Global Opportunities for the Long-term Development of ASGM (GOLD+) in the Republic of the Congo

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
10619

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Global Opportunities for the Long-term Development of ASGM (GOLD+) in the Republic of the Congo

Countries
Congo

Agency(ies)
UNEP

Other Executing Partner(s)
CASE (Centre Africaine pour la Sant? et l?Environnement)

Executing Partner Type
Others

GEF Focal Area

Chemicals and Waste

Taxonomy
Focal Areas, Chemicals and Waste, Open Burning, Waste Management, Hazardous Waste Management, Sound Management of chemicals and waste, Mercury, Artisanal and Scale Gold Mining, Best Available Technology / Best Environmental Practices, Land Degradation, Sustainable Land Management, Community-Based Natural Resource Management, Influencing models, Transform policy and regulatory environments, Demonstrate innovative approache, Deploy innovative financial instruments, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Stakeholders, Local Communities, Beneficiaries, Private Sector, Financial intermediaries and market facilitators, Individuals/Entrepreneurs, SMEs, Capital providers, Large corporations, Communications, Awareness Raising, Public Campaigns, Education, Behavior change, Civil Society, Academia, Trade Unions and Workers Unions, Community Based Organization, Non-Governmental Organization, Type of Engagement, Partnership, Information Dissemination, Consultation, Participation, Gender Equality, Gender results areas, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Sex-disaggregated indicators, Capacity, Knowledge and Research, Knowledge Generation, Innovation, Knowledge Exchange

Sector

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 0

Climate Change Adaptation
Climate Change Adaptation 0

Submission Date
3/10/2022

Expected Implementation Start
7/1/2022

Expected Completion Date
6/30/2027

Duration
60In Months

Agency Fee($)
243,000.00

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	2,700,000.00	7,821,922.00
		Total Project Cost($)	**2,700,000.00**	**7,821,922.00**

B. Project description summary

Project Objective

To prevent damage of human health and ecosystems? pollution by reducing mercury use in the ASGM sector in the Republic of Congo.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Promotion of formalization	Technical Assistance	1. Informal ASGM miners are formalized by government institutions to improve their gold production practices	Output 1.1 In-depth legal, social, technical, financial and environmental assessments of ASGM areas are completed in the targeted mining communities available to policy designers Output 1.2 A capacity building programme is designed and provided to selected ASGM communities to improve formalization in the sector	GET	504,150.00	833,334.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Financial Inclusion and Responsible Supply Chains	Technical Assistance	2. Targeted ASGM organizations have access to financial mechanisms that support transparent, legal, mercury-free gold production	Output 2.1 ASGM organizations have access to financial services from the private sector Output 2.2 ASGM stakeholders improved their knowledge on due diligence-related requirements and responsible mining initiatives	GET	685,850.00	5,235,404.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Enhancing the uptake of Mercury-free technologies	Technical Assistance	3. Mercury-free processing methods are widely used by ASGM organizations	Output 3.1 Mercury-free processing equipment are provided to selected ASGM communities - Output 3.2 National suppliers and manufacturers are able to provide long term services to selected ASGM communities that have adopted mercury-free production processes Output 3.3 ASGM Miners improved their technical capacity on the optimal use of mercury free equipment	GET	942,085.00	314,721.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Knowledge sharing and communication	Technical Assistance	4. The ASGM sector is better managed through the strengthening of communication and knowledge	Output 4.1 Knowledge sharing and public outreach of the ASGM sector in the country is fostered Output 4.2 The project contributes to the planetGOLD knowledge platform and events organized by the planetGOLD global programme	GET	382,915.00	688,730.00
Monitoring and Evaluation	Technical Assistance	5. The project achieves objectives on time through effective monitoring and evaluation	The project is monitored and evaluated	GET	60,000.00	
				Sub Total ($)	**2,575,000.00**	**7,072,189.00**

Project Management Cost (PMC)

	GET	125,000.00	749,733.00

Project Management Cost (PMC)

Sub Total($)	**125,000.00**	**749,733.00**
Total Project Cost($)	**2,700,000.00**	**7,821,922.00**

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($)
Recipient Country Government	Ministry of Environment, Sustainable Development and Congo Basin	In-kind	Recurrent expenditures	833,334.00
Recipient Country Government	Ministry of Mines and Energy	In-kind	Recurrent expenditures	398,054.00
Recipient Country Government	Ministry of Health and Population	In-kind	Recurrent expenditures	666,400.00
Civil Society Organization	Alliance for Responsible Mining (ARM)	In-kind	Recurrent expenditures	924,134.00
Private Sector	Kian Smith Refiners	Grant	Investment mobilized	5,000,000.00
			Total Co-Financing($)	**7,821,922.00**

Describe how any "Investment Mobilized" was identified

The investment mobilized via Kian Smith Refiners was identified through the collaboration between the Implementing Agency (IA) and the Executing Agency (EA) of the PPG phase. The investment mobilized belongs to the institution?s vision to create a West African regional gold supply chain that meets the highest international standards while promotes the development of the ASGM sector as in the case of the Republic of Congo. Kian Smith Refiners has an initiative called West Africa ASGM Sourcing where an earmarked fund is used to directly purchase gold from trusted ASGM actors in the region. The institution would like to partner with the planetGOLD Congo country project in order to increase its presence in the country and to channel the project?s ?access to finance efforts? towards a positive outcome.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNEP	GET	Congo	Chemicals and Waste	Mercury	2,700,000	243,000	2,943,000.00
				Total Grant Resources($)	**2,700,000.00**	**243,000.00**	**2,943,000.00**

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($)
UNEP	GET	Congo	Chemicals and Waste	Mercury	100,000	9,000	**109,000.00**
				Total Project Costs($)	**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	42809.00	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)
	42,809.00		

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

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 Forest (HCVF) loss avoided

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

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

Title	Submitted

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

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	4.00	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)
	4.00		

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 Quantity of POPs/Mercury containing materials and products directly avoided

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

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

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		500		
Male		1,000		
Total	0	1500	0	0

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

Part II. Project Justification

1a. Project Description

1.A.1. THE GLOBAL BASELINE: GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES & BARRIERS

Introduction

For decades, the Global Environmental Facility (GEF) supported developing countries in their pathway to improve the management of chemical pollution as the financial mechanism for, among other, Stockholm Convention, SAICM and most recently the Minamata Convention on Mercury that entered into force in 2017. One of the GEF?s areas of concern is the ASGM sector, recognized as one of the largest anthropogenic sources of mercury emissions and releases to the environment, but also an important source of income that can contribute to poverty alleviation and economic development insofar as the practices are regulated and legalized.

At the same time, GEF is the donor of the planetGOLD Programme launched in February 2019. The initiative aims to address some of the major issues linking mercury to ASGM. The planetGOLD programme has developed projects with activities focused on:

- Technical aspects of cleaner production techniques within the ASGM communities,
- Best practices to promote ASGM formalization
- Piloting and upscaling access-to-finance options to ASGM communities,
- Facilitating direct access to international gold markets to develop a more responsible and sustainable ASGM sector,

This document describes the child project for the Republic of Congo in the framework of the planetGOLD programme, led by Conservation International (CI) in partnership with UN Development Programme (UNDP), UN Environment Programme (UNEP), and UN Industrial Development Organization (UNIDO), with the respective collaboration of the national governments.

The overall objective is to make ASGM safer, cleaner, and more profitable, with a particular focus on the reduction of mercury use. The activities promoted through the planetGOLD programme match with a great number of the 17 UN Sustainable Development Goals (SDGs). In this regard, the planetGOLD programme aims to demonstrate that cleaner, healthier and more efficient small-scale gold mining practices can benefit everyone, from miners to downstream actors, fulfilling a more responsible mineral supply chain

The child project for the Republic of Congo will follow the global programme framework promoting an integrated approach around four main components: support to the formalization of ASGM operators,

improvement of financial and market conditions, the introduction of mercury-free processing techniques and knowledge building and dissemination.

The GEF planetGOLD programme has, as of the year 2021, its first set of country projects now in full execution. The 8 child projects have been developed with a life span of five years in Latin America (Colombia, Guyana, Peru), Africa (Burkina Faso and Kenya), Southeast Asia (the Philippines and Indonesia) and East-Asia (Mongolia).

In June 2020 and June 2021, the second and third phases of the programme were approved, respectively. The planetGOLD programme now includes the development of 15 new child projects in the following countries: Bolivia, Cote d?Ivoire, Ecuador, Guinea, Honduras, Mali, Nicaragua, Suriname, Ghana, Madagascar, Nigeria, Sierra Leone, Uganda, Republic of Congo, Zambia.

Global overview of the ASGM sector

ASGM is a global reality practised in more than 70 countries, endured through generations, located particularly in South American, African, and Asian countries, where it plays a crucial economic role. It is estimated that between 10 to 15 million miners, including 4 to 5 million women and children, are directly engaged in ASGM activities; and a further 100 million people are dependent on this sector for their livelihoods[1][1]. The number of people employed in the sector is difficult to determine due to its informal nature, the lack of official statistics, the number of seasonal and occasional workers, and definition issues.

At the same time, many factors shaping the ASGM sector are strongly linked to local and national contexts. Social and economic factors, environmental, geological parameters, health, and technical aspects, differ from country to country and at a national level from place to place. Nonetheless, ASGM is characterized by the use of adapted mining tools and equipment and limited use of mechanization (allowing for mobility), the employment of rudimentary mining techniques requiring moderate financial resources but a heavy physical investment, often being an informal economic activity outside the national legal and regulatory framework. Equally, ASGM is a labor-intensive work, where miners usually experience limited access to formal agreements on land and legal markets. Moreover, ASGM is a primal source of employment and income for poor and rural people, with a widely recognized potential for poverty reduction and rural development.

When not formalized and without any apparent organization, ASGM can be perceived as a negative economic activity by the public because of its generally insufficient consideration for environmental issues and its highly negative impact in the form of social disruption and conflicts, child labor, and unmitigated occupational health and safety risks for miners. With all those negative connotations is often included the unsafe use of mercury and its hazardous releases to nature.

Mines belonging to the ASGM category produce annually about 20% of the global gold production through supply chains that are mostly informal (80%). It is important to stress that the use of mercury is widespread in the ASGM sector. Even if miners are aware of the health risks related to the use of mercury for gold ore amalgamation, they mostly continue to use it for a variety of reasons that are critical to understand. The health hazards primarily come from the accumulation of mercury in the food chain but may also come from other sources such as the inhalation of vapors, mercury discharge in tailings, and water contamination.

Among the available technique to the miners, the use of mercury to separate gold from the ore is easier and cheaper than most other techniques, which often require a financial investment in equipment and technical training, at best. Moreover, mercury is also easy to find in the mining areas, very often provided by the buyers and middleman actors of the supply chain[2][2].

The Mercury Challenge

For decades now, the scientific community has improved the understanding of the physical and chemical fundamentals of mercury (Hg), its cycling, its sources, the processes, and pathways engaged in the global exchange of mercury among major environmental reservoirs, and its impacts on the environment and the public health[3][3].

The global long-range transport capability of elemental mercury, its persistence in the environment and ultimately its toxicity, are some of the scientifically recognized properties of mercury.

It is also well known that mercury has the ability, when transformed into organic methylmercury in particular environmental conditions, to bio-accumulate and bio-magnify throughout the food chain with significant negative effects on wildlife and human health. Exposure to methylmercury is of particular concern for women of childbearing age and children because it can pass through both the placenta and the blood-brain barrier and affects the nervous system. Therefore, exposures during pregnancy must absolutely be avoided. Worldwide, the consumption of mercury-contaminated fishery products puts too many people at high risk of mercury poisoning.

As knowledge grows about mercury and its effects on the environment and human health (refer to International Conference on Mercury as a Global Pollutant -ICMGP[4][4] -, and the WHO), nations have addressed the issue, notably by joining forces in partnerships and Conventions to address the global problem of chemicals in the environment[5][5].

In 2001, members of the UN Environment Governing Council supported the need to develop a global study on mercury and its compounds. Two years later, the first ?Global Mercury Assessment report?

led by UNEP and its partners in the Inter-Organisation Programme for the Sound Management of Chemicals (IOMC[6][6]) was presented as the Global Mercury Assessment (GMA)[7][7].

Based on the key findings of the report, the UNEP Governing Council concluded that there was sufficient evidence to warrant further national, regional, and global action against mercury, to pursue assessments and to elaborate on possible strategies and mechanisms aimed at phasing out the use of mercury in products, to reduce the emissions from unintentional releases and to reduce releases due to human activity, such as artisanal gold extraction. Both immediate and long-term actions were meant to be initiated as soon as possible, also with the objective of identifying and reduce exposure of populations and ecosystems.

At that time, the artisanal small-scale gold mining, in which mercury amalgamation is used, was already estimated as an important source of mercury emissions into the air. Estimations ranged initially around 300 Tons/year as compiled in the GMA (2002)[8][8] up to 500 to 1,000 Tons/year of mercury that may be emitted and released by artisanal gold miners nowadays, of which a very high percentage is lost, not only in mine tailings at extraction sites and trading posts but also in soil, plants, sediments, and waterways.

In 2005, the UNEP Global Mercury Partnership (GMP[9][9]), a voluntary and collaborative multi-stakeholders' group was initiated by the UNEP Governing Council. Its overarching framework was formalized in 2008 to support the objectives of the Strategic Approach to International Chemicals Management (SAICM). The GMP mandate is to deliver immediate actions to protect human health and the global environment from the anthropogenic releases of mercury and its compounds, minimizing them and, where possible, eliminating them definitively. To achieve these goals, the UNEP-GMP under the governance of the Partnership Advisory Group[10][10], operate through partnership areas or priorities for action, that are reflective of the major sectors-sources of mercury pollution. 8 partnership areas are functioning [11][11], with one focused in the ASGM sector[12][12].

The need to strengthen the international management of the problems caused by mercury led to the formation of the Open-Ended Working Group, and from 2009 of the Intergovernmental Negotiating Committee with the goal of developing the basis of a binding regulatory agreement within countries with a comprehensive life-cycle approach covering all areas of concern. From 2009, when the decision to convene negotiations was taken, to 2013, five sessions of negotiations within the committee led to outline a set of shared principles, standards, and rules to draft the sketch of the future treaty and to find ways to assist developing nations for implementation. Following the conclusion of the negotiations, the text of the Minamata Convention on Mercury to protect the human health and the environment from

anthropogenic emissions and releases of mercury was adopted in October 2013 and opened for signature on that date, before becoming an effectively binding Convention in 2017, when the fiftieth Party joined the process, enabling the first Conference of the Parties (COP 1) to be organized[13][13].

In the meantime, international negotiators named the GEF as the lead organization to fund the implementation of the Minamata Convention[14][14]. The GEF is responsible for raising and distributing grants for projects and programmes that support a wide range of activities under the Convention, including national inventories[15][15], implementation plans, investments in technologies for mercury reduction and the elimination of mercury[16][16].

Since its entry into force, the Convention has been a real success. To date, the number of nations that have ratified the Convention stands at 137[17][17], reflecting the commitment from a global perspective.

The Minamata Convention

The Convention contains articles that focus on the ASGM sector due to the importance of the sector in terms of livelihoods involved and its subsequent negative impact on the environment and public health. In particular, the following articles cover the issue.

Article 7 ? Artisanal and Small-scale Gold Mining

To combat the scourge of mercury in countries where small-scale gold mining and processing with mercury take place, the Parties shall refer to Article 7 and Annex C. According to this article, such country-Party ?*shall take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, such mining and processing*?. If the Party determines that mercury amalgamation is used to extract gold, the Party shall develop and implement a National Action Plan (NAP).

The NAP as described in Annex C of the Convention, shall contain actions to eliminate worst amalgamation and burning practices, aspects related to the formalization of the sector, estimates of the quantities of mercury used, mercury-free treatment strategies, strategies to control mercury trade, public health and prevention strategies for vulnerable populations, implementation planning and additional strategies to achieve the objectives of the action plan.

Each Party is helped in the preparation of its NAP with a general guidance document from UNEP, the GMP[18][18], and WHO (2017). In addition, a Quick Start Guide[19][19] edited in 2018 for managing mercury trade in ASGM, has been developed in response to requests from countries. It suggests

practical steps to understand mercury trade at the national level and recommends approaches to build a strategy to manage mercury trade in ASGM, in the framework of the National Action Plan.

Thus, each Party elaborates its own specific National Action Plan, but this elaboration is guided by a general framework common to all NAPs.

Art. 11 ? Mercury Wastes

Harmonized with the Basel Convention, the definition of mercury wastes includes among other, substances or objects contaminated with mercury or mercury compounds, in a quantity above the relevant thresholds defined by the COP. This definition excludes overburden, waste rock and tailings from mining, unless they contain mercury or mercury compounds above the defined thresholds. COP-3 agreed on the definition of mercury wastes, as wastes contaminated with mercury and mine tailings, and requested the Secretariat and the Global Mercury Partnership to work on guidance for the management of tailings from artisanal and small-scale gold mining for consideration and possible adoption at COP-4[20][20]. This is to improve the guidance on the preparation of national action plans for ASGM. Mercury-laden tailings can present health and environmental risks and can be even more harmful when re-worked with cyanide to leach small amounts of remaining gold.

Art.12 ? Contaminated sites

An important article for Parties with a significant artisanal gold mining sector in their territory is Article 12, dedicated to contaminated sites. From the numerous field studies reported in the GMAs, it is known that ASGM contaminated sites can be sources of mercury exposure and secondary release to the surrounding environment and water sources. This could include both active and abandoned sites, where mercury is or has been used in ASGM processes. The adoption of guidance for the management of contaminated sites is an obligation as stated in Article 12. This has been done, and guidance endorsed at COP-3[21][21]. It is thus an important step for countries where mining activity using mercury have a negative impact on the environment. Following the guideline, if the use of mercury in mining or processing activities is known to occur, an inventory of sites suspected of contamination should be carried out, a risk assessment, covering a human health survey, should be conducted and possible risk management options should be considered, in consultation with the local population. It is said that ?*any action to reduce the risks posed by such sites shall be performed*?. This can be an opportunity for national governments to develop their own management framework for risk arising from contaminated sites.

Art. 16 ? Health aspects

As stated in the preamble, the WHO is recognized by the Parties for its activities related to the protection of human health from mercury. Although human health is one of the cornerstones of the Convention and WHO states that ?the Convention?s 35 articles are ?health-related articles?[22][22], human health aspects are the focus of Article 16. The article encourages the Parties to implement strategies and programmes to protect populations at risk, with Health Ministries playing a leading role, consulting and closely collaborating with WHO.

Pursuant to Art. 16, a public health strategy on the exposure to mercury of the artisanal gold miners and their communities, must be developed in the Parties? NAP for ASGM. Parties are requested to rely on the guidance provided by WHO[23][23]. Such a strategy should include the gathering of health data, training for healthcare workers[24][24], awareness-raising of populations. It can be conducted according to the numerous tools, training materials and other supports developed by WHO.

Art. 18 ? Public information, awareness, and education

The article, which is focused on public information, awareness, and education, is very relevant for ASGM issues. Pursuant to this article, each Party shall promote and facilitate the provision of information on the health and environmental effects of mercury and alternatives to mercury. The article also encourages the provision of education, training and public awareness in collaboration with relevant intergovernmental and non-governmental organizations and vulnerable populations, as appropriate. The article is key for Parties that want to raise awareness among populations at risk.

Gender aspects in the Convention

The Parties were ?aware of the health concerns of vulnerable populations, especially women, children, and through them future generations? and agreed to implement the Convention?s articles (obligatory and/or voluntary). In the preamble, a special focus is put on the protection of women and children from mercury exposure, especially in developing countries.

Since gender inequality is a relevant issue in terms of health concerns for future generations, with the aim of affirming the awareness of gender inequality, COP-3 agreed to include gender as a focus area in the Convention?s Programme of Work for 2020-2021. The Secretariat has undertaken to develop a gender roadmap to be submitted during the next COP[25][25], to mainstream gender equality as part of a continuous and long-term process. The principles of gender equality must be embedded in the projects related to knowledge-building, skill development and technical assistance. The same applies to the NAPs submitted by Parties.

Other developments of the Minamata Convention

Since the entry into force of the Convention, significant progress has been made by the partners and the Secretariat. Other developments are under development to support its implementation, particularly to better monitor emissions and the effects of mercury on the environment and human health. For example: to improve the understanding of the transportation of mercury from its sources to the local population and the environment; to know how mercury is bound in the environment and its availability to cause adverse effects in biota in aquatic and terrestrial foods. Similarly, the Mercury Monitoring in soil[26][26] and the Global Mercury Monitoring in Biota[27][27] reports can provide useful information on how to collect harmonized and comparable information on mercury levels in the environment and fill an enormous data gap that remains for many locations.

In the meantime, efforts to raise awareness among stakeholders has been made by several local-regional workshops with the support of local and international NGOs. In particular, the implementation of capacity building programmes, or technical reinforcement, have been deployed in the field. Moreover, many documents, toolkits and publications have been produced for a large public, with databases now available for mapping the emissions[28][28], following the convention ?s implementation to evaluate its impacts.

The Global Mercury Assessment and the ASGM sector

Each Global Mercury Assessment (GMA) from 2002 to the last report in 2018[29][29], updates, clarifies and consolidates the previous one and reinforces the need for measures to be taken in each sector to improve the situation, and data gaps to be filled.

The GMA 2018 produced by UNEP, provides the most recent information available for the worldwide emissions and releases of mercury, with an emphasis given to anthropogenic emissions and its releases, based on a global inventory of anthropogenic mercury emissions to the atmosphere issued in 2015.

The report highlights the progress made in understanding mercury cycling, atmospheric mercury emissions, levels in air and transport and fate, the releases of mercury to water and the methylation of mercury in the aquatic environment. The GMA 2018 also introduces results of bio-monitoring programmes and bioindicators for human and ecological health.

The global mercury cycle presented in the GMA 2018, as shown in the figure below, illustrates the relative shares of natural and anthropogenic sources of emissions. Of the estimated 5,500 to 8,900 tons of mercury currently emitted and re-emitted each year into the atmosphere, only about 10% are

attributed to natural sources. 60% come from sources of mercury re-emission/re-mobilization that are the surface ocean, soil, vegetation, and biomass burning, while the anthropogenic sources would represent 30%. The deposition of mercury from the atmosphere to land and aquatic systems is also estimated. In figure 1, the percentages indicate the increase in mass due to human activities.

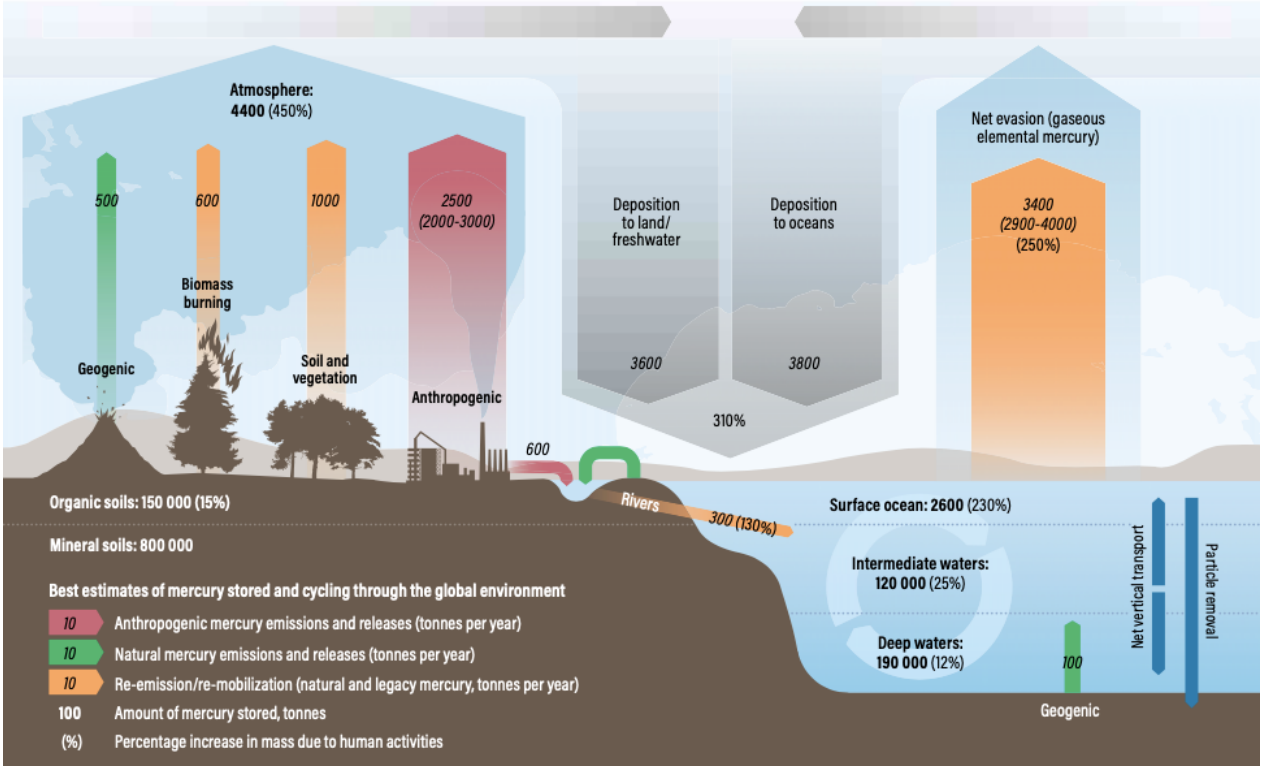

Figure 1: Mercury releases to the environment chart. Source GMA, 2018.

Among the key findings, the report reveals an increase in total atmospheric mercury concentrations caused by human activities (including legacy-mercury) of 450% compared to natural levels[30][30], a growth that would be due to 17 sectors of activity identified as the main anthropogenic measurable/accountable sources. The volume of those emissions is calculated to be within a range of 2,000-2,820 Tons/year that reflects a 20% increase in anthropogenic emissions between 2010 and 2015, following a roughly equivalent upward trend since 2010, despite continuing technological efforts to reduce emissions engaged in the US, the EU and China. The 2,500 Tons/year mean value contains several acknowledged uncertainties and a relatively wide range of ?500 Tons/year is included.

According to the latest inventory, two activity sectors prevail, accounting for 60% of all anthropogenic emissions. The first one is the ASGM that emits about 38% of the total, the other being the fossil fuel and biomass combustion sector (24%).

The ASGM would contribute to approximately between 675 tons and 1,000 Tons/year to the global mercury emission in the atmosphere.

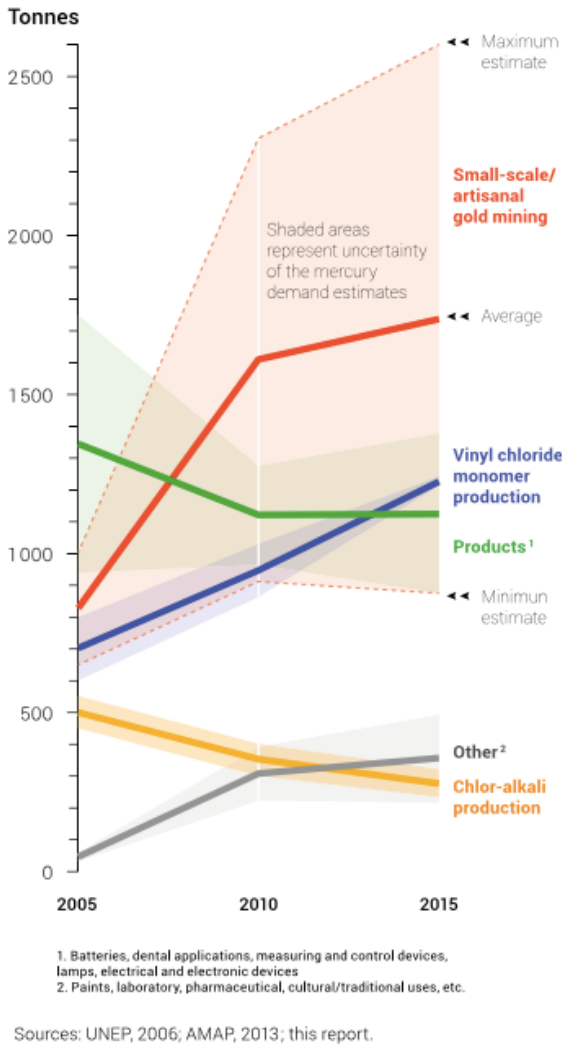

Figure 2: Tonnes of Mercury emissions by origin. Source: GMA, 2018

The increase in emissions from artisanal mining by hundreds of tons between 2010 (679 Tons/year) and 2015 (838 Tons/year) is considered to reflect the availability of new information. Particularly in South America (from 177 Tons to 340 Tons) or in Africa (from 230 to 250 Tons), where the increments relate to the results of Minamata Initial Assessment (MIAs) and related work on the NAPs that helps in improving the quality of data.

In another chapter, the GMA 2018 gives an overview of primary anthropogenic mercury releases to aquatic systems from the different sector sources. Those releases may be the largest contributor to freshwater mercury levels. Based on data from 2000 to 2015, the report points out, with large uncertainties, that ASGM would have actually a major role by introducing about 1,220 Tons/year of mercury into the terrestrial and freshwater environment, by direct losses during amalgamation or

accumulation in soils and sediments in mining sites over time (releases to water alone from ASGM activities couldn?t be distinguished). The largest proportions of water contamination caused by artisanal gold mining are occurring in South America (53%), East and Southeast Asia (36%), and Sub-Saharan Africa (8%), in agreement with the patterns of regional ASGM contributions to atmospheric emissions.

The harmonization of methodological approaches for data collection and estimates of the releases to aquatic systems seems to be necessary, particularly in developing countries and countries in transition. Insofar as aquatic environments are the sites of transformation of mercury into methylmercury and sources of major health risks, better estimates are essential for future inventories.

Numerous studies are conducted on human health and population exposure to mercury. They display results conducted on different groups and with different biomarkers. One of the targeted population groups is composed of ASG miners. The growing number of human bio-monitoring studies concerning this growing community show that mercury levels among miners tend to be high on average, nearly three times that of the general population, with some individuals at extremely high levels of exposure (see Niane et al, 2015[31][31]).

Another figure for ASGM is provided on the planetGOLD website[32][32]. It mentions that 2,000 Tons/year would be released into the environment. This figure may reflect the addition of emissions to the atmosphere and releases to soil and water.

The demand for mercury consumption from artisanal gold mining is assumed to be as large as its use and resulting emissions/releases. Thus, the sector is considered to be the largest consumer of mercury.

Mercury trade data, like other data for this very informal sector, are subject to large uncertainties. However, recent reports (COWI-WB, 2016[33][33] and UNEP-GMP, 2017[34][34]) provide a good overview of the weight of ASGM in the global mercury trade and the illegal and undocumented mercury trade that countries with such type of gold mining experience. From the UNEP-GMP 2017 report, it is believed that between 875 to 2,598 Tons were consumed by the sector in 2015 (with an average mean of 1,735 t) as it is shown in figure 2 above.

In relation to that, the Minamata Convention supports the enforcement of restrictions on supply and trade that are expected to result in a decrease in the availability of mercury and an increase of its price. Furthermore, the promotion of alternatives for gold recovery methods is one of the bases on which the text is founded in order to improve working conditions in the sector, reduce environmental impacts and eradicate mercury smuggling.

The poverty trap and the ASGM sector

More and more attention has been drawn on low?income artisanal miners, many of whom earn a significant part of their subsistence income by mining gold, but who collectively can have seriously negative environmental impacts. Considerable research is now being focused on reducing mercury pollution while improving the environmental management of artisanal mining, via training, microfinance, and fairer gold?marketing arrangements but this will only occur if national governance and enforcement capacity are improved.

In developing countries, the low economic potential for production and employment in remote rural areas, the lack of work opportunities in poorly educated populations, often relegated in locations where access to basic commodities and support from their government are complicated or even impossible, are the determining factors in most territories where artisanal and small-scale mining is practiced. In addition, the conditions governing other income-generating activities, such as seasonal subsistence farming or cattle breeding, are today threatened through the negative consequences of climate change (namely severe droughts, torrential rains, flooding, soil impoverishment, etc.) and are no longer considered as profitable as artisanal gold mining or related activities with higher returns on labor.

The need to generate incomes to survive lays on the basis of people's involvement in mining, including women and children. The growing number of people whose income is derived solely, directly, or indirectly, from the artisanal mining sector is problematic insofar as these people do not have stable incomes that would allow them to envisage the improvement of their living conditions in a sustainable manner. Consequently, the related communities fully dependent on ASGM are no longer able to maintain a basic resilience on food security. This is particularly difficult for children who do not have access to proper living conditions, including basic education. The mining communities benefit from outsourcing different services to the mining sites (cooking, craftmanship, shopping, etc.). However, this potential source of income is heavily dependent on the number of mineral resources available. In addition to the negative impacts to human health, the lack of reliability of the sources of income makes the situation even worse for the communities.

