GEF GOLD+: Advancing formalization and mercury-free gold in Suriname

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
10615

Project Type
FSP

Type of Trust Fund
GET

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

Project Title
GEF GOLD+: Advancing formalization and mercury-free gold in Suriname

Countries
Suriname

Agency(ies)
UNDP

Other Executing Partner(s)
Ministry of Natural Resources

Executing Partner Type
Government

GEF Focal Area
Chemicals and Waste

Taxonomy

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

Sector

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

6/14/2020

Expected Implementation Start

9/1/2022

Expected Completion Date

8/31/2027

Duration

60In Months

Agency Fee($)

472,500.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CW-1-1	Strengthen the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination	GET	5,250,000.00	19,650,118.00
		Total Project Cost($)	**5,250,000.00**	**19,650,118.00**

B. Project description summary

Project Objective

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

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

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Formalization optimization of ASGM	Technical Assistance	1. A higher degree of formalization in the sector through multisectoral, integrated approaches and capacity building of formalization actors.	1.1. Opportunities and constraints for peaceful ASM-LSM coexistence institutionalized by the Government of Suriname. 1.2. Government capacity strengthened to assess, plan, and implement sustainable mercury-free interventions in ASGM zones. 1.3. Landscape approach to advance formalization through peaceful ASM-LSM coexistence zones and tributer systems. 1.4. Civil Society Organization (CSO) capacity strengthened to engage Maroon and Indigenous groups and facilitate ASGM formalization.	GET	1,250,000.00	4,678,600.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
2. Financial Inclusion and Responsible Supply Chains	Technical Assistance	2. Improved income for ASGM miners through the attainment of better gold prices facilitated by transparent and responsible supply chains.	2.1. Opportunities created for ASGM sector with financial institutions to procure/retrofit equipment and invest in business skills for men and women. 2.2. Proof of concept for technology-assisted mineral supply chain due diligence developed and tested in target regions.	GET	1,400,000.00	5,240,031.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Enhancing uptake of Mercury-free technologies	Technical Assistance	3. Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by miners.	3.1. National and district government institutions strengthened to support sustainable mercury reductions and invest in mining organizations. 3.2. Assay lab, processing plant and training center(s) established to promote resource efficient gold mining in ASM-LSM zones/areas, with clear provisions for sound tailings and waste management. 3.3. Accredited ASGM-specific education programs scaled up to professionalize mining operations in cooperation with the University of Applied Sciences and Technology/ school of Geology & Mining Technology (UNASAT/SGMT).	GET	1,850,000.00	6,924,327.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
4. Knowledge sharing and communication outreach	Technical Assistance	4. Knowledge sharing and communication strategies targeted at all ASGM stakeholders to support and increase formalization and mercury reduction.	4.1. M&E and adaptive management applied to capture lessons learned, emphasizing prospecting, sustainable mercury-free gold methods, and sound tailings management. 4.2. Miner, investment and CSO focused communication strategies explored, tested, deployed and scaled up.	GET	500,000.00	1,871,440.00
			Sub Total ($)		**5,000,000.00**	**18,714,398.00**

Project Management Cost (PMC)

GET	250,000.00	935,720.00
Sub Total($)	**250,000.00**	**935,720.00**
Total Project Cost($)	**5,250,000.00**	**19,650,118.00**

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($)
GEF Agency	UNDP	Grant	Investment mobilized	25,000.00
Recipient Country Government	Ministry of Natural Resources	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	Ministry of Finance	Grant	Investment mobilized	6,000,000.00
Recipient Country Government	Ministry of Regional Development and Sport	In-kind	Recurrent expenditures	25,000.00
Recipient Country Government	Ministry of Public Works	In-kind	Recurrent expenditures	3,000,000.00
Civil Society Organization	KAMPOS	In-kind	Recurrent expenditures	96,585.00
Civil Society Organization	VIDS	In-kind	Recurrent expenditures	153,533.00
Civil Society Organization	Conservation X Labs	Grant	Investment mobilized	50,000.00
Private Sector	ARGOR-HERAEUS	Grant	Investment mobilized	10,000,000.00
			Total Co-Financing($)	**19,650,118.00**

Describe how any "Investment Mobilized" was identified

The investment mobilized refers to investments that will be done in the future and does not include any past investments. Activities involve the reduction of releases of mercury in the ASGM sector that are aimed to be eliminated during the Project's implementation period. Among the activities that have been identified there are namely: Elimination of Mercury and Development of National Capacities. Investment mobilized will provide assistance for the implementation of Component 3 of the project, mainly through the upgrade/Retrofit of existing ASGM production plants to eliminate Hg from production processes.

Furthermore, Investment mobilized Co-financing will support the improvement of existing Gold Supply chains to promote Hg-free Gold; by allowing formalized ASGM miners fully engaged by this FSP selling their mercury-free gold through formal markets, at fair price and in accordance with Surinamese export laws.

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($)
UNDP	GET	Suriname	Chemicals and Waste	Mercury	5,250,000	472,500	5,722,500.00
			Total Grant Resources($)		**5,250,000.00**	**472,500.00**	**5,722,500.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

150,000

PPG Agency Fee ($)

13,500

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

Core Indicators

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

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	32.00	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)
	32.00		

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		45,446		
Male		45,736		
Total	0	91182	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

The GEF GOLD+ mercury reduction target for Suriname is 8 MT over five years. Components on formalization, financial inclusion and knowledge sharing are measures to ensure results are sustained, resulting in 24 MT of mercury avoidance 10 years after project. In Suriname, for every Kg of gold produced, an estimated 3 Kg of mercury is emitted into the environment (NAP). To reach the GEF reduction target an estimated 2.6 t of mercury free gold would need to be produced during the project life span. The total Global Environmental Benefits of the project will be 32 MT of Mercury during the 5 year implementation and subsequent 10 years afterwards..

Part II. Project Justification

1a. Project Description

1) The global environmental, root causes and barriers that need to be addressed (systems description)

The global environmental problem

1. The Government of Suriname (GoS) signed the Minamata Convention through the approval for accession in Parliament on 8 March 2018 and entered into force for Suriname on 31 October 2020, noting that the ASGM sector of Suriname is ?more than insignificant?. The vast majority of total estimated emissions and releases of mercury of anthropogenic origin in Suriname (97%) is due to primary gold production[1].

2. Suriname?s gold sector is composed of Large-Scale Mining (LSM) and Artisanal and Small-scale Mining (ASM). In 2019, according to the Central Bank of Suriname (CBvS) gold exports from multinational companies in Suriname, IAMGOLD Corporation (Rosebel Gold Mines in Brokopondo) and Newmont Corporation (Merian Gold Mine in Marowijne), represented 61.7% of the total annual gold production (39.4 tons)[2]. Data triangulated from multiple sources in 2019 suggests that the ASM of gold sector accounts for an estimated 17 tons (17,000 Kg/year)[3]; with significant socio-economic benefits for miners and secondary industries[4].

3. As small-scale gold mining operations in Suriname are informal and transient, reliable production data is scarce. Many operations are highly mechanized, working with excavators and automated equipment tending toward the small to medium scale, driving severe environmental degradation. Due to widespread informality and limited access to legitimate finance, miners adopt a culture that applies short-term solutions, relying on cheap but inefficient and polluting technologies that endanger human health.

4. The COVID-19 crisis caused Suriname?s economy to contract sharply in 2020 and unemployment rose from 8.9% in 2019 to 11.2%. In 2021, extractive investments are not expected to expand without discovery of significant new mineral deposits and gold mining is expected to be a driving force behind economic recovery with Newmont's Merian Mine set to accelerate production between 2021-2025. Despite lockdowns, Suriname?s ASGM sector provides an important source of income and employment for miners and the host of downstream industries it spawns (i.e., basic

provisions, equipment)14. To mitigate the impact of COVID-19, the Government implemented fiscal measures to support vulnerable sectors, including the Central Bank[5].

5. Consistent with the GEF Policy on Gender Mainstreaming, the proposed Full Size Project (FSP) recognizes the gender dimensions of mercury use and exposure risks in or as a result from ASGM. Analyzing exposure risks in ASGM communities requires both gender-disaggregated (i.e., occupational roles, salary levels and frequency of mercury exposure in men and women) and sex-disaggregated data.

6. From a gender perspective, mining in Suriname viewed as a masculine or male dominated industry. In practice, mining is generally carried out mainly by adult men. Of the estimated 20,000-40,000 miners[6], 17,000 individuals (approximately 12% of the total workforce) are officially registered as miners. According to authoritative sources, women account for 15-20% of the ASGM workforce, occupying predominantly secondary roles in the service sector[7]. Heemskerk-Duijves[8] state that they observed more women in ASGM and in general more migrant women than local women. If the women in the camps were partners of the miners, their children were often present until school-age. Men primarily work in the pits and are responsible for transport and construction. Both men and women are shop-owners, traveling merchants, camp bosses and cooks. Heemskerk et al[9] note that it was difficult to estimate the average income of persons working at the campsites, although there are large differences in payment systems and earnings: for example, pit-workers are paid a percentage of the gold extracted while cooks are paid a fixed wage. Due to the gender division of labour, most probably, the majority of economic benefits and authority accrue for men. However, Heemskerk et al also note that ?female traveling merchants provided multiple additional services during their time in the mining camps such as cooking, washing clothes, cleaning campsites and providing sexual services?.[10]

7. To ensure that gender is mainstreamed effectively throughout the project, the PPG stage and the Social and Environmental Screening Procedure (SESP) have identified potential risks. Risks identified included, potential reinforcement of discrimination against women and other forms of gender inequality. Due to COVID-19 restrictions in the PPG stage, field consultations were not possible, but an extensive desktop study was carried out, which included previous field consultations and gender studies for recent projects. Furthermore, a series of stakeholder meetings, a meeting with one of the researchers, and email and telephone exchanges with informants were conducted to yield the information for the gender analysis.

8. A Gender Analysis was developed to mainstream a Gender Action Plan throughout the project?s activities (Annex 11), to upscale the opportunities for women to benefit from training and employment opportunities and develop gender-disaggregated data, accounting for multiple factors (i.e., race, ethnicity, nationality, education level, indigenous status) to strengthen their view that ASGM should be

mercury-free. To ensure equality of results, during its implementation the project will actively engage women, indigenous communities and other marginalized groups, as change agents and participants, not merely as victims of inequalities or forms of discrimination that constrain equal access to and control over resources.

