GEF-8 PROJECT IDENTIFICATION FORM (PIF)

TABLE OF CONTENTS

GENERAL PROJECT INFORMATION 3

Project Summary 4

Indicative Project Overview 4

PROJECT COMPONENTS 5

PROJECT OUTLINE 9

A. PROJECT RATIONALE 9

B. PROJECT DESCRIPTION 15

Project description 15

Coordination and Cooperation with Ongoing Initiatives and Project. 21

Core Indicators 21

Risks to Project Preparation and Implementation 24

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES 27

D. POLICY REQUIREMENTS 29

Gender Equality and Women's Empowerment: 29

Stakeholder Engagement 29

Private Sector 30

Environmental and Social Safeguard (ESS) Risks 30

E. OTHER REQUIREMENTS 30

Knowledge management 30

ANNEX A: FINANCING TABLES 30

GEF Financing Table 30

Project Preparation Grant (PPG) 31

Sources of Funds for Country Star Allocation 31

Indicative Focal Area Elements 31

Indicative Co-financing 31

ANNEX B: ENDORSEMENTS 32

GEF Agency(ies) Certification 32

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s): 32

ANNEX C: PROJECT LOCATION 33

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING 34

ANNEX E: RIO MARKERS 34

ANNEX F: TAXONOMY WORKSHEET 34

General Project Information

Project Title	
Global Opportunities for the Long-Term Development of the Artisanal and Small-Scale Gold Mining Sector in Paraguay - planetGOLD Paraguay	
Region	GEF Project ID
Paraguay	11112
Country(ies)	Type of Project
Paraguay	FSP
GEF Agency(ies):	GEF Agency ID
UNEP	N/A
Executing Partner	Executing Partner Type
Alliance For Responsible Mining (ARM)	CSO
GEF Focal Area (s)	Submission Date
Chemicals and Waste	4/11/2023
Project Sector (CCM Only)	
Taxonomy	
Chemicals and Waste, Focal Areas, Mercury, Artisanal and Scale Gold Mining, Best Available Technology / Best Environmental Practices, Civil Society, Stakeholders, Community Based Organization, Non-Governmental Organization, Communications, Public Campaigns, Awareness Raising, Behavior change, Indigenous Peoples, Local Communities, Beneficiaries, Type of Engagement, Information Dissemination, Participation, Consultation, Private Sector, Large corporations, SMEs, Gender Equality, Gender results areas, Access and control over natural resources, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Capacity, Knowledge and Research, Learning, Indicators to measure change, Theory of change, Innovation, Knowledge Generation, Professional Development, Capacity Development, Knowledge Exchange, North-South, South-South, Twinning, Peer-to-Peer	
Type of Trust Fund	Project Duration (Months)
GET	60
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
3,000,000.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
285,000.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
3,285,000.00	22,000,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
150,000.00	14,250.00

PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
164,250.00	3,449,250.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

This project aims to reduce the use of mercury and other negative environmental and social effects caused by the Artisanal and Small-Scale Gold Mining (ASGM) sector in Paraguay.

ASGM operations are highly concentrated in one area of the country, in the department of Guairá, where the use of mercury remains particularly high due to the inefficient practices and technologies used by miners. Concretely, all the ''worst practices'' identified by the Minamata Convention are taking place in the area causing negative consequences to the environment and the surrounding communities. Mercury is a well-known chemical element that is naturally occurring and emit/release through anthropogenic sources to the environment. Once in the environment, mercury can be persistent, travel long distances and bioaccumulates up the food chain. With respect to ASGM, miners often inhale mercury during amalgam burning which can damage the nervous system as well as other parts of the body. In addition, high volumes of methylmercury cause severe damage to the immune and nervous systems, with an augmented impact on pregnant women and new-borns.

The objective of this project is to trigger a behavioural change in the ASGM sector in Paraguay. To achieve this, the project plans to apply a comprehensive approach in which the project's intervention will focus on four key factors to enable a responsible, mercury-free development of the ASGM sector in the country.

Those elements are:

1) The promotion of formalization efforts in the national ASGM sector;

2) The reduction of barriers to access finance for ASGM miners and promotion of responsible gold supply chains;

3) The uptake of mercury-free gold processing technologies; and

4) The management of knowledge and communications created by the project to ensure upscaling at the national and international levels.

The Global Environmental Benefits (GEBs) expected will be the abatement of 2 metric tons of mercury, 64,000 hectares under improved land management and 2,000 people as direct beneficiaries.

Indicative Project Overview

Project Objective

This project aims to reduce the negative environmental and social effects caused by the intensive use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector in Paraguay. ASGM operations are highly concentrated in one of the departments of the country, where the use of mercury remains particularly high due to the inefficient practices and technologies used by miners. This situation causes negative consequences to the environment and the surrounding communities. Mercury is a well-known chemical element that is naturally occurring and emit/release through anthropogenic sources to the environment. Once in the environment, mercury can be persistent, travel long distances and bioaccumulates up the food chain. With respect to ASGM, miners often inhale mercury during amalgam burning which can damage the nervous system as well as other parts of the body. In addition, high volumes of methylmercury cause severe damage to the immune and nervous systems, with an augmented impact on pregnant women and new-borns. The objective of this project is to trigger a behavioural change in the ASGM sector in Paraguay. To achieve this, the project plans to apply a comprehensive approach in which the project's intervention will focus on four key factors to enable a responsible, mercury-free development of the ASGM sector in Paraguay. Those elements are: 1) The promotion of formalization efforts in the national ASGM sector; 2) The reduction of barriers to access finance for ASGM miners and promotion of responsible gold supply chains; 3) The uptake of mercury-free gold processing technologies; and 4) The management of knowledge and communications created by the project to ensure upscaling at the national and international levels. The Global Environmental Benefits (GEBs) expected will be the abatement of 2 metric tons of mercury, 64,000 hectares under improved land management and 2,000 people as direct beneficiaries.

Project Components

Component 1: Formalization of the ASGM Sector

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	**Co-financing ($)**
570,000.00	4,180,000.00

Outcome:

Outcome 1: Informal ASGM miners improve their gold production practices through formalization

Output:

Output 1.1 Government entities strengthened and multi-stakeholder approach piloted at selected ASGM area

Output 1.2

A capacity-building programme is designed and delivered to improve formalization in the sector

Component 2: Improvement of the access to finance and access to supply chain

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
570,000.00	4,180,000.00

Outcome:

Outcome 2: ASGM organizations have access to finance to foster the legally compliant mercury-free gold supply chain in Paraguay

Output:

Output 2.1: Public and private financiers strengthened to increase support to ASGM, and financial mechanism implemented

Output 2.2: ASGM organizations are capacitated in management, financial education and due diligence compliance

Component 3: Uptake of mercury-free gold processing techniques

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,000,000.00	7,330,000.00

Outcome:

Outcome 3: Mercury-free processing methods are widely used by ASGM miners in Paraguay

Output:

Output 3.1: Communities are sensitized on the health and environmental risks of mercury usage

Output 3.2: ASGM miners are capacitated and incentivised to use mercury-free technologies

Component 4: Knowledge management and Communications

Component Type	Trust Fund
Technical Assistance	GET

GEF Project Financing ($)	Co-financing ($)
540,643.00	3,960,000.00

Outcome:

Outcome 4: The ASGM sector in Paraguay reduces its negative impacts through the strengthening of communications and knowledge management

Output:

Outcome 4.1: Knowledge and information produced through the project leads to a more responsible ASGM sector in Paraguay