With the gold price rising sharply over the last ten years, a gold rush involving poverty-driven miners is being observed in many developing countries. This increase in the gold mining activity is compounded by escalating poverty due to factors such as the failure of subsistence economic alternatives and the displacement of populations. One of the most challenging aspects of this global issue is how to ensure that ASGM creates the basis for sustainable development., This must be tackled employing a holistic approach involving the whole community, distinguishing between mining and local communities if they are different. Efforts to assist the sector must be based on comprehensive socio-economic baselines and multi-factorial approaches considering organizational, social, economic, legal, technical and environmental issues together.

Legal and administrative aspects of the ASGM sector

In many developing or transition economies, informal work is ubiquitous and sustains an enormous workforce. ASGM is a fundamental part of this informal economy. Neither regulated nor protected by governments, the activity in the informal sector generally grows in parallel with economic downturns.

In most cases, the lack of adequate legal framework and access to public service maintains the artisanal mining activity in this status. In addition to the direct negative effects of loss of revenues for the State, informality can have other negative effects in terms of corruption, the attraction of all kinds of trafficking activities causing bottlenecks in the functioning of markets such as the lack of access to financial services.

To carry out artisanal mining activities as legally as possible, miners must follow a few rules that are commonly shared in many developing countries: the registration of the activity with the national mining authority, holding of a land-use permit, compliance with environmental national regulations, payment of taxes related to the economic activity, and sale of mining products in a legal circuit.

For various reasons, ASGM miners remain informal. Either because they are unaware of the legal requirements or because they have difficulties in obtaining authorizations because of costly and complex bureaucratic procedures. Another source of informality is related to the opportunity to escape administrative requirements, taxes, and sanctions from the national mining authority through corruption or bribery. In many developing countries, governments have no means to enforce the law transparently and efficiently. Hence, formalization can help to better manage the negative social and environmental effects and ultimately can lead to better living conditions with new market opportunities meanwhile generating revenues for the government.

Environmental and Health issues related to the ASGM sector

ASGM operations are prone to share risk situations that can cause injuries due to the exposure to substances such as mercury or cyanide. It can trigger the development of silicosis (by exposure to dust) and tuberculosis among other diseases. Specifically, mercury use continues to be a popular option to process the ore due to its low cost and its rudimentary skill level requirement.

Mercury releases to the environment primarily depend on a combination of the nature of the ore and of the mining technology employed, which ultimately is influenced by cultural, social, and economic factors.

As a matter of fact, the global mercury demand in ASGM is increasing, with rising international gold prices that further stimulate economic activity. In most developing countries, mercury is readily available and relatively inexpensive to miners on mining sites. In some cases, it is given for free, as counterpart to the recovered gold being sold to the mercury provider. This leads to mercury vapor exposures (during ore amalgamation and burning) for mineworkers ? as well as their families and communities ? who are not able to implement safe practices regarding mercury. It also leads to the contamination of soils and watersheds by direct releases and leads to further negative consequences on human health. In addition to the severe occupational hazards associated with mercury use, ASGM has globally generated thousands of polluted mining sites with negative impacts extending far beyond localized ecological degradation, often presenting serious, long-term environmental and health hazards to populations living near mining regions.

As it has been already said, the environmental impact of ASGM can be significant, among which landscape destruction by extensive excavation, deforestation and erosion damage, sometimes happening in protected areas, the dumping of tailings and effluents into rivers and water basins, waterways diversion, poorly constructed tailing dams and potential acid rock drainage, accumulation of garbage and solid wastes, mercury and other pollutants contamination on mining sites and nearby communities, and finally, inadequate site remediation at the end of operations.

The environmental degradation caused by ASGM production can have serious consequences on food availability, affecting livelihood activities carried out by local communities to produce or obtain food, namely agriculture, fishing, hunting, and gathering. Frequently the environmental harms occur in conjunction with cultural and social damages, for instance, when mining activity takes place in tribal native lands or leads to subsequent westernization of local cultures.

Root Causes and Problems to be Addressed

The root causes of mercury usage and mercury emissions in the ASGM sector in the Republic of Congo are strongly related to the situation of informality, poverty and revenue management described above, and a lack of awareness on the health negative impacts of mercury exposure and the availability of alternative mercury-free recovery methods.

- **The issue of informality**. The ASGM sector is largely informal in most countries. The Republic of Congo is no exception, as 91% of artisanal gold miners do not hold a valid license[35][35] . Plus, the proportion of legally exported gold from the country is extremely low[36][36]. This is the result of high formalization costs, divided into financial, administrative, and organizational costs. While the cost of an individual license and of an artisanal exploitation authorization (AEA) remain relatively low, the distance to government centers and the administrative burden of preparing the legal documentation make formalization largely unattractive (See Appendix 11 on formalization).

Informality leads miners to operate discreetly and rapidly to avoid staying too long at the same site, which entices them to work ?quick and dirty? and to move on to other sites. It also exposes them to informal economic networks, which commercialize illegal products such as mercury.

In the case of primary and eluvial deposits, mercury usage is a cheap and fast way to separate the ore which comes along after a lengthy and laborious crushing process, necessary to extract the gold.

Finally, informality makes miners, collectors and exporters evolve in a parallel economy that is not subject to international environmental standards. In the formal market, the London Good Delivery status forces intermediaries to know their producers and to comply with social and environmental standards, which most national AGSM stakeholders are not aware of.

- **Poverty and revenue management**. Most miners are attracted to artisanal gold mining by the lack of alternative economic opportunities. However, mining itself is often described as a ?poverty trap?. This notion deserves some nuance. High fluctuations make revenues very difficult to estimate in the

ASGM sector[37][37]. In the Central African region, informal ASGM average revenues are 3.5 times these of the national averages in the formal sector, which make it highly competitive.

Yet, averages do not bear much meaning: while, at any given year, around 50% of miners live in extreme poverty, generating less than 1.25 USD per day, the top 10% generate so many revenues that it pushes up the average significantly. Over a 10-year period, a standard miner would thus earn substantially more than a farmer or a petty trader, but he would have to go through long periods of poverty during which he would put himself in a situation of patronage and indebtedness.

Moreover, unlike other economic activities, ASGM requires constant expenditures to acquire equipment, to maintain a livelihood in an isolated mining camp far from the traditional household, or to invest in mining operations. Finally, gold areas are known for their high inflation rates[38][38]. The ?poverty trap? is thus more related to revenue management, especially the lack of saving capacities, than to revenue itself.

- **Lack of awareness**. Most miners as well as local government officials do not know the long-term health and environmental dangers of mercury usage. More importantly, they are not aware of existing mercury-free technological alternatives. This complicates the task of introducing new mentalities and practices.

It comes along with the lack of knowledge on the best occupational health and safety practices that have been well known in the mining sector for a long time, and that have been adopted to the ASGM sector for more than 20 years[39][39].

1.A.2 THE NATIONAL BASELINE: ECONOMIC ANALYSIS AND ASGM SECTOR SPECIFITIES

Country Economic Analysis

Despite a territory rich in natural resources, namely fossil fuels, forests and minerals, and a relatively small population of about 5 million people,[40][40] the Republic of Congo faces very difficult economic conditions, with a challenging macroeconomic outlook currently characterized by high debt levels, inadequate growth forecasts, and limited business confidence. From the International Monetary Fund (IMF) perspective[41][41], a better future for the Republic of Congo depends on non-oil revenue mobilization efforts (e.g., agricultural and transport development) and a reform of its fiscal strategy

with measures to curb tax exemptions, increase the collection of taxes and implement additional fiscal and administrative reforms. The 2020 IMF country report for the Republic of Congo highlights, among others, the main economic weaknesses, and risks, being the importance of strengthening public financial management systems and ensuring that adequate resources are allocated to critical social programmes to protect vulnerable groups, including the areas of health, education, and programmes for women.

The IFM considers that further efforts are needed and encourage continued strengthening and operationalization of the anti-corruption framework and ensuring that the new Anti-Corruption Authority and Commission on Transparency become fully operational. As a conclusion from this report, "The authorities concurred with staff?s assessment that Congo is in debt distress, and that debt is unsustainable".

Additionally, the report highlights the fragility of oil-based economies whose falling prices between 2014 and 2016 increased the debt of CEMAC[42][42] states in general and increases the external debt of Congo in particular[43][43]. Under these circumstances, the government, with a debt equivalent to 104.52% of the GDP in 2020 is facing a very severe economic recession (between -8.6% according to the IMF and -10.5% according to Standard & Poors), which led the rating agency to downgrade Congo's rating at the end of 2020. At the same time, the government has worked to reduce the country's budget deficit from 12.5% of GDP (2017) to 4% at the end of 2019 as one of its engagements with the IMF.

Despite the strong economic growth of the period provided driven by the oil sector, the report emphasizes that the Republic of Congo suffers a weak formal job creation, poorly connected with the rest of the economy, which had no consequences in terms of unemployment reduction. In terms of job allocation, the forest industry is the second largest provider of jobs after the public sector.

With a strong growth of the working-age population[44][44] and very limited access to formal jobs, especially for the youth, a programme focusing on youth employment should be boosted and scaled up as much as possible. Furthermore, a policy supporting the creation of strong small and medium enterprises could be an indirect way to ensure the creation of quality jobs for the youth. At the same time, a study conducted by the International Labour Office (ILO) in 2016[45][45] indicates the weight in youth employment of informal employment (89%) and irregular employment (68.9%) in the Republic of Congo. It also evidences that 2.5% of workers have never been to a school and that 17.2% of young people leaving the education system (mostly for economic reasons) have not been able to reach any level of education, reflected in the inequality between rural and urban areas literacy rate (80.9% in urban areas against 65.4% in rural areas). As conclusion, the surveys reveal the predominance of general education (71.5%) over technical and vocational education (11.3%).

Using a comprehensive approach, the UNDP created the Human Development Index (HDI), which considers three basic dimensions of human development: a long and healthy life (average life expectancy), access to knowledge (level of education) and a decent standard of living (per capita income). Applied to the Republic of Congo, the HDI shows that the country is experiencing a permanent downward slide in the rankings for about two decades[46][46]. A report of the World Bank (WB)[47][47] in 2017 on the assessment of poverty in the Republic of Congo between 2005 and 2011 highlights the particularly difficult living conditions of a large part of the population, with 34-35% of the entire population living in extreme poverty with less than US$1.9 PPP a day (Purchasing Power Parity per day) in 2016. the National Vision for 2030 aims at a reduction to 15% of people under extreme poverty within a forecast of sustained economic growth. Unfortunately, this simulation was made before the Covid-19 international economic crisis of 2020, the falling prices of the raw materials experienced in 2016 and the political unrest of the past decade.

In a society where inequalities are very high (reflected in urban/rural gap, marginalization of indigenous peoples, and undivided prosperity with the poorest), poverty appears as a predominantly rural phenomenon. A very worrisome point is the increase in the incidence of poverty, the rise in the number of poor people, and the severity of poverty during the study period. As an example, in rural areas where ASGM activities take place, 70% of the people are poor and the poorest are experiencing a deterioration in their living standards.

Chronic malnutrition because of inadequate nutrition over long periods of time, although decreasing during the study period, affects 21% of children under 5, and moderate to severe acute malnutrition affects about 8% of children under 5. For approximately 1 million people (20% population) nutrition is insufficient to provide the dietary energy levels that are required to maintain a normal, active, and healthy life. This has a strong impact on the development (see also the World Food Programme?s Hunger Map[48][48]). In this respect, the share of the population with access to safe water is far below what is expected and access to improved sanitation remains also very low.

The latest information about gender equality in the Republic of Congo can be extracted from the UN-Economic Commission for Africa source (2014). Theoretically, gender equality is integrated into laws, policies, programmes, and institutions and ultimately depends on the implementation of the economic resources allocated in the national budget. It turns out that the budget allocated to the promotion of gender equality in the Republic of Congo was 0.2% of the national budget at that time, (2014), which from then has suffered further reductions due to the national budget deficit.

In terms of the status of public health policies, the Republic of Congo, among other resource-rich countries in Sub Saharan Africa, faces a poor situation, according to a UNDP report in 2016. The health sector requires concrete measures to achieve and improvement of the well-being of its population. In 2019, the WHO representative in the Republic of Congo emphasized in his evaluation report of the health departments and districts, the difficulties faced by the population and health

professionals in the country[49][49]. Among his general findings, the representative highlighted that even though the country has invested heavily in public health infrastructure, the population use it poorly. The implementation of free healthcare initiatives is only partially effective in most of the health facilities. Some hospitals do not yet have doctors, and the use of volunteer staff is quite frequent at the level of local health centers, with an impact on the quality of care. The management and maintenance of equipment are not adequate, and in general, hygiene and sanitary conditions are below standards. Several centers lack water and electricity to operate, and the cold chain is difficult to respect in these conditions.

In summary, in line with what the multilateral international institutions view, the development and promotion of sectors of economic activity not related to oil-extraction (agriculture, forestry, mining) would be the key to the strengthening of the country's overall economy and the living conditions of the population. The economic efforts should be supported by an increase in public capacity building, the improvement of basic infrastructure and a strong commitment to sustainable environmental management.

Country Natural Resources Analysis

Forest Resources

The rainforest covers around 65% of the Republic of the Congo, making it the fifteenth country in the world by the proportion of forest cover. Forests are the country's most valuable natural resource after oil. According to the Minist?re de l??conomie Foresti?re, the Republic of Congo has an estimated forest cover of 22.4 million hectares. Out of this total, some 14 million hectares are currently dedicated to timber production. The rainforest covers nearly two-thirds of the territory of the Republic of Congo, making it the fifteenth country in the world by the proportion of forest cover.

Forests are a partly renewable resource with potential at different levels: economic (the forest industry is the second largest provider of jobs after the public sector), rural and urban food supply, natural medicines and environmental (i.e. fight against climate change). Investment in sustainable forest management could significantly contribute to poverty reduction in rural areas if the various sectoral policies in land use planning, transport, and land tenure were made coherent and effective. The country's forest resources are considerable and are assets for the development of a low-carbon, job-generating economy.

Almost the whole area of forested land is primary or otherwise naturally regenerated forest, and only a relatively small part of approximately 71 thousand hectares is planted forest. The country has two large, forested areas, one in the south, covering approximately 4 million hectares, formed by the Mayombe and Chaillu forests, and the main area in the north where the dense, humid forests cover more than 16 million hectares. It is important to consider the spatial occurrence of gold deposits and the locations where artisanal mining activities are known to occur in the country can lead to severe deforestation and negative impacts on soil and water that would be detrimental to the forests.

From a legal perspective, practically all the natural forests are publicly owned by the state, local authorities, and public bodies. The legal framework recognizes private property on forest areas, including private forests and private forest plantations. The law (Indigenous Peoples Rights Law 2011[50][50]) also recognizes the rights of indigenous peoples living in those forests. Forestry operations are governed by Public-Private Partnerships.

The Republic of Congo has a relatively low historical deforestation rate, compared to many other tropical forest-rich countries, although this rate is increasing in the last years with major drivers being forest clearance for industrial and subsistence agriculture[51][51] as well as illegal unsustainable logging.

Based on estimates by Chatham House, official national trade statistics and the UN Comtrade data, in 2014, about 66% of timber were exported illegally[52][52], a situation that calls for corrective actions.

To address some of the challenges linked with the sustainable management of the country?s forestry resources and driven by the President of the Republic's Green Vision, the government is engaged in numerous international initiatives, including the Voluntary Partnership Agreement (VPA)[53][53] ratified in 2013 between Republic of Congo and EU, and the process to Reduce Emissions from Deforestation and Forest Degradation (REDD+).

By ratifying the VPA agreement, the government has committed to ensuring the development of systems needed to control, verify, and license legal timber and that its entire wood industry meets the legality and traceability requirements.

It will use these systems to cover timber and timber products exported not only to the EU, but also to other destinations worldwide (Congo's main markets for timber exports are China, South-East Asia, and the EU). Under the VPA, several tools have been developed to improve forest management, traceability of forest products, enforcement, and independent monitoring[54][54] involving the PGDF, a Platform for Sustainable Forest Management, representative of civil society organizations and the CAGDF (Support Circle for Sustainable Forest Management) which implements independent forest observation. However, limited financial means and technical expertise, as well as weak inter-ministerial coordination and corruption are challenges to an effective response[55][55].

The vast North Congo Forest Landscape Project lunched in December 2020 is also one of the key projects to achieve a sustainable development of the forestry economy in the northern area of the country, with its strategic objectives of preserving biodiversity and reducing anthropic pressure on forest ecosystems, sustainable land use planning, sustainable management in concessions, promotion of local community development.

In January 2021, the Ministry of Forestry Economy[56][56] has supported the implementation of workshops to draw up a strategic and organizational development plan for the Departmental Directorates of Forestry Economy, to respond to the priorities of control, sustainable management of the sector and the sector's contribution to the fight against poverty. At the same time, a methodological guide for independent observation of the REDD+ project has been validated to improve participatory management in terms of reduced impact logging, forest ecosystem management, land management etc.

The year 2021 is already marked by progress in the implementation of pro-forest policy, the sustainable and controlled management of the forest massifs in the Republic of Congo including support to community forestry.

Mineral Resources

The development of the industrial mining sector, also considered as one of the key economic sectors to be promoted in a transition to a more diverse economic development[57][57], seems to have taken off in recent years.

The Republic of Congo geological potential is already promising, even though a large part of the territory is still unexplored. Despite this drawback, the granted permits to date currently cover about a third of the national territory. Among others, current projects for the exploitation of large deposits of potash, phosphates, iron, and copper are in place.

The main constraints that the country faces are linked to the very large initial investments required, the fluctuation of raw material prices in international markets, and the weakness of the country's infrastructure, mainly energy and transportation.

In 2020, three international mining companies operate copper, iron, lead, and zinc deposits[58][58]. With respect to gold, exploration permits have been allocated for industrial gold mining. About 20 were active in 2011 in the regions of Niari, Sangha, Cuvette Ouest, Kouilou and in the Ngouaka-Bangadi-Bambougna gold zone. However, the gold exploitation is still operated mostly by the artisanal sector and semi-mechanized operations.

Mining is a sector that contributes to important and irreversible forest loss, with a resulting reduction of biodiversity and ecosystem services. Considering the extraordinary natural resources of the country, the government must lead the development of the mining sector by taking the necessary safeguards for environmental protection.

From a legal perspective, industrial mines are framed and regulated by environmental and social impact studies, development and rehabilitation plan, due diligence guidelines, the Extractive Industry Transparency Initiative (EITI)[59][59] concerning oil, gas, and mineral resources. This is also partly the case for ASGM activities within the legal framework of the Republic of Congo, which falls under international and regional regulations and frameworks, including the Minamata Convention on Mercury[60][60], the Organization for Economic Cooperation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, or the Africa Mining Vision.

Analysis of the specificities of the ASGM sector in the Republic of Congo

Main Features

It is recognized that artisanal and small-scale gold mining provides a source of income for populations unable to access formal employment, and at the same time, viewed negatively in terms of its associated environmental and social impacts. However, the impacts on water, soil, air and forest-related environments are poorly addressed in the ASGM guidance, especially when the activity is semi-mechanized, hence more environmentally destructive.

In the Republic of Congo, the ASGM deserves the government's attention and support because the activity has already a long history. The gold production, estimated to be stable at 150 Kg/year between 2012 and 2017[61][61], appears very underestimated compared to the estimated production of Gabon (1 ton per year) or Cameroon (10-13 tons per year) and is lower than the production recorded at times when prices were much less attractive.

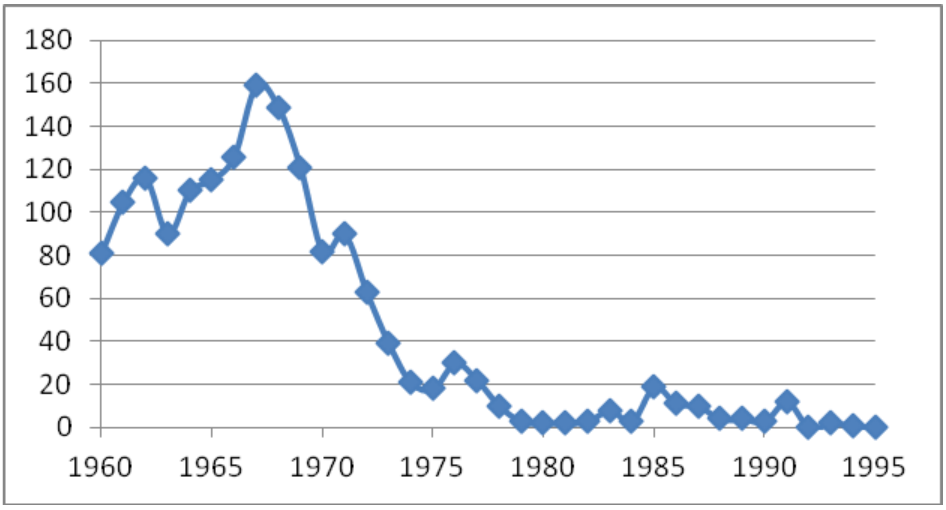

Figure 3: ASGM production of gold (Kg), 1960 - 1995. Source: World Bank, 2012.

The ASGM gold production recorded in the years 1965-1970 in figure 3 can be explained by the proactive role played by the Mines Administration in collecting gold from gold panners through official collectors. Subsequently, the State disengaged itself by authorizing the opening of private gold buying offices.

As a result of the aforementioned economic factors, artisanal mining activities are on the upswing in the neighboring countries and, even if the number of miners estimated in Republic of Congo seems important, with an estimate of 5,000 to 25,000 ASGM workers[62][62], there are good reasons to believe that a more extensive inventory in remote but nevertheless very mineral-rich areas would give a

different picture of the activity (e.g. number of artisanal mine workers, type of exploitation artisanal vs small-scale, women/family involved in the activity).

The presence of similar geological features in Central and West Africa, indicates that the mining potential of the Republic of Congo should prove to be more important than what is known today. Despite their relative abundance, the work carried out to date and the geological and mining acquired knowledge are still very fragmentary and need to be developed[63][63]. Prospecting and research activities are currently carried out only by private companies.

Regarding gold, placer deposits have always been exploited with artisanal methods throughout the country. In the sectors of Kell?, Mboma, Elogo all located in the northeast and in the Kouilou sector located in the coastal basin, gold would come from strong concentrations in the massifs of Chaillu and Ivindo and remobilization of primary mineralization, similar to what is well-identified in West and South Africa, or elsewhere in Central Africa, associated with the Pan-African greenstone belts.

Based on two studies conducted in 2012[64][64] and 2018[65][65], it appears that gold deposits are scattered throughout the country (except the Likouala watershed and along the Congo River). Gold panning (placer gold mining) is practiced in most departments, to a lesser extent in the Bouenza, Plateaux, Cuvette, Brazzaville, and Pointe Noire departments and to a greater extent in the Cuvette-Ouest and in the Kouilou, Sangha, L?koumou and Niari departments. In the 2012 WB assessment, estimated gold reserves based on ore sampling conducted in four potential rich areas, reach 140 tons. This estimate should be considered with caution as it is made based on a very small number of ore samples taken from the watercourses and the extrapolation of grams of gold/m^3 over the total length of the watercourses.

Legal status of the ASGM sector

The studies on the gender/origin of gold miners shows that a large majority of them are men (96.4% male) and of Congolese citizenship (85%). About 80% of the artisanal gold miners are self-employed, with very few as associates or partners and even less working as employees (about 5%). The 2012 mineral survey reveals that almost all of them (91.3%) do not have any professional or operator?s card or legal status.

Legally, the current Mining Code regulates the activity through the Artisanal Exploitation Authorization or the Industrial Exploitation Authorization for small-scale mining, but for various reasons such as fear of repression, tax evasion, superstition, etc.[66][66] the miners do not seem to be interested in formalizing their activity nor declare their production.

Usually, miners do not enter the ASGM sector by vocation, about 50% were former farmers, 18% employees that have quit their previous job and 30% had no previous work status. All of them have chosen this activity to "earn more" or to get out of unemployment because they had no other choice.

For their initial investment, more than 80% of the miners declare a low capital availability, with less than 100,000 FCFA (US$ 200) on average, and do not experience satisfaction in terms of the income generated by the activity (only about a quarter of the surveyed persons were satisfied with the achieved gains).

This is consistent with the fact that ASGM miners regularly report having insufficient income to cover their basic needs, forcing them to carry out supplementary economic activities such as farming, hunting, or fishing to ensure better social living conditions. This is the case for 70% of the actors in the ASGM sector in the country. Unfortunately, those extra activities do not allow them to live with dignity. Nearly 70% of them declare using loans, mostly informal loans from friends and relatives to pay for medical care, food, and other necessities.

Investment in equipment is not a major necessity while weaknesses in work equipment are, in their view, a major obstacle to the development of their activities. While about half of the surveyed persons wishes to carry out other business projects in a different economic sector, the other half wishes to continue in the ASGM activity and do not think of abandoning it, despite the encountered difficulties.

As part of the two studies mentioned above, the legal and regulatory aspects of the artisanal mining sector are studied in relation to the situations encountered on mining sites and the practice of the activity. They list the needs for strengthening and harmonizing regulatory tools in the mining and environmental framework, the needs for strengthening the capacities and resources of both the mining administration and artisanal miners, that would enable this sector to be a real income lever for a sustainable development.

Country?s ASGM production

Excluding reference to official data, often incomplete and highly dependent on the reported/unreported production ratio, different methods can be used to estimate the gold production of a country and therefore to infer the quantities of mercury used by the sector.

In the case of the Republic of Congo, the most recent data on gold production comes from the US Geological Survey (USGS)[67][67], in the range of 150 Kg/year (2017 to 2018), while UNDP[68][68], estimates the production at 3 Ton/year in 2012. The notable differences between the different sets of data provide a very vague view of the production capacities of gold in the country and encourages the project to conduct a detailed analysis of the production capacity in the country in order to obtain a reliable baseline scenario.

To overcome the encountered difficulties, an approximation has been used to estimate the current artisanal gold production capacity in the country. As a general case, the average production of artisanal gold in Africa is estimated at 0.1 grammes per day per miner, which would give for the case of the Republic of Congo, an artisanal gold production of between 156 Kg and 782 Kg per year, according to the population of active miners that is also loosely inferred.

Another source of valuable information are the international trade statistics. In this regard, the data from the International Trade Center (ITC)[69][69] shows that trade in gold from Congo may be larger than expected.

United Arab Emirates? (UAE) imports from The Republic of Congo				
Product code	**Concept**	**2017**	**2018**	**2019**
7108	Gold, incl. gold plated with platinum, unwrought or not further worked than semi-manufactured (thousands of USD)	30,034	49,715	62,823
	Import volumes (Kg)	743	1,218	1,403
	Percentage (%) of gold with origin in Congo in UAE?s Imports	9.10 %	17.97 %	19.55 %

Table 4: UAE?s gold imports from The Republic of Congo. Source ITC

Looking at the example of the declarations of gold imports from the UAE, it is noted that a significant share of gold imported into the UAE comes from the Republic of Congo. Besides, between 2017 and 2019 the weight of Congolese gold imports increased from 9.1% to 19.55%. In quantitative terms, the gold imports of about 740 Kg in 2017 almost doubled in 2019 with 1.4 Tons of gold imported by the UAE.

The exports of gold from the Republic of Congo to the UAE, the main platform for exporting to China and India of ASGM gold extracted in Africa, leave no doubt about the high proportion of gold traded via black markets, and the prominent uncertainty in official statistics.

It is also important to consider the potential flows of gold coming from neighboring countries, which relies on the market conditions and the trade facilities that gold traders can obtain at the time of the sale in each country. Gold transiting from Gabon, the DRC, Cameroon, or the Central African Republic may artificially inflate the statistics recorded by the UAE from the Republic of Congo.

Beyond official statistics, the effective ASGM trade in the Republic of Congo could be around 60 million USD per year[70][70]. Even if the declared volumes of Congolese gold exports are not always produced in the Republic of Congo, they do transit through the country, fueling an extensive market of services and goods providers, courtiers, administration officials, local entrepreneurs, and transporters, yielding significant economic externalities. Furthermore, the gold mining sector in the country is very competitive, capital-intensive, and volatile, perpetuating the informality in the sector.

Features of the ASGM production

It is necessary to distinguish at least 2 operational methods of ASGM in the Republic of Congo: the artisanal extraction, mainly using manual methods, and the partially mechanized methods, which combine the use of heavy machinery and local workforce.

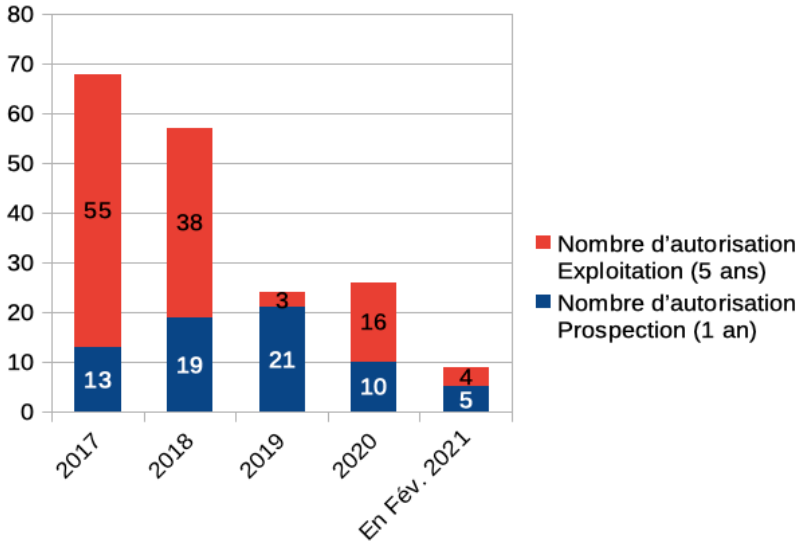

Figure 4: Number of mining exploitations in Congo. Source: Official Journal of the RoC

It is possible to evaluate the recent expansion of the partially mechanized operations based on the recordings of the Official Journal of the Republic of Congo[71][71], which lists the government?s orders of Authorization of Semi-Industrial Gold Site Exploitation (also labelled Authorization to Open and Operate a Small Gold Mine). Figure 4 shows that many authorizations have been issued for gold mining in the last 5 years. Their number represents a significant production capacity (55 operating authorizations issued in 2017, granted for a 5-year duration). Some authorizations have been granted temporarily, but long enough to have shown their profitability (sale of the gold produced) or lack of results (no renewal).

ASGM-support pilot activities in neighboring countries[72][72] and information released by the international press[73][73] tend to confirm that semi-mechanized mining operations that are currently very active in the north of the country (Sangha Department), would systematically use mercury to separate the gold contained in the ore concentrates. The analyses show that there has been a huge expansion of the small-scale operations, which can be defined as mechanized extraction and process, open cast, run by foreign staff and with capital investment mostly of Chinese origin, but not only. By comparison with what is happening in Cameroon, CAR, Gabon or DRC, the operation style is rather

similar: a few trucks and a couple of excavators, sometimes assisted by a front loader, and the strictly necessary workforce to operate. Sometimes, the operators increase slightly their income by letting the artisanal miners work on their own tailings, for an additional payment. The typical method uses large sluices to produce a concentrate that is later mixed with mercury for separation, as a quick (but potentially not very efficient) method for finalizing the process.

As stated before, such industry development should come along with environmental and social impact studies, which should lead to strict control of the process and established relationships with local communities. However, no information is available on the production, the methods and the impacts generated by these operations. Potentially, it creates a much higher risk of mercury widespread contamination than artisanal mining. Here, again, a more detailed assessment is necessary to establish the level of risks and define appropriate responses that allow for the mitigation of wide and durable mercury contamination.

If this hypothesis would be confirmed, the quantities of mercury released to the environment in gaseous or liquid form could be much higher than expected or detected in the preliminary assessments of the MIA and the NAP reports. For example, considering that only half of the 116 operating licenses of this type are still active, a rapid production estimate results in a suspected gold production of 830 to 2,600 Kg/year for this segment of activity, and therefore a potential use of between 1 and 2.7 Tons of mercury annually, based on the 1:1.3 ratio of mercury-to-gold ratio in a classic amalgamation process (without whole ore amalgamation).

The need for solid data on the production, sale and operating techniques of gold from active companies in the partially mechanized segment, is essential to account for the actual environmental impact of ASGM in the Republic of Congo, not only in terms of mercury pollution, but also in terms of the degradation of surface waters and river systems, deforestation and soil loss, which could be akin to an environmental and biodiversity disaster[74][74].

This worrisome finding also shows that the situation could have long-term effects on the equatorial forest ecosystems of the Republic of Congo and could create a serious public health problem, affecting local populations, for whom local natural resources, especially freshwater fish, are a staple foodstuff.