9. Previous research has found that women and children living in rural, interior communities in Suriname have high concentrations of mercury in hair samples. Total mercury and methylmercury concentrations have been determined in hair and blood from pregnant women across the country. Freshwater fish from these areas, also have high concentrations of mercury due to the fact that artisanal and small-scale gold mining operations in the eastern and southeastern part of the country use elemental mercury to extract gold from soils and sediments[11].

Root causes and barriers that need to be addressed

10. The development challenge is to overcome a sectorial context that encompasses a series of institutional, behavioral, social, financial, and environmental gaps that delay the national capacity to comply with the obligations of Suriname under the Minamata Convention for the ASGM sector, in an environmentally sound management approach.

11. It is estimated that an amount of **eight (8)** tons of mercury used in small mining operations needs to be eliminated in an environmentally sound manner, as the Global Environmental Benefit of this FSP.

12. The baseline analysis also reflects a major concern amid the coronavirus pandemic (COVID-19) that has impacted Suriname in 2020-2021 and it was fully considered during the elaboration of the Theory of Change; an analysis carried out during the PPG has identified critical risks due to this global pandemic which are fully considered in Section IV under the Risk sub-section. The key risks that have been identified ?in this regard- may threaten the project?s activities as presented in Annex 7 (UNDP Risk Register), in turn, a risk management strategy to handle them while minimizing harm has been developed.

Barriers to overcome to reduce/eliminate the use of Hg in the ASGM sector

13. The analysis of the development challenge carried out at the PPG stage for the preparation of the problem tree has distinguished three different levels of causes for managing the use of mercury within

the framework of national and international guidelines on chemical substances and hazardous waste management, i.e.: immediate causes[12], underlying causes[13] and structural/root causes[14].

14. A group of immediate causes may delay compliance with the commitments of the Minamata Convention and will maintain over the long-term the poor socio-economic conditions of this sector, a fundamental reasoning for the project. Initially, the following four (4) immediate causes have been identified at the PPG stage and they need to be tackled by the project:

- i. Limited enforcement of the existing regulations for sound environmental management of mercury.
- ii. Need to enhance innovative investment opportunities into the ASGM sector.
- iii. Essential need to develop alternative, cost-efficient, mercury-free technologies.
- iv. Account for the impacts of COVID-19 into the change of the existing paradigm.

15. Four underlying barriers and their root causes were also identified as the basis of the immediate causes mentioned above. These underlying causes, that prevent the country from achieving the environmentally sound management of mercury in the ASGM sector, are determined by their root causes in the following manner:

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Informality[15]: This is determined by root causes which refer to the existing structural challenges to be faced.

? Need to develop a national policy strategy for the mining sector.

A governance challenge in Suriname is the lack of formal, comprehensive, and clearly defined government and/or national priorities specifically for extractives industries, in particular the gold sector. The Government of Suriname (GoS) is still in the process of developing a national policy strategy for the mining sector, without this action, it could prove difficult to roll out a strategy to sub-national levels where no national mining policy currently exists. Subnational jurisdictions (i.e. at district level through District Authorities) often lack a legal basis for the autonomous management of budgets, and a lack of technical (human) capacity to perform mining-policy tasks[16]. In addition, there is a need to assist the GoS in the update of the Mining Decree in order to include the ASGM sector.

? Outdated legislation and low awareness of existing mining laws and regulations.

The Mining Decree (E58-1986) needs to be updated to include additional provisions for ASGM, as it currently does not required rehabilitation plans in permit applications, no clear requirements on occupational health and safety or environment protection prolonging high-risk activities. In addition, there is generally a low awareness of the existing mining law (Mining Decree 1986) and legislative regulations on ASGM by Suriname mining communities in particular, which hinders formalization efforts and transition from mercury. Low awareness creates daunting challenges for mining and environmental authorities to regulate the sector, in such a way that makes public officers not sympathetic to ASGM communities in enforcing such regulations. Informal mining operations often lack structure and capacity to adhere to legislation. At the subnational level, District Authorities have no mandate/role other than providing very limited advice on the environmental permitting process.

? Limited logistical, technical and institutional capacity to enforce regulation[17].

It is clear that in both national and district levels, there is a lack of technical and institutional capacities to enforce environmental regulation. As such, this root cause indicates that the country ?as a whole- has insufficient institutional capacity to ensure sound management of the ASGM sector in order to comply with the Minamata Convention?s requirement under Article 7. Specifically, in light of this project, this is revealed in weak controls related to the trade and use of mercury in the artisanal gold markets, in this regard, law enforcement is complicated by the fact that some ASGM sites are difficult to access, operations are widespread and infrastructure is sub?optimal, resulting in complex logistics and high associated costs.

? Informality hinders financial inclusion and social cohesion.

Most artisanal and small-scale miners are informal, hampering their access to legitimate finance and the Best Available Technologies (BAT) to reduce environmental and occupational risks, while improving miner incomes where nearly all ASGM sites are either part of a formal concession or operate on traditional land claims (Indigenous or Maroon), resulting in significant tensions between ASM and large-scale mining operations, despite signs of progress to cohabitate and coexist.

? A critical need exists to mainstream gender equality in the ASGM sector.

Although every ASM community differs in terms of its characteristics, patterns emerge. Women are often confined to processing activities ranging from crushing, sieving, washing and panning to mercury amalgamation or ancillary roles (i.e., cooking). The degree of exploitation and experience of men and women in artisanal mining is dependent on the local circumstance, along with sociocultural beliefs that can affect access to, and control over, resources and their benefits. In general, women have unequal access to ore deposits, mining entities, finance, equipment and more lucrative roles in the gold mining

value chain. These income disparities can translate into broader inequalities, leaving women behind. Gender mainstreaming aims in ASGM communities to transform unequal social and institutional structures in order to make them profoundly responsive to gender inequalities and human rights[18].

16. Suriname?s labor force in the ASGM sector is fragmented with low levels of social and organizational cohesion, which undermines efforts to organize the men and women who work in the sector. Without social or economic solidarity units, miners lack the capacity for self-regulation and planning, posing a threat to the sustainability of any formal organization founded in the present context.

Lack of access to finance: ASGM activities are undercapitalized for a variety of reasons, even though, compared to other commodities, miners would receive a relatively higher price for the gold, but the numerous intermediaries required to get the gold to the market means that miners receive far lower revenues than the international price of gold. From a finance perspective, the following are root causes which refer to the existing structural challenges to be faced, which in turn impedes investments in social programs like education, health and ecosystem conservation.

? Without access to loans or financial services, artisanal and small-scale miners cannot afford healthier, environmentally-sound alternative solutions to mercury amalgamation and open-air burning of amalgam due to the higher capital costs of introducing more advanced technologies.

? The lack of financial and fiscal incentives for the ASGM sector limits the willingness of introducing mercury-free technologies and best practices.

? The mobility of the miners is very high since they migrate frequently from one mining site to another, which makes it challenging to involve this group in formal commercially-driven practices, frequently moving from one mining site to another where they believe they will find ?easier? extractable gold.

Associated with this, there is a high level of migration of ASM miners and their production across the porous national borders.

? ASGM is considered high-risk financial by commercial lenders, among other reasons, because illegal miners business skills and do not keep records of their cash flows, with

insufficient understanding of bank regulations for credit, loans or other financial products, hampering their access to finance.

? A lack of formal business skills and the remoteness of their operations create market access challenges, for instance, the perception that commercial lending operations with this sector imply very high risks. Another reason is the fact that these miners don?t have a formal concession, not registered as entrepreneurs and are out of sight of the tax authorities and as such have no collateral for accessing finance for their activities.

Low technical capacity to support formalization and mercury reduction: The ASGM activity, in general, shows a weak technical capacity due to a wide range of root barriers:

? Lack of sufficient qualified human resources.

This barrier includes the lack of equipment and hands-on training skills, which limits the government?s capacity to assess, monitor and address the negative effects of gold mining practices, and to monitor the status of licensed and illegal mining.

? Low awareness of free-mercury alternatives, with traditional preference for gravity concentration and amalgamation methods, despite high gold losses to tailings and inefficient economic returns.

? The lack of knowledge about mineralogical characteristics of the ore affects gold recovery as reflected in an increase in the use of mercury during the amalgamation process.

Lack of a holistic approach and regional coordination: Despite country level efforts, mercury flows and inter-country migration present challenges to controlling mercury flows and ASGM formalization. Solving individual country mercury reduction targets will require regional coordination amongst neighboring countries, due to the following root barriers:

? The lack of national legislation on indigenous and tribal peoples? rights.

As mentioned above, in Suriname nearly all ASGM sites are either part of a formal concession or operate on traditional land claims (Indigenous or Maroon). Consequently, equipment owners typically recognize these claims and comply with regulations required by the mining titleholder or landlord.

Thus, security of mineral tenure and allocation of rights are ongoing challenges. This context allows for tensions to easily emerge in interactions among indigenous and tribal communities and mine operators.

? Very low levels of education at the national level.

The ASGM mining population is diverse in terms of ethnic origin, family background, living conditions, and socio-cultural aspects. In Suriname, the Law on Basic Education requires children to attend school until they are at least age 12, leaving those between ages 12-16 particularly vulnerable to the child labor as they are no longer required to attend school but are not yet legally permitted to work. In rural communities of the interior, nationwide, only 45.9% of the Surinamese population has a secondary education[19], where low level of education coupled with cultural barriers in remote areas are leaving rural boys and girls of the interior behind.

? Very low-level of awareness and information outreach on mercury use by the stakeholders engaged in the mercury supply and use chain due to a lack of systemic organization.

17. In addition, the PPG identified major constraints that emerged in 2020, as a result of the COVID-19 pandemic that have disrupted supply chains and how the ASGM sector operates in Suriname, which has been integrated into this situational analysis.

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Account for the impacts of COVID-19 into the change of the existing paradigm: This pandemic has affected ASGM locations in many ways where supply chains have been interrupted, affecting in great manner family income for the low-income miners. Many gold mining areas in Suriname (East and South-East of the country) are considered high-risk areas for COVID-19 because of the porous borders with neighboring countries and import of COVID-19 cases from Brazil and French Guiana. In fact, in a number of instances that is how COVID-19 numbers started increasing in Suriname. The current context is determined by the following causes:

? High health and safety risks, including contagious exposure for stakeholders the FSP plans to engage with, including institutional partners, plus third-party workers where field project demonstrations will take place.

