Outcome Indicator 2.1.b.:* Number of ASGM miners with increased access to finance, such as the capacity to open bank accounts, develop savings, and access micro-credit	**Baseline Indicator 2.1.a.** Low levels of access to finance for ASGM operations (To be determined during project implementation) **Baseline Indicator 2.1.b:** Few ASGM miners have access to finance, such as the capacity to open bank accounts, develop savings, and access micro-credit	**Target 2.1.a.** $500 000 made available to targeted ASGM through financial services **Target 2.1.b.:** At least 120 miners (including 50% of women)	**Output 2.1.1.:** Financial services developed or with improved access for ASGM sector actors, including women, through support to financial institutions *Indicator 2.1.1.a: Number of financial institutions supported to facilitate access to finance through improved services for ASGM* *Target 2.1.1.a.: Ten (10)* *Indicator 2.1.1.b: Number of ASGM actors participating in forums linking ASGM and FIs* *Target 2.1.1.b.: 480, of which 240 women* **Output 2.1.2.:** A pilot system for tracing AGM gold trade and mercury use from the mine to the point of export is developed through a multistakeholder approach *Indicator 2.1.2.a.: Number of systems tracing AGM gold trade from the mine to the point of export piloted* *Target 2.1.2.a: One (1) system* *Indicator 2.1.2.b: # of ASGM mining entities/miners trained on planetGOLD Environmentally and Socially responsible Criteria* *Target 2.1.2.b: 90 people, of which 45 women* *Indicator 2.1.2.c:# of completed planetGOLD Environmental and Social*

			Risk Assessment Reports and Mitigation Reports *Target 2.1.2.c: One (1)* **Output 2.1.3.:** A gender-sensitive Landscape Finance Plan is developed in a pilot jurisdiction *Indicator 2.1.3.a: Number of gender-sensitive Landscape Finance Plans produced* *Target 2.1.3.a.: One (1)*
Component 3: Enhancing up-take of Mercury-free technologies			

Outcome 3.1.: Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by ASGM miners *Outcome Indicator 3.1.a: Proportion of ASGM miners adopting mercury-free practices*	**Baseline Indicator 3.1.a:** An unknown number of ASGM miners currently use mercury-based methods to extract gold.	**Target 3.1.a.** 25% of ASGM miners at pilot sites currently using mercury adopt mercury-free practices	**Output 3.1.1.:** Capacity building program on better mining practices and mercury-free technologies is developed and implemented among ASGM stakeholders and miners, including women *Indicator 3.1.1.a.: Number of capacity-building activities on mercury-free technologies and better mining practices organized* *Target 3.1.1.a.: Four (4) as follows: One (1) Capacity building programme for national stakeholders and one (1) per site on the use of new technologies* *Indicator 3.1.1.b.: Number of miners trained on improved mining practices and mercury-free processes (sex-disaggregated)* *Target 3.1.1.b.: 480, of which 240 women trained on improved mining practices and mercury-free processes* **Output 3.1.2.:** Mercury-free processing techniques and equipment are introduced in pilot sites while addressing the differentiated needs of men and women *Indicator 3.1.2.a. Number of mercury-free techniques/technologies introduced in pilot sites*

			Target 3.1.2.a. 1 short-term intervention (e.g. sluices, use of sieves and magnets) and 1 long-term intervention (e.g. jaw crushers, ball mills) per pilot site
Component 4: Knowledge sharing, communication, and local capacity-building support			

Outcome 4.1.: Increased sensitization and awareness on the dangers of mercury use and environmental management at the national, regional, and local scale *Outcome Indicator 4.1.a. Number of people reached with awareness-raising materials generated through the project/planetGOLD, by mode of communication (e.g. online, in-person, via SMS, WhatsApp, etc) and by gender*	**Baseline Indicator 4.1.a.:** Limited number of people reached with awareness-raising materials generated through the project/planetGOLD,	**Target 4.1.a.:** 9,000 (4,500 women and 4,500 men) reached with awareness-raising materials on the dangers of mercury and ways to avoid/eliminate its use in ASGM (by type)	**Output 4.1.1.:** A national gender-sensitive awareness-raising and advocacy strategy on the dangers of mercury use and environmental management is developed and implemented. *Indicator 4.1.1.a.: Number of Knowledge, Attitude, and Practices (KAP) assessments for ASGM at the national level completed* *Target 4.1.1.a.: One (1) KAP for ASGM at national level completed* *Indicator 4.1.1.b.: Number of awareness-raising and advocacy strategies developed* *Target 4.1.1.b.: Two (2) strategies (local and national level)* *Indicator 4.1.1.c.: Number of communication tools produced on mercury use and other ASGM-related hazards disseminated to ASGM communities and to a wider audience* *Target 4.1.1.c.: Six (6) communication tools developed, among which posters/billboards, television and radio jingles, street shows, town hall meetings* *Indicator 4.1.1.d.: Number of capacity-building events conducted on sound management of chemicals for relevant national*