A campaign of chemical analyses would make it possible to highlight the origin of possible large-scale mercury pollution in mining areas. The expansion of mechanized operations without any control of their social impacts on local communities can also lead to violent conflicts between mining operators and the inhabitants of the stressed areas, as some NGOs have recently voiced[75][75].

With respect to the legal management of the sector, it also appears that the partially mechanized production is totally beyond the control of the mining and fiscal public administration services, the ?Bureau d?Expertise, d?Evaluation et de Certification des Substances Min?rales Pr?cieuses? (BEEC). It is very likely that, depending on the needs and opportunities found by mid-size operators, part of the estimated semi-mechanized production will flee the official market via neighboring countries such as

Cameroon or the DRC. The remainder could be exported directly from Brazzaville city. Thus, it is likely that the Brazzaville airport can be an important asset in commercial logistics of both the formal and informal market, like Yaound? and Douala, N?Djamena or Lagos.

Regarding artisanal gold mining in the country, all attempts to assess the production led to a wide range of estimates, from 150 kg to more than 3 Tons/year. The findings described above and the information that was collected for the writing of the Synopsis 2018 and the NAP 2019 conduct us to consider various facts for the objectives of mercury emissions reduction in the Republic of Congo.

- The reported 150 Kg/year of production of gold (by USGS) is not reliable enough to estimate the amount of mercury used by artisanal miners.
- According to the documents produced over the last eight years, it appears that most artisanal gold miners operate placer ore bodies using very rudimentary techniques and slight or no mechanization, and very rarely use mercury. This would partly explain the difficulties of the team that conducted the NAP to find sites showing signs of mercury use (1 site out of 21 visited) and the very small amount of mercury emissions estimated for the sector in the NAP.
- The lack of recent data on the ASGM sector does not make it possible to establish an inventory with enough detail to establish the risks associated with the potential use of mercury, concerning production methods.
- It can be assumed that the quantities of gold declared as imported by the UAE include partly the gold produced by artisanal operations and partly the semi-industrial operations. It is however possible that this national production is also mixed with gold from Gabon, Equatorial Guinea, Cameroon, or CAR.
- Mercury is found in the supply chain by ?sponge? gold purchased by jewelers, which would tend to prove that some of the gold is produced with mercury separation, either from artisanal mining (low proportion), or from semi-mechanized operations, which can resell part of their production on the local market, to pay for local expenses.
- According to previous experiences and based on knowledge on ASGM activity in other African countries, where artisanal and small-scale gold mines are expanding on primary ore bodies, ore processing (use of crushers) is necessarily associated with the use of mercury to allow for the recovery of the finest gold particles generated by the grinding. This is particularly the case in CAR, DRC, and Cameroon[76][76]. It is noted, however, that semi-mechanized operations in the same area use mercury as a major separation technique, while they generally operate in alluvial or eluvial deposits. It may therefore be feared that this technique could be extended to smaller alluvial deposits exploited by artisanal miners.
- It might be interesting to focus on sites operating primary gold deposits to support a controlled development of the sector, without the use of mercury, and to propose efficient methods of gravimetric processing in the alluvial operations to discourage the switch to mercury in this type of environment. Advanced gravimetric techniques achieve performances equivalent to or slightly superior to processing with mercury separation. However, they are usually more expensive in capital and operation expenditures.

Therefore, a project on mercury phasing out will require a better identification of the sources of mercury pollution in the artisanal and small-scale mining sector and will need to draw a specific attention to two important aspects: on the one hand, a potentially massive mercury contamination of the environment by semi-mechanized mining, which may introduce a serious public health problem, and rapid diffusion of mercury separation techniques in the artisanal sector, including alluvial, as a promising way of a better recovery.

It is also important to stress that deforestation can have significant negative impacts on the livelihoods of local communities, with possible social conflict with communities that are just recovering from a painful period of armed conflict and instability. The deforestation caused by artisanal mining is well identified as a problem to be considered in the country?s REDD+ strategy[77][77].

Mercury use in the ASGM sector

Before ratifying the Minamata Convention, on May 19, 2019, and following the necessary directives and orientations within the framework of Article 7, the Republic of Congo initiated its NAP, on the reduction of mercury use, based on the National Synopsis for the artisanal mining sector (2018). Beyond the legal and regulatory aspects that frame the artisanal and small-scale mining sector, the Synopsis explains the methods used by many miners to extract and process gold ore.

It highlights the fact that most of the mining sites are in and near rivers, are predominantly alluvial sites. The ore is made up of sand and gravel extracted from the bed or banks of rivers after a short prospecting phase which consists of digging shallow pits (less than 2 meters) to reach an area rich in gravel. The gravel is washed with a pan to check whether it contains gold. Prospecting thus continues from place to place until the miner considers that an area is suitable for exploitation. The site is then prepared (forest clearance, scraping of the zone, watercourse diversion if necessary), the zone is scraped, and pits are dug to reach the gold-bearing gravels. At this stage, the gravel is washed in a simple box to flush the mud and form a slurry that is passed on a sluice or long-tom to eliminate most of the gravel and light minerals and concentrate the heavy ones. The pre-concentrate recovered in the sluice is then panned with water where only the heavy minerals (black sands) and gold remain. After this phase, the concentrate is dried, and the gold is separated manually for commercialization.

The field observations on alluvial sites clearly show that the equipment used by the miners is very rudimentary (crowbar, shovel, pickaxe, bucket and pans, rudimentary sluice, sometimes motor pump) and that mercury is not used in this type of site to separate the gold. Mining operations that run on other types of deposits (bedrock, eluvial) are likely using mercury to optimize the separation step.

Other studies mentioned in the Synopsis confirmed that some sites are more mechanized (equipped with mechanical shovels or crushers), which would indicate miners looking for the gold in the pebbles or mining lode deposits. Usually, the employment of crushers and/or mills yield fine gold particles that need to be amalgamated with mercury to be recovered. It would therefore be interesting to do more research on this type of site as well as on primary sites (e.g., vein deposits) where the ore must be crushed to extract the gold.

A complementary survey performed for the Synopsis with jewelers in Brazzaville shows that some of them buy sponge gold from time to time. This is clear evidence of the use of mercury. Unfortunately, the surveys have not been thorough enough to make a reliable estimate of the use of mercury. It would therefore be necessary to carry out further investigations at this level of the supply chain.

It should also be noted that some sites are exploited today because they are known to have been productive in the past and notoriously rich in gold. In some sites, the use of mercury for gold amalgamation may have been practiced historically, and mercury releases may possibly be remobilized from mercury-polluted soils, which would potentially generate new risks for miners, communities, and the environment.

The National Synopsis concludes that the use of mercury is not very widespread, estimated at around twenty kilograms/year (19.5 Kg/year). The development of mechanized mining sites, which should produce gold from primary deposits, should be carefully considered insofar as it could lead to a much more frequent and heavy use of mercury, as it can be evidenced in other countries in the region where this is practiced.

The probable evolution without the intervention of a project

Based on the above findings and on the situation in neighboring countries, it is possible to forecast the potential evolution of the situation in the Congolese ASGM sector in upcoming years. As described by the different recent assessments, the use of mercury is not pervasive in the whole sector, as most of the miners operate in placers with basic equipment and process their ore with gravimetric methods.

It is only in a few specific areas of the country, like in the Cuvette Ouest on the Kitou site, where supposedly the miners operate lode ores, with the technical assistance of foreign miners that master the crushing/milling and separation with mercury. As the NAP document underlines, very few quantities of ?spongy gold? were found, which argues in favour of a small proportion of miners using mercury in their process.

However, despite the less impacting methods used, the number of active miners remains very poorly assessed, as the current sector evaluation is based on large extrapolations and baseline assumptions that are outdated. Hence, the impacts in terms of deforestation and watershed pollution could be much larger if the population of miners increase. It is also worth noting that most of the mining areas occur in forested areas, such as in the Sangha, the North of the Cuvette-Ouest, the Niari, Lehoumou, and the Kouilou departments. Therefore, the proposed project will improve the knowledge on the ASGM sector and will provide tools for an appropriate monitoring of the national situation, since artisanal mining currently offers one of the very scarce opportunities to improve livelihoods in rural areas.

Without a project that would contribute to structure the sector, there could be major changes in the sector, in two directions: First, the artisanal sector may evolve into slightly higher levels of

mechanization, with more productive potential, and to cope with the larger ore production, the use of mercury may increase, even in the alluvial environment. In addition, some miners may find the sourcing rocks that contain the primary orebody and may process more and more quartz veins and eluvial ores, which would require crushing and would imply the use of mercury. The project may provide the opportunity to introduce high-performance gravimetric methods, which may compete with mercury-based processing methods and structure the activity around accessible equipment that allows for technical and economic performance.

Secondly, the uncontrolled development of semi-mechanized operations in the country may lead to a widespread use of mercury as a standard processing method for gold miners. Given the high productivity of such type of operations, which can process between 100 and 250 m^3/day, the quantity of mercury used in the mining process will be much higher and may lead to systemic contamination, comparable to what is already seen in some parts of the Amazonian basin. The potential activities in river streams may also remobilize mercury trapped in soils, as the environment conditions may be like tropical environments in the Latin America[78][78] region.

The findings of the global and national assessment also show that the country has only recently integrated the mining industry as a priority in the country?s development strategy. The analysis of the strategic texts of the latest years displays a strong preference for the development of industrial mining and the promotion of direct foreign investments, as the ASGM sector is barely mentioned. Therefore, the national institutions in charge of controlling and overseeing the sector may not be well suited nor trained to cope with such development of the activity.

This issue is correlated to the potential lack of coordination between local authorities, national administrations and traditional authorities, a fact that also introduces favors the emergence of illegal operators[79][79].

The capacity of national institutions to promote formalization and attract the miners into a legalization process is a key process for durable changes in the mining practices. The formalization process will support the construction of a legal supply chain in the country, a critical aspect that underlies the use of mercury and ultimately provide better access to technologies and financial services for ASGM workers.

As conclusion, the lack of a strong policy oriented towards such objectives, most probably in the form of a technical assistance project, would leave the ASGM sector unattended and will create negative impacts that may supersede the positive economic impact of the activity.

Former Projects on the ASGM sector

The projects related to the ASGM sector in the country have been historically scarce. Being a country surrounded by large actors in the mining sector such as DRC, the Republic of Congo has received little attention with respect to its ASGM sector.

Nevertheless, there are two relevant projects related to the ASGM sector. The 2012 Report on the ASM sector by UNDP[80][80] and the 2012 Report on the Mining Sector by the WB[81][81]. Both projects consisted of a desk analysis of the mining sector in general, with attention not only to the ASGM sector, but other minerals and large scale operations as well. The direct beneficiary from both projects was the Ministry of Mines, which could use the information provided to develop a more robust legal framework for the mining sector in the country.

Despite this, during the PPG Phase, the project?s team identified one initiative related to the management of ASGM and the negative effects of mercury use to biodiversity. African Parks, an international NGO, is currently in charge of the management of the Odzala-Koukou National Park[82][82] on behalf of the Ministry of Environment, Sustainable Development and Congo Basin; and Ministry of Tourism and Leisure. The national park a UNESCO World Heritage site that lies in between the Sangha and Western Cuvette Departments. Being a hotspot for biodiversity, the park belongs to the wider landscape of the Congo Basin, shared by Gabon, Cameroon, CAR and DRC. After consultations with the park?s management team, the project team learnt that uncontrolled ASGM activity has been reported to the park in recent years. This episode could be related to the increased gold mining activity and the influx of workers from neighboring countries attracted by the discovery of new gold deposits. To address the problem, the park management team has planned to launch an action plan focused on protecting the areas affected by ASGM activities. To this extent, the planetGOLD Congo project envisions to cooperate with the park?s management team through the provision of capacity training in ASGM related issues, including the participation in the project?s activities and the exchange of information and knowledge.

1.A.3 THE ALTERNATIVE SCENARIO WITH A DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

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

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

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

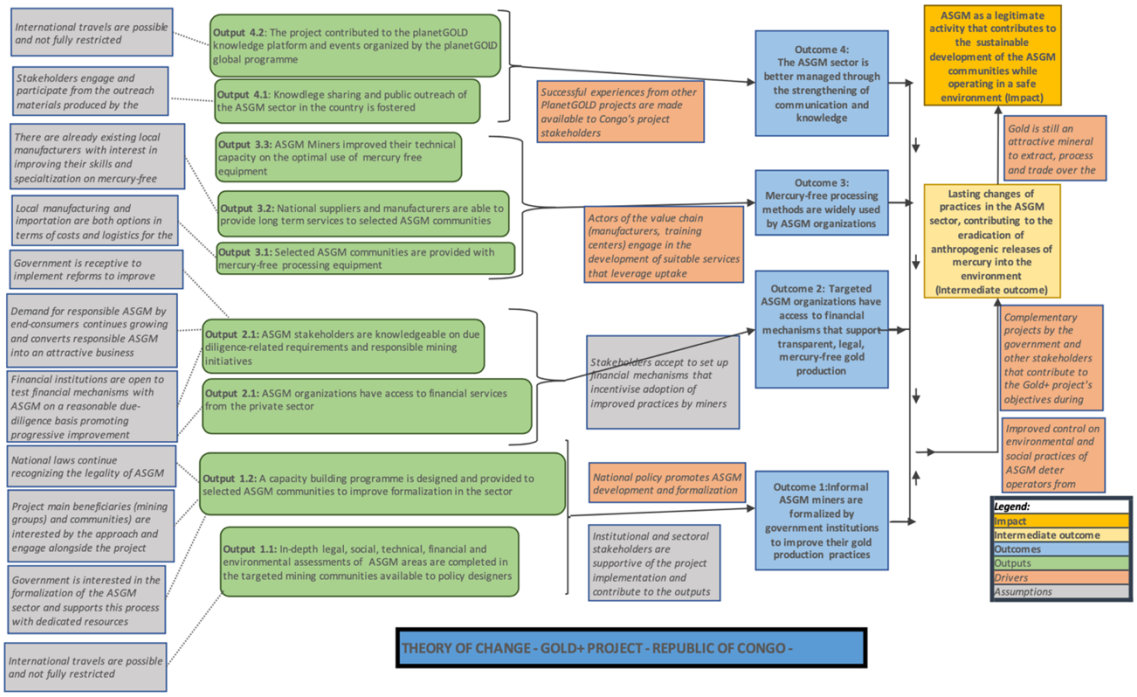

Figure 5: Theory of Change diagram.

The global intervention framework envisioned in the GEF planetGOLD programme precisely suits the challenges faced by the ASGM sector in the Republic of Congo. However, the initial analysis carried out during the PPG phase underscored some distinctive characteristics of the national ASGM sector that should be addressed through country-specific approaches. One of these aspects is the lack of reliable field information on ASGM activities.

Because of the situation of the Republic of Congo, the baseline assessments showed a remarkable scarcity of reliable and up-to-date data on the ASGM sector. To overcome this challenge, during the PPG the national team with the support of the Ministry of the Environment, Sustainable Development and Congo Basin, carried out field trips to different mining regions. The field data gathered confirmed the increasing trend in mercury use by ASGM communities and the prominent informality of the sector.

However, due to the constrains posed by the pandemic outbreak, it was not possible to perform more field visits to confirm the estimates on mercury consumption and ASGM population. This eventually results in difficulties to identify project?s targets. Such lack of available data is intended to be resolve via the establishment of a complementary study (sociological, economic, legal, environmental, and technical, gender sensitive analysis) that will fill in the gaps found[83][83]. Moreover, the study will allow to confirm the accuracy of proposed targets or adapt them in case of need.

The complementary data collected will have a strong focus on the role of women and other potentially vulnerable social groups such as migrants, indigenous communities, and children, to better understand the potential room for improvement of their living conditions.

A second national feature is the dual nature of ASGM operations in the country, divided namely between mercury-free rudimentary artisanal mining and highly impactful semi-mechanized operations. In this respect, the project?s overall approach will seek to tackle the formalization issues faced by both subsectors.

One of the key features of the second phase of planetGOLD programme is the inclusion of jurisdictional approach to promote formalization. During project?s execution phase, Jurisdictional Approach and Landscape Approach (JA/LA) will be piloted. The JA/LA approach will tackle ASGM operations from different contexts. During the PPG phase, it was found that most ASGM operations occur in an alluvial environment, quite often along rivers and within the same watershed. Therefore, the narrowest scale for Landscape Approach site selection will be on mining areas enclosed in the same watershed.

Since the project aims to foster the inclusion of local governance bodies as well as the commitment of the central administration representatives in the multistakeholder consultative approach, the Department level, as already mentioned, seems the most appropriate Jurisdictional level for the project.

In addition to this, it is necessary to consider the national level, for the public policy and synergies with other projects, and even the regional community level, that is the CEMAC level, because of the extension of the ASGM activity in neighboring countries (mainly Gabon and Cameroon). The extensive use of a multistakeholder and participative approach, in line with the JA/LA steps, will be implemented at various scales, and will ensure an inclusive and consultative mechanism.

Moreover, the complementary study will allow for an accurate exercise of stakeholders? mapping, particularly at the local level, who may greatly influence the design of the project?s intervention strategy. Such an approach will also greatly improve the knowledge database on mercury and its usage at the national level. This ?cluster? type of approach also allows for the inclusion of more operators and different types of stakeholders, which in turn enables the identification of potential conflictive issues.

Using the JA/LA approach, the results of the project won?t be based only on the outcomes from a few pilot sites, but rather work with cluster areas showing common dynamics inside them, ensuring a critical mass of committed operators for success. As each mining areas of the selected Departments (Shanga, Bouenza and Kouilou) bear specific mining ores and actors, this will be considered when the execution of activities takes place in each mining area. The 4 components of the project will closely follow the JA/LA steps that are as follows:

1. Landscape characterization ? including stakeholder mapping, spatial and contextual assessment,
2. Definition of an action plan that considers different scenarios and leads to concrete results,
3. Research for funding and co-financing sources for the action plan,
4. Implementation of the action plan and progress monitoring,
5. Integration of lessons learned adaptation and dissemination.

Such approach is aligned with the Mineral Responsible Supply Chains model, which mostly refers to the OECD Due Diligence approach, based on a sequence of 5 steps:

(1) Establishment of management systems ? (2) Risks Assessment ? (3) Design of risk mitigation plans ? (4) Carry out audits ? (5) Report and disseminate.

The combination of the 4 project components presented above will lead to the creation of an alternative scenario that will curb the use of mercury in the country and will allow for the development of an ASGM sector that supports the national development strategies in the long term. The project components are described below for the 3 targeted areas that are defined in the map section.

Component 1 Promotion of formalization

This component refers specifically to the formalization work that will be performed with the targeted mining communities. As described in the Annex E (Maps), the three preselected regions (Bouenza, Sangha and Kouilou Departments) display a high level of ASGM activity and the presence of different operation types, from purely artisanal to semi-mechanized., with a wide use of mercury, either because

of the presence of eluvial and primary ore bodies or because of the presence of the semi-mechanized operations.

As underlined above, specific mining areas have not been formally selected, but the intention to perform a complementary study to collect additional data will allow selecting the communities. During this process, the miners will be informed about the project and invited to participate.

In total, it is expected to collaborate with over 1,000 artisanal gold miners, which would represent approximately 10% of the total ASGM national workforce. A consultative approach will be privileged, through the organization of informational workshops in the mining areas. It is worth noting that such workshops will later serve as the foundation to establish local permanent information platforms, in line with the JA/LA approach.

The ultimate number of mining areas targeted in each Department will depend on the interested parties, the buy-in from Departmental authorities and the opinion of other community representatives. Potential conflicts between large scale mining operations and ASGM miners, as well as with other industrial activities (farming, forestry) will be identified and addressed. The UN Free and Prior Informed Consent[84][84] approach will be applied during the consultation process, promoting the involvement of mining organizations and the participation of the local communities in the multistakeholder processes.

The methodologies used for setting up the formalization support programme will produce specific improvement plans that will describe prioritized risks (namely legal, environmental, technical, financial, and social risks) and activities, capacity building programmes and training materials needed to support the formalization process.

The course of action will be discussed and approved for each selected territory. With such a process, it will be guaranteed that the activities will first fulfil the specific needs for each territory and secondly, will employ the JA/LA methodology.

The methodologies used will be mostly based on the mining organizations? empowerment and internal organizational capacity building. As such, the support will be mostly directed in the form of training sessions and day-to-day accompaniment of the organizations for the activities related to the formalization process.

Similarly, mining organizations will participate in the local and departmental multistakeholder platforms and will be invited to show their formalization progress, and to discuss encountered issues with the other project beneficiaries.

The project?s intervention will rely on a ?training of the trainers? approach, which will provide knowledge and capacity-building to support the upscale of the project?s formalization efforts to other mining communities in the country. The production of training materials will be coordinated with vocational training entities, especially the ones in the targeted Departments. Further partnerships may

be agreed with national universities and national training institutions. The produced training materials and tailored didactic methodologies will be available for other types of actors via online resources.

The identified project activities will be based on the experience acquired by other planetGOLD countries and on international expertise, to propose a consistent strategy that improves the working environment of miners, in terms of access to legal information, introduction of alternative technologies and the provision of services such as mining, legal and financial counselling.

The activities will be designed in close consultation with the mining, fiscal and financial national institutions for the development of an alignment with the country?s strategies related to the sector, mainly the NAP (2019), supported by the Synopsis (2018) of the sector, and the national strategy of the ?artisanal? mining sector at large, which promotes entrepreneurship and SMEs development. National initiatives in other topics, such as the REDD+ programme or the Common Mining Cadaster may also benefit from the project?s progress and its integrated JA/LA approach, which should contribute to reduce the overlap of economic activities and potential conflicts over different resources.

Expected outcome: Informal ASGM miners are formalized by government institutions to improve their gold production practices.

Expected outputs

Output 1.1 Extensive legal, social, technical, financial, and environmental gender-sensitive assessment of ASGM areas in the targeted mining communities available to policy designers

Most of the available data on ASGM in the Republic of Congo was produced around 10 years ago, and hadn?t been significantly updated, leading to an inaccurate view of the sector. Fortunately, some information could not be updated during the PPG phase of the project.

However, the knowledge of the national ASGM sector remains low, especially at the level of the local mining communities. Through an in-depth multi-stakeholder research programme, the project will be able to obtain updated data on practices and trends of the gold mining activity. This will allow to target mining communities for the execution phase of the project. The assessment will be performed with the use of individual and focus group questionnaires, as well as interviews of key informants. A local map of actors will be derived from this activity. Such work will also provide valuable information for the national authorities and local communities and will support the creation of a multistakeholder discussion platform. The produced questionnaires and tools, linked with modern database management tools, will form a good basis for a more extended national database on ASGM.

<u>Specific activities</u>

Activity 1.1.1 Design plan tools for data collection and perform assessment in targeted areas

This activity will consist in the design of analytical tools (i.e., surveys, questionnaires) for the project?s national team to collect field data from targeted mining sites. This will ultimately contribute to improve the baseline information of the national?s ASGM sector. In this activity the target ASGM communities where the project will pilot its intervention will be identified and engaged.

Activity 1.1.2 Analyze the data and produce an updated assessment on the status of the ASGM sector in the targeted areas

This activity will target the production of a global assessment on the current (as of 2022) situation of ASGM sector in the country. Special attention will be given to assess the current workforce involved in ASGM activities (including gender sensitive information), the production of gold and the use of mercury and cyanide. The assessment will be shared and endorsed by project stakeholders.

Output 1.2 A capacity building programme is designed and provided to selected ASGM communities to improve formalization in the sector

Based on the complementary assessment performed at the Departmental and local levels, plus the national legal framework of cooperatives, associations and other appropriate artisanal and mid-scale enterprises background, a support for formalization, administrative and financial management is proposed to each pilot site engaged in the project.

A series of training modules will be created to respond to the needs of the organizations and will be tested and improved as progress is made. Follow-up support comes along in parallel with the training programme, especially on legal issues and internal governance bottlenecks.

The produced material will cover all administrative issues that will be flagged during the complementary assessment, covering 3 critical areas of interest:

1. The legal status of the mining activity: tackling the legal existence of the mining organization, their access to mining rights. A methodology will be produced for the training sessions on the legal framework and awareness-raising on the benefits to access legal rights.
2. The governance of the mining organizations: A series of training sessions will be implemented on governance (best-fitted governance mechanism that ensures transparency, equity and turn-over in decision-making processes), and on the type of legal organization that will be most appropriate (small enterprise, association or cooperative). The training programme will include discussion workshops on the appropriate internal code of conduct, that guarantees the respect of human rights, and the inclusion of discriminated social groups. The role of women in the organizations will be specifically addressed during these discussions, and the organizations will be supported to promote a better inclusion of women in their governance boards.
3. The internal organizational capacity: as a key parameter for success, the internal organizational capacity will be strengthened. This will be key to empower the miners on the occupational health and safety process and the application of environmental mitigation measures, among others. The training and support will produce a best governance practice guidance, approved by miners and a step-by-step methodology to perform appropriate and transparent procedures for the sharing of responsibilities and creation of specific action groups.

The training will also include the best practices in terms of simple accounting, financial and business management for community-based organizations, with a specific focus on mining tools and the management of mining products and sales. To enhance sustainability and the capacity to support the sector?s formalization, various training of trainers? sessions will be delivered to local and civil society organizations. Such a programme will come along with a monitoring and evaluation mechanism that will allow actors to improve both, methods, and approaches. In parallel to the training and capacity approach, the project will support specific activities that target administrative knowledge, follow-up of bureaucratic processes and the mobilization of local and regional public authorities.

In each targeted mining community, sessions will be organized covering the following topics: legal aspects of ASGM, governance and internal capacity. The programme will be monitored with an individual evaluation system and a post-training assessment session performed by the project?s team. The adoption of newly acquired practices will be supported by the project?s team and the trainers.

The design of environmental mitigation plans will be validated by the environmental and mining authorities, to be in line with any legal requirements and strategic orientations that may be of importance in the national ASGM context. This approach will tackle the potential use of chemicals in the ASGM sector as well as the impacts on the forest, land cover and river systems. In this respect, the project will try to create synergies with ongoing environmental projects at the regional level such as the Congo Basin Programme or the REDD+ fight against deforestation programme.

On the other hand, the social issues will be discussed directly with the miners and their neighboring communities, with priorities focused on potential discriminations and human rights violations. Tailored activities will call on the commitment of the mining organizations and the miners to reduce social inequalities and potential human rights violations. The social issues will tackle specifically the most vulnerable groups such as discriminated ethnic minorities, children, women, and migrants. The project?s approach considers that women miners should be a strong part of the inclusion policy in the organization?s commitments.

The definition of the environmental and social priorities will heavily rely on the full cooperation, input, and validation of the target mining organizations, and will need a strong commitment for its implementation.

By performing wide consultations and awareness-raising workshops, potential solutions for better management of the ASGM sector should be identified and carefully designed to achieve the expected results. Attention will be paid to the real impacts of operations on the ground. The subsequently proposed solutions will contain identified opportunities for a change towards better practices.

Specific activities

Activity 1.2.1 Establishment of Departmental multistakeholder platforms in each targeted mining community

This activity will pursue the establishment of platforms where different project stakeholders (mining communities, public institutions, CSOs, international organizations, etc.) will gather to discuss project related issues, approve workplans, share experiences and knowledge. The platforms will be established at the Departmental level.

Activity 1.2.2 Design of a formalization support programme on organizational, administrative, financial management and social & environmental safeguards through introduction of the JA/LA approach

This activity will be at the core of the formalization efforts developed by the project. The formalization capacity building programme will tackle organizational, administrative, financial, social, environmental

and health issues related to the ASGM activity. The JA/LA approach will be introduced through the training programme.

Activity 1.2.3 Validation of the training modules and M&E framework with the multi-stakeholder?s platforms

This activity will consist in the sharing and validation of the formalization capacity training programme among stakeholders at each Departmental multistakeholder platform. It will include the design of a specific M&E framework for the formalization programme.

Activity 1.2.4 Training of trainers of local CSOs and other actors for long-term support and capacity building of stakeholders

This activity will aim to provide training on formalization to different national actors to build a national team of trainers with specific knowledge on ASGM formalization so they can provide further training to ASGM communities within the country. This activity will be key in the upscaling efforts of the project.

Activity 1.2.5 Deployment of the training programme on pilot sites and subsequent monitoring

This activity will benefit the selected ASGM communities with a capacity building programme about ASGM formalization. The programme will be delivered through a series of meetings when theoretical and practical sessions will be combined.

Component 2 Financial Inclusion and Responsible Supply Chains

Even though the artisanal mining activity scarcely uses heavy equipment, ASGM operations still need financial services that are essential for the adequate conduction of mining operations. The need for funding is especially notable in the case of the transition from mercury usage to mercury-free processing techniques, as high-performance gravimetric equipment is more expensive than the basic tools that are usually combined with mercury amalgamation.

ASGM miners evaluate the appealing of each method, the mercury-intensive and the mercury-free methods, based on the global efficiency of the process. In this respect, the use of mercury does not bring significant results on tailings coming from an improved gravimetric process; hence, miners would choose a free mercury technology if an adequate source of funding would be available.

Generally, the financing of the mining operations in the country come from informal lenders (traders, exporters, or local investors) who also commonly sell equipment and food supplies to the miners. The primary interest shown by these financial services providers is to have a pre-emptive access to the mineral, usually at a much lower price than the local market levels. In turn, the miners? activity is made easier thanks to the provision of equipment, mercury, food, and other supplies but, at the same time, the miners usually lack access to more efficient mining techniques.

In the specific case of the Republic of Congo, due to the variety of ASGM actors and types of mining on the field, a tailored response will be needed regarding the provision of financial services as shown in the baseline analysis where artisanal miners differ in their needs from those participating in semi-

mechanized operations. It is foreseen that the activities regarding the strengthening of the financial management and the creation of saving mechanisms within the artisanal mining organizations will greatly improve their capacity to access formal financial services (microfinance services, for instance). For larger needs, government mechanisms (in the form of development funds, for example) supported by international institutions will be seek for and mobilized, aiming for the establishment of a legal, responsible, and sustainable national gold supply chain.

Expected outcome: Targeted ASGM organizations have access to financial mechanisms that support transparent, legal, mercury-free gold production

Output 2.1 ASGM organizations have access to financial services from the private sector

A critical feature, the financial capacity of the mining organizations will be addressed in detail through Output 2.1. The international experience shows that financial management is a key parameter for a sustainable change of practices in the ASGM sector.

A specific set of activities will be designed to promote savings mechanisms for ASGM organizations, in which women may find alternative livelihood opportunities, and where they may have important management roles. Thanks to a better management of the internal savings, the mining organization?s will improve their chances of obtaining loans from commercial banks and other national financial institutions. Training sessions, as well as tailored learning materials will be provided. Different financial mechanisms will be examined, depending on the amount of required funds and the opportunities that can be materialized. The provision of capacity building to the mining organizations on topics such as savings systems will provide empowerment on the financial management of the day-to-day operations. The objective is to increase the internal capacity to finance small expenses such as buying equipment

Investment plans will be drafted by the mining organizations, according to the technological solutions that will be identified and tested in Component 3. If access to microfinance or banking services is deemed necessary, additional information will be collected to meet the expectations of potential investors or financial institutions.

The activities will prepare the ground for further progress on responsible mining production.

Specific activities:

Activity 2.1.1 Establishment of formal agreements with national financial institutions to create financial products adapted to the ASGM sector, including the organization of a national workshop devoted to foster private equity and investment opportunities for the national ASGM sector

This activity will aim to establish legal agreements with national financial institutions (i.e. Banks, credit cooperatives, investment firms, public financial institutions) in order to create financial services specifically designed for the needs of the ASGM communities. A workshop meeting will be organized in Brazzaville to meet financial representatives and introduce the project?s approach to finance access for the ASGM sector.

Activity 2.1.2 Design, organization, and implementation of a capacity-building programme for the pilot mining groups on savings and loans systems.

This activity will be related to the development of a complete capacity-building programme on saving schemes and loan systems for the ASGM sector. It will include the most relevant types of savings systems and its application to the ASGM context.

Activity 2.1.3 Provision of guidance to ASGM communities in their application to formal credits.

This activity will aim to build long-term effects in the access to finance for ASGM miners as it will help ASGM organizations to apply for financial services and will counsel on the procedures to follow.

Output 2.2 ASGM stakeholders improved their knowledge on due diligence-related requirements and responsible mining initiatives

Another important step in the formalization process will be the introduction to the due diligence processes (to the planetGOLD criteria), which are based on the OECD due diligence steps. Specific aspects of the market requirements will be highlighted with an approach based on comparing benefits and drawbacks. The connection to international buyers will be ensured by the project team who will perform outreach and create opportunities for stable and legal purchases of gold from the ASGM sector of the Republic of Congo. Participative methods will allow for the expressions of grief and needs that may allow for recommendations on better attractive conditions for legal compliance.

Such due diligence approach will create additional support for the mitigation of risks related to human rights, social and environmental issues.

The traders, aggregators, exporters, and private financing actors will be invited to express their vision of the legal market opportunities and the difficulties of the status of the national gold market.