? Potential delays of anticipated co-financing, both in-kind and cash sources, due to COVID-19 corporate response, especially from private sector stakeholders that need to react immediately to adjust their cash flows to cover unexpected labor costs and significant drops in business revenues.

? The health and environmental authorities must attend with immediate actions urgent situations related to the COVID 19 pandemic and cannot assume the project's requirements to attend meetings, trainings and the implementation of activities that are required for the timely execution of the project.

? Longer periods to prepare tenders and purchase some goods and services due to the delay in the delivery of supplies, equipment, laboratory tests, among others, may affect the proposed annual FSP workplan.

18. This set of shortfalls are summarized in Figure 1 below.

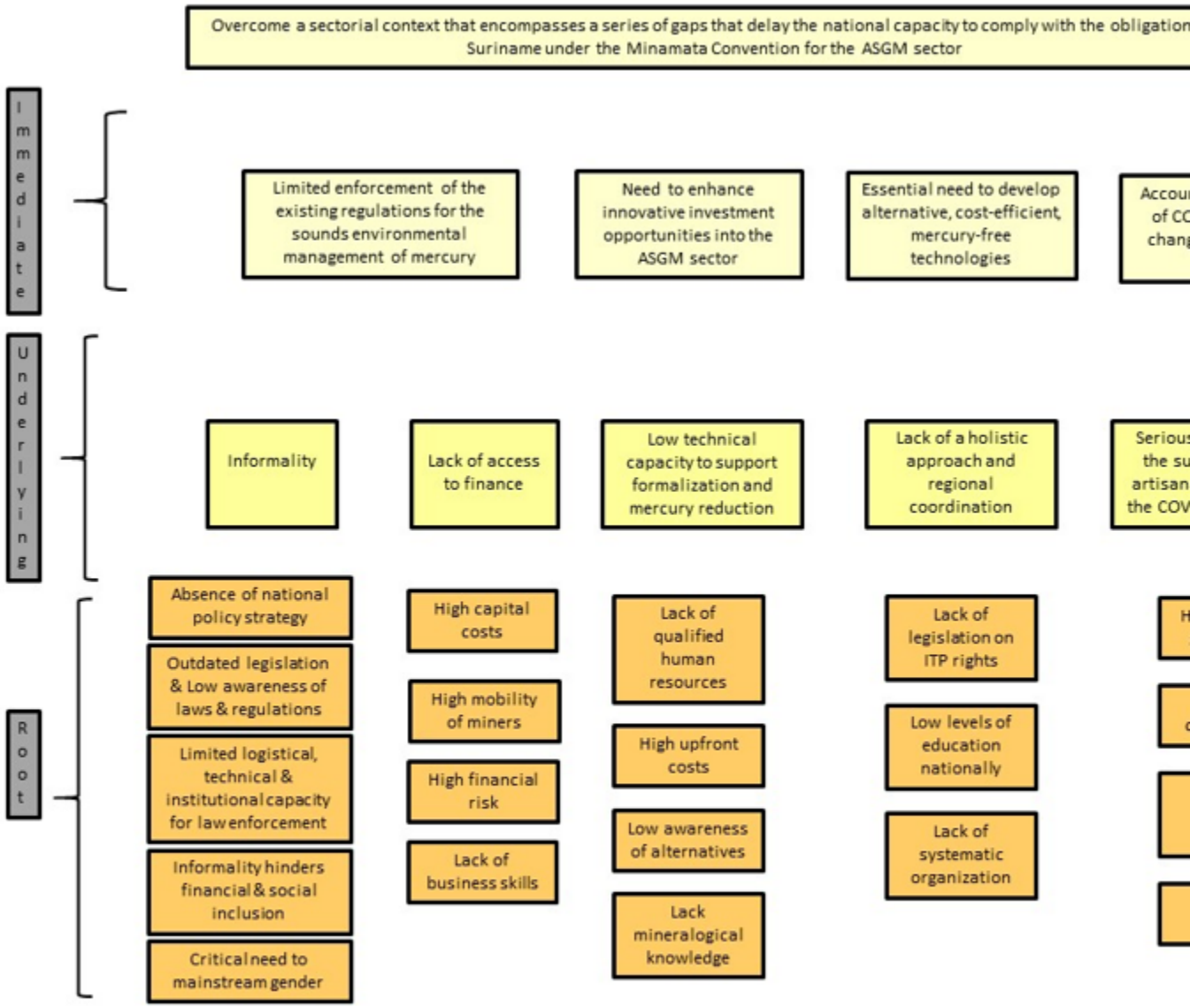

FIGURE 1: THEORY OF CHANGE: PROBLEM TREE ANALYSIS DIAGRAM

2) The baseline scenario and any associated baseline projects;

The baseline scenario

19. The Republic of Suriname is located on the north-eastern coast of South America, north of Brazil, between Guyana and French Guiana, it is part of the Guiana Shield geological formation. With a population 541,631 inhabitants, it is the smallest state in South America with a land area of

approximately 165,000 km2. It is bordered by Guyana to the west, French Guiana to the east, Brazil to the south and the Atlantic Ocean to the north with a coastline of 370 km. In 2015, 66% of the population was living in the urban areas of the capital of the country[20], Paramaribo and the surrounding District of Wanica[21], 20% in other rural coastal districts and the remaining 14% living in the interior in indigenous and tribal communities along rivers.

20. Suriname is a small, open, commodity-based economy that is vulnerable to external shocks. On the back of high international commodity prices, Suriname grew at a high average yearly rate (3.8% or a total real per capita income growth of 65%) over the past decade. Growth is driven by exports from the extractive sector (gold, oil, and bauxite), which generate 90% of foreign exchange earnings and 45% of government revenue[22]. However, high dependence on mineral exports affects the stability of tax revenues and economic growth.

21. Artisanal and Small-scale Gold Mining (ASGM) is the largest global source of anthropogenic mercury releases into the environment with about 38% of total releases from a multitude of sites in over 70 countries[23], and accounts for about 15% of the world?s annual gold (Au) production (Metal Focus, 2019)[24]. The UNEP Global Mercury Partnership estimates that the amount of mercury used by the sector annually is conservatively evaluated at 1,500 metric tons (MT), making ASGM the largest intentional use sector and leading source of mercury emissions into the environment[25]. ASGM occurs almost entirely in developing countries and countries with economies in transition, where Mercury (Hg) is used in separate gold from sediments, whole or concentrated ore using rudimentary processing methods.

22. The GEF Program, ?*Global Opportunities for Long-term development of Artisanal and Small-scale Gold Mining (ASGM) Sector Plus ?GEF GOLD+?,* aims to achieve Global Environmental Benefits (GEBs) by reducing mercury use from ASGM practices by addressing root causes of informality, capacity limitations of ASGM actors to access finance, technology and geologic information required to improve gold extraction and recovery techniques. By professionalizing ASGM operations, GOLD+ targets upstream production issues to improve miner incomes and reduce poverty while building downstream market linkages to bring responsible small-scale mines to market through due diligence measures addressing issues of inequality and exclusion.

The ASGM Sector in Suriname

23. Artisanal and Small-scale Gold Mining (ASGM) is a practice carried out by individual miners or small businesses with limited capital investment and production[26] that relies on mercury (Hg) to process ores. During mineral processing activities, mercury losses to the environment occur at two stages, during the amalgamation process and the amalgam roasting, mostly carried by small informal gold shops in Paramaribo City. Both practices are found in Suriname. Whole ore amalgamation (worst

practice under Article 7 of the Minamata Convention) is endemic to certain regions and open burning of Hg-containing amalgam without mercury capture devices is widespread, leading to severe contamination and exposure risks for miners, neighboring and downstream communities through fluvial transport of contaminated sediments in river systems.

24. Most of the Suriname?s gold deposits are located in the Guiana Shield, in the Green Stone Belt, a geologic formation spanning 415,000 km2 across Venezuela, the Guianas, and Brazil, as shown in Figure 2[27]. Nearly all small-scale gold mining activities are located in Northeast Suriname[28] practiced in alluvial creek valleys and neighboring colluvial foot-slopes with scattered activities conducted on terraces along the main rivers[29] . Due to its largely unregulated and uncontrolled nature, mining, and in particular small and medium-scale gold mining, is causing significant negative environmental impacts on air, water and land such as land degradation (deforestation and soil erosion), fresh and sea water (Hg contamination, increased turbidity), biodiversity loss and CO_2 emissions due to the consumption of diesel oil for hydraulic pumping. At the same time, the sector delivers remarkable socio-economic benefit for communities of the rural interior even though it is also a cause of negative impacts on human health and safety, mainly due to the use of mercury.

FIGURE 2: THE MINERAL BELT OF THE GUIANA SHIELD

25. Similar to the other Guiana Shield countries, gold production in Suriname has experienced a period of growth driven by the rising gold prices since the 1970s but was disrupted by the Interior War (1986?1992)[30]. A modern gold rush emerged in the early 1990s, involving intensive, largely informal non-legal artisanal mining of lateritic and alluvial deposits within the greenstone belt, as well as dredging in the Marowijne River and Afobaka storagelake[31]. For the last thirty years, ASGM has represented more than an emerging economic sector, contributing a dominant share of national gold exports through the Central Bank[32], but a way of life for rural people. Despite the sector?s

importance, law enforcement is complicated by topographic and logistical constraints, as operations are transient, remote and informal, operating where road and basic infrastructure is limited[33].

26. While ASGM the largest intentional use sector and source of mercury-emissions releases contributing 88 tons Hg/year16, processing techniques vary between different geographic areas. Baseline estimates show that whole ore and concentrate amalgamation without the use of retorts account for 53% (46.64 tons Hg/year) and 25% (22 tons Hg/year) concentrate amalgamation without the use of retorts and concentrate amalgamation with the use of retorts contributes 19% (16.72 tons Hg/year) to total emissions. ASGM activities are geographically dispersed throughout Suriname?s rural interior with a migratory, transient and diverse regional workforce that drifts throughout the Guianas.

27. The ASGM sector directly employs between 20,000-40,000 miners, of which 17,000 individuals are officially registered[34]. While data is unreliable due to the transitory nature of mining operations, at least 11,000 people are estimated to be Surinamese nationals[35]. Between 15%-20% of the total ASGM population, both primary and secondary workforce, are women[36]. Children from low-income households, particularly in the interior, face difficulties accessing basic education making them vulnerable to labour exploitation[37]. Evidence shows that boys are more active as child laborers in ASGM, whereas girls mainly adopt secondary roles. The total number of people employed in the ASGM sector in Suriname are unreliable, because of high migration rates and widespread informality of the sector.