			stakeholders and ASGM stakeholders *Target 4.1.1.d.: At least one (1) capacity-building activity for national stakeholders, especially EPA, MMMR, NRA, and NMA, on detection of chemical control and detection of mercury* **Output 4.1.2.:** Gender-sensitive knowledge products and tools on key ASGM topics are generated and disseminated at the national, regional, and international levels *Indicator 4.1.2.a.: Number of knowledge products produced on good practices on formalization, financial inclusion, and mercury free transition and published on planetGOLD digital platforms* *Target 4.1.2.a.: Five (5) publications and at least three (3) knowledge products from the project will be available to the platform* **Output 4.1.3.:** Project is coordinated and aligned with planetGOLD programme objectives and outcomes, through regular coordination activities and reporting *Indicator 4.1.3.a: Number of representatives participating in each planetGOLD global*

			forum and annual programme meetings *Target 4.1.3.a: 3 representatives for the global forum, including: one from EPA, MMA, Gold+ Project for Sierra Leone Project Lead, and 2 representatives for annual programme meetings* *Indicator 4.1.3.b: Number of learning and sharing exposure trips undertaken to best case practice Gold+ Child Project countries and International/Regional Mercury conventions* *Target 4.1.3.b: At least 2 exposure trips to best case practice Gold+ Child Project countries and at least 2 trips to International/Regional Mercury conventions*
Component 5: Monitoring and Evaluation			

Outcome 5.1: A monitoring and evaluation framework for the project *Outcome Indicator 5.1.a: Number of M&E frameworks developed for the project*	*Baseline 5.1.a.: No M&E framework for the Project*	*Target 5.1.a.:* One M&E framework for the project	**Output 5.1.1.:** Periodic M&E reports generated and submitted to CIGEF Agency *Indicator 5.1.1.a.: Number of Annual and Quarterly M&E Reports submitted to CIGEF for review and approval.* *Target 5.1.1.a.: 20 Quarterly Technical and Financial Reports; 5 Annual Progress Implementation Reports (PIRs)* **Output 5.1.2.:** Mid-term Evaluation and Terminal Evaluation commissioned by CIGEF *Indicator 5.1.2.a: Number of Mid-Term Evaluation Reports generated by the project* *Target 5.1.2.a: One Mid-Term Evaluation Report generated by the project* *Indicator 5.1.2.b.: Number of Terminal Evaluation Reports generated by the project* *Target 5.1.2.b: One Terminal Evaluation Report generated by the project*

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).

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

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($) 100,000		
	Budgeted Amount	Amount Spent To date	Amount Committed
Personnel- Project design and coordination	$????? 38,563	$ 32,525	$ 6,038
International Consultant- ProDoc Development	$????? 46,900	$ 32,674	$ 14,226
Travel ? Meetings	$????? 14,537	$ 13,717	$ 820
Total	$???? 100,000	$ 78,916	$ 21,084