The training programme will highlight the evolution of the market, introducing the due diligence process and the tools, such as the planetGOLD criteria as a market incentive for mercury-free produced gold, which will be used for the export of gold under the project.

The related activities will also try to identify the need to improve traceability and propose affordable mechanisms that may be used. In addition, the project will try to identify potential actions for the improvement of the fiscal incentives related to responsible gold exports.

<u>Specific activities</u>:

Activity 2.2.1 Awareness-raising workshops on the implementation of responsible practices and due diligence processes, including administrative burdens, and the identification of potential solutions for the facilitation of the due diligence processes with the project?s stakeholders.

This activity includes the organization of a series of workshops where the concept of due diligence will be introduced to the ASGM communities. In addition, different criteria related to transparent

international gold supply chains (such as the planetGOLD criteria) will be introduced to the project stakeholders.

Activity 2.2.2 Implementation of a pilot proposal on due diligence with selected mining communities.

This activity will consist in the application of an international due diligence process to selected mining communities to help them achieving the exporting of their gold production through fair means.

Component 3 Enhancing uptake of mercury-free technologies

As described in the baseline scenario, artisanal miners may not be the heaviest users of mercury in the country, as they mostly work on alluvial deposits and use very simple techniques. However, they may quickly learn about the use of mercury from artisanal miners from neighboring countries as revealed during the PPG phase.

Artisanal miners may also benefit from easily accessible mercury from semi-mechanized operations and be inspired by its systematic use by these companies. Demonstrating to miners that mercury-free technologies can achieve equivalent or better yields than the classic ?mercury approach? is therefore key to stand in the way of the expansion of mercury use in the country. It is also a key incentive for formalization, as the promise of better incomes comes with improved efficiency in the ore process, and the inclusion in formal markets through the application of the planetGOLD criteria will lead to further positive externalities.

However, it is clear that this technical component, although critical, won?t be implemented without the support to strengthen the formalization and organizational skills of the project beneficiaries (see Component 1) and from an improved business environment supported by financial resources (see Component 2). These prerequisites will create an enabling environment for a perennial transition to better techniques.

Expected outcome: Mercury-free processing methods are widely used by ASGM organizations

Output 3.1 Mercury-free processing equipment are provided to selected ASGM communities

The first step will consist in the evaluation of the current situation of the selected mining communities. Thereafter, adapted equipment that addresses the technical challenges faced by the miners will be purchased.

The switch to mercury-free techniques will be considered along with the entire ore processing, as the quality of the concentrate is conditioned by three constraints: the ore preparation, the efficiency of the concentration and the separation steps. Considering this, and the interest of the miners to improve the recovery of gold as a direct economic incentive, the crushing and milling, concentration, separation and smelting operations will be tackled.

Once the technical challenges and the potential room for improvement are well defined, the project will look at the management of mining tools. First, existing tools may be improved in their capacity to

concentrate and separate gold from the waste rock. With proper support, more efficient tools will be redesigned and manufactured locally, which offers the possibility to increase the economic impact of the project by creating more livelihood opportunities. The project?s intention is to create a demand-driven industry for mining tools that correspond to the best available techniques.

The possibility to import highly efficient devices at reasonable costs will be evaluated. For this to succeed it is necessary to identify local service and product suppliers and engage with them in the technical support process. A cost-benefit approach will be used for selection.

For artisanal mining operations in alluvial environments, small and movable devices such as sluice boxes, trommels, centrifugal concentrators, elutriation separators, mechanical pans, and shaking tables will be tested. In the case of hard rock mining, crushers and ball or hammer mills will be tested and used. For larger operations, above 50 tons of capacity per day, larger devices such as fluidized bed concentrators and jigs may also be tested. The selection of equipment will depend strongly on the capacity to maintain such devices.

During the needs assessment, the needs of women that practice ASGM activities will be specifically looked at, and solutions that foster their role, or increase their mining production will be searched for. The technical support shall serve as a trigger to promote a better role of women in the mining activity.

Mining tools will be available for testing in the selected departments. Each mining community will be able to handle the devices, while the project?s team, will test the performance in each specific environment.

Occupational health and safety training sessions will be included, as well as training sessions on the cost management for maintenance and repair. In this regard, environmental issues will be part of the focus. Wastewater management, tailings management and landscape reclamation will all be integrated into the technical assistance and the training sessions.

Specific activities:

Activity 3.1.1 Acquisition of adapted gravimetric processing tools

This activity will be twofold. First, the project will assess what is the most appropiate type of processing tools for each selected mining site based on site specific context. Thereafter, the project will purchase of mercury free gold production machinery which will help to the selected ASGM communities to efficiently perform their production without the use of mercury amalgamation.

Activity 3.1.2 Perform tests to verify the performance and needs for adaptation with the mining communities

This activity will be initiated once the equipment is installed and will ensure that the machinery is adapted to the specific production features of each selected mining site

Activity 3.1.3 Perform technical, health and safety, and production monitoring training sessions on the pilot sites.

This activity will consist in a series of trainings to the selected mining communities about technical, health and occupational safety issues related to the production of mercury-free artisanal gold.

Output 3.2 National suppliers and manufacturers are able to provide long term services to selected ASGM communities that have adopted mercury-free production processes

The technological transfer will allow to create new job opportunities and to expand the overall mining engineering knowledge at the national level, fostering the economic situation of the ASGM sector. The provision of new innovative mining-related services may improve the social stability and the welfare of different social groups such as women miners, which may, in turn, participate in the local development.

This approach will look for viable and low-tech solutions, combined with the promotion of locally crafted mining tools adapted to the ASGM sector. Such an approach will include the possibility to improve already existing equipment, but also to verify the capacity and needs of the local manufacturers.

Likewise, the project will look at practical ways to reduce production costs and improve the capacity to provide maintenance and production services. The local manufacturers will be provided with technical training, formalization and financial support.

The long-term expected result is to obtain a small national industry that can respond to the needs of the ASGM organizations

Specific activities:

Activity 3.2.1 Capacity building of the local manufacturers and service providers in mercury-free technologies

This activity will engage with local mining tools and equipment manufacturers as well as mining service providers to introduce mercury free technologies which can be unknown for them.

Activity 3.2.2 Collaboration for the design and production of locally made mercury-free technology devices

This activity will try to create the foundations for long-term behavioural changes in the national supply chain of mining equipment for the ASGM sector. It will help national manufacturers to build machinery prototypes and to distribute them to selected mining communities to ensure that positive business relationships are well established.

Output 3.3 ASGM Miners improved their technical capacity on the optimal use of mercury free equipment

To foster the development of best practices in the sector, practical curricula will be developed in cooperation with national vocational training centers and universities. The courses are sanctioned by a national diploma that will allow recipients to increase their revenues.

Hence, the aim of the courses will be to improve the efficiency of the use of mercury-free devices and to boost capacity to maintain and repair mechanical devices. Furthermore, the curricula will promote the transfer of new technologies and the import of complementary solutions.

The best available practices will also be taught in such an approach, among which the proper use of chemicals (fuels, acids, etc.), the environmental issues related to mechanical tools, and the occupational safety and health practices.

Specific activities

Activity 3.3.1 Draft of a practical curriculum on handling and best practices of mercury-free technologies. Piloting in selected mining communities

This activity will focus on the drafting of an educational curriculum on mercury free formalized ASGM production. It will try to cover the gap that currently exists at the national level, as miners usually do not receive any type of formal vocational education about their profession. As an introductory phase, the curriculum will be piloted in selected mining communities through a series of trainings, in order to make the adjustments the curriculum to the specific needs of ASGM miners in Congo.

Activity 3.3.2 Delivery of the curriculum to national training institutions for its upscale at a national level

This activity will be related to the selection and engagement with national vocational training institutions to promote the newly developed mining education curriculum at the national level.

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

As highlighted earlier in the baseline assessment, the lack of information on the national ASGM sector hinders the capacity to design appropriate strategies and disseminate accurate information on the production, impacts, and opportunities for further development.

With the complementary assessment performed in Component 1, the Republic of Congo will have an up-to-date database on the sector that will be very useful for future policy-making decisions. It is therefore appropriate to extend the knowledge on the sector within the country. In this respect, the project will deploy a national communication and awareness-raising strategy for various audiences. The information will be available for the public through radio and advertising campaigns, while targeted communities in mining areas will be sensitized with communication materials such as brochures and posters about the main objectives of the project, in particular the uptake of mercury-free technologies and the promotion of responsible production of gold in the country. Specific activities will be developed for jewelers who are in contact with local customers.

Moreover, Component 4 develops the tools for knowledge sharing with the other projects of the global planetGOLD programme by sharing the project?s communication and education materials (videos, courses, publications, and technical designs) through the planetGOLD knowledge sharing platform, and through the publication of clip news on the planetGOLD portal. The project team members will also participate in the Annual Programme Meeting (APM) and the Global Forum (GF). On a regular basis,

they will participate in the knowledge-sharing meetings that will be organized to foster exchanges between the different planet GOLD child projects. The project also aims at publishing lessons learned about pilot cases implemented in the country, in the form of articles published in social and environmental reviews. It should be noted that writing articles in French may be encouraged to achieve a greater impact at the national and regional levels.

Finally, Knowledge sharing activities will be organized between the miners and stakeholders of the different target mining areas by setting up learning trips from one location to another, in which they will be able to share experiences.

Expected outcome: The ASGM sector is better managed through the strengthening of communication and knowledge

Expected outputs

Output 4.1 Knowledge sharing and public outreach of the ASGM sector in the country is fostered

The communication strategy will be designed by the national communication manager in coordination with the project manager. The main objective of the different campaigns will be to raise awareness about the mercury risks, but at the same time to promote the inclusion of the ASGM operators in the formal economy and the perception of the public.

Specific campaigns will be dedicated to local mining communities and the risks that arise with mercury pollution. Besides, the campaigns will try to disseminate the lessons learned and the best practices achieved from successful experiences in the pilot mining sites. The national written, radio and internet media will be regularly mobilized to report on the results of the project.

Various audiences are considered for a successful communication campaign: the public in urban areas, the mining communities exposed to mercury and the other professional users of gold produced by the national ASGM sector such as traders and jewelers who are also exposed to the risks of mercury.

The knowledge acquisition will be improved by real experience sharing, either on the field, between miners and other actors involved in the activity or by networking with other actors between the different target mining areas. During the project, gatherings will be organized between miners of the different regions of the country to promote exchanges about their progress on the adoption of mercury-free techniques and any related issues they may face.

The main objective will be to open the capacity and create opportunities to collaborate between actors of the different mining regions in the country on the formalization and promotion of good mining practices and to foster the official representation of the miners at the national and departmental landscape levels.

Specific activities:

Activity 4.1.1 Design and deployment of the projects? communication campaign, including the production of specific communication campaigns and materials such as posters, brochures, radio spots, internet campaigns and others.

This activity will comprise the production of outreach materials for the project at the national level. The communication materials will be differ depending on the targeted audiences. All materials will be written in French to favour the dissemination of information to other neighbouring countries.

Activity 4.1.2 Impact monitoring, evaluation, and adaptation of the different communication campaigns

This activity will try to measure the impact of the different communication campaigns developed during the execution phase of the project, and will adapt the outreach materials depending on the success achieved.

Activity 4.1.3 Organization of a exchange trips among miners and other stakeholders, with visits to innovative ASGM sites combined with workshops on knowledge sharing.

This activity will take place at the final years of the project execution phase. It will consist of a series of gatherings where miners from different regions will be able to share common experiences and exchange information and knowledge about the ASGM practices within their communities.

Output 4.2 The project contributes to the planetGOLD knowledge platform and events organized by the planetGOLD global programme.

To provide input into the monitoring and evaluation of the planetGOLD programme, the project will provide regular reporting to the global project on key indicators, activities, and areas of progress. Furthermore, the project will also actively participate in various internal programme-wide coordination events, to enhance ongoing communication and knowledge sharing among the projects of the planetGOLD programme.

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

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

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

In sum, the project will:

- Participate in a virtual inception/ implementation orientation with global program staff

- Send at least one representative to each Annual Programme Meeting

- Have project managers attend bimonthly programme coordination online calls

- Have project managers participate in regular (~quarterly) Programme Advisory Group (PAG) calls

- Adopt stakeholder engagement strategy consistent with programme guidelines

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

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

- Impact of Access to Finance for the ASGM Sector (Infographics/Case studies): Infographics documenting the impact of access to finance to artisanal miners and cooperatives, including finance model chosen, data submitted to financial entities, total amount of financing disbursed, repayment rates.

- Lessons learning in implementing mercury-free technology (Video): This video will seek to specifically document how the project?s technical assistance adapts to the realities of ASGM actors in the Republic of Congo to identify the appropriate technologies and incentives for sustaining their use. On the narrative, the report should include the initial ore assessment, rationale and final design, total throughput, gold recovery rates, uptake by miners, and associated costs, etc.

The project will share information with the planetGOLD knowledge platform through various communications means, such as technical briefs, blogs, news articles, videos, or photographs. This will include publication of at least one original blog article per year on the planetGOLD website. These activities will be coordinated with the global programme to ensure maximum added value based on existing resources produced by the programme.

For reporting purposes, the project will submit data once per year to the global project on:

1) The programme level indicators:

- amount of mercury avoided
- amount of finance mobilized (disaggregated by gender)
- amount of mercury free/ responsible gold sold to formal markets
- number of beneficiaries assisted in formalization by the project (disaggregated by gender)

2) Additional global environmental co-benefits for which the project has set targets.

3) Key achievements on project-specific outputs and activities, using the templates provided by the global programme, including reporting on efforts to ensure that all planetGOLD beneficiary mining entities conform with the planetGOLD Criteria.

The project will also provide narrative reporting (quarterly) to the global project on key activities and areas of progress toward achieving the programme and project-specific indicators, using a template provided by the global programme.

Under this output the project will:

- Participate in a virtual inception/ implementation orientation with global program staff

- Send at least one representative to each Annual Programme Meeting

- Have project managers attend bimonthly programme coordination calls

- Have project managers participate in regular (~quarterly) Programme Advisory Group (PAG) calls and attend or delegate attendance of relevant staff to ad hoc PAG subcommittee meetings.

- Adopt stakeholder engagement strategy consistent with program guidelines

Specific activities:

Activity 4.2.1 Participate in planetGOLD Knowledge sharing activities and events

This activity will contain all actions related to the participation in the global community of knowledge from the planetGOLD programme, including the participation in online meetings and gatherings, in-person meetings and exchanges of information between project participants.

Activity 4.2.2 Produce knowledge products from Components 1, 2 and 3

This activity will be related to the creation of outreach materials from project components 1, 2 and 3 specifically designed to be shared at the international level through the planetGOLD web platform.

Activity 4.2.3 Contribute to the planetGOLD knowledge platform and programme communication activities

This activity will help the dissemination of planetGOLD media content through the social media accounts from the project.

As it has b een already mentioned, the project planetGOLD Congo project is a country child project of the planetGOLD global programme. In this respect, the country child project will benefit from the global component of the planetGOLD programme, which provides support, guidance and coordination to all current country child projects. The mutual benefits between the country child projects and the global programme are focused on three main aspects: Coordination and monitoring activities, communications at the international level and knowdlege management. More specifically, table 3 (below) summarizes the interaction between the global and child project under the programme.

Country Project Activities	**Global Project Activities**
Coordination and Monitoring	

Include planetGOLD programmatic indicators in results framework and submit data once per year to the global project for these indicators as well as other information on project-level achievements per project-specific log frames	Produce annual progress report for programme that includes narrative as well as quantitative reporting from all projects on achievement of project level and programme-level indicators
Provide narrative reporting quarterly to the global project on key activities and areas of progress	Produce quarterly summaries of key activities and progress across programme for dissemination to PSC and Programme Advisory Group
Participate in inception/ implementation orientation with global program staff	Organize and facilitate inception/implementation orientation for country projects to provide clarification on cross-programmatic coordination and knowledge sharing activities
Project managers attend bimonthly programme coordination calls	Organize and facilitate bimonthly programme coordination calls
Project managers participate in quarterly Programme Advisory Group (PAG) calls, and attend or delegate attendance of relevant staff to PAG subcommittee meetings	Serve as secretariat to PAG, organize and facilitate quarterly PAG calls and subcommittee meetings
Ensure that all planetGOLD beneficiary mining entities conform with the planetGOLD Criteria for Environmentally and Socially Responsible Operations through review of the planetGOLD Environmental and Social Risk Assessment Report and the Mitigation Report	Further develop, disseminate, and socialize the planetGOLD Criteria for Environmentally and Socially Responsible Operations Assist country projects to access existing trainings and resources to implement these criteria
Adopt stakeholder engagement strategy consistent with program guidelines	Elaborate and disseminate overall stakeholder engagement guidelines for programme participants
Communications	
Develop project strategy for communications and stakeholder engagement in alignment with global communications strategy	Further refine and disseminate global programme communications strategy, including recommendations for approach and messaging
Utilize planetGOLD country logo and brand assets for all communication materials	Disseminate suite of planetGOLD country logos and brand assets (templates for fact sheets, reports, presentation slides, event banners, etc)
Adhere to planetGOLD style guide and messaging guide in production of external materials, adapting global messages to national context	Disseminate style guide and messaging guide documents to all child projects
Share and store both raw and edited photo files, video files, graphics, and other visual assets in a timely manner with the global project via a shared Google Drive for global promotion and dissemination	Create communications products to promote responsible ASGM at the international level and stories of success or lessons learned among country projects

Country project communications managers participate in programme communications network, including regular calls, digital communication platforms, trainings, and notification to the global project of significant comms-related activities or story leads at country level	Facilitate programme-wide communications network, tools for collaboration, and plans for cross-programmatic communications activities
In years when the APM is held in concert with the GF, also send the communications manager to attend the GF, and the communications network side meeting for the APM	Organize and facilitate the planetGOLD communications network side meeting for the APM
Publish at least one original blog article per year on planetgold.org, notifying global project for incorporation in global editorial calendar	Maintain global editorial calendar and support country projects in publishing original content on website and other planetGOLD communication channels
Knowledge Management	
Send at least 1 representative to each planetGOLD Global Forum (GF)	Organize and facilitate the planetGOLD Global Forum every two years for exchange of lessons learned between child projects and other ASGM stakeholders
Send at least 1 representative to each Annual Programme Meeting (APM)	Organize and facilitate the planetGOLD Annual Programme Meeting each year
Country project subject matter consultants (finance, gender, technology, etc.) participate in regular (~quarterly) knowledge exchange meetings/networks	Organize and facilitate regular (~quarterly) knowledge exchange meetings/networks for subject matter experts
Share relevant (non-confidential) project materials, approaches and documents that may provide relevant information or serve as examples/models to other country projects. Examples of such material may include information on selection of Hg processing systems; due diligence pilot results; training materials of common interest (e.g. gender in ASGM).	Facilitate the sharing of relevant information and materials across all child projects and develop original knowledge products or organize knowledge sharing opportunities on key gaps or areas of interest across the programme based on inputs received from country projects.
Ensure that all public facing documents produced by the country project are either uploaded to the planetGOLD website or link is provided if the document is housed elsewhere	Manage knowledge repository and broader knowledge sharing via the planetGOLD website, email listserv, and other dissemination channels.

Table 3: planetGOLD Global and Country Level Activities. Source: planetGOLD global programme

1.A.4. ALIGNMENT WITH GEF FOCAL AREA

This project is directly aligned with the Chemicals and Waste Focal area, Industrial Chemicals Programme (Programme 1) which seeks to eliminate or significantly reduce chemicals subject to better management, as in this case of mercury in the framework of the Minamata Convention. The relevant focal area element is CW-1-1: Strengthen the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination. A specific objective within the Chemicals and Waste Focal Area, programme 1, is the reduction and elimination of mercury from the Artisanal and Small-Scale Gold Mining Sector. The planetGOLD programme will contribute directly to this objective, building upon the GEF-6 planetGOLD programme.

The project components address the four core problems identified by the January 2018 UNEP national synopsis of the ASGM sector in the Republic of Congo (UNEP Synopsis) and integrated into the December 2019 National Action Plan (NAP):

- The illicit usage of dangerous chemical products in the sector,
- The physical and biological degradation of ecosystems,
- The shortage of regulatory dispositions to improve the sector,
- And the lack of financial access, or financial autonomy, for miners to adapt their methods to mercury-free gold production.

The project?s strategy and components also align with the National Development and Environmental Government Strategies, especially the National Development Plan, the National Policy for the Development and Promotion of Handcraft, and the National Action Plan for the Environment.

At the same time, this programme proposes a few adjustments to the 2019 NAP. The following areas had been properly identified by the NAP though with lower prioritization:

- An anticipation of the ASGM sector economic growth due to an exponential rise of gold prices since the beginning of the COVID pandemic. The UNEP Synopsis and the NAP estimated the number of active artisanal miners at 5,275 individuals, the number of mining sites at 221, and the annual gold production at 14,95 kg.

However, these figures are extrapolated from a UNDP survey conducted in 2012. It is very likely that the number of production sites and artisanal gold miners have grown more since the last ten years. Therefore, this project considers the sector?s rapid growth, as identified by the NAP, especially since 2015, boosted by the surge of international gold prices since April 2020 due to the pandemic crisis.

- An enhanced focus on semi-mechanized operations. The 2019 NAP noted a rapid extension of semi-mechanized operations, most often conducted by small foreign ventures, especially in the Departments of Kouilou, L?koumou, Cuvette-Ouest and Sangha, while acknowledging a severe lack of clear information and data on this type of production.

The current understanding of these operations in the sub-region is that they appear to be a major user of mercury in the ASGM sector, and possibly a major provider of mercury to smaller operators as well.

This project takes into account the role of semi-mechanized operators as a large mercury user and as a major vector of risk in the potential introduction of mercury into presently mercury-free artisanal mining sites.

- An enhanced focus on organizational ASGM production systems. The first project component proposes to set the improvement of the inner organization of artisanal gold miners as a critical lead for operators to formalization and to the possibility of up-taking mercury-free technologies. More broadly, the focus on organizational production systems is another way to anticipate the sector?s rapidly growing attractiveness by proposing adaptive structures to miners: associations, cooperatives, or any other forms of financial, labor or equipment pooling.
- An enhanced focus on data collection and updates. Policymakers clearly lack information to measure the scope of mercury-induced environmental impacts and to raise awareness to local stakeholders.

Project component 4 proposes that robust data collection and dissemination will be necessary to inform operators, communities, value chain stakeholders and policymakers. Data is critical to the proper triggering of a multi-stakeholder problem analysis, which would lead to information sharing, advocacy, and policy reforms.

1.A.5. INCREMENTAL / ADDITIONAL COST REASONING AND EXPECTED

CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDFC, SCCF, AND CO-FINANCING

With the support of the GEF Trust Fund, the project will provide incremental funding for formalization, access to finance and reduction of mercury use in ASGM by building on past and current mercury reduction initiatives being implemented in the region. These initiatives include the National Action Plan for the reduction of Mercury in the Republic of Congo funded by GEF. The project has set the ground to demonstrate the concept that mercury-free technologies are feasible in the national ASGM sector.

The project will provide support to a more coordinated effort between various government ministries, organizations, and stakeholders. The Project Steering Committee (PSC) will host an annual workshop for stakeholders of the project to come together, provide inputs, share lessons learned and planned activities, and identify collective opportunities.

The project is designed to play a supportive role to national and local level actors, ensuring that they effectively continue to lead efforts in this area and providing them with the necessary resources and expertise to do so.

The project is proposed as a cost-effective way of linking together a multitude of government and non-government efforts in tackling mercury reduction, which will in the end significantly increase the impact and overall value-for-money of all these projects as duplication and redundancy is avoided, while synchronicity and alignment allow for better results.

In addition, the project will also benefit from knowledge sharing, lessons learned and capacity building materials that have been created within the planetGOLD global component, as well as any future resources created through the planetGOLD programme. Lessons learned on regional approaches such as implementation of OECD Due Diligence Guidance will provide a solid footing for engagement with responsible market players for the mercury-free gold produced through the project.

The project will support national and local actors to coordinate their efforts and will directly or partially contribute to their planned interventions identified in the NAP, including in the areas of formalization, financial inclusion, and mercury reduction. laws/regulations to incorporate provisions of ASGM/ASM formalization strategies.

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

The project boasts a few co-financing partners, including various ministries of the Congolese government, along with other national and international organizations, such as Kian Smith Refiners and ARM.

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

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

1.A.6. GLOBAL ENVIRONMENTAL BENEFITS (GEFTF)

The main environmental benefit of the programme is to anticipate the surge of mercury consumption in the Republic of Congo. It will enable the country to adopt the right knowledge, strategies and practices to address an environmental problem for which the government is currently ill-equipped, and the population uninformed.

As described in earlier sections, the project will have the advantage to start combating the use of mercury in the ASGM sector at quite an early stage when only a few artisanal mining sites are using it, and when the size and number of small-scale gold mining sites have not yet reached their full potential.

The relatively small magnitude of the gold production in the Republic of Congo compared to neighboring countries and the high connectivity between collectors throughout the different gold-producing countries of the region create a situation where the project, with its right balance between local and national scope, has the capacity to trigger a change in practices for a critical number of miners in the ASGM sector of the Republic of Congo. It will not only halt the use of mercury in sites that are already using it but above all will prevent its current rampant creep to other sites or new types of actors.

The project?s qualitative benefits will be to accurately measure the volume of mercury used in the national ASGM sector, to spread the knowledge of mercury health hazards through rural populations and gold producers and to enable the government to adapt its legal and regulatory framework to the current situation of mercury usage.

Quantitatively, the benefits will correspond to the potential reduction of mercury use in a fast-growing sector, which has only recently begun to use mercury as a standard production method. The current artisanal gold production is estimated at 156-782 kg per year, while the small-scale gold sector (including semi-mechanized) produces 830-2,600 kg per year. Based on the 1:1.3 ratio of mercury-to-gold ratio in amalgamation, this would amount to a potential release of mercury of 1.3 t to 4.3 tons per year into the environment at the national level.

Furthermore, the programme will support the current efforts (mostly engineered through the Central African Forest Initiative (CAFI) and the Reduce Emissions from Deforestation and Forest Degradation (REDD+) programme) to limit the scope of deforestation and forest degradation. As most artisanal and small-scale mining in the Republic of Congo is conducted in forested areas (Sangha, Cuvette-Ouest, Niari, L?koumou and Kouilou Departments), the project?s expected results of formalization, organizational improvement and mercury-free technology will also yield direct climate adaptation benefits to the country.

As the ASGM miners work mostly in rivers where gold deposits are located, consuming high quantities of water during the ore processing, without any special precautions, the project will benefit the country by the better preservation of forest soils and surface water quality, as well as of underground water resources.

Formalization is expected to lead miners to respect the national environmental laws and regulations to acquire legal mining documentation. Combined with the awareness-raising and the ?training of trainers? activities, the initiative will pave the road for the implementation of an ambitious ASGM national policy that will strongly contribute to stop the expansion of ASGM into protected areas, allowing for a better landscape management at the Departmental and Regional levels, positioning the sector into a positive learning curve. This is particularly true in areas where other income-generating activities may potentially be developed though currently hindered by the uncontrolled expansion of ASGM.

While this would have substantial adaptation benefits over the sites currently occupied by artisanal miners, such an approach will also encourage a stronger control on semi-mechanized sites, which often disregard environmental laws and practices, and whose impact over forested areas is much more hazardous than in artisanal gold production.

Specifically, when accompanying small-scale operators in respecting the environmental laws applicable to the mining sector, the project will entice those small-scale operators to conduct environmental impact assessments and to take corrective measures to their current practices. Local government agencies will also be more capable of monitoring these practices, as they will be able to rely on trained individuals, administration, and CSOs-staff.

Organizational and technological improvement, mostly aimed at artisanal operators who use rudimentary techniques, will yield better deposit recovery rates, resulting in higher income and enhanced mining engineering knowledge. This should have the expected outcome of stabilizing miners over their production sites, breaking their habit of working fast, recovering little and moving on to other sites, which is the main cause for mining-related deforestation.

At the policy level, the multipartite reflection platforms between miners, supply chain actors, CSOs and administration officials will generate a better understanding of the challenges and opportunities in the sector, setting up strong tools against rampant corruption and concessional mismanagement. The inventory of sector-specific problems should lead the government to support an ambitious fiscal and procedure facilitation strategy, which will draw more supply chain actors into the legal chain of custody.

It is expected that well-informed policy decisions will slowly start changing the nature of the private sector. The use of responsibly mined gold, the attraction of responsible gold buyers, and national partnerships such as with the Congolese jeweler sector will contribute to changing the reputation of the Republic of Congo on the international market. The objective is to generate a virtuous circle in the supply chain, as the risks attached to working informally will increase while more buyers and traders access the legal chain. This, in turn, should gradually increase the government?s mineral revenues and give it more fiscal space to implement and co-fund environmental initiatives beyond mercury elimination.

1.A.7 INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

Considering the challenges identified in the baseline scenario and looking at the potential negative effects of the sector?s development in the coming years, the project proposes an innovative approach that is in line with the Programme Framework Definition. By taking a holistic approach on the entire supply chain and, to a certain extent, on the environment of service and equipment providers for the formalization of the ASGM activity (including artisanal and semi-mechanized operations), it is possible to foresee a real socioeconomic contribution of the sector while reducing drastically the mercury

emissions and releases. The innovative approach also lies in the JA/LA approach which considers an inclusive approach in a defined territory (the jurisdiction), the close involvement of the local government authorities, and the consultation and participation of all concerned actors at the local level.

The potential for scaling up of the project resides mainly in the bottom-up evolution of the intervention, from the local level to a national level, including the transfer and support to policy design. In addition, there is a potential for scaling-up on the capacity building of national actors such as local civil society representatives or the local administration officers who are in contact with the mining communities. Addressing the financial sustainability of the change is also a guarantee for improved empowerment of the mining groups and realistic dissemination of the concept. The financial consideration is closely linked to the inclusion in legal supply chains, and more generally, to the formalization and in the inclusion of the ASGM activities in the formal economy.

As a member of the International Conference of the Great Lakes Region (ICGLR), the Republic of Congo is also entitled to use the tools and the regional certification mechanism for the ASGM produced gold. As such, this would enhance the country?s capacity to become compliant with the OECD Due Diligence process and propose green-flagged sites for responsible gold production.

The main aspects that are seen as key factors for success are as follow:

1. Considering lessons learned by the mining administration, proposing tools for the strengthening of capacity and knowledge management of the sector, and a facilitated process for legalization of the ASGM activity and commercialization of the gold.
2. Taking into account the social aspects of the activity, including the role of women (and their capacity to participate in decision-making levels of organizations), economic opportunities for indigenous communities and other vulnerable groups, addressing the negative effects of child labour, as well as other environmental impacts that come along with the use of mercury, namely deforestation and inadequate water resource management.
3. Having a multi-sectoral approach, that includes all sectors that are related to ASGM such as forestry, water, health, and environment.
4. Working at different levels and landscapes, creating bridges between the local stakeholders and the national management of the sector.
5. Including all stakeholders in the process, especially those who have economic interests in the production and commercialization, who might also be attracted by legal options.

The project?s innovative approach introduces the capacity to take the outcomes obtained during the pilot projects as inputs to feed a national methodology for the formalization and support of the sector. This allows for full involvement of the concerned administration and the capacity to perform on-the-job training and learning.

Another part that may generate innovative benefits is the combination of supporting the import of equipment with supporting the local crafting, relying on local economic actors and vocational training institutions and universities to promote quality employment and support the development of mining

clusters. This should be adequately combined with the work on the financial services to boost the uptake of cleaner production systems, notably through contributions from supply chain actors.

Part of the proposed innovative strategies is meant to foster sustainable changes and the capacity of dissemination of the concept. Heavily relying on the training of trainers (including field mining officers, civil society representatives and private operators), and on the financial support by the State and supply chain private actors, the programme should create conditions not only for strong post-programme support to the ASGM producers but also, for a shift of mentality among the semi-mechanized producers.

The work at different territorial scales should also include a regional approach with neighboring countries that display similar trends in the activity, especially in the case of trans-boundary effects, like with Cameroon, Gabon, Equatorial Guinea, and Central African Republic. Such approach may include, strategic aspects, fiscal regimes (to reduce fiscal dumping competition), financial services from the private sector, and global integration in national legislation.

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[4]The ICMGP is a large international academic conference. Many mercury researchers from various fields attended the conference to describe their recent research findings. The ICMGP conference has been held every 2-3 years since the first meeting in 1990. The next ICMGP (15th) will be held in 2022.

[5]Multilateral environmental agreements on chemicals and waste, notably the Long-Range Transboundary Air Pollution Convention and Aarhus protocol on heavy metals, Basel, Rotterdam and Stockholm Conventions, the Montreal Protocol and later the Minamata Convention, as well as other relevant international commitments and policy frameworks, including the Strategic Approach to International Chemicals Management (SAICM).