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

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
176,500.00	1,200,000.00

Outcome:

The project achieves results on time through effective monitoring and evaluation

Output:

The project is monitored and evaluated

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Formalization of the ASGM Sector	570,000.00	4,180,000.00

Component 2: Improvement of the access to finance and access to supply chain	570,000.00	4,180,000.00
Component 3: Uptake of mercury-free gold processing techniques	1,000,000.00	7,330,000.00
Component 4: Knowledge management and Communications	540,643.00	3,960,000.00
M&E	176,500.00	1,200,000.00
Subtotal	**2,857,143.00**	**20,850,000.00**
Project Management Cost	142,857.00	1,150,000.00
Total Project Cost ($)	**3,000,000.00**	**22,000,000.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Mercury use and ASGM at the global level

Mercury is a naturally occurring element and emitted/released as well through anthropogenic sources which pose adverse negative impacts to human health and the environment. Exposure to mercury via inhalation of mercury vapor, skin contact with liquid mercury or consumption of contaminated water or food, especially when these are in high frequency and long-term, can cause severe and irreparable harm. Because mercury is recognized as one of the chemicals of major public health concerns according to the World Health Organization (WHO),[1] and it is known to affect the brain, kidney, lungs, nervous, digestive, and immune systems, skin, and eyes.

Moreover, the mercury that is emitted into the atmosphere can eventually make its way into water sources, and subsequently to the aquatic food chain as it is transformed into another chemical compound called methylmercury. This toxic form of mercury biomagnifies as it passes from one trophic level of the food chain to another, having significant impacts on biodiversity and ecosystems, and detrimental impacts on human health. In this regard, children are most susceptible to the adverse effects of mercury exposure.

The artisanal and small-scale gold mining (ASGM) sector is the main contributor to global anthropogenic mercury emissions[2]. Due to its physical properties, mercury has been used for centuries in the sector to separate the gold from the ore. During processing, mercury losses occur to the environment at two stages, during the amalgamation process, when mercury is mixed with gold and other minerals to form the amalgam, and during the roasting process of the mercury-gold amalgam, when mercury is evaporated leaving a gold sponge.

While mercury is used and emitted at the local level, due to its intensive use, it can travel long distances around the world, contributing to the global mercury pollution, contaminating the earth's ecosystems. In addition, artisanal and small-scale gold mining extraction and processing activities often lead to other environmental challenges, including deforestation and land degradation, among others. Certain studies[3] have shown that deforestation also increases mercury mobilization in ASGM areas, increasing levels of both naturally occurring and anthropogenic toxins.

These challenges have gathered the attention of and mobilized action of a variety of actors and stakeholders, including national governments, international bodies, the private sector, civil society, and the affected local mining communities. The emphasis has been placed on identifying scalable and sustainable solutions to reducing and eventually eliminating the use of mercury in the production of artisanal gold. These efforts are challenging due to the characteristics of the sector and the complex environments in which artisanal gold mining often operates.

In this sense, the Global Environment Facility (GEF)-funded planetGOLD programme, currently in transition from the first (2018-2023) into second phase (2023-2028), is a key initiative in driving large-scale, systemic change across the ASGM sector globally[4], aiming to make ASGM safer, cleaner, and more profitable. The programme recognizes that tackling the elimination of mercury in the ASGM supply chain requires an integrated approach that addresses the root causes of mercury use, and the barriers that often impede artisanal miners from transitioning to mercury-free technologies and a formalized business. The approach includes a focus on several key areas: (i) support for formalization; (ii) access to financing and responsible gold markets, (iii) awareness raising on the harmful effects of mercury towards human health and the environment, (iv) increasing access to mercury-free technologies and (v) strengthening local capacity to ensure a long-term sustainable positive impact.

The project builds on previous GEF efforts to tackle mercury use in ASGM such as the Global Mercury Project (GMP), the ongoing planetGOLD programme (GEF GOLD and GOLD+) and bilateral initiatives. At the global level, the planetGOLD programme supports countries' obligations under the Minamata Convention on Mercury that entered into force in August 2017, and of which Paraguay is a Party since 2018.

ASGM is an activity practised in more than 80 countries, located particularly in South and Central America, Africa, and Asia; where it plays a crucial role in socioeconomic development and poverty reduction, as it is often a primary source of employment and income for people in rural areas. 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 that an additional 100 million people are dependent on this sector for their livelihoods[5].

Artisanal and small-scale gold miners produce annually around 20% of the global gold production through supply chains that are mostly informal (80% of ASGM production)[6].

Generally, ASGM features the use of basic mining tools, limited use of mechanization (allowing for mobility), the employment of rudimentary techniques requiring moderate financial resources but a heavy physical investment. Therefore, the low barrier to entry leads to miners often operating in informal settings outside the national legal and regulatory framework. At the same time, many factors affecting and defining the ASGM sector are strongly linked to local and national contexts. Social and economic elements, environmental, geological parameters, health, and technical aspects, differ from country to country and at a national level from one site to another.

Despite its significant potential for development, when not organized and mismanaged, ASGM can present important challenges such as conflicts over land use, child labour, mercury use and occupational health and safety risk for miners.

Main development challenges

Paraguay is a landlocked, upper middle-income developing country with a population, mostly urban, of about 6.7 million (50.2% men and 49.8% women)[7]. Its economy is dependent on its natural and agro-livestock resources, the poverty rate is 27% and the unemployment rate is 9.3%[8]. The country is characterized by high concentration of wealth and land, and exposure to extreme climatic events, mainly floods and droughts, as well as high rates of deforestation and land degradation[9].

It is subdivided into 17 departments and a capital district, Asunción, which is the seat of the national government. The Paraguay River divides the national territory into the eastern and western regions, also known as the Chaco.

Land use change remains a critical environmental challenge in the country as the agriculture sector is large and continues growing. The production of soybeans and the exploitation of cattle generate high nitrogen emissions and massive destruction of its forests, which in turns leads to enormous losses in its terrestrial biodiversity[10].

The indigenous population living in Paraguay comprises 19 Indigenous Peoples belonging to 5 linguistic families, with a total of 117,150 people[11]. Concretely, the Mbyá Guaraní are present in the department of Guairá[12].

The mining industry does not represent a significant sector for the economy (0.1% of the GDP)[13]. Gold mining is concentrated in the municipality of Paso Yobái, located in the department of Guairá. However, there are prospecting and exploring activities for metallic minerals being conducted in the department of Caazapá, located as well in the eastern region of the country.

The municipality of Paso Yobái, located 205 km from the capital city of Asunción, is divided into 22 towns or communities. The municipality is home to 28,182 individuals (15,103 men and 13,079 women)[14] and the traditional economic activities are agriculture and cattle ranching. Since 2000, gold mining has become a

relevant source of income for the local population (estimates suggest that between 2,000 to 4,000 people are directly involved in ASGM).

Root causes and barriers

Poverty and Lack of Economic Opportunities

Frequently, ASGM is a primary source of income for many workers and their families. The alternative traditional sources of income such as agriculture or farming generate lower incomes than mining, are very reliant on the global economic cycle, and highly impacted by the effects of climate change. With an average annual production of 425 - 475 kgs of gold, artisanal mining in Paso Yobái can bring substantially higher incomes compared to traditional activities including cultivation of yerba mate, soybeans…

Despite its physical requirements, ASGM is perceived as a high potential generator of revenues. Poverty-driven ASGM represents a crucial obstacle to reducing mercury use and formalization, especially as barriers to entry in the sector are low, while barriers to access mercury-free technologies or mining permits can be high.