ANNEX D: Project Map(s) and Coordinates

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

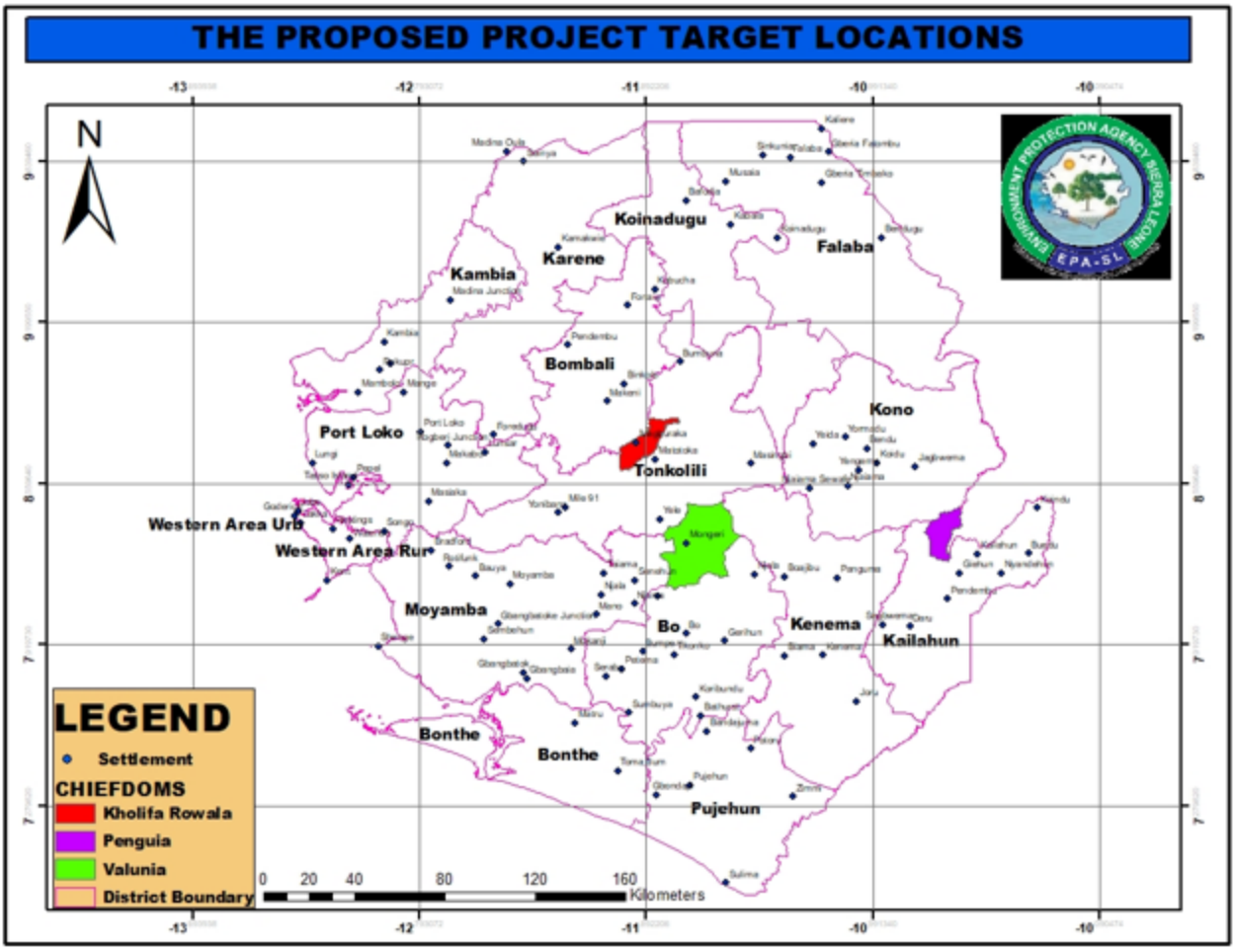
Project Location

The project will be implemented in a total of three pilot sites

The first site (Referred to as ?Site 1?) in the village Nemima (8.429276, -10.714858) (close to the chiefdom Headquarter town of Sandaru (7.7721235, -11.0395544), in Pengoya Chiefdom of Kailahun District, Eastern Sierra Leone.

The second site (Referred to as ?Site 2?) in Boamahun town (8.205327, -12.488801); (close to the chiefdom Headquarter town of Mongaray) in Valunia Chiefdom, Bo District in the Southern Province of Sierra Leone

The Third (Referred to as ?Site 3?) is in the village of Makum {close to the chiefdom Headquarter town of Magburaka (which is also the District HQ town), in the Kolifa Ruawale chiefdom, in the Tonkolili District of the Northern Province of Sierra Leone



Political map of Sierra Leone with districts and chiefdoms

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)							Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	Component 2	Component 3	Component 4	Sub-Total	M&E	PMC		
		Outcome 1.1	Outcome 2.1	Outcome 3.1	KM					EPA is Environmental Protection Agency
Personnel and	Staff:Project Manager	44,650	51,403	40,220	54,417	**190,690**	15,678	30,217	**236,585**	EPA

Professional Services	StafII:Finance and Administration Officer	27,333	27,333	28,863	25,801	**109,330**	0	43,755	**153,085**
	Staff: Environment and Social Safeguards Officer	43,212	43,212	46,969	46,969	**180,362**	7,515	0	**187,877**
	Honorariums	7,500	7,500	7,500	7,500	**30,000**			**30,000**
	Project Financial Audit					**0**		48,300	**48,300**
	Local Consultant: ASGM Institutional Expert (National)	36,000				**36,000**			**36,000**
	Local Consultant: ASGM Institutional Expert - Stakeholder Engagement (National)	12,000				**12,000**			**12,000**
	Local Consultant: Community Awareness Raising Expert	0			0	**0**			**0**
	Local Consultant: Mining Cooperatives Experts (Company or NGO)	60,000				**60,000**			**60,000**