[6]IOMC: a cooperative agreement among FAO, ILO, UNEP, UNIDO, UNITAR, WHO, OECD, UNDP, World Bank, established in 1995 promoting coordination of the policies and activities to achieve the sound management of chemicals in relation to human health and the environment. The last 10 years focused on the priorities of the Strategic Approach to International Chemicals Management (SAICM) framework.

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[12] https://web.unep.org/globalmercurypartnership/our-work/artisanal-and-small-scale-gold-mining-asgm
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[21]UNEP 2019 Guidance on the management of contaminated sites https://www.mercuryconvention.org/Convention/Formsandguidance/tabid/5527/language/en-US/Default.aspx
[22]In WHO 2019, Introduction to Strategic planning for implementation of the health-related articles of the Minamata Convention on Mercury. https://apps.who.int/iris/handle/10665/329449.
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[39] Walle, M. and Jennings, N., 2001. "Safety and health in small-scale surface mines: A handbook" ILO Working Papers 993662273402676, 92-2-112475-4[ISBN], International Labour Organization.
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[51]CHAMBERLAIN, W., and ROGERSON, C. M., 2012. Agricultural land grabs in Africa: Scope, patterns and investors, African Journal of Agricultural Research https://doi.org/10.5897/AJAR12.939 It points out that in RoC more than all arable land is potentially allocated to overseas investment projects.

This means that to accommodate all the plans from foreign investors, land currently under permanent grazing (mostly communal grazing grounds) and possibly forests, will have to be converted into crop land.

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[53] Voluntary Partnership Agreement ratified in 2013. See more at: http://www.apvflegtcongo.com/index.php

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[55] See VPA Congo annual implementation reports: http://www.apvflegtcongo.com/index.php/telechargements

[56] Facebook page of the Ministry of Forestry Economy

[57] R?publique du Congo, Revue du secteur minier. World Bank 2012

[58]CongoEco n?17, April 2020

[59]The RoC joined EITI in 2007 and published its latest report in 2018, See https://admincnitie.pythonanywhere.com/

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[69]Trade Map provides indicators on exports performance, international demand, alternative markets, competitive markets, as well as a directory of importing and exporting companies. Trade Map covers 220 countries and territories and 5,300 Harmonized System products. Monthly, quarterly, and annual trade flows are available from the most aggregated level to the tariff line level.
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1b. Project Map and Coordinates

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

Introduction

The Jurisdictional /Landscape approach (JA/LA) strongly relies on the involvement of the local government authorities and the engagement of concerned entities that have been included in the stakeholder mapping exercise (see Appendix 7). The report evidences the critical role of local

representations of the concerned public administrations and the local public governance. In the Republic of Congo, the Department scale seems the most appropriate for the selection of the jurisdictional targets, as they represent the local government and at the same time are in connection with the national level. There are 6 Departments with a significant ASGM activity: Kouilou; Niari, L?koumou, Bouenza, Cuvette-Ouest and Sangha. Indeed, the concerned Departments have only a small proportion of their area affected by the AGSM activity. In each Department, formally led by the Prefect, there are representatives of the Ministry of Mines and several other important administration services such as the Ministry of Health, Ministry of Labor, and others.

Considerations on specific features

The baseline assessment, despite the lack of recent data on the ASGM sector, still provides valuable insights for the selection of the most interesting targets, especially the description of the ASGM sector. The analysis of the past reports on the sector, and the current state of the mining authorizations provide a good idea when plotted on a map (Annex E). Obviously, medium-size authorizations (?Autorisations de prospection et d?exploitation semi-industrielles?) overlap with the artisanal activity in the Departments of Kouilou, Niari, L?koumou, Bouenza, Cuvette-Ouest and Sangha to the North. It is also clear that the ASGM activity spreads over the borders, and mining groups do extend their works in Cameroon (Sangha Department) and Gabon (mostly Cuvette-Ouest, Niari, and Kouilou Departments).

Taking the geographic coordinates of each claim, some of them are clearly extended over neighboring countries. In the perspective of the JA/LA, it will be important to integrate a regional approach, involving the Republic of Congo, Cameroon and Gabon, all countries being part of the CEMAC (Communaute ?conomique et Mon?taire de l?Afrique Centrale).
In terms of semi-mechanized operations, in the past 5 years at least 116 mining authorizations have been awarded, some of them with areas over 1,000 km^2. As the baseline study leads to the conclusion that the semi-mechanized operators may be much heavier mercury users than the artisanal miners, it will be critical for the success of the project to address this feature and take this factor into account including this type of operators in the selection of the target areas.

Another dimension is also revealed by mapping the ASGM areas (as mapped by the UNDP 2013 study), and the current state of awarded large-scale mining permits. It shows that most permits overlap with existing ASGM areas, creating potential conflicts between both types of activity. The JA/LA will need to tackle such potential issues, especially in the perspective of the establishment of legal/legitimate and responsible supply chains.

The same exercise can be done with the industrial forestry concessions map, which clearly shows that almost all the ASGM centers of activity take place within forestry concessions, a potential source of conflicts and legal issues for the future selected mining groups. Such issues will need to be addressed more in detail with the JA/LA approach during the selection of the pilot sites and monitored in the multistakeholder participative local platforms.

One of the most critical parameters to be addressed in the selection of the targeted areas is related to mining in protected areas, a disengagement criteria in the planetGold programme. The map of the protected areas and the ASGM zones (see Annex E) provides a good overview of the potential risk. The map displays the hunting concessions, RAMSAR sites, National Parks and Absolute Protection Areas.

It is possible to appreciate that 3 ASGM areas display significant penetration within National Parks: in the Kouilou Department with the Conkouati-Douli RAMSAR reserve and the Dimonika Biosphere reserve, in the L?koumou Department with the Qgoou?-L?k?ti National Park, and in the Cuvette-Ouest Department with the Odzala-Kokua National Park. Although not all ASGM activity occurs in such protected areas, it will be necessary to map the actual extension of the ASGM in these protected areas and address such issues at the Department and National levels.

The targeted Departments

The selection is based on features regarding the current level of ASGM activity, as described by the public authorities and staff in charge of the administration of the sector, and by the local team who developed the NAP for Congo.

The selection considers the connection between the miners and the local communities, including the involvement of vulnerable groups like indigenous groups and women, citing potential conflicts over the resources in the area, and with other economic actors located on the mining areas. Other criteria include practical features such as the year-around accessibility and the level of security.

Below it is a description of the different jurisdictional areas have been highlighted during the PPG phase and reported in the project map (Annex E):

- **Bouenza Department** (capital city Madingou): despite the smaller number of active sites, this Department is accessible all year round and concentrates a significant community of Burkinabe citizens, who are specialized in lode ore processing with mercury amalgamation and/or cyanide dissolution. In addition, operations of eluvial ore have been flagged in former reports, which indicates that miners process non-free-gold ore. This means crushing and milling steps, which in turn will require the use of mercury for the separation and recovery of the very fine particles. In this department potential pilot regions could be the area of Kingou? to the North of the Department and the area of Kimba, extending in the neighboring Department of Pool. All these mining operations take place in the Ndou? watershed.

- **Kouilou Department** (capital city Loango): The mining areas of this Department display a high level of activity at the artisanal scale and the semi-mechanized scale. It is a place where forestry operators, semi-mechanized and small-scale actors overlap, with issues regarding the resources. The types of operations are on alluvial, eluvial and primary ore, which also increases the potential use of mercury. Recent observations from the project?s team showed cyanide usage by semi-mechanized operations. Local communities are fully involved and integrated in ASGM activity, The access is possible all year round, but more difficult in rainy seasons.

- **Sangha Department** (capital city Ouesso): Although quite distant from Brazzaville, the Sangha Department displays specific features of interest for the project, namely an important number of semi-mechanized operations, the forested natural environment, and the connection with operations that take place in Cameroon. Indeed, there are strong indications that intense exchanges do happen over the border, including sales of gold. Here the activity is mainly eluvial, being Baka communities quite present in the area. Many mining sites can be potentially targeted for the project, all working on tributaries of the Dja River, which traces the borderline between the two countries. In this region, the potential risks come from conflicts between informal ASGM groups and semi-

mechanized operators, who are often accused of bad environmental and social practices. Mercury usage by these operators may be the main target for this department.

- **Western Cuvette Department** (capital city Ewo): The region is one of the richest in terms biodiversity and natural resources. The Odzala-Kokua National Park, a UNESCO World Heritage site is an excellent example of pristine tropical forest in the Congo Basing region. However, in the recent years the boundaries of the park have been threatened by illegal activities from ASGM miners attracted by the discovery of gold alluvial deposits. In this respect, the project has targeted the region to explore the potential synergies between the project intervention and the already ongoing natural conversation efforts made by the national authorities.

As highlighted in the alternative scenario section, a complementary assessment will be required to improve the global knowledge on the activity in each preselected department, enabling for an accurate selection of the mining areas.

Nonetheless, the JA/LA concept is based on a critical mass of committed actors for a change in a consistent jurisdiction, hence the challenge will be to explore, inform and select voluntary producers in the same watersheds, communities, and administrative subdivisions. In the case of the Sangha Department, a concrete collaboration with the Cameroonian authorities and may also reveal necessary, as a lot of activity extends beyond the border. This approach may also be an opportunity to take the jurisdictional approach at an inter-governmental level.

1c. Child Project?

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

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

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

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

potential best practices for its application in the ASGM sector of other countries both in and external to the global programme.

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

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

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

At the national level, the project will support the creation of a space in which efforts of multiple stakeholders (including various levels of government, private sector, academia, and civil society) can better coordinate and streamline their efforts related to mercury reduction, so that both resources and impact can be maximized.

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

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

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Please consult Appendix 7 for a stakeholder engagement plan.

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

Because of its integrated approach, the project ?Global Opportunities for the Long-term Development of the Artisanal and Small-Scale Mining Sector? (planetGOLD) in the Republic of Congo? will feature a multi-level and multidimensional stakeholder?s mobilization. This focus translates its primary objective of eliminating the use of mercury and its secondary objectives referring to the formalization of the artisanal and small-scale mining sector (ASM), looking at the financial inclusion of ASM and the creation of responsible supply chains.

Going beyond the mining sector understood in the technical features, the implementation of the project will, among others, call on the fields of health, environment, economy, finance, administration, and management of small and medium-sized enterprises. With a wider scope than the sole circle of institutional actors, the project will seek to promote a multisector approach, bringing together actors from the ASM sector, from the value chain, equipment suppliers, knowledge, and expertise providers (CSOs, local consultancies, universities), and financial services, among others. In addition, this project will not only aim at changing the operational reality of selected pilot sites and communities, but also at creating an institutional and regulatory environment that will foster the formalization of the ASM sector in the country. Thus, it will be a question of engaging stakeholders both at the local and the national level.

In short, the panorama of stakeholders with a role to play in this project is wide. The stakeholder engagement plan appended to this project document proposes a categorization of the different actors and then, methodically, classified them into groups according to the levels of influence and interest, to define differentiated engagement strategies by project components.

From the analysis carried out it emerges that the project will only be able to achieve its results if in a timely manner it considers the interdependence and complementarity of actions of all these actors.

Before mobilizing stakeholders for concrete actions, it is first necessary to obtain their buy-in for the project, which requires communication on the objectives and conditions of implementation of the project that is targeted by type of actor. It needs to reassure the stakeholders who may express a certain mistrust with regards to such an intervention. A more detailed characterization of the communities involved will be necessary to better understand the social, economic, technical, cultural, and governance features that then will help refine an implementation strategy adapted to the context. The baseline analysis that will be carried out will also be used to refine the list of specific actors and essential resource persons, and thus to complete the engagement strategy (Output 1.1).

Periodic and ongoing engagement, both local and national, is essential to maintain stakeholder buy-in and avoid pitfalls. Participatory monitoring and evaluation activities at the local level and the consultation at the national level are two mechanisms that, among other things, should facilitate the support from the stakeholders to the project.

One of the keys to the success of this project will undoubtedly be the ability to keep the participatory and consultative frameworks alive while maintaining certain flexibility in these consultation spaces. Periodic information to and meetings of the Project Steering Committee (at least twice a year), co-headed by the Environment and Mines Departments and with the participation of the Implementation Agency, the Execution Agency and the main institutional, sectorial and civil society actors having a direct interest in the project, will also help to ensure a more fluid and homogeneous communication on the challenges of the project, the main progress, as well as the opportunities and expectations of the stakeholders.

Finally, insofar as the project seeks the engagement of stakeholders for the implementation of concrete actions or decision-making in favour of the formalization of the ASM sector, it will be key to identify and communicate their contribution to the project?s overall objectives. Giving visibility to the partner?s work and demonstrating openness and an inclusive approach could facilitate mutual recognition, collaboration, and long-term adhesion to the project from such stakeholders. Participation in events, exchange sessions between like-minded initiatives or even opportunities for field study visits should not be neglected, as it is generally perceived by stakeholders, and by the men and women miners, as a highly valued learning opportunity (Output 4.1)

While the baseline analysis (Output 1.1), as described above, should help refine the selection of specific stakeholders to engage in the project, these are some primary and essential stakeholders to be considered for the project implementation:

Stakeholder	Proposed engagement in the project

United Nations Environmental Programme (UNEP) / Economy Division /Chemicals & Waste unit	Is the Implementing Agency (IA). Will be overseeing the Executing Agency?s work. Will be participating in the Project Steering Committee. Will act as a bridge between the global PlanetGOLD programme and the planetGOLD child project in Congo. Will play a key role in making sure the overall objectives and the spirit of the global programme are followed by the country project Will facilitate partly the exchange of experiences between country level projects.
Ministry of Environment, Sustainable Development and the Congo Basin / General Directorate of Environment (DGE) [Hosts the Minamata Convention national Focal Point]	Will be the national main institutional point of contact for the project Will chair the Project Steering Committee Will facilitate and contribute to project outcomes achievement by mobilizing complementary human and financial resources (as stated in the co-financing letter) Will foster institutional stakeholders? engagement and will ensure contributions to the project from other ministries (co-financing letters).
Ministry of Mines and Energy / General Directorate of Mines (DGM)	Will co-chair the Project Steering Committee Will facilitate and contribute to project outcomes achievement by mobilizing complementary human and financial resources (as stated in co-financing letter)
Ministry of Health and Population	Will participate in the Project Steering Committee Ideally, will facilitate and contribute to project outcomes achievement by mobilizing complementary human and financial resources
Ministry of Small and Medium Enterprises, Crafts, and Informal Sector	Will participate in the Project Steering Committee Ideally, will facilitate and contribute to project outcomes achievement by mobilizing complementary human and financial resources
Ministry of Territory Decentralization and Local Development	Will participate to the Project Steering Committee Ideally, will facilitate and contribute to project outcomes achievement by mobilizing complementary human and financial resources
Ministry of Women Promotion, and Women Integration into Development	Will participate to the Project Steering Committee Ideally, will ensure the effective integration of gender aspectes throught the different project components

Local Governments	Will participate in local multi-stakeholder participative platforms Will facilitate project implementation by sharing information on local context, helping with logistics, and stakeholders? engagement Will take action to facilitate ASGM formalization of mining groups supported by the project
Miners: Artisanal and Semi-Mechanised	Will be the main objective group, key participants, and beneficiaries of the project Will give input on the risk assessment and drafting of an action plan Will benefit from and co-participate in the delivery of the project outputs in relation to formalization, mercury-free technologies, financial inclusion, responsible supply chains
Technical and Financial Service Providers	Will provide attractive and competitive technical and financial solutions to artisanal and semi-mechanised operators
Supply chain actors	Have the potential to bring more attractive and competitive market deals for miners that engage with risk-mitigation and towards responsible practices
African Centre for Environmental Health (CASE for its acronyms in French)	Will lead the project execution as a not-for-profit organization knowledgeable on ASGM and mercury-related issues, with presence in Congo

Table 4: Project Stakeholders. Source: ARM.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier; No

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The gender dimension is not only relevant to, but a critical feature of the success of the project. While women represent less than 5% of the artisanal mining population, they are a key target group of the project both to reach its objectives (leveraging women?s role in and around mining to foster general outcomes for the whole population) and as a result of specific activities (women are expected to benefit more than men from key results such as health promotion or formalization).

At a general level, the role and status of women in and around mining is determinant to the success and benefits of the project for at least three reasons:

Women are relatively more affected than men by mercury contamination, as mercury affects human embryos during pregnancy even before other health damages become obvious.

One of the institutional counterparts to the project is the Ministry of Women Promotion, and Women Integration into Development.

Formalization of ASGM operators will be particularly beneficial to women. Even if the country?s legal and regulatory environment regarding women conditions can be further improved (for example in the 1984 Family Code, as explained in the Appendix 6 on Gender Analysis), gender equality is a significant pillar of the legal framework. To put it bluntly, the condition of women under the Republic of Congo?s statutory system is much better than under the customary one. By removing the obstacles to professional formalization, and assisting miners in shifting to formal, rational, environmentally, and socially friendly practices, women should access an improved status full of new positive possibilities, especially in the realms of inheritance rights, access rights and access to credit.

At a more specific level, gender dimensions are critical to the success of the following project components:

Output 1.1 (In-depth legal, social, technical, financial, and environmental assessments of ASGM areas are completed in the targeted mining communities)

Through a multi-stakeholder survey programme and the possibility to collect data that can be disaggregated by gender, the assessment will address the issue of gender inequalities in the mining sector. Similarly, the implementation of the survey campaign will be designed to highlight the role of women in the legal, technical, financial, and environmental areas.

Examples of gender-sensitive data include, but are not limited to, the measurement of women?s power within their household, the proportion of household budget managed directly by the household women, or the effectiveness of statutory inheritance rights in the case of a woman inheritor.

Women are more represented in some sub-sectors of ASGM operations than others. For example, women tend to dominate what is sometimes described as the ?peri-mining economy?[1], which include petty trade, equipment tools and cooking services[2].

Activity 1.2.1 (Establishment of Departmental multistakeholder platforms in each targeted mining community)

One objective of the multilevel stakeholder?s platforms will be to ensure a fair representation of various groups, such as women, in the framework of a well-agreed grievance mechanism. Additionally,

local consultations and reflections on social breaches and human rights violations do include an analysis of gender inequalities, their drivers, and their consequences.

Output 2.1 (ASGM organizations have access to financial services from the private sector)

The financial capacity of the mining organizations will be addressed as this is a major bottleneck commonly faced by mining corporations. A specific set of activities will be designed to promote internal saving mechanisms, in which women may have important management roles.

Output 2.2 (ASGM stakeholders are knowledgeable on due diligence-related requirements and responsible mining initiatives)

Special attention must be given to the role of women along the entire supply chain to support the uptake of legal, environmentally, and socially friendly practices. It is essential for women to be treated as valuable market actors, not only mere aid recipients. More generally, it is expected that women empowerment within the ASGM sector could spearhead positive leads and synergies that could be applied to other sectors and programmes.

Output 3.1 (Mercury-free processing equipment is available to selected artisanal mining communities)

During the needs assessment, the specific needs of women that practice mining activities will be looked at. Consequently, the project will search for solutions that foster their role or increase their mining production. The activities to be developed will pay attention to the inclusion of different types of tool users, particularly women and other vulnerable groups. Specific technical and safety training session will be considered and implemented.

Output 4.1 (Knowledge sharing and public outreach of the ASGM sector in the country is fostered)

The main objective of a better communication, information and knowledge sharing will be to raise awareness about mercury risks, especially for women and children, and the perception of the risks by the public. Specific campaigns will be dedicated to local communities and the risks that may rise with mercury pollution. The involvement of the ?Women Houses? created in 2019 (see Appendix 6 Gender Analysis) in this multi-stakeholder platform is seen as necessary to improve the positive impacts on the civil society.

Output 4.2 (The project contributes to the planetGOLD knowledge platform and events organized by the planetGOLD global programme)

The project team will strive to contribute to show the evolution of the situation, the change of practices, the successful achievements, highlighting women in these events, exchange platforms, social networks.

The Appendix 6 on Gender Analysis further describes the status of women in the Congolese ASGM environment, as well as the political and economic factors that constrain it. Furthermore, the aforementioned appendix presents a more in-depth description of the gender measures in the project?s outputs and outcomes.

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[1] The ?peri-mining economy? encompasses all economic activities, which draw their profits from the presence of a mining site, but which profits are not directly correlated to the mining site?s production.

[2] In the traditional organizational set-up, the head miner must provide one daily ration (with meat) to each digger under his direct supervision throughout the operation, in addition to his share and salary.

He usually outsources such service to a group of local women. Cooking services can amount to up to a third of a site?s operational budget.

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;

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.

The involvement of the private sector in project?s design and implementation phases is of great importance for a successful long-term project development. First, value chain actors are often the origin of mercury sourcing for artisanal miners. Secondly, some operators, especially of the semi-mechanized type, are the most systematic users of mercury in the production line. Third, value chain actors, especially local ones, constitute a primary access point to identifying and reaching out to mining producers in a largely informal, if not invisible economy. In this sense, value chain actors are both the project?s targets (beneficiaries) and relays (facilitators).

Undeniably, the private sector in the Congolese gold economy is far from being monolithic. The project should resolutely avoid bundling all profit-seeking intermediaries into one large ?private sector? category to invite into reflection and decision-making platforms alongside government agencies and civil society organizations. Instead, one key feature of the strategy will be to identify coherent sub-groups and treat them separately. The following market actors have quite different roles and interests in the ASGM mining sector:

1. **Semi-mechanized operators (SMOs)** are largely autonomous and tend to use mercury as a standard operation in the production process when separating the gold contained in the ore concentrates. Bringing equipment, capital, and workforce from abroad, especially China, they work generally on legal exploration permits where they illegally perform semi-mechanized operations to avoid mining regulations (especially social and environmental ones).

   They can also stretch out of their concessions into customary artisanal mining sites, causing social conflicts. A typical SMO uses a few excavators to load 100-250 m^3/day of mineral into large sluices, which produce a concentrate. Sometimes, a crushing and grinding station processes the larger pebbles of the ore prior to the sluicing/washing station. After washing, the SMO mixes the

concentrate with mercury for amalgamation[1]. Reportedly, most SMOs bring their own mercury directly from abroad. In addition, artisanal miners located near their sites buy mercury from them to perform their own amalgamation. SMOs represent a group of only few well-connected companies, some of them permit incumbents for repeated years, others waiting for the right investment/permit opportunity, or simply trading in permit ?flipping?. SMOs are direct programme targets.

2. **Local aggregators and traders:** typically sponsor ASGM miners through pre-financing and buy-gold schemes. Located in all mining towns and villages, often labeled as ?local buyers?, ?collectors?, ?merchants?, ?traders?, they are not formally organized, only a few of them bear a valid trader?s card, but are easily identifiable at the local level. They are also highly connected to one another, including the ones located different provinces and departments, and therefore represent a great vector of practice dissemination. Because they provide seed investment to most artisanal sites, they also provide the tools and equipment used by the miners, which, in the case of primary or eluvial deposits, also includes mercury. Many of them, though not all, are West African nationals. Their extensive knowledge of local pricing, mining, supply logistics and financing make them an unavoidable notch in the value chain. To miners, they provide the only available and attractive channel of commercialization, equipment supply and financing.

3. **Service and equipment providers** are also merchants but rather specialized in the sourcing and sale of mining equipment. Their sales range from non-mechanized tools (shovels, crowbars, sluices) to small and medium size mechanized equipment (water pumps, generators, small-scale installations). Even if, at the local level, this group coincides very often with buyers and collectors who also run local businesses. To think of them as a distinct category is convenient for the project?s strategy. They could act as the vectors through which mercury-free technological solutions may spread into and outside of the selected mining sites. In addition, local service and equipment providers often collaborate with wholesale equipment importers based in Brazzaville or Pointe-Noire, although initial assessments have failed to identify them.

4. **Exporters** are large traders who operate mostly informally at the sub-regional level. They can be located either in the Republic of Congo or in neighboring countries from which they source gold indifferently. Buying from local traders and aggregators, sometimes from SMOs too, they usually sell to partners in the United Arab Emirates. Some of them perform legal exports from time to time. Although the programme does not aim at working with them on a daily basis, these large businesspeople exert a strong influence over the market in general and local traders in particular, and can thus act as powerful change drivers.

5. **Downstream supply chain actors** encompass those foreign refiners who buy gold from exporters and SMOs to transform and sell gold bars, and jewelers (both abroad, and in Brazzaville and Pointe-Noire) who source directly from either local traders or site managers. Some of them, especially jewelers based in the Republic of Congo, finance their own gold mining sites. It also encompasses foreign buyers who can be international traders, refiners, and jewelers.

Because of the wide differences between them, the project?s implementation team will dedicate significant energy to properly identify local value chain actors and involve them adequately in the selected pilot sites? areas. Depending on the size and influence of the actor, the approach should take a balanced use of trust-based relationship, legal compliance, and community-based conflict resolution.

Trust-based relationships are to be favored with local aggregators and traders, as those stakeholders can act as positive relays to trigger change in the ASGM organizational system, support the formalization process, and introduce mercury-free technology in the market. The project?s implementation team should keep in mind that practices will only evolve if value chain actors can diminish their marginal investment costs to finance formalization.

Tactful pragmatism and discernment should drive the task of imposing environmental compliance, particularly to SMOs. Sometimes, the current legal constraints offer more financial and administrative burdens than solutions. The project?s strategy should carefully weigh and consider discordant and converging interests in the local political economy spectrum to achieve progress.

In many cases, SMOs acquire exploration permits to exploit large land swaths and avoid writing an official Environmental and Social Impact Assessment and Environmental and Social Implementation Plan. Those exploration permits change hands and sizes continuously, adding another transactional layer in the economy. In many cases, local officials are involved in this local permitting trade. Therefore, the project may start engaging local decision-making platforms with limited achievable objectives, such as fixing the minimal terms and provisions of mercury-focused environmental benchmarks, rather than engaging in robust legal battles.

At the same time, this approach should confront the interests of permit holders to those of local communities. To most traditional landowners, the most pressing issue relates to conflict and land rights rather than mercury usage, though a well-designed health education campaign can expose mercury?s long-term hazards too. The project?s strategy should thus facilitate a solution-oriented confrontation between right holders, permit holders and local administrations. In some cases, these discussions should also involve cross-border representatives, as mining concessions often straddle international borders (see Fig. 6 and 7 below). In fact, to select one border area in the programme selection pool could foster innovative solutions for knowledge building and possible replications.

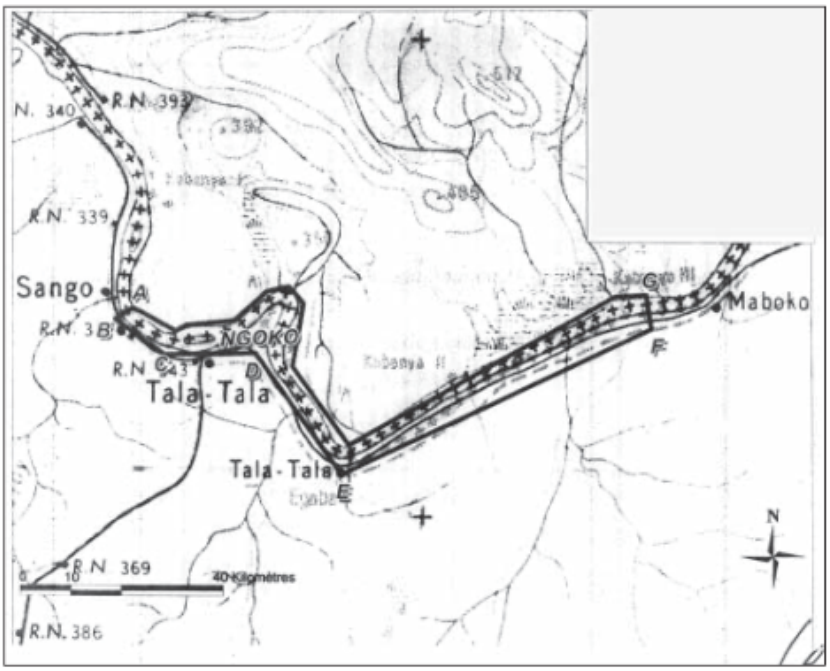

Figure. 6: Local mining permits at the border between Republic of Congo and Cameroon. Source Mining Cadaster

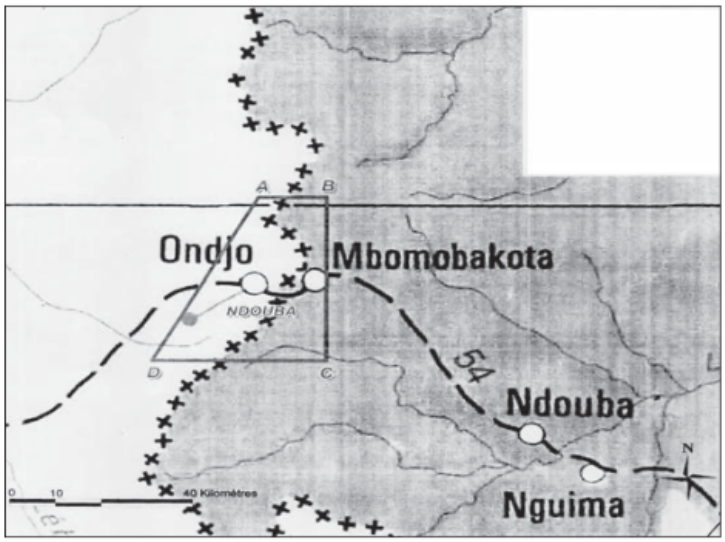

Figure. 7: Local mining permits at the border between Republic of Congo and Gabon. Source Mining Cadaster

To reach this state of dialogue and trust, an activity will be to characterize the mechanisms and stakeholders who drive, from a financial perspective, the development of ASGM operations in the selected pilot areas. A few existing professional associations can help perform this characterization.

- The National Association of Jewelers (*Association des Artisans Bijoutiers du Congo*) was created in 2007 to augment the volume of nationally sourced gold and improve local arts and crafts. Because Congolese jewelers provide significant value addition to the product, they can afford to source gold at a relatively higher price and thus represent an opportunity to involve local miners and aggregators in a positive momentum. In addition, some of these jewelers finance their own mining sites and could pilot the adoption of new technologies.
- The Association for Artisanal Mining Development (*Association d?Appui au D?veloppement de l?Artisanat Minier*) works toward easing the appropriation by miners of semi-mechanized equipment, namely sludge processors, improved sluices, dredges, etc. Presently located in the offices of the CRGM (Geological and Mining Research Center) in Brazzaville, this association is running tests to improve exploitation efficiency on the field and is willing to participate in a mercury elimination programme.
- Most local traders and aggregators do not have an organized representation platform, but they are known locally and can easily be reached out to, for example through decentralized government agencies or the jewelers association.
- The Federation of Solid Mines of Congo (*F?d?ration des Mines Solides du Congo),* or FedMines is a professional advocacy platform of industrial miners created in 2011 to discuss the national mining regulations and attract investment. Currently composed of 10 non-gold industrial mining operators (phosphate, potash, copper, and iron), it advocates for a reduction of administrative constraints in the mining sector, a review of the mining code, and proposes useful interpretations of existing regulations. In this sense, the federation can offer technical and legal assistance to facilitate the understanding and respect of norms by large-scale miners, especially regarding local content, social and environmental impact studies, or the ?social license to operate?. FedMines could be used as a relay to reach out to SMOs.

The notion of private sector engagement comprises various project implementation tasks: capacity building, dialogue and advocacy, and experimentation. Capacity building aims at identifying and leveraging key market improvements, including organizational factors, to trigger and accompany market-based formalization processes. Dialogue and advocacy should focus on finding reasonable solutions to comply with the national laws and regulations in a cost-effective manner. Finally, experimentation is a key step to subsidize the adoption of new processing practices and technologies to facilitate the uptake of improved practices.

The key opportunity to a successful programme is that the national ASGM sector is presently going through a major transition. Driven by high international prices and a steadily growing demand yet slowed down by the limits posed by the artisanal miners? rudimentary techniques and the lack of finance, especially since the beginning of the Covid-19 pandemic, market actors are ripe for testing new approaches. Therefore, their stake is critical in the design of a roadmap towards more formal and environmentally sound mining operations.

[1] The volume of mercury used in such type of operation often exceeds the standard 1.3:1 gold to mercury ratio.

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):

OPERATIONAL/DELIVERY RISKS		
Risk	Rating	Risk Mitigation measures
Political instability and shifting priorities	medium/high	? The institutionalization of the project through the National Steering Committee will be encouraged, limiting its reliance on any one or set of individuals who may be susceptible to replacement due to political changes. ? Introduction of significant project co-funding, which will ensure strong national ownership of programming at the national level. ? Project implementation focused on ASGM miners as core beneficiaries, employing economic benefits as a major driving force will reinforce the project status towards greater accommodation of ASGM in host-government policy. ? The project will be articulated at different scales, and on different mining regions, reducing the risks of complete activity halt.