In Paso Yobái, the number of permanent workers is very low, with temporary staff being the most common form of contracting. As ASGM is mostly an informal activity, those operating in the sector often lack regular contracts and therefore are not covered by the social security system. Informal workers, who often come from the most vulnerable groups of the community, have difficulties meeting their basic needs and lack access to basic public services.

In Paraguay, the main effects of climate change are heat waves, floods, prolonged droughts, effects on plant and animal species, quality and availability of water resources, that can have an impact in the main economic sectors and migratory movements of the population.

Lack of an Effective Legislative and Regulatory Framework

The informal status of mining communities makes difficult to organize and increase the skills and awareness of miners on the risks of mercury, and to invest in technological and social solutions to reduce the negative impacts of unsustainable practices.

The drivers of informality are primarily rooted in the absence of an effective governance framework that regulates and incentivises miners to formalize. This includes the presence of fiscal-administrative obstacles, such as excessive costs for licenses, burdensome processes, and the distance between government services and the ASGM sites.

According to the Mining Cadastre of the Vice Ministry of Mines and Energy in Paraguay, only one mining company has a legal concession title in Paso Yobái, although there are several legalization requests from individuals and groups to obtain legal mining permits that have been presented and are under review.

In Paraguay, the Mining Law No. 3,180/07 applies to all levels of mining production, and it addresses specific aspects applicable to the ASM (Artisanal and Small-Scale Mining) sector. However, the current definition of ASGM activities as well as other factors such as the legal requirements, and the economic and bureaucratic costs associated with obtaining licensed areas, have derived in no organized ASGM groups currently holding a mining permit in Paso Yobái, which consequently pushes them to operate in informality.

The gold extraction is done through informal agreements, either leasing arrangements with land property owners or with the company that owns the concession which has caused occasional conflicts among the different stakeholders over the access to extraction and processing areas in the municipality[15]. In addition, the lack of a Territorial Management Plan (“Plan de Ordenamiento Territorial”) in the Municipality of Paso Yobái has led to the emergence of unregulated activities, such as the presence of processing units using mercury in urban areas and near watercourses.

Limited Access to Finance

In most cases, miners use mercury because it is quick, cheap, and easy to use. Shifting to improved technologies requires capital for the equipment, set-up, permitting, management systems, and knowledge to operate formally and obtain a larger and more reliable payoff.

As the ASGM sector is often associated with environmental, social and governance challenges (I.e., money laundering, child labour, mercury use, corruption...), it can cause a great threat in the form of reputational damage for lenders.[16] Additionally, investors are often discouraged by the fact that ASGM is financed through informal channels, as well as by the unpredictability regarding prospective production, its migratory nature, and the lack of collateral assets from artisanal miners.
Concretely for Paraguay, only a minority (48.7%) of adults have an account in a bank at the country level[17] and financial and banking institutions are not present in Paso Yobái. Additionally, as most miners operate informally, ASGM miners rely on informal financing arrangements provided by close family, friends, mercury dealers, gold traders or informal savings groups. Local traders and mercury providers often fund the operations in exchange for purchases of gold, leading them to sell the product at lower market prices. Concretely for the targeted area, there is no information on how these networks operate.

As a result of these factors, ASGM miners are unable to finance the initial investments needed to switch to low or no mercury techniques and lack the incentives to adopt responsible practices as their primary sources for financing and subsequent gold purchases do not provide a demand for mercury-free gold.

Low Technical Capacity and Poor Knowledge of Best Practices for ASGM

In Paso Yobái, the population is mostly young and reliant on the primary sector (82.2%)[18]. The education levels for the producers in the area were lagging compared to the ones of the department and the country.

The use of mercury to separate the gold from the ore is cheaper and easier to use than other techniques, which often require financial investment and technical training. Moreover, mercury is easily available in mining areas, often provided by buyers and other intermediary actors in the supply chain.

Artisanal gold miners have limited knowledge and understanding of the potentially negative health and environmental impacts associated with mercury use and the management of mercury-containing tailings. Additionally, those who may understand these impacts, have limited awareness of and access to technologies that reduce and/or eliminate mercury use.

Additionally, the use of hazardous pesticides and nitrogen pollution (as a fertilizer), pose serious risks for the environment and human life from agricultural practices.

According to the Index of Vulnerability and Adaptation to Climate Change in the Latin American and Caribbean Region (CAF, 2014), Paraguay is in the "extreme risk" category because of factors such as poverty, inequality and vulnerable livelihoods.

A lack of effective local solutions and capacities to organize and collectively address these problems, especially via scalable knowledge sharing and communication efforts, can often weaken the impact of efforts to educate and improve understanding.

Adequate access to information, capacity building and awareness-raising activities on mercury use, sustainable and responsible practices and technologies and climate change adaptation (CCA) are crucial to limit this barrier and will in turn improve the impacts on human health and the environment.

Exposure to Illicit Mercury and Gold Trade

With regulatory measures increasingly banning or limiting the trade of mercury and its use in the sector in Latin America, informal flows to gold mining areas have increased and are often controlled by illicit networks.

In the case of Paraguay, mercury trade for ASGM is often conducted through gold buyers, and interviews

held during the draft of the NAP (National Action Plan) report suggested that it enters through Ciudad del Este, originating from Brazil and Peru. However, there is no comprehensive information on how the trade flows operate.

Adopting a repressive-only approach to mercury trade could limit the capacity of artisanal miners to sell and export their production, negatively impacting their finances and livelihoods. Assessing the mercury flows and power dynamics in ASGM sites and, targeting behavioural changes in the use of mercury at the mine site level then appears as the most promising intervention. The analysis should consider the gains and losses of the actors profiting from mercury trade and use and engagement and/or enforcement strategies shall be considered.

Gender Inequality and other Social Challenges

In Paraguay, women have traditionally been linked to domestic and care tasks. This cultural aspect is one of the greatest obstacles to the labour market insertion of women. On the one hand, it limits their labor supply and reduces their economic opportunities due to the need to reconcile domestic and care work with paid work. On the other hand, it defines in the collective imagination social representations of women's roles and capabilities, which in turn influence labour supply and demand, both in terms of remuneration and the occupations socially assigned to women[19].

Despite representing half of the population, women in Paso women in Paso Yobái represent only 16% of formal employment in the primary sector and 39% in the secondary and tertiary sectors. Concretely for ASGM, interviews during the baseline of the NAP suggest that women have been involved in these activities since the mining boom in Paso Yobái, although the numbers have been decreasing with time. Currently, it has been reported that they are mostly involved in secondary tasks related to logistics and provision of food in the mining sites. There is no existing sex-disaggregated data in relation to the number of women miners or members of the organized ASGM groups in the municipality nor information available on the distribution of labour, access to resources and participation in the decision-making mechanisms.

Very often strong social norms influence the participation of women in the ASGM sector as it negatively perceived and constrained by intertwined factors. Therefore, women do not have equal access to, and control over gold resources and are often not involved in decision making processes. Being excluded from the activities related to gold extraction means that women do not have the same opportunities as men in benefitting from gold sales.

Women are most vulnerable to the effects of mercury particularly when pregnant. In pregnancy, mercury exposure can have severe effects on the unborn child. Yet women may be the ones in the community that are more receptive to raising awareness about the negative health effects of mercury.

In parallel, in Paraguay, Indigenous Peoples, as a whole and each one in their particularity, suffer structural discrimination built and sustained, expressed fundamentally in the denial of their rights to land and territory as a primary obstacle to the enjoyment of their human rights[20]. Several communities are in the municipality but there is no information on their interaction with the productive sectors (i.e., agriculture, mining).