28. In the rural interior where economic alternatives are limited, ASGM provides an essential source of direct income through gold mining, processing and trade, alongside the diverse range of secondary industries it spawns. Secondary workforce estimates, including merchants, service sectors, mining equipment providers and transport support between an estimated 100,000-200,000 indirect dependents[38]. ?Despite the important contribution of LSM to the national economy, small-scale gold mining is far more significant in terms of employment due to the number of jobs created in downstream industries to sustain remote operations.

29. Suriname?s ASGM labor force is dominated by Brazilian *Garimpeiros* and Surinamese Maroons (tribal peoples of African descent) who are underrepresented among legal concession title holders26. More recently, Chinese and Dominicans have also become active in ASGM in Suriname[39]. Even though *Garimpeiros* and Maroons dominate the small-scale gold mining sector workforce, the vast majority of concessions are under exploration or exploitation permits[40]. As a result, ASGM takes place on ?legally titled? mining concessions under illegal circumstances. Some concessions include areas that Maroons traditionally consider their tribal homelands, to which they claim customary rights. Virtually all locations where ASGM occurs are either part of a formal concession ? titled to a multinational company, a Surinamese firm or individual ? or are part of a traditional land claim (Indigenous or Maroon). ASGM equipment owners (i.e. bosses, *dono do baranco*) typically recognize these claims and comply with the regulations required by the mining title-holder or landlord. However,

problems arise when there is more than one land claimant and there have been several cases where land is occupied by miners who do not recognize third-party rights[41].

30. The largest ASGM workforce segment (i.e., migrant *Garimpeiros* and Maroons) lack basic mineral tenure and the right to mine. Formal mining title-holders are people with a mining title extended by the Ministry of Natural Resources (MNR), either directly or through the Geological and Mining Department (GMD). Regardless of whether or not the concession owner operates a fixed processing plant, the largest share of concessions are typically sublet to independent small-scale operators, against payments of 10-12% of recovered gold[42]. Engaging concession owners (title-holders) is critical to sustainably allocate land for ASGM activities, however the majority of tributer agreements currently in place are informal and poorly documented[43].

31. Title holders of legal mining rights are represented by the *Stichting Houders Mijnbouw Rechten* (SHMR or Foundation Holders Mining Rights) who own the majority of mining rights in Suriname. Exploration and exploitation title holders represent a key stakeholder group to understand the nature of tributer systems with transient miners but also to help allocate land for ASGM activities. Given SHMR?s close proximity to ASGM hotspots the foundation is especially useful in collecting data on gold production, primary and secondary workforce dynamics, socio-economic aspects and other important items including COVID impacts on gold prices, supply chains and patterns of mining activity and have to access remote areas[44].

32. Insufficient recognition of the customary rights of Indigenous and Maroon peoples of Suriname is a crosscutting issue in the gold mining industry. The lack of national legislation on indigenous and tribal rights ? particularly to land and natural resources ? creates tensions among indigenous communities and mine operators[45]. In recent years, progress has been achieved including the *?Environmental Framework Law?* passed on May 7th, 2020. The 2020 Law clearly specifies that strengthening Free, Prior and Informed Consent (FPIC) should be applied in decision making processes concerning habitats and living areas of indigenous and tribal peoples. Furthermore, the Policy Note 2020-2025 of the Ministry of Natural Resources mentions that the FPIC procedure should entail the freely established, prior and deliberate consent of the concerned community of indigenous people and/or other tribal Surinamese, and it will be introduced in all policy areas (mining, water and energy) of the Ministry[46]. The Community Engagement and Development (CE&D-NH) Unit within MNR is especially being established for this purpose. This Unit will also work with all other ministries to include FPIC in their policies[47].

33. Mine level organization typically involves one person who owns the production equipment (e.g., pumps, hoses and, depending on the type of operation, other sorts of equipment such as crushers and excavators) and an extremely migrant work force. The owner of an operation is responsible for its organization and resourcing, including food for miners and fuel for machinery. After recovery, gold is divided between the partners according to pre-established shares[48]. While some of *Garimpeiros* stay

in Suriname for years -sometimes decades- establishing firms or settlements, others are part of a continuous rotation of transient mine workers throughout the Guianas.

34. In Suriname ASGM predominantly exploits alluvial deposits (river sediments), colluvium, laterites (soil rich in iron oxides), saprolites (deeply weathered rocks and rich in clay content), tailings, and to a lesser extent, hard rock deposits. As surface deposits are depleted mining methods change for ASGM actors, for example the Rosebel Gold Mine carries out blasting for artisanal miners on parts of their concession[49]. Due to changing geology, more advanced techniques are required to access deposits. As ore characteristics change with shifting geology, processing techniques must also adapt. When surficial (coarse, soft rock) deposits are depleted and deeper (fine, hard rock) ores are encountered, improved milling techniques to liberate gold are required and to accommodate changing geology, mercury use can increase in ASGM operations.

35. Where surface deposits are still accessible, sediment or overburden is commonly removed by hydraulicking[50] and sluicing, or mechanical excavation in combination with bulldozers (i.e.: mucking). A mechanical excavator loosens the material and transports it to a muck pile. Crushers or sluice boxes are fed, depending on the site, from this muck pile. The ore is mined through hydraulic mining, mechanized hydraulic mining, surface excavation, tunneling or river dredging (*Skalian*)42; hydraulic mining is known in Suriname as ?*soigi spoiti?*. Hydraulic mining uses powerful high-pressure water jets to loosen unconsolidated material and suspend alluvial gold in a slurry. The slurry than moves into a channel/reservoir (*marak*) for concentrating transported through suction hoses to a sluicebox. Additional running water is required to wash slurry through sluices where gold is recovered from clean-up of riffled sluice boxes as coarse gold settles behind riffles and finer gold particles are trapped in mats, rewashed and panned.

36. Gold-rich slurry is then placed into a container, where mercury amalgamation takes place. The amalgamated concentrate is panned out and the mercury is evaporated by roasting in open air with a blow torch. Mine waste and tailings are dumped onto the land nearby. The amount of mercury applied depends on the amount of ore to be processed (more ore requires more mercury), ore grade (lower ore grade requires more mercury), and grain size of the gold (lower grain size requires more mercury). Based on field interviews throughout ASGM hotspots estimated mercury-to-gold ratio for Suriname ASGM at 3.3:1[51] where whole and to a lesser extent concentrate amalgamation use large amounts of mercury, generating pollution hazards.

37. ?Though effective in extracting minerals, hydraulic mining leads to severe environmental degradation, unstable slopes, soil erosion, flooding, increased sedimentation in river systems blocking waterways. When overburden removal by bulldozers does not accompany hydraulic excavation, overhanging walls liable to collapse at any time pose significant risks to human health and ecosystem conservation. Drowning in deep water and being crushed by collapsing slopes are constant threats that

equipment operators face in Suriname. Furthermore, machinery accidents and falls from height are serious hazards where the equipment operators are either unskilled or unaware of these risks.

38. Increased turbidity of Suriname?s inland water ways has adverse impacts on drinking water quality for downstream communities and fish populations. Fish species generally caught for human consumption such as ?anjoemara? (*Hoplias aimara*) and ?piren? (*Serrasalmus rhombeus*) disappear from streams as turbidity increases leading to economic losses for fishermen and shifts in species distribution. Fish species that remain are those dependent on other senses rather than sight, and most importantly are not palatable species that are common eaten by rural communities of the interior[52].

39. To reduce the negative impacts caused by ASGM, access to geologic data and characterizing ores will be key to building the capacity of miners and promoting resource efficient mining practices across the mine life cycle. In Suriname, ASGM is a vital income source but the sector is limited by a lack of technical capacity. Technical capacity in ASGM areas is weak and support is required to assist the sector to professionalize, train on mercury-free techniques and build capacity. Therefore, a review of legislation on mining, especially ASM-LSM coexistence, alongside a better understanding of educational programs targeting miners and local workforce dynamics is needed to understand the most viable business models and financial schemes.

40. In addition, unregulated small-scale gold mining is a major threat to forest conservation in Suriname. Between 2000 and 2015 ASGM accounted for 73% of total deforestation (59,554 ha) and 95.5% of all mining-induced deforestation[53]. According to the REDD+ programme report, gold mining as a driver of deforestation doubled between 2008 and 2014, as compared to the 2001-2008 period (+97%)[54]. Therefore, improving regulation and enabling the adoption of mining practices that mitigate impacts on biodiverse ecosystems and inland waters is critical, including low-cost strategies for mine rehabilitation and closure. In mining-affected tropical forest landscapes of Suriname, applied nucleation and assisted regeneration offer cost effective techniques to reduce soil erosion, reclaim slope stability and overtime, and optimize botanical diversity.

41. While large-scale gold mining firms, specifically IAMGOLD (Rosebel Gold Mines) and Newmont (Merian Mine) represent 61.7% of the total gold production, ASGM remains vital to Suriname?s economy. Site invasion by small-scale gold miners onto large-scale concessions are a regular occurrence, and a source of unease. Models of ASM-LSM coexistence offer one strategy to engage miners directly to address land allocation issues and promote land-use planning to minimize environmental impacts and improve mine waste, effluent and tailings management. Intervention strategies can include the establishment of a viable ASM zone by ceding part of a concession or allowing miners onto their concession to mine or operate a processing plant. The Table below provides an overview of existing and planned LSM initiatives.