Lack of buy-in by the government	low/medium	? The jurisdictional approach, which will enable the project in establishing strong partnerships with host-government, will be optimally placed to identify and manage shifts in commitment to the core project objectives. ? The project will engage government bodies at regional and national levels during the project?s development and implementation phases, relying on the cooperation and integration of mechanisms such as the ICGLR one, the CEMAC vision, and Minamata secretariat to minimize risks. ? The project will rely on showcases from the pilot sites to mobilize higher administrative and political levels and to turn the results into political opportunities.
Local support is not provided for project needs	medium/high	? To have clear co?finance agreements and ensure country commitments to the established agreements. ? To work with a variety of different stakeholders, which minimizes the risks of lack of support. ? To work with stakeholders that have clearly identified interests in supporting the projects? goals.
Lack of transparency in financial management and distribution	low/medium	? Execution coordinated via the steering committee to secure financial management and transactions. Regular reporting of disposed funds against activities completed. ? Periodic audits of the project and field verification of implementation of activities and procurement.
Vested interests	low/medium	? A programmatic approach that minimizes discretion and personality driven interventions that will come from use of the Jurisdictional Approach may reduce the impact. ? The project will seek to engage all legitimate actors, identified during the implementation phase. ? The project will do due diligence on all key partners.
TECHNICAL RISKS		
Risk	Rating	Risk Mitigation measures

Introduction of new technologies may threaten jobs	low/medium	? The project will seek to promote adoption of technologies that are accessible (financially, geographically, culturally etc.) and where possible procured locally. ? The project will execute and exhaustive profiling of the national ASGM landscape at the beginning of the project?s life. The collective project design and decision-making adoption with beneficiary communities will minimise risks of marginalizing these actors. ? The project will work closely with the national government to firmly establish its role as a regulator. ? Alternative income strategies may be implemented as part of the holistic Jurisdictional framework.
Technical assessment inadequately characterizes the sites and needs	low	? Engage national and international experts with assessment experience on technical matters at similar environments. ? The project engages with all technical stakeholders from the pilot sites and shares experiences from the global planetGold knowledge platform. ? All technical decision will include validation by the miners and other beneficiaries, coming from participative tests and agreed in written terms.
Government capacity to implement technical interventions	medium	? Capacity building activities are planned to involve governmental agencies and local trainers. ? A rapid survey conducted during the PPG phase, of locally available capacity confirmed the existence of strong technical knowledge in the country at the capital city level. A more in-depth assessment will be conducted during the initial stage of the project.
Local support is not adequate for project need	low/medium	? Capacity building activities are planned and focused on actors (private sector, CSOs, CBOs) involved in the mining areas.

Lack of buy-in by the private sector	medium	? The programme will engage private sector parties through their professional associations at all stages of the implementation. ? Part of the communication strategy will engage stakeholders in a regular manner and will perform various activities to strengthen their involvement. ? Attention will be paid to identify attractive conditions for supply chain actors and service or equipment providers.
Lack of buy-in by miners	medium	? Miners will be engaged through their associations, CSOs, community-based associations CBOs and ultimately through government institutions during the projects? development and implementation to encourage them to progress. ? Part of the communication strategy is dedicated to knowledge sharing to foster interactions around better practices.
ENVIRONMENTAL SAFEGUARD RISKS		
Risk	Rating	Risk Mitigation measures
Environmental assessment inadequately characterizes site	low	? Engagement with national and international experts with assessment experience on technical matters in similar circumstances to adapt technics with the local mining environment. ? Implement assessment involving various stakeholders and cross-check collected data. ? Perform a participative evaluation of environmental impacts
Climate Change adversely impacts the environment / **Changes in the environment**	low	? The project will track changes in the environment due to climate change impacts and adapt accordingly. ? The choice of the pilot sites will consider the climate change vulnerability of the mining environment (repeated flooding, prolonged droughts...)

Disregard for the environmental and health impacts of the mercury use	low	? A robust awareness raising campaign will engage key stakeholders (from elected officials to local administrations, CSOs, CBOs) involving equally men and women, and will involve local measurements of pollution levels and the health impacts on target communities. ? Awareness of environmental, health and production quality issues will be raised among all actors involved in the chain
SOCIAL RISKS		
Risk	Rating	Risk Mitigation measures
Poor uptake of alternative financial mechanisms to progress towards improvement	low/medium	? The involvement of the actors in the responsible chains is sought from the beginning of the project and supported throughout the improvement process. ? Mining organizations will be trained to generate internal financial capacity (savings mechanisms) that will empower them on financial issues. ? Financial Inclusion and Responsible Supply Chains; is intended to raise the value of the entire supply chain by promoting transparency and encouraging the purchase of responsibly produced gold.
Injuries resulting from the use of new technologies	medium/high	? The number of safety hazards will be reduced by a strong involvement in the training workshops adapted for men and women. ? ASGM miners will receive site?specific health and safety training. ? Pilot sites will be supported to create a specific occupational health and safety committee, which will be able to overview the OHS issues and drive the organization towards continuous improvement. ? Personal Protective Equipment (PPE) will be provided.
Vested interest	low/medium	? The programme will carry out a due diligence on all its key partners.

Table 5: ESS risk assessment. Source: ARM

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.

The structure related to the governance, coordination and implementation of the project is illustrated in Figure 8 below.

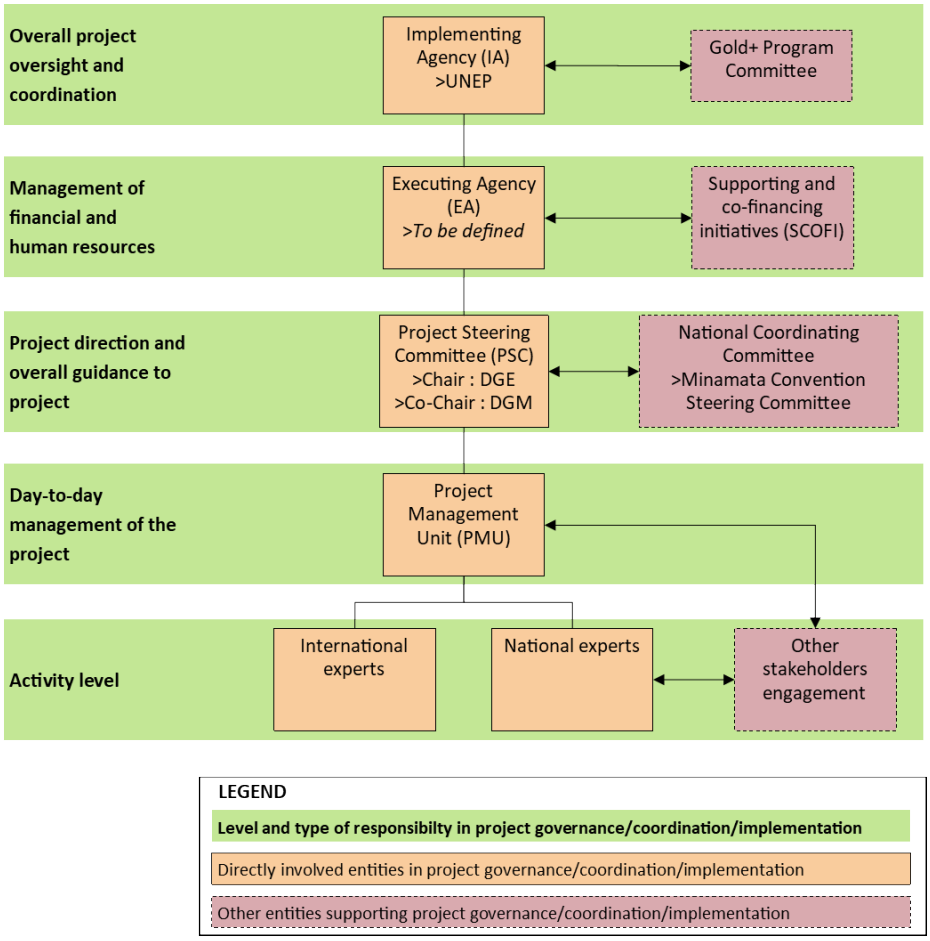

Figure 8: Governance structure of planetGOLD project in Congo.

The roles of the different entities would be as follow:
Implementation Agency (IA).

The United Nations for Environment Programme (UNEP) will be the IA of the planetGOLD project in the Republic of Congo. UNEP will therefore be responsible for the overall project supervision, overseeing the project progress through the monitoring and evaluation of activities, outcomes, and outputs. It will be responsible for quality assurance procedures; it will issue the legal contracting documents with the Executing Agency (EA) and will approve progress and financial reports. UNEP will ultimately report the implementing progress to the funding agency, the Global Environmental Fund (GEF).

The IA will take part in the Project Steering Committee (PSC) and can request to the PSC to meet outside of the planned schedule as deemed necessary. The IA will proactively participate in the planetGOLD programme Steering Committee, as it is the established platform to discuss the progress of the different

country child projects? progress, achievements, and challenges encountered, foster synergies between projects and align the implementation strategies.

Executing Agency (EA).

The EA selected during the validation workshop held in December 2021 is CASE (Centre Africaine pour la Sant? et l?Environnement), a not-for-profit organization based in Ivory Coast. The EA has a wide experience in the execution of ASGM-related projects in Africa, with a strong focus in Western African countries. In the case of the Republic of Congo, CASE partly executed the National Action Plan on Mercury.

The EA will be responsible for the overall management of the financial and human resources related to project execution in the country. It will function as the general coordination unit for the project and will be accountable to the IA for the achievement of project outputs and outcomes. Moreover, the EA will take guidance from both the IA and the PSC (of which it will be a member) in all matters concerning the project. Finally, the EA will oversee establishing the Project Management Unit (PMU).

Project Steering Committee (PSC).

The PSC will be the prominent body where to provide an overall guidance to the project?s execution, thus making all critical decisions on strategic matters. The PSC will meet at least twice a year. The PMU will serve as the Secretariat and provide annual workplans for endorsement as well as periodic progress reports.

Chaired by the General Directorate of Environment (DGE) and co-chaired by the General Directorate of Mines (DGM), the PSC will count with the participation of both the IA and the EA, as well as other representatives of other key stakeholders: 1) from the public sector such as the Ministry of Health and Population; the Ministry of Territory Decentralization, Local Development and Administration; the Ministry of Small and Medium Enterprises, Crafts and Informal Sector; and the Ministry of Forest Economy2) from international initiatives developed in the ASGM national sector, 3) from the private sector, in particular representatives of the ASGM communities, international gold refiners, Large Scale Mining (LSM) , 4) from the civil society, in particular CSO that may contribute to project outcome. such institutions, academia, NGOs, and actors of any other relevant areas.

Project Management Unit (PMU)

The PMU will oversee the day-to-day management of the project. This will be composed of a Project Manager and other project staff who will be hired under the EA supervision.

The PMU will be responsible for hiring and pulling together all the necessary internal and external human resources for project delivery, including hiring and supervising the work of eventual subgrantees. The PMU will provide scheduled updates and progress reports to the PSC.

The EA will contract through the duration of the project?s life span, a team of experts who will take responsibility for delivery of outcomes, outputs, and activities, and may recruit national and international consultants on demand responding to the specific external support needs in relation to achieving these objectives.

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.

United Nations Framework Convention on Climate Change (UCFCCC)

The Republic of Congo, through its Minister of Environment, Sustainable Development and Congo Basin, recently submitted an updated version of its Nationally Determined Contribution (NDC) Report under the UNFCCC [1]

This report highlights that the population of the Republic of Congo is one of the most vulnerable, insofar as it has little room for adaptation, especially because of the national poverty levels. Maintaining the services provided by natural ecosystems (forests, savannas, hydrological basins, etc.) is essential to ensure a future sustainable development, to limit the impacts of climate change and to offer adaptation possibilities to the most vulnerable groups, including women and young people from all socio-cultural categories in urban and rural centers. The report points out that ASGM, forestry, water and human health are, among others, the economic sectors that serve as the foundation for the Republic of Congo?s socio-economic development. The project, by improving the production capacity of artisanal mining communities (working conditions, production, environmental compatibility etc.), plays an important role in achieving the sustainable development objectives set out in the country's NDC report.

National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC: According to the last NDC report, one of its highest priorities is to develop the National Action Plan for Adaptation. The main socio-economic sectors identified as most vulnerable to climate change impacts are agriculture, forestry, fish farming, water resources, forest resources and health. Most of these sectoral adaptation actions have strong synergies and co-benefits with mitigation. In the framework of the planetGold programme, avoiding environmental risks (water pollution, forest, soils degradation etc.) also contributes to this direction.

Strengthening the climate resilience of rural communities in central and northern Congo through the implementation of ecosystem-based adaptation in forest and agricultural landscapes is one of the main outcomes in the projected NAPA project. This will be achieved through significant policy and legislation reform, combined with land use planning to catalyse the scaling up of climate resilient management of agricultural land and forests. The planned reform of the land registry towards a common forest-mine-agriculture land registry in a national spatial planning scheme supported by the REDD+ strategy, may have an impact on the target groups of beneficiaries of the planetGOLD Congo project, particularly about the allocation of mining permits and legalisation.

National Communications (NC) under UNFCCC: NC n?1 and NC n?2 are already transmitted. The third national communication to the UNFCCC is currently being finalised.

Technology Needs Assessment (TNA) under UNFCCC: Other aspirations and contextual priorities recognised when joining the Paris Agreement, the Republic of Congo aspires to be an emerging country by 2025 and advocates development in line with the SDGs, but also the African Union's Agenda 63. One of the stated priorities for achieving this objective is the assessment of technology needs (TNA), which are not yet quantified.

United Nations Convention to Combat Desertification (UNCCD)

National Action Programme (NAP) under UNCCD: The Republic of Congo ratified this Convention in 1999 and submitted its National Action Programme to Combat Desertification in 2006, followed in 2018 by the submission of the report on Land Degradation Neutrality Target Setting Programme. The major threats to land management include the lack of pertinent legal instruments and the lack of effective integration of land management issues into legal instruments. The non-compliance with the legal framework for mining and forestry is also pointed out as a threat.

The ASGM miners? capacity building, foreseen in the planetGOLD Congo project, will certainly bring benefits in terms of environmental management of natural areas, which would be in line with the objectives of Land Degradation Neutrality, or at least the search for land restoration.

The Minamata Convention on Mercury

As a member State of the Convention, the Republic of Cong has complied with all the Party?s reports required by the Convention to be submitted to the secretariat: the Minamata Initial Assessment (MIA) in 2019, the Artisanal and Small-scale Gold Mining National Action Plan (NAP) in 2019 and a National Synopsis of the ASGM in the Republic of Congo (2018).

United Nations Convention on Biological Diversity

The National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD has been developed and submitted in 2015, and the mining sector is presented as a direct threat to biodiversity (through

deforestation leading to habitat loss, pollution of water systems, human occupation). The indirect factor related to this threat is the weakness of institutions and legal instruments that could act in synergy to limit the impacts.

Another factor pointed out is people's lack of knowledge about the risks and effects of environmental degradation on biological diversity. The planetGOLD Congo project is contributing to the limitation/elimination of pollution risks in the natural environment by tackling the use of mercury, particularly in waterway. A project?s collaboration in the strategic action plan under UNCBD could be sought.

National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD

The main objective of the NCSA project is to determine the gaps, constraints and priorities for the creation, development and reinforcement of individual, institutional and systemic capacities required to better manage environmental resources to ensure that they are used sustainably to support national efforts in the areas of development and the fight against poverty.

National Portfolio Formulation Exercise (NPFE) under GEFSEC

The report on this exercise was written in 2012 under the supervision of the Ministry of the Environment and presents 4 project sheets relating to environmental protection. In the Sangha, a REDD+ project for forest plantations, income-generating activities, and the classification of a zone as a protected area. In the Bouenza and Pool departments, a community plantation project for wood energy. A larger project on the assessment of the impacts of global warming on water deficit. Finally, an environmental awareness-raising project for the population. As this report is about ten years old, the stakeholders have probably changed. Environmental objectives have broadened with the consideration of climate change, the population explosion, and the poverty of the population.

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[1] update in August 2021 of the first Nationally Determined Contribution report from 2015, see https://www4.unfccc.int/sites/ndcstaging/Pages/Party.aspx?party=COG&prototype=1

8. Knowledge Management

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

Under the planetGOLD programmatic knowledge management approach, each Child Project includes a component dedicated to Knowledge management and Communications (component 4). This component is expected to lead to the outcome of planetGOLD programme?s experiences being available not only to direct and indirect project stakeholders in-country, but also to other Child Projects and the Global Project.

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

Since this is a child project of the global planetGOLD programme, the project team will make accessible the most recent project information, which includes all relevant project documents and tools, through the main knowledge management platform developed under the global project. Because the results of this specific child project will feed into the global reflections regarding this next global programme cycle, the project will pay a particular attention to documenting activities and output achievements while developing user-friendly communication materials for national and international dissemination. Conversely, the child project in the Republic of Congo will adapt, contextualize, and translate the most relevant communication tools available on the global platform.

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

Strategic Approach and Objectives

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

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

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

- Build solid communications foundations, which can exceed the duration of the project. To achieve an effective and sustainable change of mentalities and practices among miners, supply chain actors and government officials require that these stakeholders are aware of the changes undertaken and can replicate them. Change and adaptation is a long-term goal, which often spreads through imitation. It is thus very important that the new practices adopted by the initial risk-taking ?change agents? in the pilot areas spread to the more hesitant actors. It is also critical that the content of the knowledge management/communication approach is simple and unequivocal to allow appropriation.

- Support widespread knowledge uptake. The general project strategy is rooted in innovative technical experimentation, so knowledge management is the foundation for a change of practices. Awareness is often

driven by technical knowledge, whether on health impacts of mercury, innovative finance solutions, mining environmental practices or other themes developed in the *Content and messaging* section below. Such technical knowledge must be driven by facts, data, and individual experiences.

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

- Change perceptions of the finance sector. As explained in the Alternative Scenario, under-investment is one strong constrain to straightening out the ASGM sector. Access to legal documentation and to mercury-free technologies must be facilitated by new national and international investments. The perception of a high-risk informal supply chain among potential investors, especially in the banking and micro-banking sector, limits the scope of possible changes. To change such perception is a requisite for bringing new equity into the ASGM sector and triggering the adoption of new mining practices.
- Fully integrate the child project in the global planetGOLD programme knowledge exchange strategy. The importance of sharing knowledge and disseminating positive solutions as well as lessons learned is a key factor for the success of the planetGOLD programme and will increase the visibility of the results obtained in the Congo child project. By the same token obtaining adequate support from other projects will foster the technical and financial approaches developed in the components.

Management and Dissemination Platforms

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

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

The documentation and progress sharing with other child projects will be done through the planetGold programme website and knowledge repository. The project will make sure that the main project documents are publicly available. If needed, assessments and solutions could be shared on other ASGM online platforms such a Delve. The main online knowledge management platform (www.planetgold.org) contains multiple storytelling, training, and awareness-raising tools from other child projects. The themes developed in the global platform cover the areas of cleaner production techniques, pathways toward formalization, pilot access to finance options, and access to international responsible gold markets, among others. The project?s progress on activities related to financial tools development, technical results, gender issues and topics of interest for the Global programme level will be shared through quarterly knowledge exchange

meetings. The Republic of Congo child project will liberally adapt, translate, and contextualize these resources to build its initial toolkit and trigger theme-specific conversations among national stakeholders.

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

At the national level, the project will initially rely on the following dissemination platforms, which the project team will setup and formalize during the start-up phase (see Component 1):

- A national public-private multi-stakeholder platform will convene regularly to discuss opportunities and challenges in ASGM formalization and build regulatory solutions. (Component 1) Linked to the local stakeholders? discussion platforms in the pilot areas, this national platform will identify key problems, looking at the evolution of the national ASGM strategy and the engagement at the country level on public policy issues. The project team will use these regular meetings to disseminate its technical and storytelling tools, as well as its key project outputs starting with the results of the baseline assessment.

- At the Department level and in line with the Jurisdictional and Landscape approach, multistakeholder platforms will be setup and periodically held. Smaller local and community-level platforms may also be held for specific needs of the project. However, the main exchange level should occur at the Departmental level because it includes most of the required stakeholders (administrative, civil society, and private sector). Here, most of the decisions and results will effectively be shared and discussed at this level. It will be important to obtain the participation from the Departmental public authorities, to play a role as the convening institution for the different parties in each targeted region.

- The institutional counterpart of the national multistakeholder platform will play a critical role in liaising between government agencies. The project team will seek to leverage a year-around continuous dedication of a solid group of government technicians at the Ministries of Environment and Mines, namely the so-called Mercury Team in charge of the submission to the Minamata Convention of the National Action Plan. For nearly a decade, these technicians have worked together, conducted field assessments, reported over mercury usage in the ASGM sector, and introduced the planetGold programme objectives and methods to numerous other ministries and institutions. The specific programmatic role of this informal network, whether it should be formalized, or take a monitoring role such as a steering committee, etc. is left for the project team to decide in the early start-up stage.

- In any case, these individuals understand the problems and opportunities of the ASGM sector as much as the administrative bureaucracy and inter-ministerial relationships and should thus, be involved at every stage of project implementation. The group would have a decisive role in advocating for a sound evolution of the national ASGM strategy that would accompany the jurisdictional/landscape approach. The tools, stories and modules that will form the core of the project?s knowledge management strategy should be first presented to this informal platform, as government technicians can use their government network to disseminate them further and could support national or regional communities (CEMAC and ICGLR) level strategies.

- Cross-learning visit(s) and workshop(s) will provide the opportunity for sharing resources and content between practitioners. The project will organize other cross-learning visits within the country, for example between different pilot areas, especially once the first ?change agents? will successfully start implementing new practices and technologies. This platform relies on peer-to-peer communication.

Content and messaging

Knowledge products will cover the following areas:

- Health impacts of mercury.
- Technological mercury-free solutions: improved crushing and milling, gravity concentration tools (sluices, shaking tables, etc.), flotation, chemical leaching, elimination of the worst practices of mercury usage.
- Formalization: integrating miners and traders into the formal economy and the regulatory legal framework.
- Access to legal supply chains in pilot mining sites (landscape approach) for traders and exporters.
- Access to finance and investment solutions, embedded within legal supply chain opportunities.
- Other available best practices such as environmental water management, occupational health and safety, mine planning and abatement of the deforestation rate in practices.

The outline of those knowledge products will take various forms: training handbooks, online courses, case studies, individual stories, interviews, op-eds, technical analyzes, instruction manuals and technical specifications for mercury-free technology, educational and awareness-raising tools. The objective is to balance individual stories of successful change, which are a powerful vector of replication and technical products, which provide insights to the available types of technology on the market and support knowledge uptake.

The project will preferably integrate the development of knowledge and communication products with the global programme implementation. At the beginning, the adaptation of globally designed communication products by the planetGOLD online platform will be a solid basis for content. Later, as the project will root itself in the local and national context, content production will also come from the project?s quantitative results, the problems and experimentation exemplified at local platforms, and panel discussions held in events and workshops. Finally, the project will seek to leverage the existing platforms of national partners, tapping into their websites and social media accounts.

The project?s general outreach strategy will frame its narrative around the positive notion of opportunity. This entails underlining the positiveness of an adequate development of the ASGM sector and the high returns on investment that a transformation of the sector would bring to investors. The focus should not be on present mercury usage in ASGM, but rather on the prospects of a clean and transformed ASGM sector.

To achieve this, the project will seek to wisely articulate the storytelling content with other types of technical content. Experimentation-focused storytelling products with a strong emphasis on audio-visual content production have the power to change perceptions around artisanal and small-scale miners. The message that at least a new trend is underway should interest stakeholders in learning more precisely what

type of financing or technology is necessary to accompany this change, and how to test it. Storytelling should be conceived as a first step leading to knowledge transfer and uptake.

The project will draw inspiration from the messages and narratives developed by the planetGold global communication strategy. At the national level, the form of messaging will be customized to each type of stakeholder, articulating the content strategy with the specific interests and objectives of the stakeholder (see Stakeholder Engagement Plan). The table below offers a preliminary outline of such articulation, ranking stakeholders from the potentially most supportive to the potentially most challenging ones.

Targeted Audience Groups	**Objective**	**Key message**	**Key channels**
Gold buyers and traders (informal and formal)	This group is quite supportive of the ASGM sector, always seeking for new supply sources, but often wary of government regulations. The goal is to integrate them into policy discussions with the government representatives to improve the regulatory framework.	Formalization is not always a burden. With the right fiscal and commercial policies, formal ASGM can open the sector to new environmentally responsible markets.	Local and national dialogue platforms and workshops, downstream buyers? networks
Local health institutions and practitioners	This group is supportive of mercury elimination. The goal is to integrate them into the local and national discussion in order to raise awareness on the health hazards of mercury use among the general population.	Mercury usage in ASGM damages the health of miners and local populations. It is important to know why. To achieve its elimination, we must work together and propose new market solutions.	Local and national dialogue platforms, op-eds, expert interviews
National service and equipment providers	This group is largely neutral and should be informed on the commercial opportunities a transformed ASGM sector could bring.	The uptake of new ASGM practices gives the opportunity to position your company as a major manufacturer or importer of mercury-free tech early in this pioneering trend.	Local and national dialogue platforms, expert interviews, commercial fact sheets and data
Artisanal miners	This group likely encompasses supporters keen to work under the planetGold programme and challengers who would consider doing things differently as a risk.	The project is working with miners and local communities to introduce new technologies and financing opportunities, which will help you to upgrade your current practices and improve your productivity.	Local dialogue platforms, downstream buyers? networks, radio programmes, success stories, op-eds

Government officials	This group is divided between the challengers who profit from the concessional politics of the informal sector, especially at the local level, and the supporters who want operators to respect the law. This group should come to recognize the strong ASGM economic potentials for the region and the country, while at the same time acknowledge that the regulatory framework needs changing for miners and traders to formalize.	The project commends the government for its leadership in tackling the environmental and social challenges faced by ASGM communities. Supporting miners to eliminate mercury will reduce the burden on the local healthcare system, protect the environment and stimulate growth. To achieve this, it is necessary to hear what the private sector has to say about the current legal and regulatory framework.	Local and national dialogue platforms, expert interviews, position papers
Large-scale miners	This group is largely neutral though potentially anti-ASGM. The goal is to make them participants in the mercury elimination conversation to influence other actors, especially SMOs.	A clean ASGM sector would bring more interest and new investors to the Republic of Congo. This can increase the reputation of all mining operators in the country.	National workshops, op-eds, expert interviews
Local population (pilot areas)	This group has rather negative perceptions of ASGM as a cause for land degradation, but it is also aware of its strong revenue potential. The goal is to include their voice in the ASGM conversation.	Miners and non-miners can live harmoniously with one another, provided they agree on environmental norms and limits, so that everyone can make better profits over local resources.	Local dialogue platforms, radio programmes, village meetings
Economic and financial stakeholders	This group is rather distrustful of ASGM and sees it as a high-risk sector. It should gradually begin to understand that a clean ASGM has higher economic returns or reducing their initial prejudice.	By investing in safer and more efficient mining practices, miners will gain access to new markets with increased profits. You can profit financially from the change in the sector.	Local and national dialogue platforms, expert interviews, commercial fact sheets and data, peer-to-peer exchanges
Development agencies	This group often sees ASGM as a social and environmental problem and an economic poverty trap. The goal is to confront them with the livelihood?s opportunities ASGM can bring into vulnerable rural areas.	While the sector is ridden with problems, ASGM is not necessarily destructive of the environment. A formal clean sector is possible and has the potential to unlock local economic benefits to miners and other villagers.	Websites, social media accounts, success stories, national dialogue platforms and workshops

Local and national media	This group channels most of the negative perception around ASGM to the public. The objective is to help them take a more nuanced approach, recognizing the challenges but also the potentials of changing the sector.	ASGM is a critical livelihood for some of the most vulnerable people in the country. While the sector is associated with significant problems, environmentally and socially responsible ASGM is possible.	Radio programmes, expert interviews, fact sheets, social media, local and national dialogue platforms, and workshops, possibly press conferences
Semi-mechanized operators (SMOs)	This group is a major user of mercury and does not see change as profitable. The goal is to exert pressure over them through the local population and government, while offering them technological solutions.	Your techniques are sub-optimal and destructive of the environment, which creates long-term damages to local communities. An uptake of mercury-free technologies can offset the additional cost of your necessary formalization.	Local and national dialogue platforms and workshops, training manuals

Table 6: Communication messaging to project stakeholders (inputs)

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

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project will follow UN Environment standard monitoring, reporting and evaluation process procedures. Reporting requirements and templates are an integral part of the UN Environment legal instrument to be signed by the executing agency and UN Environment.

Project M&E will be conducted in accordance with established UN Environment and GEF procedures and will be provided by the EA. The M&E plan includes inception report, annual review, and final evaluations. The Project Management Unit (PMU) will be responsible for stakeholder engagement, gender monitoring, and outreach to the broader community in the country. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-?-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the PMU, but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the PMU to inform UN Environment of any delays or difficulties faced during implementation so that the appropriate support or correlative measures can be adopted in a timely fashion.

The Project Steering Committee (PSC) will receive periodic reports on progress and will make recommendations to UN Environment concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UN Environment and GEF policies and procedures is the responsibility of the Task Manager of the Implementing Agency. The Task Manager will

also review the quality of draft projects outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-a-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UN Environment. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of the project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

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

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

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

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed

Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

Type of M&E activity	Budget from GEF	Budget co-finance	Responsible Parties	Time Frame
Inception Meeting			EA	Within 2 months of project start-up
Inception Report			EA	1 month after project inception meeting
Measurement of project progress and performance indicators			EA	Annually
Baseline measurement of project outcome indicators, GEF Core indicators (Tracking tools)			EA (Tracking Tools not applicable in C&W focal area)	Project inception
Mid-point measurement of project outcome indicators, GEF Core indicators (Tracking tools)			EA	Mid Point
End-point measurement of project outcome indicators, GEF Core indicators (Tracking tools)			EA	End Point
Quarterly Progress/ Operational Reports to UNEP			EA	Within 1 month of the end of reporting period (quarterly)
Project Steering Committee (PSC) meetings and National Steering Committee meetings			EA	Once a year minimum
Reports of PSC meetings			EA	Annually
Project Implementation Review (PIR) report			EA and IA	Annually, part of reporting routine
Monitoring visits to field sites			EA	As appropriate
Mid Term Review/Evaluation	20,000		IA	At mid-point of project implementation

Type of M&E activity	Budget from GEF	Budget co-finance	Responsible Parties	Time Frame
Terminal Review/Evaluation *(whether a project requires a management-led review, or an independent evaluation is determined annually by UNEP?s Evaluation Office)*	40,000		IA	Typically initiated after the project?s operational completion
Audit	5,000 (Part of PMC)		EA	Typically initiated after the project?s operational completion
Project Operational Completion Report			E EA	Within 2 months of the project completion date
Co-financing report (including supporting evidence for in-kind co-finance)			EA	Within 1 month of the PIR reporting period,
Publication of Lessons Learnt and other project documents			EA	Annually, part of quarterly reports & Project Final Report

Table 7: M&E description.

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)?

The project addresses the core paradigm that miners must generate enough additional profits to offset the costs of formalization, which is a condition for accessing new partners, new markets, and innovative financing mechanisms. Nonetheless, the access to further to additional profits for the beneficiaries depend on the social, economic, and geological local context of each targeted areas (the Departments of Bouenza, Sangha and Kouilou), the. Miners will start increasing their economic benefits early in the project roll-out through the following avenues:

The integration of miners? representatives in the dialogue platforms (at the local and regional levels) will increase the acknowledgment of this type of actor with respect to the national public administration and will contribute to accelerate the legalization process.

The reduction of harassment by government officials: the local and departmental multistakeholder platforms will be a forum for information exchange and grievance mechanism. By confronting local decision makers with their practical problems, miners will be able to reduce the pressure often exerted by local government and police officials. It is known that some officials take advantage of the informal nature

of the sector to racket miners and extract revenues from them. It is expected that these platforms will augment peer pressure from mining organizations over corrupt officials. Therefore, miners (especially the most vulnerable ones), will benefit from a cleaner, less corrupt enabling environment.

Enhancing the dialogue at local level will also benefit to the communities by identifying and proposing adequate services for artisanal and semi-mechanized operations, which will be supported by community saving systems. The dialog platforms will also open the chance to improve grievance mechanisms between communities and semi-mechanized operators.

Specific training sessions will improve the perception of vulnerable groups (ethnic minorities, women, migrants, etc.) and thus their integration in the mining activity will be improved. This may lead to improved revenues for such groups that are quite active in the ASM sector.

Reduction of elite capture: similarly, vulnerable miners are often excluded from their traditional mining areas and from the richest deposits by semi-mechanized operators. The local multistakeholder platforms will give miners a stronger voice to defend their economic interests.