Once the global environmental problems, and the main development challenges in Paraguay have been presented, it is important to pay attention to how the different identified project stakeholders will cooperate with and benefit from the project, triggering the necessary changes for a sustainable behavioural change of practices towards a mercury-free ASGM sector in the country.

The main project stakeholders are introduced below:

Ministry of Environment and Sustainable Development (MESD): The MESD will be the main national counterpart of the project. In particular, the I team will work with the National Mercury Commission, the GEF Operational Focal Point (OFP) and the Minamata Focal Point (MFP) in the design and implementation of the project, with a special focus on activities related to the reduction of the negative impacts on biodiversity and natural resources in the Paso Yobái region.

Vice Ministry of Mines and Energy (VMME): The project will cooperate with the VMME, located in the Ministry of Public Works and Communications, in strengthening the current legal framework of the ASGM sector at the national level. This close cooperation will ensure that the progress and lessons learned through the formalization component is transferred to national policy makers to guarantee the ownership and sustainability of the project outcomes, improving the management of the gold supply chain in the country.

Municipality of Paso Yobái: The project will work closely with the public authorities at the local. Municipalities are local government bodies with legal personality that, within their competence, have political, administrative and regulatory autonomy, as well as autonomy in the collection and investment of their resources. The main counterpart will be the municipality of Paso Yobái who in turn will involve the authorities of the 22 towns that form the whole district based on the selected mining sites. The main towns involved in the mining activities are San Antonio, Coronel Cubas, Colonias Unidas, Colonia Sudetia, Colonia Nanssen and Mangrullo. All of them will be consulted during the PPG. A consistent and aligned leadership at the provincial and district level is fundamental for a successful implementation of the Jurisdictional Approach and Multi-Stakeholder Platforms.

Ministry of Public Health and Welfare (MPHW): The project will involve the MPHW in the activities related with awareness raising health-related risks in ASGM (including mercury use), capacity building on OHS (Occupational, Health and Safety), protection of vulnerable populations and others. Data and insights on the ASGM sector gathered through the project will be shared to inform public health officials at the national and local level.

Ministry of Women (MW): The project will ensure the participation of the MW in the preparation of the stakeholder engagement plan and activities related to gender equality and empowerment of women involved in ASGM activities in Paraguay.

Ministry of Industry and Trade (MIT): The project will seek the participation of the MIT, as it is the public body that oversees the export of gold from Paraguay.

LAMPA (Latin America Mining Paraguay): LAMPA is a private LSGM (Large-scale gold mining) company, with a 100% Paraguayan capital and which owns and operates a mining site in Paso Yobái. The project will ensure an adequate engagement with LAMPA as the company is seen as a key player to support the formalization efforts of the artisanal miners. In addition, its participation in the project will consolidate the efforts related to the reduction of the potential social conflicts between LSGM and ASGM in Paraguay.

Artisanal Miners Associations: The project has identified various mining associations such as the Miners Association of Paso Yobái, Mining Cooperative of Paso Yobái and Miners Group of Albin Neukirchinger. These organizations will play a key role in the project's execution phase as they will serve as the main communication channels with the different targeted project mining sites. In addition, these institutions will help the project to achieve an effective upscaling of the behavioural changes needed to transform the current Paraguayan ASGM sector into a mercury-free and sustainable extractive industry. The artisanal miners and the rest of related workers in the ASGM will be the ultimate beneficiaries of the project.

Alliance for Responsible Mining (ARM): ARM is a Colombia-based international NGO with a long-standing experience in the development and execution of ASGM-related projects from various donors. In the South American region, ARM has executed projects in Colombia, Honduras, Peru, and Bolivia[21]. ARM is an active partner of the planetGOLD Advisory Group (PAG) and has developed the CRAFT Code used by planetGOLD projects as a benchmark to support due diligence activities under Component 2. They will act as the executing agency (EA) of the project.

planetGOLD global programme: The planetGOLD Paraguay project will support of the global component of the planetGOLD programme (GED ID 10606) to ensure that coordination and lessons learned are exchanged with other planetGOLD child projects, and results are sustained through the entire lifespan of the project. Reporting mechanisms will be established to compile homogenous information on the programmatic indicators and the Global Environmental Benefits (GEBs) achieved by the project at the national level. The project will participate in regular coordination calls with programme stakeholders, will

use the global communication strategy and comms channels (I.e., website), and will participate events such as the Annual Programme Meeting (APM) and the planetGOLD Global Forum (GF).

[1] World Health Organization. 2017. Mercury and Health. Available from: https://www.who.int/news-room/fact-sheets/detail/mercury-and-health [accessed November 8, 2021].
[2] United Nations Environmental Programme (UNEP). 2018. Global Mercury Assessment 2018. Available from: https://wedocs.unep.org/bitstream/handle/20.500.11822/27579/GMA2018.pdf?sequence=1&isAllowed=y [accessed August 15, 2022].
[3] Sarah E. Diringer, Axel J. Berky, Marco Marani, Ernesto J. Ortiz, Osman Karatum, Desiree L. Plata, William K. Pan, Heileen Hsu-Kim. Deforestation Due to Artisanal and Small-Scale Gold Mining Exacerbates Soil and Mercury Mobilization in Madre de Dios, Peru. Environmental Science & Technology, 2019
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B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

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management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document.

The project structure is built around four components that reflect the identified needs in terms of activities, outcomes, and key outputs. The main 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 Is 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 (ToC) 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.

The four outcomes will ensure long-lasting changes in the ASGM sector at the national level and will leverage global environmental benefits through coordination and participation in the planetGOLD global programme. Gender mainstreaming will be incorporated into all project components.