Local Consultant:Jurisdictional Approach/Landscape Planning Expert (Company or NGO)	50,000	50,000			**100,000**			**100,000**
Local Consultant:Cooperative Business Management and Gold Buying Trainer/Expert (Company or NGO)	40,000	40,000			**80,000**			**80,000**
Local Consultant:Gender, Livelihoods, and Conflict Expert	15,000				**15,000**			**15,000**
Local Consultant:ASGM/M&E Expert			27,000		**27,000**			**27,000**
Local Consultant;ASGM Clean Technology/Good Mining Practices Expert			18,900	8,100	**27,000**			**27,000**
Local Consultant: Sustainable Land Management and Land Reclamation Expert (MoU with NGO)			90,000		**90,000**			**90,000**

	Local Consultant: KAP Expert				21,700	**21,700**			**21,700**	
	International Consultant: Mid-term Evaluation					**0**	46,000		**46,000**	
	International Consultant: Terminal Evaluation					**0**	48,000		**48,000**	
	Workshop: Inception Workshop					**0**	5,800	0	**5,800**	
	Workshop: Quarterly Steering Committee meetings					**0**		4,778	**4,778**	
Travel, Meetings and Workshops	Workshop: Tier 2 Jurisdictional Approach Trainings/Workshops for Chiefdom Stakeholders	52,560				**52,560**			**52,560**	EPA
	Travel: ASGM Institutional Expert - Stakeholder Engagement (National)	3,220				**3,220**			**3,220**	
	Travel: Community Awareness Raising Expert	0			0	**0**			**0**	
	Travel:Gender, Livelihoods, and Conflict Expert	7,380				**7,380**			**7,380**	

Travel:ASGM/M&E Expert			7,040		**7,040**			**7,040**
Travel:ASGM Clean Technology/Good Mining Practices Expert			7,040		**7,040**			**7,040**
Travel:Sustainable Land Management and Land Reclamation Expert (MoU with NGO)			7,380		**7,380**			**7,380**
Travel:KAP Expert				3,220	**3,220**			**3,220**
PlanetGOLD Global Forum				35,040	**35,040**			**35,040**
Annual Programme Meetings				29,200	**29,200**			**29,200**
Project supervisions of pilot sites	3,924	3,923	3,923	3,923	**15,693**	4,057		**19,750**
Workshop:National stakeholders capacitated to ensure compliance with ASGM regulations and gender-sensitivity	30,603				**30,603**			**30,603**
Workshop:Capacity-building of financial institutions for ASGM financing		21,503			**21,503**			**21,503**

Workshop:Forum linking ASGM and FIs		85,216			**85,216**			**85,216**
Workshops: engage stakeholders (e.g. dealers, exporters, goldsmiths and other relevant ASGM stakeholders) to discuss gold trade routes and new ways of structuring gold trade		64,822			**64,822**			**64,822**
Workshop:Trainings for operation and maintenance of mercury-free technology/Monitoring of adoption/Awareness-raising and advocacy campaign on safe/mercury-free ASGM			44,470		**44,470**			**44,470**

	Workshop:Awarenes s-raising and advocacy campaign on risks associated with mercury				96,180	**96,180**			**96,180**	
	Workshop: Trainings on mercury waste disposal and mercury contamination detection for the Gold Mining environment				28,210	**28,210**			**28,210**	
Grants and Agreements	Equipment: Regional Gold Buying Stations Equipment		77,551			**77,551**			**77,551**	EPA
	Equipment: Alternative mercury free technology and maintenance of the equipment (spare parts)			382,500		**382,500**			**382,500**	
Equipment	Equipment: 4x4 Vehicle for access to remote pilot sites2	20,000	20,000	20,000	20,000	**80,000**			**80,000**	EPA
	Equipment: Specialized mercury analysis technology/ Monitoring			296,740		**296,740**			**296,740**	

	Equipment: Computers and office equipment	1,500	1,500	1,500	1,500	**6,000**			**6,000**	
Other Operating Cost	Printing services for KM products				5,000	**5,000**			**5,000**	EPA
	Fuel and Maintenance	12,000	12,000	12,000	12,000	**48,000**			**48,000**	
	Internet and telecommunications Cards for Project Staff[3]	8,150	8,150	8,150	8,150	**32,600**	1,700	1,700	**36,000**	
Grand Total		475,032	514,113	1,050,195	406,910	2,446,250	128,750	128,750	2,703,750	

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 Agencys 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).