Enhanced financial management: the capacity building programme offered to selected mining organizations (Outcome 2) will benefit miners in various ways. (1) The most vulnerable miners will benefit from the organizational governance modules, which is expected to increase inclusiveness. (2) Miners will also increase their revenues through better productivity; specific technical modules will lower their operational expenditure hence maximize their outputs. (3) Finally, other technical modules will improve their sales capacity by giving them better understanding of pricing, or by incentivizing them to treat and purify their gold better before first sales.

Access to regulated markets: practical knowledge of due diligence mechanisms will enable mining organizations to access international regulated markets, which will lead them toward larger, more secure outlets. Revenue streams will be less affected by sudden economic contingencies and externalities, which are more frequent in the informal value chain. Predictable revenue streams will enable better financial projections, which will prevent miners to rely on debt.

Mining techniques: the vocational training programme (Output 3.3) will enhance the productivity of mining organizations by strengthening their capacity to explore, map, or assay. Miners will earn more revenues in shorter time periods.

Savings: the savings & loans capacity building programme (Output 2.1) will provide a better economic safety net to miners who will be less constrained to rely on expensive local credit. It is expected that internal loans will offer better rates than the available informal credit providers.

The formalization process should also greatly facilitate the access to formal loan systems that may be proposed by microfinance institutions and, in the frameworks of a potential national sector policy, by national institutions, as a support to integration in the formal economy. Investment: the mobilization of private investors is likely to inject new capital into the selected ASGM areas. This will translate into increased production, hence more revenues for miners.

Efficient equipment: the introduction of highly efficient mercury-free equipment will increase gold recovery rates through gravitational methods while reducing labor harshness, thus better revenues.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Low		

Measures to address identified risks and impacts

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

Please refer to Appendices 8a (SRIF), 8b (COVID questionnaire) and 9 (Risk Mitigation Plan) for further elaboration.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
10619 - Appendix 9 - Risk Mitigation Plan	**CEO Endorsement ESS**	

Title	Module	Submitted
10619 - Appendix 8b - COVID questionnaire	**CEO Endorsement ESS**	
10619 - Appendix 8a - SRIF	**CEO Endorsement ESS**	

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

Project: Global Opportunities for Long-Term Development of artisanal and small-scale gold mining (ASGM) Sector Plus ? GEF GOLD+ Congo						
Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Link to SDGs

To prevent damage of human health and ecosystems? pollution by reducing mercury use in the ASGM sector in the Republic of Congo	# Quantity of mercury reduced and avoided # Quantity of gold produced without mercury # Quantity of gold produced fulfilling planetGOLD environment and social criteria # Of miners formalized *(women/men)* $ Amount of investment leveraged from new or existing financial inclusion mechanisms or responsible supply chain mechanisms made supporting mercury-free technologies.	2,352 kg of mercury used (per year, national level Congo) 1,760 kg of gold is produced without mercury; 440 kg of gold is produced with mercury 0 kg of gold produced fulfilling planetGOLD environment and social criteria or any other compatible criteria. Baseline values remain to be determined (*women/men)* Lack of access to financial resources is a considerable barrier for the ability to adopt mercury-free technologies.	**End of project Target:** 1 tons of mercury avoided including other ASGM sites, by replication and uptake at project end (through the global project, additional 3 tons of mercury to be avoided in the 10 years following end of project, totalling at 4 tons) 20 kg of gold produced without mercury in the project areas (additional 60 kgs of gold produced without mercury through other ASGM sites, by replication and uptake) 10 kg of gold produced fulfilling planetGOLD environment and social criteria At least 50% of miners formalized within targeted miner associations (*which at least 5% are women*)	Country level reporting Mining Cadastre statistics ASGM sites records Tracking of investment and funds mobilized	**Risks**: Change in the political and economic situation during the lifetime of the programme impacts its implementation Avoided mercury volumes from targeted areas could be displaced to neighbouring areas as mercury traders would like to compensate for losses. ***Assumptions:*** Governments are engaged in creating enabling environment for formalization. Private Sector considers ASGM an investment opportunity with managed risks. Financial sector actors can overcome barriers (perceived and real) to providing finance. Miners are willing to access the finance and transition to	*SDG 5.c: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels* *SDG 9.3: Increase access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets* *SDG 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities* *SDG 12.4: By 2020, achieve the environment-tally sound management of chemicals and all wastes throughout their life cycle, in*

Component 1: Promotion of formalization						
Outcome 1	**Outcome Indicators**	**Baseline**	**Targets and Monitoring Milestones**	**Means of Verification**	**Assumptions & Risks**	**Link to SDGs**
Outcome 1: Informal ASGM miners are formalized by government institutions to improve their gold production practices	# Of new regulations or legal initiatives implemented, that target the formalization of the ASGM sector and reduction of mercury (Impact class 4) # of legal initiatives by public institutions implemented under JA/LA (Impact class 4)	The national government is undertaking steps to formalize the ASGM sector, but miners fail to fulfil formalization requirements. Additional supporting activities are needed to reinforce the efforts, included a detailed country assessment.	***Mid-Point Target:*** 1 new regulation prepared that target the formalization of the ASGM sector and the reduction of mercury At least 1 legal initiative implemented under JA/LA ***End of project Target:*** 2 new regulations or legal initiatives prepared that target the formalization of the ASGM sector and the reduction of mercury At least 2 legal initiatives implemented under JA/LA	- Workshop and meeting reports - Policies and laws developed	**Risks** Institutional national stakeholders do not provide sufficient support to achieve the project goals. Inability or lack of capacity for governments to provide adequate support services **Assumptions** Governments engaged in creating enabling environment for formalization. The legal framework will advance formalization.	*17.14 Enhance policy coherence for sustainable development* *17.15 Respect each country?s policy space and leadership to establish and implement policies for poverty eradication and sustainable development* *17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships*

Component outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Link to SDGs
Output 1.1 In-depth legal, social, technical, financial, and environmental assessments of ASGM areas are completed in the targeted mining communities available to policy designers -	# Of assessments conducted (Output indicator 4.1, related activities 1.1.1; 1.1.2) # Of participants reached in national consultation workshops *(gender disaggregated)* (Output indicator 10.1, related activities 1.1.1; 1.1.2)	Insufficient quantity of reliable data available to project stakeholders.	**Mid Term project Target:** One detailed assessment drafted and shared with project?s stakeholders At least 100 participants reached in national consultations workshops **End of project Target:** One detailed assessment on the current situation of the ASGM sector in the country approved and delivered At least 500 participants reached in national consultations workshops	Assessment Reports	Covid-19 pandemic doesn?t allow travelling within the country	

<u>Output 1.2</u> A capacity building programme is designed and provided to selected ASGM communities to improve formalization in the sector	# Of governmental institutions that have received technical support for the implementation of formalization processes (Output indicator 10.3, related activities 1.2.1; 1.2.3;) # Of miners trained in ASGM formalization procedures (gender sensitive) (Output indicator 10.1,related activities 1.2.3; 1.2.4) # Of environmental, social and safety risk management plans adopted by ASGM communities (Output indicator 2.3, related activities; 1.2.4) # Of mining cooperatives and enterprises established (Output indicator 6.1 related activities; 1.2.4)	Informality widespread in the ASGM national sector The Jurisdictional and multi-stakeholder approaches for natural resource governance that go beyond traditional sector consideration s have been successfully at the international level but not yet in the Republic of Congo	**Mid-Point Target:** At least 3 governmental institutions (Departmental and national level) that have received capacity building in formalization At least 400 ASGM miners sensitized on formalization issues *(of which at least 5% are women)* At least 3 ASGM cooperatives or enterprise trained in environmental and safeguards standards At least 2 mining cooperatives and enterprises established **End of project Target:** At least 5 governmental institutions (Departmental and national level) that have received capacity building in formalization At least 1,049 ASGM miners sensitized on formalization issues *(of which at least 5% are women)* At least 3 ASGM cooperatives or enterprise trained in environmental and safeguards standards At least 2 mining cooperatives and enterprises	Workshop training reports List of participants Knowledge assessment results at workshops National Policies updated	**Risks** Inability or lack of capacity for governments to provide adequate support services **Assumptions** Public institutions at the national and Departmental level work cohesively and ensure an adequate transfer of knowledge and utilize capacity to facilitate development of formalization strategies. Project main beneficiaries (mining groups) and communities) are interested by the approach and engage alongside the project Institutional and sectoral stakeholders are supportive of the project implementati on and contribute to the outputs development	*3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination* *3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks* *5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels* *8.8 Protect labour rights and promote safe and secure working environmentsf or all workers, including migrant workers, in particular women*

Component 2: Financial Inclusion and Responsible Supply Chains						
Outcome 2	**Outcome Indicators**	**Baseline**	**Targets and Monitoring Milestones**	**Means of Verification**	**Assumptions & Risks**	**Link to SDGs**

Targeted ASGM organizations have access to financial mechanisms that support transparent, legal, mercury-free gold production	$ mobilized by buyers/refiners/mining companies for inventory financing/technical partnerships with ASGM operations (impact class 12)
	
	$ accessed by miners in targeted ASGM associations and enterprises from new financial inclusion mechanisms (impact class 12)
		The national stakeholders in the ASGM sector, particularly the ones in the informal economy, declared that the lack of access to finance is one of the biggest barriers towards formalization, economic development and access to best practices available such as mercury free technologies.	**Mid-Point Target:**
			
			At least 20,000$ mobilized by buyers/refiners/mining companies for inventory financing/technical partnerships with ASGM operations
			
			At least 2,000$ accessed by miners in targeted ASGM associations from new financial inclusion mechanisms *(of which at least 5% by women)*
			
			End of project Target*:*
			
			At least 60,000$ mobilized by buyers/refiners/mining companies for inventory financing/technical partnerships with ASGM operations
			
			At least $40,000 accessed by miners in targeted ASGM associations from new financial inclusion mechanisms *(of which at least 5% by women)*
				- Data provided by national financial institutions
				
				- Savings scheme and funds records
				
				Accountability data from ASGM cooperatives and enterprises and other actors of the gold supply chain
				
				- Surveys and interview
					Risks
					
					Expectations from downstream actors are not compatible with the reality of ASGM operators.
					
					Financial services might be primarily accessed to cover other needs than mercury-free technologies.
					
					Financial illiteracy might increase the credit default rate of miners.
					
					Assumptions
					
					Governments engaged in creating enabling environment for transparent supply chain investments.
					
					Financial sector able to overcome barriers to providing finance.
					
					Downstream actors show increased interest in buying
						1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
						
						8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance, and financial services for all.

Component 2 outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Link to SDGs
Output 2.1 ASGM organizations have access to financial services from the private sector -	# Of financial inclusion mechanisms identified (Output indicator 12.3, related activities 2.1.2) # Of miners sensitized on financial inclusion mechanisms (gender disaggregated) (Output indicator 10.1, related activities 2.1.2, 2.2.1; 2.2.2) # Of institutional partners reached out with the aim of creating a financial service for ASGM (Output indicator 12.2, activity related 2.1.1)		**Mid-point target:** At least 1 financial mechanism identified for each targeted area At least 400 miners sensitized on financial inclusion mechanisms (of which at least 5% are women) At least 1 institutional partners reached out with the aim of creating a financial service for ASGM **End of the project Target:** At least 1 financial mechanism implemented for each targeted area At least 1,049 miners sensitized on new financial services for ASGM *(of which at least 5% are women)* At least 3 institutional partners reached with the aim of creating a financial service for ASGM	Accountability records from national institutions Surveys and interviews	**Risks** Expectations from national financial institutions are not compatible with the reality of the ASGM sector. **Assumptions:** Identified investors are interested and engaged in potential ASGM investing Miners are willing to access finance to transition to mercury free process The financial sector can overcome barriers (perceived or real) to providing finance.	*9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including afford-able credit, and their integration into value chains and markets*

Output 2.2 ASGM stakeholders are knowledgeable on due diligence-related requirements and responsible mining initiatives .	# Of ASGM actors (ASGM communities, traders, refiners, jewellers, service providers) sensitized on OECD Due Diligence Guidance implementation and responsible sourcing (international standards and traceability)*(gender disaggregated)* (Output indicator 10.1, related activities 2.2.1; 2.2.2)	*There exist no responsible supply chains with ASGM actors in any of targeted areas*	***Mid-Point Target:*** At least 3 ASGM actors (ASGM communities, traders, refiners, jewellers, service providers) sensitized on OECD Due Diligence Guidance implementation and responsible sourcing (i.e., planetGOLD criteria) *(gender disaggregated)* **End of project Target:** At least 5 ASGM actors (ASGM communities, traders, refiners, jewellers, service providers) sensitized on OECD Due Diligence Guidance implementation and responsible sourcing (i.e., planetGOLD criteria) *(gender disaggregated)*	- Official statistics on trade - Surveys and interviews with downstream supply chain participants - Database of financing institutions	**Risks** Expectations from national financial institutions are not compatible with the reality of the ASGM sector. **Assumptions** Governments engaged in creating enabling environment for transparent supply chain investments Downstream actors show increased interest in buying mercury-free ASM gold ASGM perceive value in implementing OECD DDG.	*9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial process-es, with all countries taking action in accordance with their respective capabilities*
Component 3: Enhancing uptake of Mercury-free technologies						
Outcome 3	**Outcome Indicators**	**Baseline**	**Targets and Monitoring Milestones**	**Means of Verification**	**Assumptions & Risks**	**Link to SDGs**

Mercury-free processing methods are widely used by ASGM organizations	% of miners in targeted ASGM communities adopted mercury-free technologies (*gender disaggregated*) (impact class 3) X % increase of average monthly gold productivity with the use of mercury-free technologies (impact class 3)	*Mercury continues to be traded and used in the ASGM sector.* *Alternative, mercury-free technologies are not always suitable for the realities of artisanal miners, and their benefits are not always clear to miners.* *A lack of technical knowledge hampers the adoption of mercury free technologies*	***Mid-Point Target:*** At least 50% of miners in the targeted communities (which actively use mercury) initiate the adoption of mercury free technologies At least 1% increase of average monthly gold productivity with the use of mercury-free technologies ***End of project Target:*** 100 % of the miners in the targeted communities (which actively use mercury) initiate the adoption of mercury free technologies At 2% increase on average monthly gold productivity with the use of mercury-free technologies (equals uptake)	- Progress reports - Knowledge assessment results - planetGOLD programme compliance assessment.	**Risks** Miners are unwilling to take up mercury-free practices because of mistrust of (real or perceived) lack of efficiency of those methods. Better practices are adopted during the project and then abandoned by miner groups once the project support stops. **Assumptions** Miners endorse the conversion to mercury-free gold processing methods. Efficient and lucrative alternative mercury-free gold processing techniques are appropriate and available for ASGM. Mercury suppliers (informal gold traders) are willing to engage with formal financial markets.	*3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination*

Component 3 outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	Link to SDGs

Output 3.1 Selected ASGM communities are provided with mercury-free processing equipment	# Of Hg-free processing systems in ASGM target associations installed (Output indicator 3.1, related activities 3.1.1; 3.1.2; 3.1.3)	*Many ASGM operators lack knowledge about the negative health and environmental impacts of mercury use.* *Many ASGM operators lack knowledge about the increased efficiency of mercury free technologies*	***Mid-Term project Target:*** At least 1 Hg-free processing systems in ASGM targeted associations installed ***End of project Target:*** At least 2 Hg-free processing systems in ASGM targeted associations installeded	Purchase orders Production assessments and reports Due Diligence reports	**Risks** Miners are unwilling to take up mercury-free practices because of mistrust of (real or perceived) lack of efficiency of those methods. Better practices are adopted during the project and then abandoned by miner groups once the project support stops. **Assumptions** Miners endorse the conversion to mercury-free gold processing methods. Efficient and lucrative alternative mercury-free gold processing techniques are appropriate and available for ASGM. Mercury suppliers (informal gold traders) are willing to engage with formal financial markets.	*6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globall*

Output 3.2 National suppliers and manufacturers can provide long term services to selected ASGM communities that have adopted mercury-free production processes - -	# Of national suppliers trained to carry out mercury free technologies provision and maintenance (Output indicator 10.1, related activities 3.2.1; 3.2.2)	*National services providers to the ASGM sector have scarce knowledge on mercury technologies production*	***Mid-Point Target**:* At least 3 national providers engaged (one in each targeted Department) **End of the project target:** At least 6 national providers engaged (two in each targeted Department)	- Project?s Progress report - Equipment records from targeted ASGM communities	**Risks:** The national supplier?s ecosystem is reluctant to cooperate with the project due to the perceived barriers. **Assumptions:** Suitable participants for ASGM training are selected Training strategies are suitable for target participants	

Output 3.3 ASGM Miners improved their technical capacity on the optimal use of mercury free equipment	# Of miners sensitized in the use of mercury free technologies (Output indicator 10.1, related activities 3.1.3) # Of educational curriculum drafted and provided (Output indicator 11.3, related activities 3.3.1) # Of educational institutions engaged in the provision of vocational training to ASGM miners (Output indicator 11.1, related activites 3.3.2)	*The national ASGM workforce has little knowledge about handling mercury free equipment and processes*	***Mid-Point Target:*** At least 500 miners trained in mercury free technologies use (gender sensitive) At least 1 vocational training curriculum drafted and endorsed by project stakeholders At least 1 educational institution engaged **End of the project target:** At least 1,049 miners trained in mercury free technologies use (gender sensitive) At least 1 vocational training curriculum implemented by project stakeholders At least 1 educational institution engaged	- Knowledge assessment results - Surveys and interviews	**Risks:** Government authorities do not provide the support need to develop the educational curriculum National educational institutions do not engage with the project Women are unable to participate in training or access equipment due to gendered biases **Assumptions:** Suitable participants for technological training are selected Varying levels of education and literacy amongst miners cause differences in the ability to enhance knowledge	*17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favour-able terms.*
Component 4: Knowledge sharing, communication and local capacity building support						

Outcome 4	? Outcome Indicators	**Baseline**	**Targets and Monitoring Milestones**	**Means of Verification**	**Assumptions & Risks**	**Link to SDGs**
The ASGM sector is better managed through the strengthening of communication and knowledge .	# Of beneficiaries changing their practices because of improved awareness impact class 8)	*Information is scattered among different locations and not properly organized in a useful manner to ASGM national stakeholders.*	***Mid-Termt Target:*** At least 400 direct beneficiaries changing their practices ***End-Point Target:*** At least 1,049 direct beneficiaries changing their practices	Progress reports Outreach materials	**Risks** Lack of political will to communicate continued commitment.	*17.16 Enhance the Global Partnership for Sustainable Development, com-plemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries*
Component 4 outputs	**Output Indicators**	**Baseline**	**Targets and Monitoring Milestones**	**Means of Verification**	**Assumptions & Risks**	**Link to SDGs**

Output 4.1. Knowledge sharing and public outreach of the ASGM sector in the country is fostered	# Of institutional stakeholders reached with Outreach materials (Output indicator 8.2, activities 4.1.1; 4.1.2) # Of knowledge products produced and disseminated (Output indicator 8.1, activities 4.1.1; 4.1.2) # Of exchange activities between different ASGM communities organized (Output indicator 11.2, related activities 4.1.3) # Of beneficiaries accessing published/available knowledge generated from components 1,2, and 3 (Output indicator 8.2, related activities 4.1.1; 4.1.2)	*As of 2022, the Republic of Congo does not have an organized country-level communication platform.*	***Mid-Point Target:*** At least 5 institutional project stakeholders reached with outreach materials and other awareness raising tools At least 5 knowledge products produced and disseminated At least 1 exchange activities between different ASGM communities organized At least 400 beneficiaries accessing published/available knowledge ***End-Point Target:*** At least 10 institutional project stakeholders reached with IEC materials and other awareness raising tools At least 10 knowledge products produced and disseminated At least 2 exchange activities between different ASGM communities organized At least 1,000 beneficiaries accessing published/available knowledge	-Progress reports - List of participants - National and regional journals and media platforms publications - ASGM relevant related websites, groups, and associations	**Assumptions** Interest by the ASGM stakeholders at the local and national levels remain high	

<u>Output 4.2</u> The project contributes to the planetGOLD knowledge platform and events organized by the planetGOLD global programme	% Of completion on delivery of communications materials produced and disseminated that follow planetGOLD branding, style guide and messaging guide (Output indicator 8.1, related activities 4.2.2; 4.2.3) # Blogs, news articles, events, photo essays, videos, etc. published on planetgold.org or on other planetGOLD digital communication platforms (Output 9.2 indicator , related activities 4.2.2; 4.2.3) # Hits on website (Output indicator 9.3, related activities 4.2.2; 4.2.3) # Of project representatives participate in each planetGOLD activities, global forum and annual programme meeting (Output indicator 10.1 related activities 4.2.1)	*The national ASGM sector is isolated from the international ASGM community of practice*	***Mid-Point Target:*** At least 4 comms materials produced and disseminated that follow planetGOLD branding, style guide and messaging guide At least 5 blog posts, news articles, events, photo essays, videos, etc on planetgold.org or on other planetGOLD digital communication platforms; At least 25 hits on website per year At least 1 national project representative participate in each planetGOLD activities, global forum and annual programme meeting ***End-Point Target:*** At least 8 communications materials produced that follow planetGOLD branding, style guide and messaging guide At least 10 blogs, news articles, events, photo essays, videos, etc published on planetgold.org or on other planetGOLD digital communication platforms; At least 50 hits on website per year At least 1,049 beneficiaries accessing available knowledge	- ASGM relevant related websites, groups, and associations	**Assumptions** Interest by the ASGM stakeholders at the international levels remain high Programme stakeholders are willing to use the branding assets	

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

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

Sur ina me	**Also, in Suriname project, in the next iteration of the child project we would like to see coordination with the U.S. Department of State project also working on ASGM and mercury-free technologies.**	

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

Nig eria	**Within the Nigeria child project, the executing agency is also the Basel Convention Coordination Center for Africa Region. While they are at least based in Nigeria, we have similar concerns as above about their suitability for these issues, including if they have the contacts or substantive understandin g of the ASGM sector to effectively manage the projects. We understand the EU is supporting an effort across Africa to build capacity in the small-scale mining sectors, especially of the geological survey agencies. This may be a more effective way to make progress on mercury in ASGM.**	**The comment is acknowledged, and the team would like to clarify that the execution arrangements involving the Basel Convention Coordination Center for Africa Region (BCCC-Nigeria) considered and endorsed at the concept stage were discussed during the project preparatory phase.** **The project decision-making committee (incl. relevant Ministries, private sector stakeholders, representatives of the mining sector and UNIDO) concluded during the preparatory phase that a combination involving national executing partners (Federal Ministry of Environmental FMENV and Federal Ministry of Mines and Steel Development FMMSD) and the BCCC-Nigeria would be the most appropriate approach.** **The BCCC-Nigeria will be involved as a co-executing partner in particular regarding their specific international experience on jurisdictional approaches.** **The proposed institutional and execution arrangements are explained in the CEO Endorsement Document.**

Madagascar	**Within the Madagascar child project, the project includes $2 million of recurring expenses from the MEDD. It is our understanding that their budget has recently been significantly downsized, and we would request confirmation of this support in the next iteration of project development.**	**The MEDD has confirmed $3 million co-financing contribution for the GOLD+ Madagascar project.**

Madagascar	**Also, within the Madagascar child project, we would like further information in the next iteration of the project on the justification for selecting GIZ as a basis to build on. They are mentioned as an ?excellent basis for the proposed GOLD+ Madagascar project to build on?, since GIZ has a very small-scale mining component under their Programme d?Appui ? la Gestion de l?Environnement or PAGE Programme. However, we understand that GIZ does not cover all the areas that will be covered by this project and have a distinct domain of expertise and experience than this project, namely in fair-trade affiliated very small-scale mining.**	**At the time of project submission, the PAGE Programme delivered outputs that have systemic importance for the GOLD+ Madagascar Project: a) Support to the Ministry of Mines and Strategic Resources? five-year sustainable development strategy for the ASGM sector (SDDEMAPE); b) Roadmap for responsible ASGM in Madagascar, including an action plan for the professionalization of artisanal miners through the implementation of a ?Fairmined Malagasy? certification and traceability system; and c) Introduction of practices that could lead to Fairtrade certification in ASGM pilot sites.** **While the GOLD+ Madagascar project has a broader scope, the SDEEMAPE strategy and ASGM roadmap have been included in the project design.** **During the GOLD+ Madagascar inception phase, the project team will explore whether the activities carried out by the PAGE programme can be replicated and/or scale up across the GOLD+ Project sites.**

Madagascar	**We look forward to greater clarity on CSO involvement in the next iteration. This will also be critical, given ongoing efforts at mining code reform in Madagascar. CSOs were very active during the government?s efforts to reform the mining code at the end of 2019. Related, are there planned contributions from this project to ongoing efforts for mining code reform, and/or considerations for the potential implications of reform for the implementation of this project?**	**CSOs will be involved in the following areas: a) improvement of gold supply chain; b) waste management in ASGM sites; c) advocacy and awareness raising on the extractive sector in Madagascar and health and environmental risks related to the use of mercury; d) development of skills at the national level; e) development and implementation of education strategy for ASG miners; and f) awareness raising on good governance of natural resources. The GOLD+ Madagascar project, under its component 1, will work jointly with national authorities and ASGM stakeholders to identify gaps and opportunities across policy and regulatory framework (incl. the Mining Code). Where appropriate, the Project will provide technical support to strengthen legislative and capacity gaps in relation to formalization.**

Madagascar	**Finally, in the next proposal iteration, we would like to better understand the relationship between the proposed activities and the MECIE (Mise en Compatibilit ? des Investissements avec l'Environnement). We understand that the proposed activities are subject to environmental impact study and approval of an environmental commitment program, subject to this decree, but did not see this referenced within the project documents.**	**The project has allocated funds in the budget plan and developed the ToR to carry out an Environmental and Social Impact Assessment (ESIA) of the proposed activities in the selected mining sites as required by the Mining Code No. 99-022 of 19 August 1999 and as amended by Law No. 2005-021 of 17 October 2005.**

Congo & Uganda	**The child projects for Congo and Uganda should coordinate with current gold formalization and supply chain efforts by the International Conference on the Great Lakes Region (ICGLR), of which both Uganda and Congo are members. http://www.icglr-rinr.org/index.php/en/. The ICGLR was also instrumental in the establishment of the OECD Due Diligence Guidance, which is a key supply chain component for this program. Up to this point, there has not been much focus on mercury in the PPA, mostly due to lack of funding for the specific issue. We strongly encourage coordination with this strong Partnership working on ASGM in this region of Africa, and**	**In Uganda, the Executing Agency has a strong relationship with and significant work experience with the ICGLR. IMPACT has been a technical partner to the ICGLR for a decade. IMPACT is also a member of the PPA, and a staff member of IMPACT (who will be a team member of the project) is currently a member of the Governance Committee of the PPA. This offers an excellent opportunity to support the Ugandan government and other stakeholders in the project to create greater linkages with these various initiatives and bodies (note that the Ugandan government has already been active in both the ICGLR and the OECD through the Ministry of Mines (notably DGSM)** **In the Republic of Congo, the Ministry of Environment as chair of the project?s steering committee will ensure that the development of the project benefits and shares synergies from the ICGLR experiences, not only in the field of ASGM formalization but also in terms for forest resources management as it has been identified as feature of importance in the Congo child project. Links with the Congo Basin Programme have also been established.** **Finally, OECD is a strong partner and co-financer of the global project of planetGOLD.**

Global	**Overall, for Program component 6, Global coordination, knowledge management and outreach, there seems to be a lack of focus on the private sector gold buyers and users. Large companies (refiners, jewelers, electronics) can benefit from GOLD+ data and other insights as they increase implementation of gold sourcing due diligence programs. If this program can better consider and be sensitive to ongoing private sector due diligence policies and programs, then the program?s sustainability can be greatly amplified. Eventually, funding for these types of projects, and demand for responsible mercury free gold, will come from the downstream supply chain.**	**Refiners and jewelers are active members of the Programme Advisory Group of the current planetGOLD which will be continued under GOLD+. Private sector has been fully involved in the development of the planetGOLD criteria.**

Global	**A related supply chain concern is that in our view, the current program potentially hides supply chain issues under the ?lack of access to finance? heading. While they are related, lack of access to finance is not completely a supply chain question, and vice versa. Critical supply chain issues that should be considered include transparency, customs and trade, consumer demand (how do we mainstream responsible gold for the final consumer), responsible production, and coordination with company due diligence measures (OECD DDG). To couple these supply chain issues with another large issue like access to finance dilutes the importance of both of these**	**The comment is duly noted and will be taken into consideration where applicable.**

GERMANY		
Madagascar	**In Madagascar, apart from the BMZ/GIZ PAGE project already mentioned further synergies could be generated with the ProD?CID project. The ProD?CID project works on anti-corruption at national scale as well as on community development (community service, finance and local economic development) in the regions Analamanga, Boeny and DIANA in Madagascar. GER therefore kindly asks to consult the PAGE and the ProD?CID project during the further project preparation phase.**	**The ProD?CID project has been identified as a potential partner for piloting jurisdictional approaches within the Malagasy ASGM sector. During the inception phase, ProD?CID staff (national and DIANA-based) will be involved.** **BMZ/GIZ PAGE project staff and other relevant stakeholders (Focal Point, Gender Officer and Head of DIANA) were consulted during the project preparatory phase and will be involved in the implementation phase as well.** **Formal collaboration agreements with both initiatives will be explored, and synergies between the GOLD+ Project and the activities planned under both ProD?CID and PAGE Phase 2 will be pursued.**

Madagascar	**In addition, the project proposal points out on page 9 that there is a Co-Finance/ grant investment of 8,631,495 USD from GIZ?s PAGE project. This information is incorrect. GIZ PAGE is not a donor of the upcoming project, but the implementing agency. Therefore, GER kindly asks to list the Federal German Ministry for Economic Cooperation and Development (BMZ) as the donor agency with the GIZ as the implementing agency.**	**The comment is duly noted, and changes will be done where applicable.**

Honduras	**In Honduras, the German Civil Peace Service (CPS) works on environmental conflicts and might be a relevant stakeholder/ partner for cooperation.**	
Uganda	**In Uganda, the BMZ/GIZ project Responsible Fisheries Business Chains Project (RFBC) is interested in cooperating around the issue of tracing mercury in fish in Lake Victoria.**	**Outreach with BMZ/GIZ will be carried out to identify potential synergies and opportunities for collaboration. The Executing Agency has already engaged representatives from GIZ who are responsible for supporting the ICGLR to share information about the project and will broaden this engagement to those involved in the RFBC.**
Global	**To include the international multi-stakeholder working group on Women and Mining (www.womenandmining.org) as a global knowledge-sharing partner on gender aspects of the proposal.**	**Noted and included.**

Glo bal	**Education institutions appear in the Sources of Co-financing but are not specifically mentioned as stakeholders. Please include them.**	**Noted and updated.**

Global	**Monitor the outcome additional environmental parameters could be added such as monitoring the mercury concentrations in fish and/or along the food chain in the affected areas. The evaluation of the GEF GOLD program has noted that other issues (apart from mercury pollution) caused by ASGM (e.g. deforestation, harmful replacement technologies, child labour, indigenous peoples rights) could have been better addressed. While they cannot be accurately assessed before sites have been selected, Germany asks the project to fully consider these risks and to ensure co-benefits once possible.**	**The comment is duly noted, and changes will be made where applicable. All country level projects have been instructed to analyze co-benefits. Please see individual country level comments for details.**

Global	**According to the evaluation of the GEF GOLD program the reduction of mercury use after project completion varies significantly in different project regions. In light of these results, Germany appreciates further clarification on whether the application of a uniform replication factor for all countries is appropriate. In the current proposal the replication factor after project completion is 3. The final project proposal should state how obstacles for replication identified in the evaluation (e.g. lack of government enforcement of mercury bans, lack of training and lack of availability of replacement parts for nonmercury technology) will be**	**Since each country has their own reduction target, in-country replication through component 4 and continuation/replication of project interventions at project sites would lead to doubling of the target. Furthermore, dissemination to neighboring countries and global knowledge sharing efforts through the global project would lead to another level of reduction equivalent to the original target. Therefore, in sum, the programme target is 3 times the country's specific reduction target.**

Switzerland		
Global	**We welcome this program, but it is unclear to us, how the lessons learned from the GEF GOLD Program were included in the design of the GEF GOLD+ Program. Institutional Learning is key to us, so could you clarify how this program builds on the lessons learnt on AGSM in particular from the GEF GOLD Program so far?**	**The GEF GOLD agencies have been fully involved in the development of the CEO endorsement document.**

Glo bal	**Page 16, Para 41: It is estimated that nearly 100% of all mercury used in ASGM is released into the environment (Global Mercury Project, UNIDO 2007). Is there no more recent literature you could quote for this?**	**Response Pending**

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

Global	**Please further elaborate how you will ensure the sustainability of the program. The information contained is very limited. Please e.g. add an element on institutional strengthening, since we consider this to be crucial for the sustainability of the program. Governments often do not issue any regulation for ASGM or issue last minute regulations which often leads to an even larger illegal / informal ASGM sector. Institutional intermediary steps and well thought through policies are key for the long-term success.**	**Response Pending**