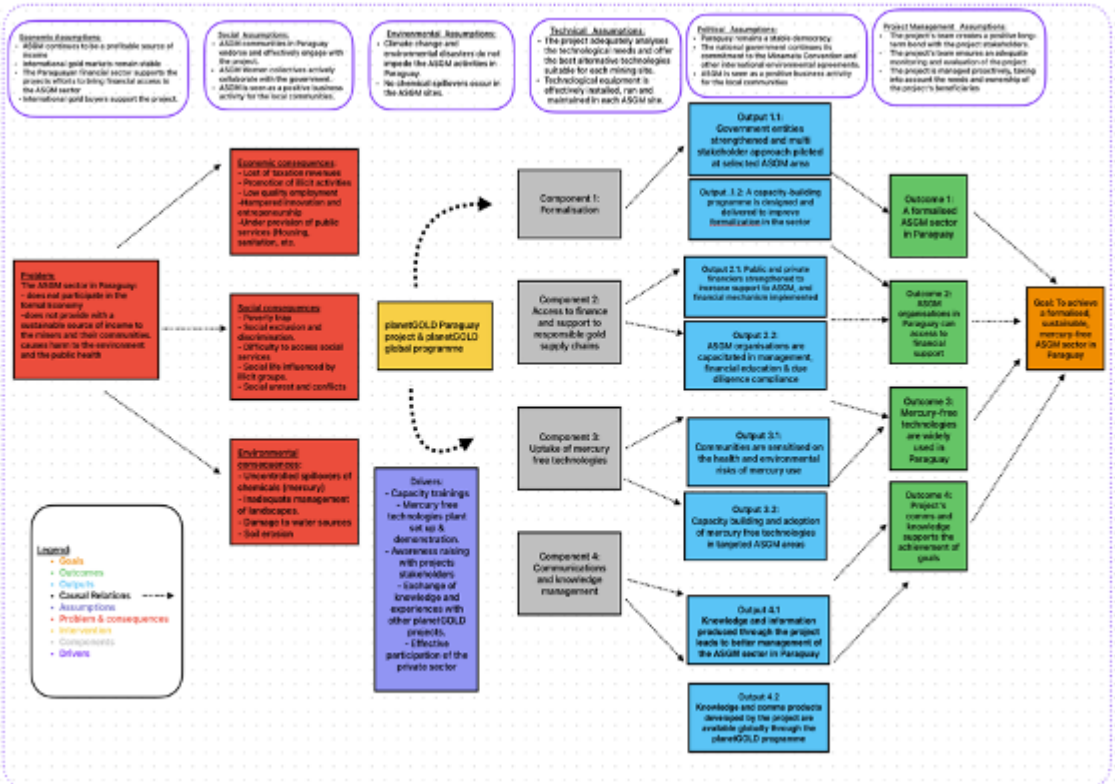

Figure 1: Theory of Change planetGOLD Paraguay project. Source: UNEP

One of the key features of the second phase of planetGOLD programme (GEF ID 10606) is the inclusion of the Jurisdictional Approach and Landscape Approach (JA/LA) to enhance the formalization efforts.

This approach uses government administrative or landscape boundaries to define the scope of action and involvement of stakeholders rather than social and environmental boundaries. It emphasizes the importance of subnational governments in multi-stakeholder land use.

Therefore, the JA/LA approach will tackle ASGM operations from a broader context. Using the JA/LA plan of action, the results of the project will not be based only on the outcomes from a few pilot sites, but rather the work with cluster areas showing common dynamics inside them, ensuring there is a critical mass of committed ASGM communities for success.

The 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.

Therefore, the combination of the 4 project components presented above and the pilot of the JA/LA approach and other related methodologies will lead to the creation of an alternative scenario that will curb the use of mercury in the national ASGM sector and will eventually trigger the necessary changes for the development of an ASGM sector that supports national and international development strategies in the long term.

Indigenous People are present in the municipality where the project will target its intervention. To mitigate the potential risks to local indigenous groups, the project envisions to carry out the following activities during the Project's Preparatory Phase:
- Comprehensive consultation with and participation of indigenous people that may be potentially affected by project activities: the engagement process will be gender and inter-generationally inclusive, paying attention to marginalized groups. The PPG phase will offer an opportunity for Indigenous groups to participate in the design of the activities to be executed during the Implementation Phase.
- Introduction and dissemination of Free, Prior and Informed Consent (FPIC) tools regarding project activities that may affect the indigenous people's rights, lands, territories, natural resources, traditional livelihoods, tangible and intangible cultural heritage.
- Prior assessment and avoidance of impacts: carry out environmental and social analysis.
- Culturally appropriate benefits: ensure that indigenous people can benefit from project activities in a culturally appropriate and inclusive manner.
- Support rights to lands, territories and resources: support activities that would result in legal recognition of customary or traditional land tenure and management systems and collective rights of project-affected indigenous people.
- Plan to address impacts and benefits: develop a time-bound plan for project activities that may affect indigenous people and identify risks and impacts, implementation of risk avoidance and risk mitigation measures. Introduction of measures for provision of culturally appropriate benefits, continued consultation and participation, grievance procedures, and targeted monitoring and evaluation procedures.

Component 1: Formalization of the ASGM sector

Discussions with government authorities on the current legal framework and its applicability will take place and actions to support its implementation will be proposed as part of the project (i.e., revision of the definition of ASGM, categorization of different licenses allowing for flexibility, decentralization of licensing…). Cost-

effective monitoring engagement structures will be supported to ensure the formalization process is being carried out in accordance with the regulations.

The formalization of the sector will be further fostered by the integration of the ASGM sector into broader dimensions of landscape management, such as local development plans and land-use planning. In that sense, the development of a Land Management Plan for the municipality ("Plan de Ordenamiento Territorial") and through coexistence multi-stakeholder agreements including ASM-LSM interaction will be explored.

Therefore, potential conflicts between large scale mining operations and ASGM miners, as well as with other productive activities (farming, forestry) will be identified and addressed through conflict resolution mechanisms and economic diversification strategies. Special attention will be paid to the current territorial situation of Indigenous People in the municipality and to vulnerable groups such as women and children. The project could exchange with other child projects that have previous experiences in building such local mechanisms and interaction with vulnerable groups (I.e., "Modelo Bonanza" in Nicaragua).

If the pilot of this approach is successful, it can be replicated in other areas of the country as the main challenges (deforestation, land degradation, competing land uses) are similar.

Specific mining sites have not been formally selected, a complementary study to collect additional data during the project preparatory phase will allow the selection of the communities including a gender analysis. The UN Free and Prior Informed Consent 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, including the capacity building programmes and training materials needed to support the formalization process, climate change related risks and adaptation measures, and gender equality and women empowerment. 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. Local authorities will be involved in the process to build awareness and knowledge in relation to the ASGM sector.

Similarly, mining organizations will participate in the local and departmental multistakeholder platforms and will be invited to discuss their formalization progress, and challenges 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. Partnerships with Technical Vocational Training (TVT) institutions, universities or civil society organizations will be explored to ensure involvement of local staff and further sustainability upon project closure.

Component 2: Improvement of the access to finance and responsible supply chains

Even though the ASGM sector scarcely uses heavy machinery or equipment, ASGM operations still need financial resources to operate. 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 usually more expensive than the basic tools that are mostly used with mercury amalgamation.

Generally, the financial inclusion in the country remains a key challenge as there are many Paraguayans without a bank account. According to the NAP, there are no financial institutions present in the Paso Yobái

municipality and most of the miners operate informally which prevents their access to formal funds. Therefore, they rely mostly from informal lenders who also sell equipment and other supplies to the miners and very often buy gold from them. 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 international gold price.

An assessment of the financial mechanisms available for productive sectors in Paraguay will be developed to see which products could be tailored to the ASGM sector. This assessment will be disseminated at the national level as it could be applicable to other economic sectors such as agriculture, husbandry and others and it will contribute to the increase of financial inclusion at the national level.

Based on the preliminary findings, a specific set of activities will be designed to increase financial inclusion in ASGM areas including raising awareness of the ASM sector's financial needs among the different actors in the financial sector (National Development Bank, private sector banks, other financial institutions, etc.).

Different financial mechanisms will be examined, depending on the amount of required funds and the opportunities that can be materialized. Savings mechanisms for ASGM organizations, in which women may find alternative livelihood opportunities, and where they may have important management roles, will be promoted.

Additionally, the project will seek to assist small-scale miners in complying with the requirements for accessing credit for technological or operational change. As such, training sessions, as well as tailored learning materials will be provided.

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. Therefore, it is foreseen that the activities related to the strengthening of the economic management and the creation of saving mechanisms within the ASGM organizations will improve their capacity to access formal financial services.

The p rogrammme also emphasizes the need to put in place better conditions to improve control and traceability in the ASGM supply chain. A more responsible and transparent gold supply chain will result in greater economic and social benefits.

It will be important to explore market mechanisms for responsible gold and assess how the intervention will impact the different stakeholders along the supply chain and how to ensure an adequate involvement of local gold buyers in the proposed strategies.

The capacity building activities of the project will include due diligence mechanisms, incentives for responsible ASGM and the implementation of the planet GOLD Criteria for Environmentally and Socially Responsible Mining Operations. If the conditions allow, pilot traceable supply chains of mercury-free gold will be set-up.