Large Scale Mining initiatives that (potentially) benefit ASM

Large-scale Mining (LSM)	**Site location**	**Cooperation modality**
IAMGOLD (Canadian, TSX)	Mamakreek	? Unstructured site, to serve as pilot site for the project of the Artisanal Gold Council (AGC) focusing on eradication of mercury within their operations. ? Within this AGC project, Iamgold contributes mainly through ground logistics (? US$20.000).
	Roma East/East Tailings	? Sites operate according to a protocol developed by Iamgold. At these sites, the community of Nieuw Koffiekamp is facilitated through coordination with the Multi Stakeholder Platform of the GoS. ? Discussions with EMSAGS to include these sites as pilots within that project, but there have not yet been any firm commitments. ? Lessons learned from Hg-pilot at Mamakreek can be expanded into these two sites with potential for more financial contribution from Iamgold.
Newmont Suriname	Merian Mine	? Historic issues with Pamaka Community where forced eviction has been an issue. ? November 2020 ASM strategy aims to: i) Formalize the sector and its economy; ii) Reform environment management practices (including mine restoration) and safety in their operations. ? Newmont is looking into an opportunity to collaborate with ASM to request a concession and perform exploration to select the appropriate mercury-free technology and improve bankability of the mine operations. ? Newmont will facilitate contact with bank and equipment suppliers for financing mechanisms. ? Newmont will provide alternative livelihood training to miners who want to diversify incomes.
Grassalco NV	Maripaston	? Assessing options for soil reclamation (i.e. to remove mercury from environment) and perform rehabilittion; it seeks support for that process. ? Will establish nursery for trees for replanting. It will have a measuring station for several monitoring of wildlife re-entering the area. ? Grassalco will also work on establishing a mercury-free processing facility at this site.

42. Suriname is well positioned to support the systems transformation designed under the GOLD+ programme, which plans to pilot holistic, multi-sectoral and integrated strategies emphasizing ASM-LSM coexistence and/or ?tributer? systems at the landscape scale. Formalization[55] is increasingly being put forward as one strategy to mitigate adverse social and environmental impacts of ASGM and there is a growing consensus that LSM companies have a role to play[56]. Further, the GoS has tested strategies to organize small-scale miners[57], including ASM zones. Demarcation of ASM zones offer an alternative to forced eviction (i.e., exclusion) of artisanal miners from concessions. ASM-LSM collaboration modalities in Suriname have shown progress moving away from strict eviction to more inclusive approaches of dialogue to resolve conflicts on the path toward coexistence (see Figure 2). Strategies adopted by IAMGOLD and Newmont matured to more inclusive modalities trending toward cohabitation. For instance, as alternative livelihood and economic diversification programs aim to reduce competition for mineral deposits these constitute less formal mining arrangements, whereas tributer systems or setting aside part of a concession with geologic potential as part of an ASM zone strengthens land tenure security and allows the right to mine.

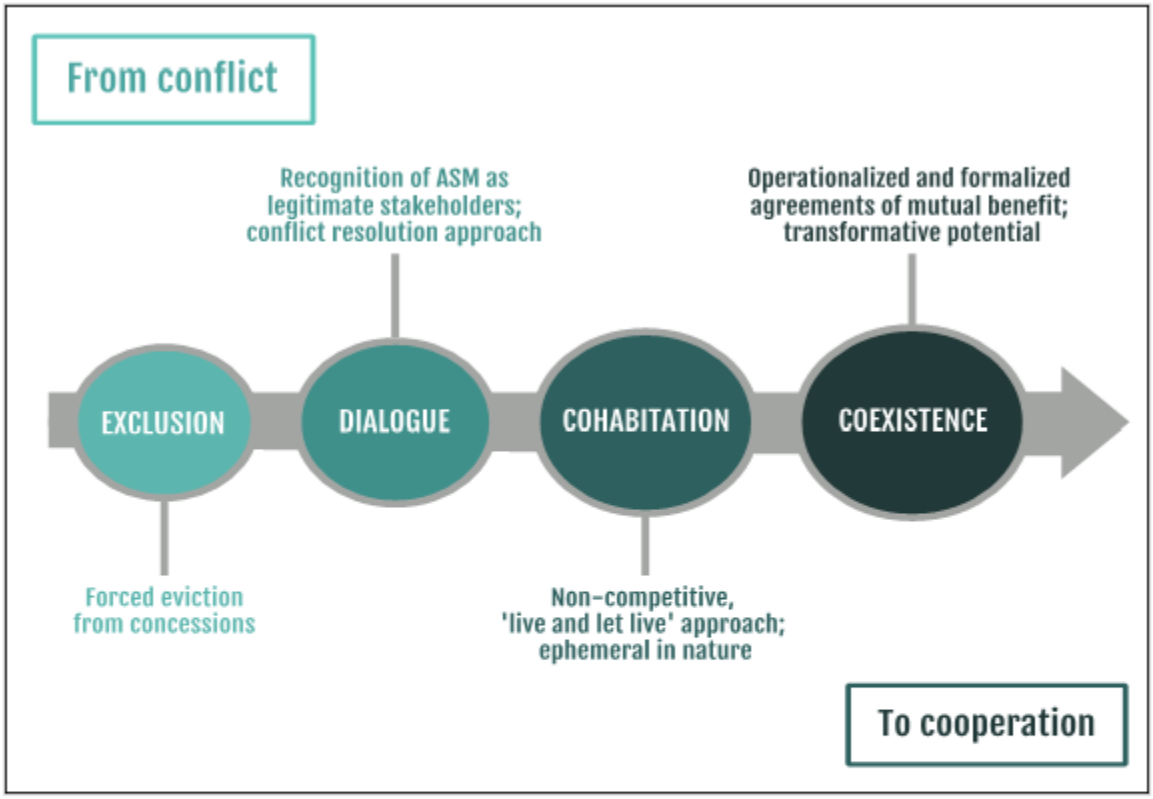

FIGURE 2:CONTINUUM OF COOPERATION AT THE ASM-LSM INTERFACE.

NOTE: FIGURE 2 ILLUSTRATES A PROGRESSIVE PATH FROM CONFLICT (EXCLUSION) TO COOPERATION (DIALOGUE, COHABITATION, COEXISTENCE). COEXISTENCE IS THE MOST ADVANCED ASM-LSM SCENARIO WITH FORMALIZED, LEGITIMATE WIN-WIN ARRANGEMENTS THAT FOLLOW DIALOGUE AND COHABITATION (I.E., INFORMAL APPROACHES TO REDUCE COMPETITION FOR SITES). ADAPTED FROM MEZNARIC, DALES AND VEIGA (2021).

43. To sustain process, land allocation through ASM zones or ASM-LSM coexistence offers a critical entry point to organize, professionalize and formalize operations. Ensuring access to a viable mineral deposit and enabling the right to mine, legitimizes ASGM livelihoods and can provide much needed collateral for financial institutions to improve access to asset-based or other forms of finance[58]. ?Establishing mineable reserves is vital to creating a sustainable operation as it enhances the link between miners and the land they work, thus promoting land-use planning that may be accompanied by extended mine life, and may encourage regulatory compliance to maintain access to and control over viable mineral deposits.

44. Without cohesive strategies to reconcile land-use conflicts, enhance financial access and promote technology transfer, mercury pollution will continue unabated endangering vulnerable populations, fisheries and wildlife, and through drainage of major waterways into the Atlantic Ocean generating global impact. In Suriname, ASM zones and models of ASM-LSM coexistence offer benefits to reduce mercury use and prevent conflict with the aim of balancing land-use between sectors to reduce pollution hazards, while promoting sustainable land, forest and water management, thus enabling global environmental benefits.

45. In Suriname, responsible sourcing is in part limited by the number of licensed buyers who may, or may not, have lawful export permits. According to key informant interviews, there are at least five formal buyers with valid export permits. Gold buyers are reported to perform a pre-scan of the gold and remove the mercury, however, the specific technology used and verification mechanism employed remains unclear. Recently, the Dubai-based Group Kaloti opened a refinery in Paramaribo through a joint venture with the GoS. Gold destined for export is re-analyzed at Kaloti Suriname Mint House to confirm purity, which is then reported to the Central Bank of Suriname (CBVS) for payment of royalties. Gold is then sealed and packed under the supervision of customs agents. A report of its value is sent to the Foreign Exchange Committee (Deviezencommissie), which grants permits for export. The Department for Import, Export and Foreign Exchange Control (IUD) calculates statiestiekrecht (additional fees) to be paid before international export. For legal gold exports originating from Suriname, Dubai is the major downstream destination with a reported, yet unconfirmed, percentage of buyers in Belgium and London[59].

46. While gold is often mined illegally by ASGM actors in Suriname and Guyana, supply chains do not share the same risk profile as neighbouring gold mines in Venezuela, where illegal operations are controlled by army officials, organized crime syndicates, or rebel groups. Intermingling of gold from Conflict Affected and High-Risk Areas (CAHRAs)[60] can translate into scrutiny of due diligence measures in place by the Central Bank. Consequently, public sector capacity building on OECD mineral supply chain Due Diligence Guidance (DDG)[61] and market entry standards, such as the CRAFT Code can allow the GoS to sustainably attract and retain refining contracts while encouraging responsible, mercury-free gold production in the ASGM sector.

47. As of 2021, it is expected that the GoS or the Central Bank will secure refining contracts for ASM gold with the London Bullion Market Association (LBMA)[62] approved refiners. LBMA refiners constitute a downstream market with the highest levels of integrity and transparency for the global precious metals industry. Through responsible sourcing programs, the LBMA community have stated commitments to source from responsibly produced gold from Central Banks, or directly from legitimate Mining Entities (MEs) with adequate due diligence.

48. In recent years, the GoS and national and international partner organizations have become increasingly aware of the necessity to take action to reduce, and where feasible, eliminate the use of mercury. In line with the Minamata Convention on Mercury, Suriname is also developing the following initiatives:

? **GEF enabling activities:** MIA (GEF ID 9349) NAP on ASGM (GEF ID 9452).

? **GEF-6 funded programme:** *?Improving Environmental Management in the Mining Sector of Suriname?* (GEF ID 9288). The EMSAGS project targets the ASGM sector with active engagement of LSM actors, aiming to improve environmental management in ASGM by introducing responsible gold mining methods and mining, training and education centers (MTEC) where leading practice and demonstrations can occur. Newmont and IAMGOLD, have provided financial support to this ongoing project with complimentary outcomes to amplify formalization, financial inclusion and advance business models.

? **World Bank** project ?*Suriname Competitive and Sector Diversification (SCSD)?* to fund: (1) Review of the mining law, (2) Setting up the Suriname Mineral Institute (DIS), and (3) Continuation of transparency of the mining policy, including complimentary focus on responsible mineral supply chain due diligence.

? **World Wildlife Fund (WWF)** project focuses on (1) support the Surinamese Government in alignment of national policy and legislation with the Minamata Convention. WWF-Guianas will also establish national and regional platforms to facilitate implementation, (2) develop an economically feasible model, with support from the Alliance for Responsible Mining (ARM), for mercury-free mining, including the establishment of two pilot sites in Suriname, and (3) collect, analyze and make mercury related data available for the public through an online repository.