Global	**Could you clarify what will happen with the mercury still in use at this stage and the various mercury waste stocks in the ASGM areas of the recipient countries of the program? Where will the mercury waste be treated and by whom? Who will transport it? The treatment of the waste is key to ensure that the mercury intake to the environment will be avoided / limited as much as possible.**	**The comment is duly noted. Please reference individual country ProDocs for details regarding in country mercury protocols.**
STAP		

Global	**Section B of the PIF indicates that the project will have six components. However, Section 3 of the PIF (the proposed alternative scenario) only presents four components. The components on "monitoring and evaluation of country-level child projects" and that on "global coordination, knowledge management, and outreach" are not described. These are essential parts of the project and should be fully presented.**	**To clarify, the country level child projects have 4 components, while the Global child project has 2, totaling 6 components. The Global child project will focus on global coordination and knowledge management. Each country level project has reporting requirements at the global level as well as individual M&E resources for the respective projects.**

Global	**The project will adopt the jurisdictional approach (JA) as a framework for structuring interventions. The second paragraph on page 28, however, highlights some of the challenges associated with the JA, including unrealistic expectations, political turnover, limited public sector capacity, and lack of broader support and incentives. Yet, the PIF is silent on how the project will overcome these challenges to ensure success. STAP recommends that this should be done.**	**This comment is duly noted and additional information regarding how the JA approach will be piloted is included in the ProDoc. Through the jurisdictional approach, the market- and policy-based interventions could be bridged for greater impact on the ground. This includes encouraging governments, businesses, local communities, and NGOs to work together towards common goals, such as improving local livelihood, eliminating mercury and maintaining natural ecosystems through coordinated strategies across the sector. By involving and educating all the relevant actors across the ASGM landscape, the efforts to improve the perception of the ASGM sector, including raising awareness about the challenges and opportunities the miners are facing, can be magnified.**

Global	**Component 4 will support capacity building, knowledge sharing, and communication, including "using online education and digital marketing tools to support the traditional participatory workshop and training model to help institutionalize sustainable mining methods at the community level." It is, however, unclear how online education and digital marketing tools will be used given the remoteness of ASGM operations. Does this project intend to provide digital access to ASGM miners? The details of how this component will be achieved need to be elaborated.**	**Response Pending**

	Further clarification is needed on replication estimates of the global environmental benefits. A reduction of 70 metric tons in mercury use is expected in the participating countries. Another 210 metric tons is expected via replication. It is, however, unclear if the replication will occur in the participating countries or whether it will occur indirectly through the transfer of knowledge from this project to other countries (given the global nature of the project). This needs to be clarified. Also, how was the replication factor of 3 determined?	**GEF investments are predicated on the delivery of global environmental benefits in biodiversity, climate change mitigation, international waters, land degradation and chemicals and waste. The global project will support child project countries in their efforts to achieve an aggregate of more than 129.138 metric tonnes reduction in mercury and engage more than 202,500 direct beneficiaries over a 5-year period through sharing lessons. It is expected that mercury use reduction will be replicated through sharing lessons on the planetGOLD platform, webinars at national and global level. As such, it is anticipated that through technology replication, additional mercury will be reduced attributed to lessons learned. After 10 years following the project, it is anticipated that a replication by a factor of 3 will be achieved, representing an additional 387.414 metric tonnes reduction in mercury globally. These activities in the reduction of mercury use are directly aligned with GEF?s long term goal of curbing the exposure of humans and the environment to harmful chemicals through a significant reduction in the use and release of mercury. Since each country has their own reduction target, in-country replication through component 4 and continuation/replication of project interventions at project sites would lead to doubling of the target. Furthermore, dissemination to neighboring countries and global knowledge sharing efforts through the global project would lead to another level of reduction equivalent to the original target. Therefore, in sum, the programme target is 3 times the country's specific reduction target.**

	It is good that the PIF acknowledged that the project would contribute to other GEF core indicators, including the area of land restored, area of landscapes under improved practices, and greenhouse gas emission reduction. The PIF did not, however, present clearly how the interventions will lead to these benefits. We encourage that the project proponent elaborates further on this and provide a detailed estimation of all expected GEBs at the PPG stage.	**The comment is duly noted, and changes will be made where applicable. All country level projects have been instructed to analyze co-benefits. Please see individual country level comments for details.**

	For a project that will depend on significant multi-stakeholder engagement for its success, the stakeholder section of the PIF is inadequate. Please provide a detailed analysis of stakeholders expected to be engaged in the project in the participating countries. Please, also highlight how they will be engaged, their expected role in the project, and whether they have been engaged already or if this is ongoing.	**The comment is duly noted, and a detailed stakeholder engagement plan has been included in CEO endorsement submission.**

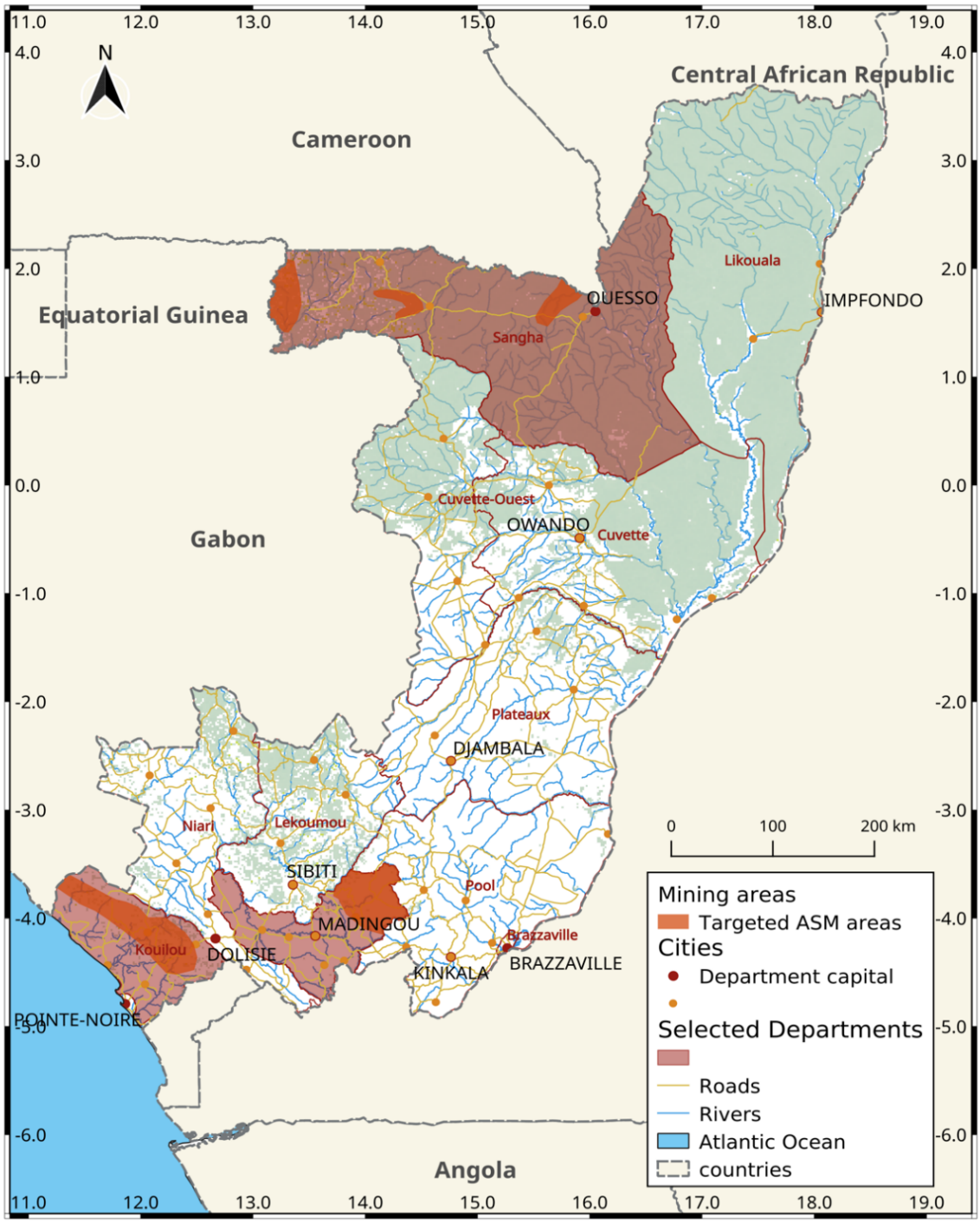
	It is good that the PIF acknowledges the potential impacts of projected climate change, for example, desertification on achieving project objectives. The effects of climate change may also influence decisions on ASGM sites? We recommend that a detailed analysis of climate risk and management strategy should be presented for the project.	**The comment is duly noted. Please reference country level ProDocs for respective climate risks analysis.**

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 ($)*		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Int Consultants	81,600	74,480	7,119
Field visits and data gathering	12,300	12,300	
Inception Workshop	3,050	3,050	
Validation Workshop	3,050	3,050	
Total	100,000	92,880	7,119

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.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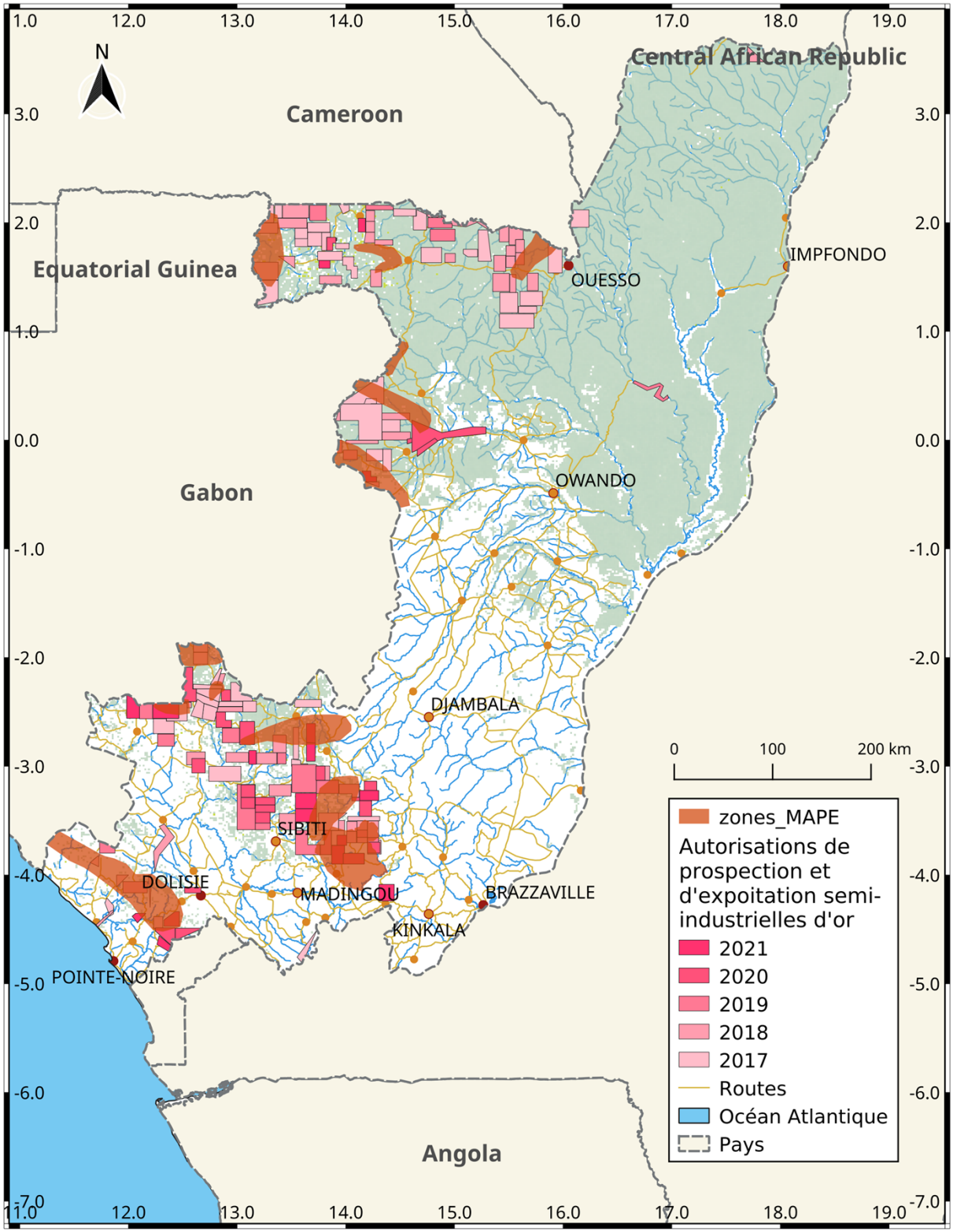
Current situation of the mining permits and authorizations, as well as the forestry concessions

It has been derived from the analysis of the official journal publications over the 5 past years.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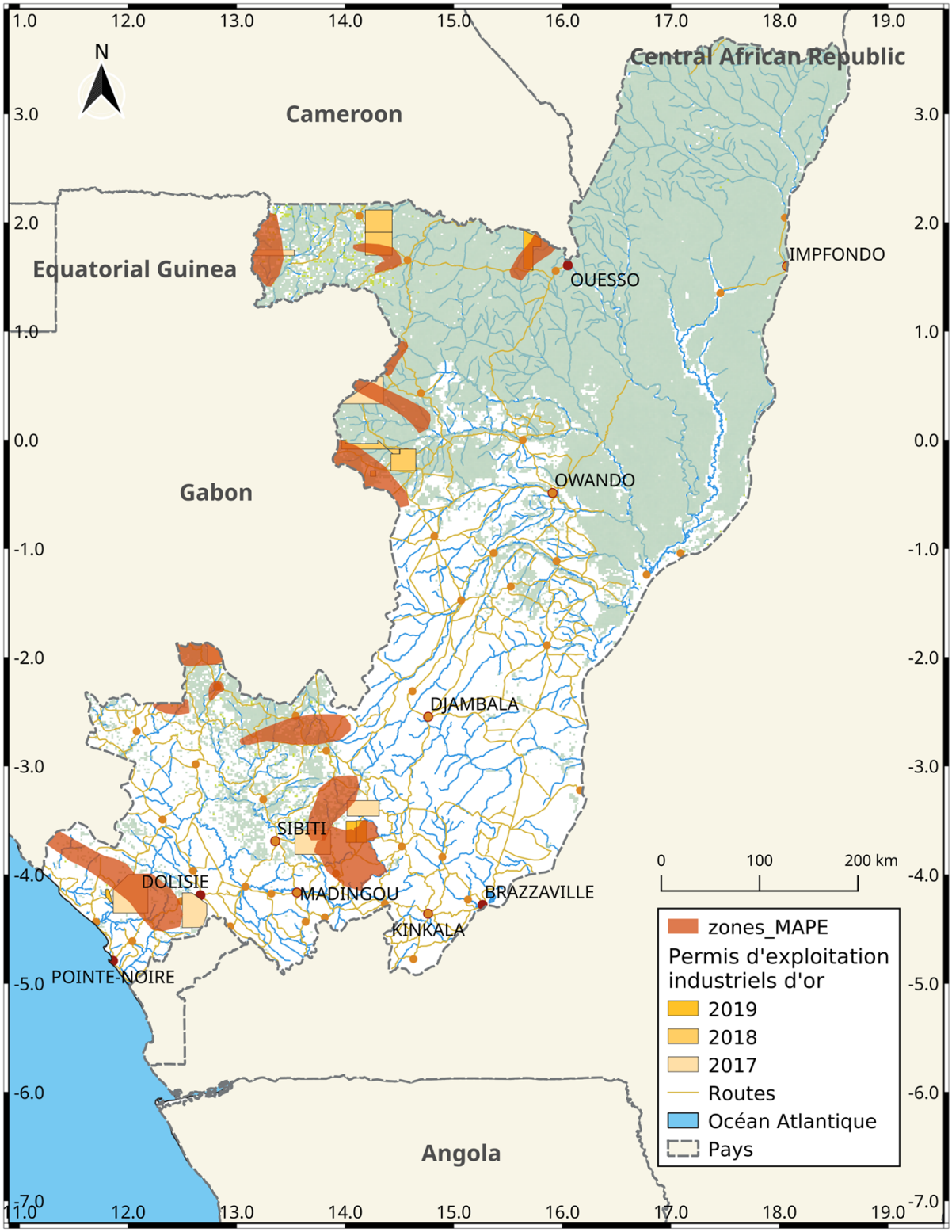
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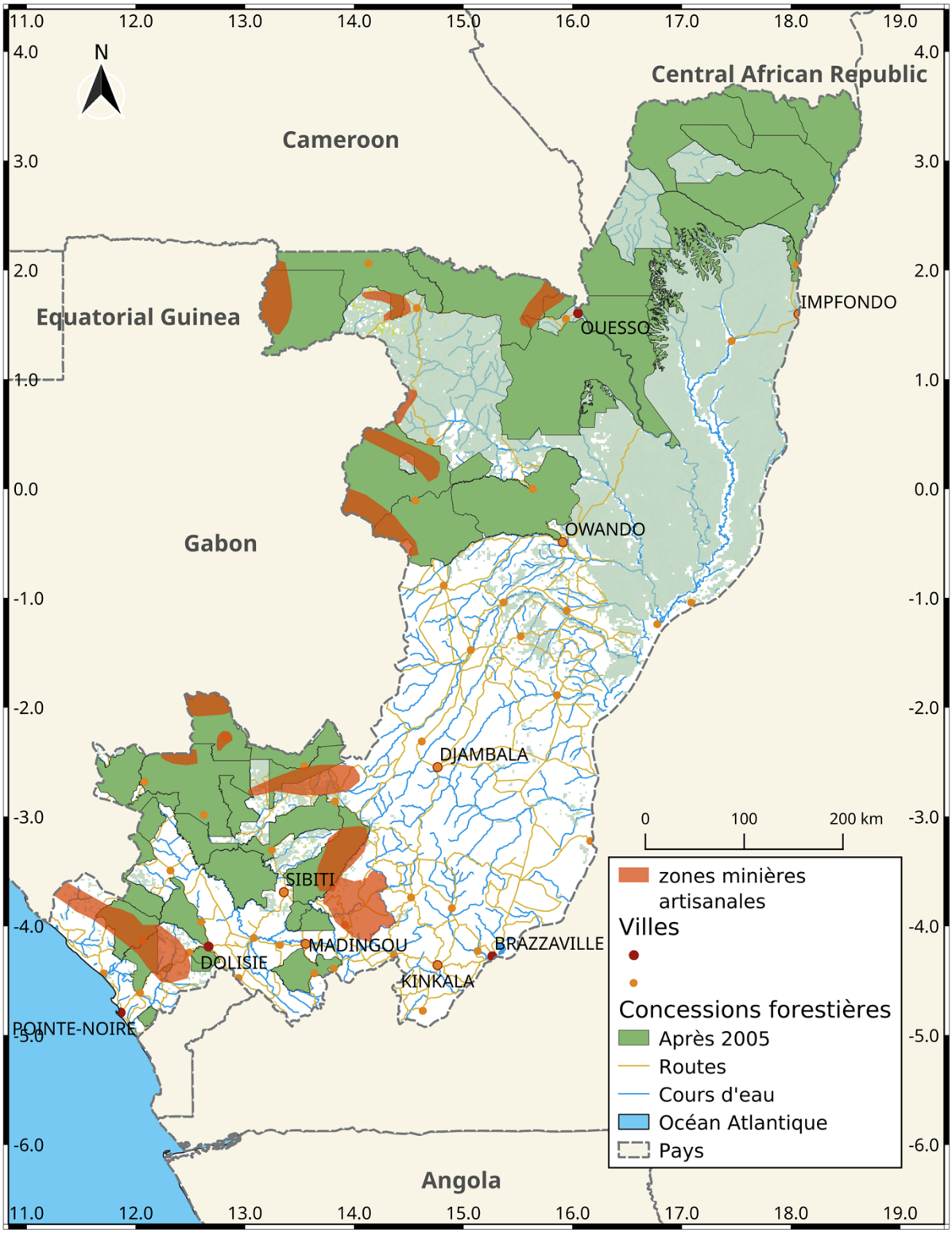
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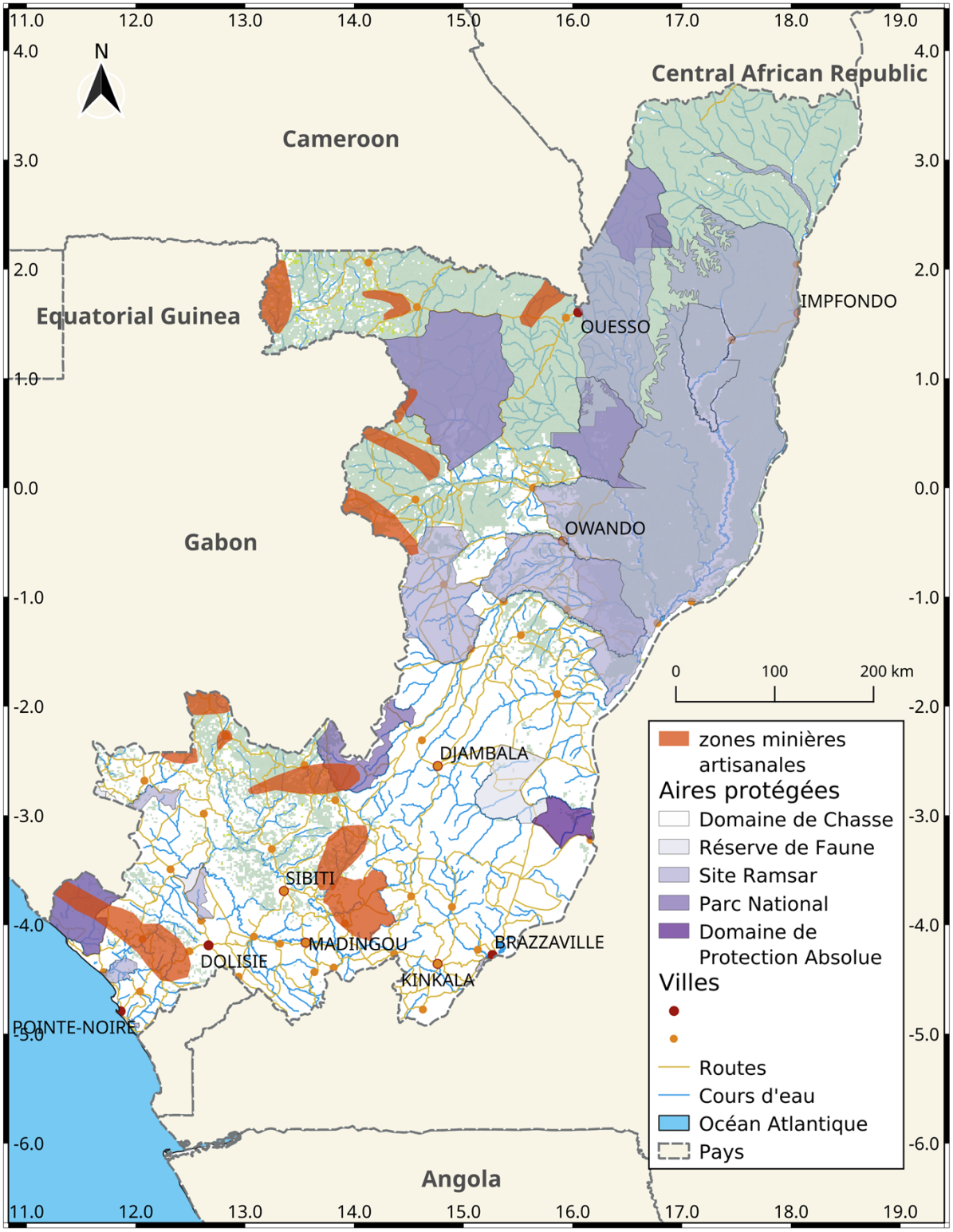

ANNEX E: Project Budget Table

Please attach a project budget table.

			BUDGET ALLOCATION BY PROJECT COMPONENT/ACTIVITY *						
		10619 GOLD+ Congo	**Project Component 1: Promotion of Formalization**	**Project Component 2: Financial Inclusion and Responsible Supply Chains**	**Project Component 3: Enhancing the uptake of Mercury-free technologies**	**Project Component 4: Communication & knowdlge management**	**PMC**	**M&E**	**Total**
UNEP BUDGET LINE/OBJECT OF EXPENDITURE								US $	**US$**
10	**PROJECT PERSONNEL COMPONENT**								
	1100	**Project Personnel**							
	1101	Project Management Support (Project Manager)	0	0	0	0	27,000	0	**27,000**
	1102	Knowledge Transfer/ Capacity Development Expert	35,650	44,750	48,750	44,750	0	0	**173,900**
	1103	Gender and Inclusion Officer	50,000	55,000	45,000	31,000	0	0	**181,000**
	1104	Senior Governance, Legal and Regulatory Advisor	68,000	0	0	0	0	0	**68,000**
	1105	Responsible ASGM Advisor	0	0	0	0	0	0	**0**
	1106	Local Environmental Advisor	0	0	74,000	0	0	0	**74,000**
	1107	Gender and Inclusion Training Specialist	0	30,000	20,285	7,500	0	0	**57,785**

	1108	ASGM Procurement, Logistics and Supply Chain Expert	0	40,000	56,500	5,000	0	0	**101,500**
	1109	Senior Communication Expert	0	7,800	20,000	69,000	0	0	**96,800**
	1110	Association/Cooperative Capacity Building Expert(s)	0	23,000	0	0	0	0	**23,000**
	1111	Training and Sensitization Coordinator	30,000	12,500	40,000	0	0	0	**82,500**
	1112	Downstream Engagement Expert	0	35,500	0	0	0	0	**35,500**
	1113	Financial Inclusion Expert	0	55,000	0	0	0	0	**55,000**
	1200	**Consultants**							
	1201	Communications Consultant	0	5,000	12,500	52,000	0	0	**69,500**
	1202	ASGM Association Technical Support Consultants	0	0		0	0	0	**0**
	1203	Formalization Expert (s)	57,000	0	0	0	0	0	**57,000**
	1204	JA/LA Approach Advisor	60,000	0	0	0	0	0	**60,000**
	1205	Training Specialist (s)	80,000	40,000	57,000	0	0	0	**177,000**
	1206	Access to Financing Specialist(s)	0	65,000	0	0	0	0	**65,000**
	1207	SAP RSM Trainer(s)	0	0	0	0	0	0	**0**
	1208	ASGM Business Model Expert	0	18,000	0	0	0	0	**18,000**
	1209	Senior ASGM Technical Advisor(s)	0	0	68,000	0	0	0	**68,000**
	1210	Senior Environment Advisor	0	0	80,000	0	0	0	**80,000**
	1299	Sub-Total	380,650	431,550	522,035	209,250	27,000	0	**1,570,485**
	1300	**Administrative support**							

	1301	Finance Officer	0	0	0	0	15,000	0	**15,000**
	1302	Technical Contracts officer	0	0	0	0	15,000	0	**15,000**
	1399	Sub-Total	0	0	0	0	30,000	0	**30,000**
	1600	**Travel on official business (above staff)**	0	0	0	0	0		
	1601	Travel	18,000	66,800	54,000	42,000	0		**180,800**
	1699	Sub-Total	18,000	66,800	54,000	42,000	0	0	**180,800**
	1999	**Component Total**	**398,650**	**498,350**	**576,035**	**251,250**	**57,000**	**0**	**1,781,285**
20	**SUB-CONTRACT COMPONENT**								**0**
21	**2100**	**Subcontract (UN organization)**							**0**
	2199	Sub-Total							**0**
22	**2200**	**Sub-contracts (SSFA, PCA, non-UN)**							**0**
	2201	Communications (formatting, layout, design, illustrations, etc.)	4,000	6,500	12,500	26,165	0	0	**49,165**
	2202	Local consultants (data collection, M&E)	0	0	0	0	0	0	**0**
	2203	Local community-based consultants/organizations (NGOs, universities, etc.)	8,000	45,000	55,000	0	0	0	**108,000**
	2204	JA/LA assessments (SWOT Analysis)	0	0	0	0	0	0	**0**
	2205	Responsible Sourcing Assessment	0		0	0	0	0	**0**
	2299	Sub-Total	12,000	51,500	67,500	26,165	0	0	**157,165**
	2999	**Component Total**	**12,000**	**51,500**	**67,500**	**26,165**	**0**	**0**	**157,165**
30	**TRAINING COMPONENT**								**0**

	3200	**Group training (field trips, WS, etc.)**							**0**
	3201	Expert group training (formalization)	33,000	0	0	0	0	0	**33,000**
	3202	Expert group training (access to finance)	0	90,000	0	0	0	0	**90,000**
	3203	Expert group training (mercury free technologies)	0	0	76,800	0	0	0	**76,800**
	3299	Sub-Total	33,000	90,000	76,800	0	0	0	**199,800**
	3300	**Meetings/conferences**							**0**
	3301	Formalization/jurisdictional approach meetings	41,000	0	0	0	0	0	**41,000**
	3302	Financial Inclusion/Responsible ASGM	0	32,500	0	0	0	0	**32,500**
	3303	Mercury-free technologies	0	0	8,250	0	0	0	**8,250**
	3304	Communication / Knowledge sharing meetings/workshops (including national workshops and inception workshop)	0	0	0	60,500	0	0	**60,500**
	3305	Project Steering Committee Meetings (annual)	13,500	0	0	0	0	0	**13,500**
	3306	International meetings, conferences, events (GEF, planetGOLD, UNEP, etc.)	0	0	0	30,000	0	0	**30,000**
	3399	Sub-Total	54,500	32,500	8,250	90,500	0	0	**185,750**
	3999	**Component Total**	**87,500**	**122,500**	**85,050**	**90,500**	**0**	**0**	**385,550**

40	**EQUIPMENT & PREMISES COMPONENT**								**0**
	4100	**Expendable equipment (under 1,500 $)**							**0**
	4101	Office supplies (paper, ink, pens, folders, staples, etc.)	0	0	0	0	7,785	0	**7,785**
	4102	Office equipment (computers, printer, headsets, monitors, mouses, etc.)	0	0	0	0	4,665	0	**4,665**
	4103	Office furniture (desks, chairs, monitor stands/raisers, etc.)	0	0	0	0	14,500	0	**14,500**
	4104	PPE / Small Equipment	0	0	25,000	0	0	0	**25,000**
	4105	Cell phones / tablets / laptops	0		0	0	0	0	**0**
	4106	Office costs (rent, utilities, communications costs, etc.)	0	0	0	0	36,050	0	**36,050**
	4107	Organizational Operational Costs Specific to the Project (project-related general audit costs, professional fees, etc.)					0	0	**0**
	4199	Sub-Total	0	0	25,000	0	63,000	0	**88,000**
	4200	**Nonexpendable equipment (beyond 1,500$)**							**0**
	4201	Hg Free Systems (including pilot equipment, installation & maintenance costs)	0	0	175,000	0	0	0	**175,000**
	4202	Local transportation and fuel	5,000	12,500	12,500	14,000	0	0	**44,000**

	4299	Sub-Total	5,000	12,500	187,500	14,000	0	0	**219,000**
	4999	**Component Total**	**5,000**	**12,500**	**212,500**	**14,000**	**63,000**	**0**	**307,000**
50	**MISCELLANEOUS COMPONENT**								**0**
	5200	**Reporting costs (publications, maps, NL)**							**0**
	5201	Translation of essential documents	1,000	1,000	1,000	1,000	0	0	**4,000**
	5299	Sub-Total	1,000	1,000	1,000	1,000	0	0	**4,000**
	5300	**Sundry (communications, postage, etc)**							**0**
	5301	Communication, postage, freight, etc.	0	0	0	0	0		**0**
	5302	Closing costs (e.g. mailing files, records, etc.)	0	0	0	0	0		**0**
	5303	Computer software, anti-virus, cloud storage, conference call licenses, etc.	0	0	0	0			**0**
	5399	Sub-Total	0	0	0	0	0	0	**0**
	5500	**Evaluation**							**0**
	5501	Mid-term evaluation (UNEP)	0	0	0	0	0	20,000	**20,000**
	5502	Final Evaluation (UNEP)	0	0	0	0	0	40,000	**40,000**
	5503	Final Audit	0	0	0	0	5,000		**5,000**
	5599	Sub-Total	0	0	0	0	5,000	60,000	**65,000**
60000	**5999**	**Component Total**	**1,000**	**1,000**	**1,000**	**1,000**	**5,000**	**60,000**	**69,000**
	TOTAL		**504,150**	**685,850**	**942,085**	**382,915**	**125,000**	**60,000**	**2,700,000**
			2,515,000.00				**125,000**	**60,000**	
			2,700,000						

ANNEX F: (For NGI only) Termsheet

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

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The 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).