Component 3: Uptake of mercury free technologies

According to the information available through the NAP report (UNEP, 2020), the mercury emissions coming from the ASGM sector in Paraguay have been stable in the last years, with a current average of approximately 1 Ton of mercury yearly. Unfortunately, mercury is still seen as a highly attractive method of gold production by ASGM miners and worst practices are still prevalent in Paso Yobái. Hence, demonstrating to miners that mercury-free technologies can achieve equivalent or better yields than the commonly used “mercury approach” is key to revert the use of mercury.

It is also a significant 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, this technical component, although critical, will be implemented jointly with the support to strengthen the formalization and organizational skills of the project beneficiaries (Component 1), and an improved business environment supported by financial resources (Component 2). These prerequisites will create an enabling environment for a perennial transition to better techniques.

The first step will consist in the evaluation of the current technologies and practices of the targeted ASGM sites in Paso Yobái. Thereafter, equipment that addresses the technical challenges faced by the miners will be purchased and adapted to the local circumstances taking into account the lessons learned from adoption of equipment in other planet GOLD child projects. Considering 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, and ownership and management of the equipment will be defined to ensure sustainability of its use. During the needs assessment, the roles, challenges, and opportunities of women that practice or are present around 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 better conditions and opportunities for women in the mining activity. Potential affected stakeholders (i.e., mercury providers, processing systems owners) should be engaged and strategies to mitigate the impacts on their livelihoods will be assessed to prevent their opposition to the project and possible externalities.

The mercury processing units are mostly located in one town (67% are in San Antonio). If the conditions allow and replication is successful, mercury use could be eradicated in the whole area.

Occupational health and safety training sessions will be included in close collaboration with governmental health agencies, as well as training sessions on the cost management for maintenance and repair. Wastewater management, tailings management and landscape reclamation will be integrated into the technical assistance and the training sessions, using a hands-on practical field training approach and taking stock from the most updated information and good practices published by the planetGOLD programme, the Minamata Convention on Mercury, and the Global Mercury Partnership (GMP).

Component 4: Knowledge management and communications

The main objective of the communication strategy will be to raise awareness about the risks of mercury usage in the ASGM activities and to disseminate information of the sector's progress in formalization, mercury reduction, gender equality and good environmental practices. In that sense, gender-sensitive campaigns will be dedicated to the local ASGM communities and stakeholders at the local and national level.

In addition, communication efforts will be built around the steps and benefits of implementing a jurisdictional / landscape approach for landscape sustainability, improvement of local livelihoods and the maintenance of forests and other natural ecosystems.

The lessons learned and the best practices achieved from successful experiences in the pilot mining sites will be gathered and disseminated. The national print, radio and digital media will be extensively used to disseminate the results of the project. It should be noted that writing articles in local languages (I.e., Guaraní) will be encouraged to achieve a greater impact among ASGM communities at the local level.

Various audiences are considered for a successful communication campaign at the national level: (I) the ASGM communities; (ii) citizens in urban areas, (iii) other professional users of gold such as traders and jewellers, and (iv) policymakers and other relevant authorities.

The generation of knowledge will be enhanced by genuine experience sharing, either on the field, between miners and other actors involved in the activity or by networking with other stakeholders in the municipality. During the project, gatherings will be organized between with stakeholders from other countries in the region to promote exchanges about their progress on the adoption of mercury-free techniques, formalization, and any other relevant topic. It should be noted that there are some similarities in the way the ASGM sector operates in Latin America in relation to the forms of organization (e.g., cooperatives), equipment used (e.g., mills) and practices (e.g., WOA). In that sense, during the PPG, the project will build on the lessons learned from the Phase 1 countries and bilateral exchanges will be organized with Ecuador, Colombia and Peru. The planetGOLD Paraguay project will also coordinate directly with Phase 2 countries in Latin America, in particular its neighbour Bolivia. Finally, collaboration with those child projects with elements focusing around ASM-LSM coexistence and interaction with indigenous people is expected as these are relevant topics for Paraguay.

Moreover, under Component 4 the tools for knowledge sharing (I.e., videos, publications, reports) at the global level will be developed and shared through the planetGOLD knowledge sharing platforms (e.g., website, newsletter). The training materials designed by the global and child projects in Spanish will be gathered and reused for Paraguay to avoid duplication of efforts. Additional topics based on the training needs will be identified during the PPG.

As previously mentioned, the project team members will also participate in the Annual Programme Meeting (APM) and the Global Forum (GF) of the planetGOLD programme.

On a regular basis, the team will participate in the knowledge-sharing activities that will be organized to foster exchanges among the different planetGOLD country projects.

In terms of project implementation arrangements, UNEP will be the project's Implementing Agency (IA). The project's Executing Agency (EA) will be the Alliance for Responsible Mining (ARM), through a local team in the country. ARM will report on project's progress and financial expenses directly to UNEP. A Project Steering Committee (PSC) will serve as the national coordination mechanism with relevant institutions and stakeholders, and it will be established building on the results of the NAP. These arrangements will be confirmed during the PPG phase. Finally, both project's IA and EA will report and coordinate on programmatic indicators with both the planetGOLD Global Project and the GEF Secretariat.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

N/A

Currently, there are no other projects related to the ASGM sector or the Minamata Convention (Article 7) in Paraguay.

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)
64000	0	0	0

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)

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

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

Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
64,000.00			

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

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

Indicator 4.5 Terrestrial OECMs supported

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

Documents (Document(s) that justifies the HCVF)

Title

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
2.00	0.00	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)
2.00			

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)
1			

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

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

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

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

Indicator 9.7 Highly Hazardous Pesticides eliminated

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

Indicator 9.8 Avoided residual plastic waste

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

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	500			
Male	1,500			
Total	**2,000**	**0**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

GEF Core Indicator 4: This indicator captures the landscape area that is in production (I.e., mining, agriculture and other productive sectors) and whose soil, air and water are managed in a sustainable manner. Piloting the jurisdictional approach will result in improved practices for the selected landscape area while the component 3 activities will support the implementation of technologies to reduce and eliminate mercury use. Therefore, the estimated co-benefits calculated at PIF stage are 64,000 hectares corresponding to the surface area of the Paso Yobái municipality.

Nonetheless, during the PPG phase the core indicator will be confirmed, and coordinates and maps of the area will be provided.

GEF Core Indicator 9: The latest estimates for mercury emissions in the ASGM sector in Paraguay calculated in the NAP reached approximately 1 ton of mercury released annually. Based on a five-year project and mercury reduction starting in the second year of the project lifetime, the objective is thus to reduce mercury by 0.125 tons per year. Therefore, the total mercury reduction will reach 2 tons after project completion (including 0.5 tons during the project lifetime and 1.5 tons achieved through the programme replication factor). However, the numbers will be confirmed based on an assessment of the practices and technologies used in the selected project sites during the PPG phase and the replication factor of the planetGOLD programme will be included.

GEF Core Indicator 11: According to several sources of information, the current ASGM (direct and indirect) workforce in Paraguay is approximately 4,000 people. As ASGM miners operate in mostly informal settings, the statistical data often fluctuates and therefore the number should be carefully assessed during the PPG phase including sex-disaggregated indicators and targets. At the PIF stage, it is estimated that the project will aim at assisting at least 50% of the ASGM workforce (2,000 beneficiaries) which constitutes approximately 7% of the overall population of the Paso Yobái Municipality.