? **Artisanal Gold Council (AGC)** project funded by the United States Department of State (USDOS)[63] focuses on the establishment of two mercury free ASGM pilot sites within the concession of Iamgold Rosebel Gold Mines NV, using shaking tables added to the already existing setup of the operations. The AGC will also provide an on-the job training to use the shaking tables during several months.

? **French Embassy** is working with the Parliament of Suriname on developing a law to provide tools and means to the Suriname police and military to enforce the Environmental Framework Law (Milieu Raamwet S.B. 2020 No. 97[64]) and Mining Decree (Decreet Mijnbouw S.B. 1997 No. 44[65]), based on legislation in French Guyana. This law proposal is expected to facilitate better enforcement for the illegal ASGM sector in Suriname. The proposition is still in a draft stage and needs to be reviewed by the responsible committee, before it will be openly discussed in the Parliament.

? **OKGS (*Ordening Kleinschalige Goudsector*)** ongoing work to support formalization of the ASGM sector by registering miners/mining operators.

? **The Community Engagement and Development Unit (CE&D-NH**) at the Ministry of Natural Resources is now being established. The Unit will integrate Free, Prior and Informed Consent (FPIC) principles in the national legislation and in all ministries, create environmental FPIC games for children incorporated in their school curricula (4?13 years old), adapt curricula of Surinamese education system, produce publications and broadcasts by government entities in all spoken languages in the country, promote environmental benefits of mercury free mining practices, and engage all disadvantaged districts and resorts (municipal districts) in the process.

? **Suriname?s EITI Multi Stakeholder Group (MSG)** is part of a global standard Suriname joined in 2017 requiring multi-stakeholder oversight, as well as a functioning MSG comprised of relevant public agencies, extractive companies, and the full, independent, active and effective participation of civil society. In 2016, Suriname?s EITI MSG was formed and stakeholders drafted an MSG Terms of Reference (including a Code of Conduct) selection processes for nine (9) MSG members, with mandatory indigenous representation. In absence of formal EITI legislation in Suriname, an extra layer of formalization was added by Ministerial Decree (through MNR) by establishing the MSG as a Presidential Committee in 2016, under the coordination of the Ministry of Natural Resources.

Before April 2023, the EITI Board of Governors has requested corrective actions on the status of mineral licences, efficiency of license allocation and transfer, public disclosure on mining licences and employment disclosure in ASM sector are priorities, where data standards are in design by the OECD.

Institutional and legal framework

49. **The Constitution of the Republic of Suriname**, enacted in 1987, includes several articles to create and improve the necessary conditions to protect nature and preserve the ecological balance, all workers have the right to safe and healthy working conditions (Article 28), children have the right to protection without any form of discrimination (Article 35), and everyone has a right to health (Article 36). However, it does not contain any specific language pertaining to the mining sector, except that all natural resources are state property[66]. In addition, Article 20 of the Law on Basic Education requires children to attend school until they are at least age 12. This leaves children between ages 12 and 16 particularly vulnerable to the worst forms of child labor because they are no longer required to attend school but are not yet permitted to work.

50. **The Mining Decree (Decree E-58, 1986)** governs Suriname?s mining sector under the responsibility of the Ministry of Natural Resources. It reiterates that the minerals in and on the ground in Suriname are property of the state, and separate from land tenure. The Decree states that mining should be carried out according to modern international techniques and methods, and indicates that

worker and public health and safety must be respected and protected by those operating in the industry, and they must follow norms for the protection of ecological systems[67]. The Geological Mining Service (GMD), under the MNR, is responsible for generating and distributing geological information, conducting surveys and concession management. The GMD are responsible for all matters related to Suriname?s mineral policy. GMD gains information with regard to the mining policy in order to optimize the mining sector.

51. **Article 35?40 of the Mining Decree (1986)** governs small-scale mining, where miners can apply for small-scale mining rights, including reconnaissance, exploration and exploitation for an area less than 200 hectares, granted for a period of two years (renewable). While obligations of rights holders are laid out in the Decree, including: submission of quarterly reports detailing capital investments, operating costs, the number, age and nationalities of people working in the permitted area, and the tonnage of minerals mined, the capacity of small-scale miners and their entities to collect and report on this information is extremely limited. Small-scale right holders are not required to include rehabilitation plans in permit applications, with no clear requirements on occupational health and safety or environment protection prolonging high-risk activities.

52. **The Commission for Regulation of the Gold Sector, or OGS (*Ordening Goudsector*)**, was established in January 2011 with a mandate to re-establish government authority in small-scale gold mining areas. In an effort to fight illegality in the ASGM areas, OGS started with a gold miners? registration program, both in the interior and Paramaribo City. In several mining areas the Commission OGS has established Mining Service Centers (MSCs), as a means to manage tensions among small-scale miners and prevent conflict with large-scale mining actors. The purpose of establishing MSCs was to improve miner registration and access services such as technical training, health services, and selling gold[68]. OGS is no longer active. OGS as presidential committee was annulled since 1 August 2020. The new Government (2020-2025) installed OKGS (*Ordening Kleinschalige Goudsector*) commission placed under the Office of the Vice President, upon the start of their term for a period of one year, with the following tasks[69]:

- ? Managing the risks associated with gold extraction by means of small-scaled gold mining;
- ? Controlling environmental aspects in relation to the small-scaled mining sector;
- ? Setting up a structure for the inclusion of local communities in mining rights issuance and monitoring policies;
- ? Guaranteeing and monitoring the safety of both local communities and holders of mining rights and regarding, among other things, conflicts that arise between communities and holders of mining rights, crime control, regulation and / or containment of illegality;
- ? Coordination of the financial context with regard to optimizing government revenues from this sector;

- ? Monitoring of legislation and internationally accepted standards and rules and mining, environmental and labor conventions ratified by Suriname in the context of the mining sector;
- ? Developing targeted integrated policy to improve, modernize and make the sector more sustainable;
- ? In addition to the annulment of OGS and installation of OKGS Commission, the OGS Unit under the Ministry of Natural Resources was also renamed to OKGS Unit. This Unit is responsible for implementation of mining policies and law enforcement.

53. In 2015, the School of Geology and Mining Technology (SGMT) at the University of Applied Sciences and Technology (UNASAT), started offering a 6-month bachelor level course on mercury-free gold mining technologies for graduates of the secondary technical school NATIN and bachelor students of mining. The course teaches competencies in mercury-free gold extraction, concentration, and refining. Field training for students takes place in the Brokopondo District within OGS (now OKGS) established mining reserves and in the Paamaka gold mining reserve near Snesi Kondre/Merian communities), under an institutional arrangement between OKGS and UNASAT.

54. Despite the sector?s importance, Suriname lacks adequate legal, environmental, and social frameworks and the majority of ASGM is informal. Consequently, operations are driving land degradation, deforestation, and pollution of inland waters[70] where mercury releases and poor tailings management, endanger human and ecosystem health. According to Suriname?s mercury inventory (GEF ID 9349) primary mining and processing of gold ores represent the largest source of releases to land (44.85 Kg Hg/year), water (24.34 Kg Hg/year), and air (18.24 Kg Hg/year), for a total of 88,019 kg HG/year (88 tons); accounting for 97%[71] of annual mercury releases[72]. However, data on mercury content in raw ore, mercury flows and mass balances, in both ASGM and LSGM operations is uncertain, creating wide discrepancies in Hg-Au ratios that include whole and concentrate amalgamation.

55. Despite data gaps, it appears that small-scale gold miners use large volumes of water and mercury, where it is estimated that each kilogram of gold recovered discharges between 1-3 kilos of Hg into the environment. In recent years, small-scale surface and underground gold mining, including mechanized excavation, hydraulic monitoring and river dredging techniques degrade land, forests, and aquatic ecosystems[73]. Mercury pollution is further aggravated by the lack of tailings management facilities. As a result, increased mobility of Hg-contaminated sediments which disperse heavy metals through fluvial transport can enhance exposure risks for downstream communities, fishing industries, and wildlife in the interior[74].

56. According to the Mining Decree title holders are not allowed to sublet a concession, in practice however ?informal? tributer systems are tolerated by the GoS[75]. The establishment of ASM zones has been discussed by regulatory bodies to improve supervision and administration of the sector and prevent conflicts with LSM actors where mineral claims overlap, yet Suriname lacks a clear policy on

securing of tenure and allocation of rights between ASM-LSM actors. ?Possessing the right to mine and access an economically viable deposit has potential to make mine operations predictable, manageable and reduce conflicts but requires an enabling legislative framework and supporting policy to facilitate formalization and optimize land-use planning.

57. Suriname is well positioned to support the systems transformation designed under the GOLD+ programme, which plans to optimize formalization through a holistic, multi-sectoral and integrated landscape approach, emphasizing models ASM-LSM coexistence and ?tributer? systems. The GoS has tested different strategies to organize small-scale gold miners, including ASM zones. Newmont and IAMGOLD have provided financial support to the GEF-funded project (EMSAGS) on environmental management in the gold mining sector, with complimentary outcomes to accelerate formalization, financial inclusion and business models proposed under this project. Structural ASM zones and coexistence models can improve mining livelihoods with the aim of balancing land-use between natural resource sectors and reduce mercury pollution hazards.

58. Unfortunately, the Mining Decree is outdated, resulting in a lack of legislation on environmental issues, safety and health aspects, or strategies to improve access to finance through financial inclusion. Furthermore, due to a highly migrant workforce, the movement of miners across the porous border remains a problem for securing mining rights. Under Article 36.3, the GoS (via MNR) is responsible for designating areas for ASGM, yet the government lacks clear policy on the identification, delineation, geo-prospecting and management of such zones, despite growing demands for geologic information and conceptual planning on social and environmental safeguards, including dispute resolution with LSM actors.

59. As part of plans to increase the capacity of the mining sector, the Mining Decree should be revised during 2021-2022[76]. The latest draft of a revised ?Mining Law?[77] dates to 2004 but was not adopted. Nevertheless, pending revisions must create an enabling legislative framework to facilitate legal recognition of ASGM actors and facilitate their formalization. While institutions have a clear mandate to formalize the ASM sector (i.e. permits, OGKS, etc.) the GoS does not have mechanisms to improve access to finance or incentive structures such as tax exemption for small-scale operators to procure Hg-free mining technologies in a cost-efficient manner. Furthermore, as rehabilitation plans are not a requirement during the small-scale permitting process, positive incentives such as reclamation bonds (i.e., funds for mine closure) or tax incentives for good environmental performance.