Risks to Project Preparation and Implementation

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation- such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the "Project description" section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
Climate	Moderate	Climate Change related project risks are twofold and consist of: First, potential floods and landslides in selected projects sites. During the PPG phase, the project team will assess climatic information related to the project sites and propose specific mitigation measures. In addition, during the implementation phase, the project will introduce capacity building on climate-related risks

		under Component 1 on Formalization.
Environment and Social	Low	Environmental risks consist of the potential spill overs of mercury in ASGM sites. In addition, poor management of ASGM landscapes can also be considered as an environmental risk. However, the project aims to improve the environmental management of ASGM, resulting in improved practices that should result in reduced/eliminated mercury use and an improved landscape management. Social risks are identified as any labour related abuse, in the form of child labour or labour enforcement. Other social risks are the potential displacement of communities or the erosion of social heritage. In this respect, the project will overall seek to improve labour conditions in the ASGM sector through component 1. In addition, there are risks related threats and/or criminal activities due to the loss of jobs for intermediaries and mercury providers. It will be relevant to assess mercury trade flows and related risks during the project lifecycle and provide job opportunities in formalized gold supply chain for intermediaries if needed. Finally, challenges related to the implementation of gender equality and women empowerment will be considered. A detailed assessment and consultations with relevant stakeholders during the PPG phase will ensure these risks remain low. A project's accountability and grievance mechanism has been established at the level of the global planetGOLD programme, in line with UNEP's and GEF's policies.

Political and Governance	Low	Political and Governance risk are related to the appearance of political conflicts and violence at the national or regional level. In this respect, Paraguay and the neighbouring countries are stable from a political perspective. However, the project's team will closely monitor the political situation at the country level for an early identification of potential sources of conflict that may affect the project's implementation phase.
Macro-economic	Low	Macro-economic risks are related to a significant deterioration in the economic situation of the country, which has happened historically (i.e., currency crisis in the 2000's, pandemic economic crisis more recently) and that could negatively affect to the ability to export gold of the ASGM targeted communities. In this sense, the project will closely monitor economic risks and will aim to establish long-term cooperation with international gold market entities.
Strategies and Policies	Low	Strategies and policies risks are related to the possibilities of diversion from national strategies and priorities. In this respect, the project has already established strong cooperation with the different relevant ministries to ensure the project's goals and approaches are aligned to the national priorities.
Technical design of project or program	Low	Technical design risks are identified as poor-quality design. This project is linked to the planetGOLD programme, a GEF-funded internationally validated programme with 23 on-going country projects, and the project design will follow the main programmatic components.

Institutional capacity for implementation and sustainability	Low	Institutional capacity risks are related to the lack of potential project support from the national counterparts for the implementation of the project. National counterparts have an extensive experience dealing with GEF funded projects and have already worked with UNEP in the field of chemicals and waste.
Fiduciary: Financial Management and Procurement	Low	Financial Management and Procurement risks correspond to any potential mismanagement of funds. The project will ensure that UNEP and GEF financial rules are followed during the entire lifespan of the project. In addition, financial audits will be carried out on a regular basis to avoid any potential misuse of project funding.
Stakeholder Engagement	Low	The project will reduce the potential risk of stakeholder detachment by identifying and contacting all relevant stakeholders and developing in cooperation with them a stakeholder's engagement plan, in line with UNEP's and GEF's guidance.
Other		
Financial Risks for NGI projects		
Overall Risk Rating	Moderate	Through the combination of identified risks, this assessment concludes that this project risk rating is overall moderate. However, close monitoring of risks (identified or upcoming) will guarantee an adequate risk identification, management, and adaptation.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

The project will seek to substantively reduce the amount of mercury use in the ASGM sector in Paraguay, contributing to the GEF's strategic goals, the national and regional priorities and directly supporting the implementation of the Minamata Convention in the country.

The project is aligned with the GEF-8 Programming Directions, concretely the GEF Chemical and Waste Focal Area contributing to (I) Objective 1: Creation, strengthening and supporting the enabling environment and policy coherence to transform the manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution; (ii) Objective 2: Prevention of future build-up of hazardous chemicals and waste in the environment; and (iii) Objective 3: Elimination of hazardous chemicals and waste. In addition, the outcomes of the project will contribute to the Integrated Programme 11: Elimination of Hazardous Chemicals from Supply Chains.

Paraguay ratified the Minamata Convention on 26 June 2018. As part of its obligations under Article 7, the country developed a National Action Plan on ASGM in 2020 containing the main targets and objectives as well as nine strategies to reduce and eliminate the use of mercury in the sector. The project design was developed jointly with the Ministry of Environment and Sustainable Development through its Mercury Commission and was based on the national baseline and specific the strategies in combination with the planetGOLD approach.

Concretely, the project will support the following priorities:
1) Effective reduction of mercury usage in the ASGM sector.
2) Development and implementation of coherent national policies and regulations that promote a responsible ASGM sector including environmental and social measures to protect miners and local communities.
3) Establishment of legal and organized groups of ASGM miners representing the needs of the sector.
4) Increased capacity of institutions and regulatory authorities linked with the ASGM sector.
5) Enhanced cooperation and partnerships at all levels among miners, public authorities, industry, civil society, religious groups, academic institutions, local leadership, and other stakeholders.

In addition, the planetGOLD Project in Paraguay will contribute to priorities outlined in the National Development Plan Paraguay 2030: (I) poverty reduction and social development; (ii) inclusive economic growth; and (iii) insertion of Paraguay in the world. During the preparatory phase, the design will also build on the Cooperation Framework for Sustainable Development 2020 – 2024 between the Republic of Paraguay and the United Nations.

Finally, it is worth mentioning that no country policies that might contradict with the expected outcomes of the planetGOLD Paraguay project were identified.

The project will contribute to UNEP's Medium-Term Strategy (MTS) and Programme of Work (PoW) 2022-2023, concretely to Outcome 3A) Human health and environmental outcomes are optimized through enhanced capacity and leadership in the sound management of chemicals and waste; and Outcome 3C) Releases of pollutants to air, water, soil, and the ocean are reduced. More concretely, it will directly contribute to the following outputs:
3.1. Regional and national integrated policy has shifted towards the sound management of chemicals and waste.
3.2. Land-based sources of pollution in freshwater and oceans, including the marine litter and nutrients, are reduced.
3.5. Institutional capacity to adopt and act on national and international commitments is enhanced.

3.9. Use of harmful chemicals in products and processes is reduced in key sector.
3.12. Markets, supply chains, trade and consumer behaviours have shifted towards reduced pollution, influenced by transparency enabled by digital technologies.
3.13. Sound science, data and statistics, analysis and information and knowledge are generated and shared.
3.14. The economics of actions on chemicals and waste and pollution reduction, support a shift away from harmful chemicals.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

Online and in-person consultations were held with the following entities during the PIF development phase:

Ministry of Environment and Sustainable Development (Mercury Commision) (Recipient Country Government): Regular calls, online meetings, information exchanges monthly from May 2022 to June 2023.

ARM (Executing Agency): Regular calls, online meetings, in-person meetings, information exchanges monthly from September 2022 to June 2023.

World Gold Council (Private Sector): Information exchanges and in person meetings between February and April 2023.

Various phone calls with private sector international gold refiners and associations (e.g., Valcampi, Argor Heraeus, MKS, Italpreziosi, SBGA) from November 2022 to June 2023.

Online calls and in-person meetings with NRDC, Executing Agency, for project 10606 Global Component of planetGOLD programme.

Online meetings with UNEP's Office in Paraguay, and UNEP's LAC Region Office in Panama.

ASGM organizations such as local artisanal miners' unions and cooperatives have expressed interest in the project. Further consultations and engagement activities will take place during the PPG phase. Indigenous people and community organizations in the targeted areas of intervention will be engaged at early stages of the process.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNEP	GET	Paraguay	Chemicals and Waste	Mercury	Grant	3,000,000.00	285,000.00	3,285,000.00

Total GEF Resources ($)		**3,000,000.00**	**285,000.00**	**3,285,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

150000

PPG Agency Fee ($)

14250

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
UNEP	GET	Paraguay	Chemicals and Waste	Mercury	Grant	150,000.00	14,250.00	164,250.00
Total PPG Amount ($)						**150,000.00**	**14,250.00**	**164,250.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CW-2	GET	3,000,000.00	22000000
Total Project Cost		**3,000,000.00**	**22,000,000.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)

Recipient Country Government	Ministry of Environment and Sustainable Development	In-kind	Recurrent expenditures	1200000
Recipient Country Government	Vice Ministry of Mines and Energy	In-kind	Recurrent expenditures	700000
Recipient Country Government	Ministry of Public Health and Welfare	In-kind	Recurrent expenditures	600000
Recipient Country Government	Ministry of Industry and Commerce	In-kind	Recurrent expenditures	700000
Recipient Country Government	General Directorate of Customs	In-kind	Recurrent expenditures	200000
Recipient Country Government	Ministry of Women	In-kind	Recurrent expenditures	100000
Recipient Country Government	Ministry of Labour	In-kind	Recurrent expenditures	400000
Recipient Country Government	Municipality of Paso Yobái	In-kind	Recurrent expenditures	100000
Recipient Country Government	Government of the department of Guairá	In-kind	Recurrent expenditures	200000
Civil Society Organization	Alliance for Responsible Mining (ARM)	In-kind	Recurrent expenditures	1000000
Private Sector	Latin American Minerals Paraguay (LAMPA)	In-kind	Recurrent expenditures	16800000
Total Co-financing				**22,000,000.00**

Describe how any "Investment Mobilized" was identified

During the project preparatory phase, the project will seek the support of international gold refiners (TBC) that can provide a commitment to purchase mercury-free gold produced by ASGM organizations working with the planetGOLD project

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Victoria Luque Panadero	4/12/2023	Ludovic Bernaudat		ludovic.bernaudat@un.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Graciela Soledad Miret Martínez	Director of Strategic Planning	Ministry of Environment and Sustainable Development	3/28/2023

ANNEX C: PROJECT LOCATION

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

Figure 2: Paraguay national map. Source: UN Geospatial, 2023.

The project will develop activities mostly in the Municipality of Paso Yobái, located in the Guairá District, 205 Km southeast of the country capital. Additionally, some activities targeting policy makers and other stakeholders will be conducted in the capital city, Asunción.

After a course of consultations with the government counterparts and mining communities, the identified project sites at the Paso Yobái area will be confirmed during the PPG Phase Validation workshop along with the rest of project related documents. After that, the geocoordinates will be shared with the GEF, the global coordination team of the planetGOLD programme as well as any other relevant stakeholder who may request this information.

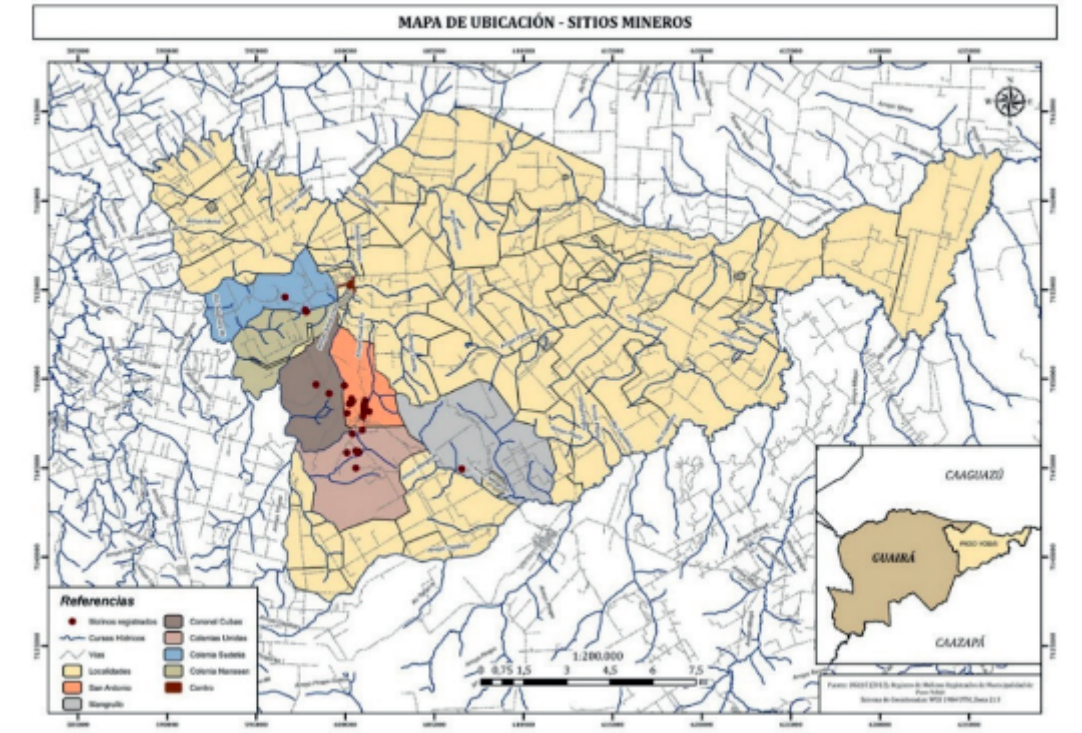

Figure 3: ASGM sites identified in Paso Yobái during the execution of the NAP project. Source: UNEP and Ministry of Environment and Sustainable Development in Paraguay, 2020.

To identify potential project sites during the PPG phase, the project team will employ the latest geographical information available. In this respect, the above map will lay the foundations for ASGM sites identification in combination with relevant socioeconomic and demographic information.

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	No Contribution 0	No Contribution 0	Significant Objective 1

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing Models	Transform policy and regulatory environments Strengthen institutional capacity and decision-making Convene multi-stakeholder alliances		

	Demonstrate innovative approaches Deeply innovative financial instruments		
Stakeholders	Private Sector Beneficiaries Local Communities Civil Society Type of Engagement Communication	Capital providers Financial intermediaries and market facilitators Large corporations SMEs Individual/Entrepreneurs Community-based Organization Non-governmental Organization Academia Trade Unions and Workers Unions Information Dissemination Partnership Consultation Participation Awareness Raising Education Public Campaigns Behaviour Change	
Capacity, Knowledge, and Research	Capacity Development Knowledge Generation and Exchange Innovation Knowledge and Learning Stakeholder Engagement Plan	 Knowledge Management Capacity Development Learning	
Gender Equality	Gender Mainstreaming Gender results areas	Beneficiaries Women groups Sex-disaggregated indicators Gender-sensitive indicators Access and control over natural resources Access to benefits and services Participation and leadership Capacity Development Awareness raising Knowledge generation	
Focal Area/Theme	Land Degradation Chemicals and Waste	Sustainable Land Management Mercury Artisanal and Small-Scale Gold Mining Sound Management of Chemicals and Waste Waste Management Best Available Technology/Best Environmental Practices	Community-Based NRM Hazardous Waste Management