60. The new Government of Suriname (since 2020) has aimed to reform the MNR and mining polices, including small-scale gold mining (by 2020-2025). Thus, it is anticipated that Suriname will have a new Mining Law by the end of 2022 with implementation of an enabling mining framework expected to take force by late 2025. The updated Decree should incorporate existing and proposed laws to

harmonize all definitions. Acting and proposed laws that must be taken into consideration for ASGM formalization in Suriname include:

Acting laws:

? **Environmental Framework Law (Milieu Raamwet[78]):** adopted in 2020 by the Parliament of Suriname (DNA=De Nationale Assembl?e) which regulates a sustainable environment and specifies the strengthening of Free, Prior and Informed Consent (FPIC). This law establishes the legal framework for Environmental (Social) Impact Assessments (ESIA/EIA), underscored by the polluter pays principle[79];

? **Freight Traffic** (Wet Goederenverkeer[80]) and its Negative List S.B. 2003 No.74[81]: which both regulates the international freight traffic in Suriname (details on mercury outline below);

? **Nature Conservation Act** (Natuurbeschermingswet 1954[82]): which regulates the management of legally protected areas in Suriname. It is forbidden to intentionally damage the preserve areas, i.e. no mining activities are allowed within these areas;

? **Labor law** (Arbeidswet[83]): which includes all legal provisions regarding Suriname?s labor conditions;

? **Act on Labor of Children and Juveniles** (Wet Arbeid Kinderen en Jeugdige Personen[84]): in general, it is forbidden that children and juveniles perform industrial labor in Suriname, but small work-activities are allowed in family companies or cultural communities, taking into account that it is no intensive and harmful labor;

? **Law on Minimum Wage** (Wet Minimumloon[85]): Regulates the minimum wages to be paid by an employer to an employee per hour as defined by Surinamese law.

Proposed laws:

? **Draft Law of the collective rights of Indigenous and Tribals of Suriname** (Ontwerpwet Wet Collectieve Rechten Inheemse en Tribale volken Suriname[86]): draft of the recognition and protection of the rights of traditional authorities in Suriname, in accordance with the FPIC principles, inclusive the right to preserve tribal lands. The draft law is currently under review before it can be proposed to the Parliament for consideration.

? **Four drafts of Suriname?s Water Laws** (Waterwetten[87]): i) draft on the control of quality of drinking water; ii) draft groundwater law; iii) draft groundwater protecting areas; and iv) draft Suriname water authority (Wetsontwerp Waterautoriteit Suriname).

? **Draft on Guidelines for Strategic Environmental Assessments (SEA)** were developed in 2019, but the National Institute for Environment and Development (NIMOS) will consider these as an internal working document and will develop it further on SEA practice within the next 4-5 years as proposed by NIMOS. NIMOS wants to build its capacity regarding SEAs, which differ from ESIAs essential to evaluate policies, programs and plans developed by the GoS. SEAs are a set of analytical and participatory processes for systematic incorporation of environmental considerations (findings), at early stages of decision making, policies, plans, and programs that affect natural resources. SEAs must incorporate the cumulative environmental impacts of multiple projects part of a development plan(s). SEAs help to understand higher level risks, avoid mistakes, conflicts, build commitment, and smoothen the normal ESIA processes[88].

? **Residential and Living Areas Protection Act** (Wet bescherming woon- en leefgebieden S.B. 1982 No. 10, zoals laatstelijk gewijzigd bij S.B. 2003 No. 8) holds provisions to protect residential and living areas of Indigenous and Tribal Peoples (ITP), based on indicative protected areas consisting of ITP villages surrounded by a 10 kilometer radius. This law includes application of FPIC as part of procedures for issuance of land to third parties. This law has been approved by the Parliament, but not as yet published which means that it is not yet applicable. However, the provisions can serve as a guideline for the Government when formulating legislation and policy in which protection of ITP land rights is relevant.

61. **According to Surinamese Freight Traffic Act S.B. of 2003 (Order Negative List S.B.2003 No.74)** the import of mercury is regulated. Mercury import in Suriname has not been banned but restricted to certain amounts and sectors. Measures to further reduce the import and trade of Hg are part of Suriname?s NAP[89], including strategies for managing trade and preventing diversion of mercury. Together with inter-ministerial collaboration (Ministry of Economic Affairs, Entrepreneurship and Technological Innovation, Ministry of Foreign affairs, International Business and International Cooperation, Ministry of Natural Resources and the Ministry of Justice and Police) an investigation on minimizing illegal mercury including imports in collaboration with neighboring countries French Guiana and the Suriname-Guyana Cooperation Council is planned as to inform the formulation and implementation of measures to circumvent illegal trafficking.

62. Mercury predominantly enters Suriname from Guyana, mostly by overland or water transport. Individual small informal traders buy flasks or plastic bottles of Hg either just across the border Guyana or the border District of Nickerie[90]. Once entered the country, informal traders resell mercury in smaller amounts in Paramaribo neighbourhoods where gold miners often buy their supplies. The majority of artisanal gold miners buy mercury in Paramaribo. A second plausible source of mercury used ASGM is from China via marine containers importing mining equipment via the Suriname Port87. While suspected, Hg-containing shipping containers have not been intercepted, Chinese shops catering to ASGM also sell mercury87.

Associated baseline projects

63. Also related to institutional partnerships, there is a group of GEF-financed projects and other initiatives currently under implementation related to the development challenge this project is also addressing, which could provide some additional support to strengthening this institutional partnership approach in the Suriname context. Thanks to the involvement of the institutional partners in some of them, under the leadership of the Ministry of Natural Resources, it appears the achievement of the outcomes for this FSP is of mutual benefit. Specifically, this FSP will ensure coordination and count on the capacity built and knowledge gathered from the concurrent projects that are already in progress, as shown in the Table below:

Associated relevant projects and initiatives

Project	Agency	Main relevance for this FSP
The planetGOLD Global Program	GEF/CI	This Program aims to support the participating countries in fulfilling their commitments under the Minamata Convention. Cost-effective knowledge management practices related to formalization, technical solutions access to financing and awareness raising developed by the first group of participating countries will be adapted to the Suriname context through this FSP. One of the key inputs of this Program to this FSP is ?innovation?, i.e.: the market does not see mercury usage in isolation, but rather as one of many factors that need to be tackled if they are to trade gold as ?ethical?. This FSP will build on the GEF planetGOLD Global Program through the use of an existing knowledge platform, lessoned learned, capacity building materials, databases, proven technologies and market opportunities. Through outputs of Component 4, it also enhances the scope of this global platform and contributes to the evidence base housed there.
Global Knowledge Management and Exchange of Child Project Results Through Networking and Outreach Activities for the GEF GOLD Program	GEF/UNEP	This GEF project, implemented by UNEP, together with the National Resources Defense Council (NRDC) and UNIDO, aims to facilitate the sharing of technical information and engage in outreach to relevant stakeholders to reduce and where feasible eliminate mercury use in ASGM. It has been initially designed to ensure that lessons learned from the eight individual planetGOLD+ country child projects will be captured and shared between the child projects and other ASGM stakeholders globally. This knowledge sharing platform is assisting countries where ASGM is present to increase capacity to formalize ASGM and approach the process in a holistic manner; provide technical advice with respect to access to finance for the ASGM sector; and increase technical capacity to support mercury reduction efforts through a broad range of guidance material to implement practical projects, which will be consulted during the implementation of the pilot projects of this FSP.
The planetGOLD Global Forum and Annual Meeting	GEF/UNEP	This FSP will be engaged in the planetGOLD Global Forum by participating in a ~ two-yearly learning and sharing event that will facilitate face-to-face meetings (in line with COVID-19 safety protocols) between ASGM experts and practitioners, governments, gold buyers and miners in support of ongoing of experience exchanges and development of global expertise and capacity building on ASGM issues in Suriname, in order to influence the global ASGM dialogue agenda and policy development. The project will also participate in the annual planetGOLD program meeting, meant to enhance knowledge exchange and cooperation among the planetGOLD country projects.

Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas	OECD	OECD, which launched in 2016 the ?Sourcing Gold from Artisanal and Small-Scale Miners? policy, will provide practical guidance on how companies should engage and source gold from ASGM miners; reference material that this FSP will access during its implementation.
Fairmined and Fairtrade Gold	ARM	The Alliance for Responsible Mining (ARM) and Fairtrade International have developed international standards for best ASGM best practices, i.e.: ?Fairmined? and ?Fairtrade Gold?, in a move to raise public awareness on the positive impact of their consumer choices. These standards require communities to be formalized and respect social and environmental minimum requirements. ARM has further developed with Code for Risk Mitigation for ASGM engaging in Formal Trade (CRAFT), which is a code for progressive compliance for ASM producers. The above actions will also serve as guidance to the implementation of the activities foreseen in this FSP.
Improving Environmental Management in the Mining Sector of Suriname, with Emphasis on Artisanal and Small-Scale Gold Mining (EMSAGS/GEF-ID 9288)	GEF/UNDP	The objectives of EMSAGS are to improve environmental management in the mining sector of Suriname, with the emphasis on independent and artisanal small-scale gold mining and to promote uptake of environmentally responsible mining technologies, focusing on the following outcomes: institutional and technical capacity of the main stakeholders; uptake of environmentally responsible artisanal and small-scale gold mining practices and increase knowledge availability and sharing at national and regional scales on environmentally responsible artisanal small-scale gold mining. Overall coordination between this FSP and EMSAGS will be a major responsibility of the Project Management Unit, in close coordination with the same Implementing Partner, MNR.
Suriname Competitiveness and Sector Diversification (SCSD)	World Bank	This WB project, also implemented through the Ministry of Natural Resources and the Ministry of Trade, Industry and Tourism, has one main component, i.e.: ?*Strengthening the mining sector governance, transparency, accountability, and Administration*?, which focuses on supporting improvements to the legal, regulatory, and institutional framework governing mining in Suriname. Overall coordination between this FSP and WB/SCSD -regarding the activities related to ASGM- will be a major responsibility of the Project Management Unit, in close coordination with the Implementing Partner, MNR.

The Amazon Sustainable Landscapes (ASL)	GEF/UNDP	This initiative is to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover. In Suriname, the project will be implemented by the Ministry of Land and Forest management and will focus on four strategic project components: (1) improved management of protected landscapes, (2) strengthened, gender-inclusive, participatory management o productive landscapes, (3) policies/incentives for protected and productive landscapes, and (4) knowledge management, learning, and monitoring and evaluation. This project will be executed in two major landscapes of the Surinamese Amazon Biome: the Saamaka-Matawai and the Coeroeni-Paroe Landscapes.
World Wildlife Fund Guianas	WWF-Guianas	Project WWF with the objective ?*to reduce mercury contamination in the Guianas by phasing out mercury use in the gold mining sector and contributing to reduce mercury emissions from mining deforestation by 2025*? and includes three components: i. Support the government in alignment of national policy and legislation with the Minamata convention. WWF?Guianas will also establish national and regional platforms to facilitate implementation; ii. Develop an economically, socially acceptable and feasible model, with support from the Alliance for Responsible Mining (ARM), for mercury free mining; including the establishment of two pilot sites in Suriname and two in Guyana; iii. Collect, analyze and make mercury related data available for the public through an online repository.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project;

The proposed alternative scenario

64. The planetGOLD+ programme?s Theory of Change (ToC) has been developed around:

? Optimizing formalization strategies through integrated, holistic, and multi-sector approaches at the landscape scale through commodity-specific Jurisdictional Approach (JA)[91];

? Accelerating financial inclusion and creation of responsible supply chains;

? Enhancing uptake of mercury-free technologies through sustainable business models;

? Foster knowledge sharing, learning, and synthesis of experiences.

65. The integrated approach proposed for the Suriname Child Project fully responds to and reflects the planetGOLD+ Programme?s ToC as can be deducted from the child project?s results framework. All child project components fully align with the programme components, and the child project outputs directly contribute to the PFD and child project outcomes as described in the project?s results framework. As such the proposed child project proposes suitable and appropriate options to tackle systematic challenges for countries where the ASGM sector is a more than significant source of mercury and environmental harm. The child project will achieve tangible and desired transformation including global environmental benefits, enhancing environmental management and compliance of the gold mining sector toward accelerating progress on the Minamata Convention, REDD+, the United Nations Convention on Biological Diversity (UNCBD), the United Nations Framework Convention on Climate Change (UNFCCC), the Treaty for Amazonian Cooperation (ACTO), and the RAMSAR Convention in Suriname. As mentioned above, gender mainstreaming will be critical to all project activities, and a Gender Action Plan has been developed to support this.

66. This project will trigger adequate investments are made to ensure a miner-centric perspective is captured and viewed through a 360 lens of the community. For example, each mine has a story to tell in land-use history, levels of miner organization, stakeholder relations, especially where site invasion or concession sharing conflicts occur, and resource sharing challenges related to water, forests and other natural assets. To sustainably attract and retain future investments in the ASGM sector, local stakeholders and the investment community of Suriname can find a point of convergence in capturing the lessons learned to date during the project by exploring, documenting and translating the culture of gold mining in Suriname into a positive narrative. In this regard, the strategic focus of the project is to support the formalization of the artisanal small-scale gold mining sector, improve access to finance, and promote technology transfer, knowledge management and communication.

67. The proposed alternative approach seeks to maximize the potential of the ASGM sector in a way that the use of mercury for gold production will be reduced and banned over time. This approach aims at enabling holistic development management and a strong contribution to the reduction in persistent poverty in the ASM territories; by strengthening the quality of human capital and increasing the offer of finance instruments to this segment of the economy. Partnering of public institutions, ASGM and other international initiatives -led by UNDP and the GEF- should develop the comparative advantages of each partner and exploit their synergies, in order to achieve sustainability to capitalize on Suriname?s development.

68. The alternative scenario is of great significance for human health, environment and sustainable growth; in order to follow the existing national regulation and international guidelines on chemical

substances and hazardous waste management, specifically, to comply in due time with the commitments signed by the GoS under the Minamata Convention and in accordance with a national environmental policy already in place, which guides the intervention principles of this FSP.

69. As such, the proposed Child Project offers suitable and appropriate options to tackle systematic challenges for countries like Suriname, where the ASGM sector is a more than significant source of mercury and environmental harm. This FSP, as reflected through the expected outputs and corresponding outcomes will achieve a tangible and desired transformation including a significant global environmental benefit, while contributing to reducing poverty in the ASGM territories. This Child Project will explore various options for financial mechanisms to structure lending opportunities suited to the ASGM sector; Suriname will have the opportunity to customize strategies for certificate of origin and traceability measures through technology-assisted, mercury-free, mineral supply chain.

70. The planetGOLD+ Child Project in Suriname aims for the reduction of eight (8) metric tons (MT) of mercury over a five-year period, through a holistic, multi-sectoral integrated formalization approach, and increasing access to finance leading to the phase-out/phase-down of mercury in the ASGM sector. Nevertheless, it should be taken into account that there are substantial aspects that need to be explicitly established, complemented, or in some circumstances even regulated, in order to improve provisions to protect human health and the environment from mercury releases as a result of the intentional use of mercury in the ASGM sector.

71. The strategy of mainstreaming gender will be applied in every component of the project. To this end, gender analyses has formed part of the socio-economic assessments for this FSP; the roles women play in various stages of the ASGM process include mining, crushing, processing, mercury use in gold recovery (burning), gold trading, mining support services, leading and organizing, and support services. Through these processes mercury exposure happens in varying levels. The unique health risks mercury poses to women due to their roles on the mine sites and the potential adverse effects of prenatal mercury exposure will be highlighted in community level communications; and women will be strongly encouraged to participate in all ASGM miner training activities, from business skills to clean technology skills transfer.

72. In order to achieve its outcomes, the project?s strategy will require attention and collaboration (political, technical and financial) with different sectors, in particular, with the small artisanal miners as direct consumers of mercury. The project will provide technical assistance through the process lifecycle to bring about integrated institutional support and coordination of groundbreaking technology interventions. Contribution from the GEF will add value in many ways, yet three elements are highlighted:

i. This UNDP/GEF project will help to assure that mercury-free activities are done in accordance with national and international standards;

ii. the project will play a coordination role among possessors of mercury techniques, contaminated equipment and materials, which will lead to lowering individual disposal costs through an improved coordination among all the stakeholders participating in the current ASGM production chain;

iii. the Theory of Change analysis for this project should be highly adaptive during project implementation due to the overall circumstances of Suriname, being characterized by a very challenging socio-economic environment, on-going social distress, the hardship impacts of the COVID-19 pandemic, and high vulnerability due to recurrent climate change events.

73. The alternative path will be based on reliable sources and Best Available Technologies/Best Environmental Practices (BAT/BEP) in order to mitigate potential risks due to the reduction and elimination of the use of mercury in the ASGM sector. Alternatives to the business-as-usual scenario will be evaluated and compared in light of the identified risks, and the safest, most feasible alternatives that fit the intended users will be selected. Pilot projects will be undertaken to identify the required technological changes and business models together with social and environmental safeguards in order to mitigate negative impacts, and to establish the necessary control measures; and more challenging critical risks recently idenfied amid the coronavirus pandemic. Criteria for the feasible path will be drawn up and aligned with Suriname?s socio-economic reality and specific needs of the intervened territories, recognizing gender needs and implementing ?inclusively- a gender equality action plan under a participatory approach.

74. This FSP will build upon ongoing efforts of the Government of Suriname to fulfill its global environmental commitments through the implementation of the Convention of Minamata, in accordance with the *?Minamata Initial Assessment for Suriname ?MIA-?*. This policy has provided guidance for the development of appropriate administrative and regulatory frameworks for the pursuit of an alternative development path through suitable and relevant strategies and actions to address national capacities to the environmentally sound management of mercury in the ASGM sector.

75. Under this policy guidance, two main purposes have emerged. The first is to protect human health and the environment from mercury while strengthening collateral socio-economic and environmental sustainability actions in small artisanal gold mining production, in order to fully comply with the country?s commitments to phase out all use of mercury in this sector over the long term. The second purpose is to trigger innovative actions for alternative technologies in order to manage gold production

in this sector in an environmentally sound manner. However, the baseline actions on this front have a significant limitation; the need to ensure ?jointly- the maximum delivery of Global Environmental Benefits with prevention, reduction and elimination because of the high levels of human exposure to these substances while boosting local development in gold mining territories; considering the context of the wide variety of challenges associated with the use of this chemical substance for decades.

76. This FSP is aligned with the MIA Roadmap, as presented in the Table:

Alignment of the ASGM FSP with Suriname MIA Roadmap

FSP Outputs	Policy Area
1.1 / 1.2 / 1.4 4.1 / 4.2	Policy Area 1: Legal and Institutional Framework Subgoal 1.2: Efficient and effective management structure and enforcement mechanism
1.3 3.1 / 3.3 4.1 / 4.2	Policy Area 2: Data and Research Subgoal 2.2: Mercury-free methods have been investigated and are available
2.2 3.2 4.1 / 4.2	Policy Area 5: Artisanal and small-scale gold mining (ASGM) Subgoal 5.2: The use of mercury and mercury compounds and their emission by ASGM is less and where possible prohibited Subgoal 5.3: Mercury-free alternatives are being implemented
2.1 4.1 / 4.2	Policy Area 7: Financial mechanism Subgoal 7.1: There is a government budget for implementation Subgoal 7.2: Overview of multilateral, regional and bilateral forms of financial financing

Source: PPG elaboration based on the *?Suriname Minamata Initial Assessment Report 2020?*.

77. It is important to note that the overall strategy of this FSP and the related activities to be executed under each output will be complementary and coordinated ?through the Ministry of Natural Resources- with the activities to be carried out under Component 1 of the World Bank Project *?Suriname Competitiveness and Sector Diversification -SCSD-?*. Likewise, this planetGOLD+ will need to create an interactive operational platform to harmonize its execution with the other UNDP/GEF FSP *?Improving Environmental Management in the Mining Sector of Suriname, with Emphasis on Artisanal and Small Scale Gold Mining ?EMSAGS-?,* in order to avoid double dipping during the execution of these three projects. The Project Management Unit (PMU) will be responsible for guaranteeing this coordination as well as ensuring the compliance of the agreeable and separate key indicators for this FSP.

Theory of Change for this FSP

78. In order to improve the provisions to protect human health and the environment against the use of mercury in the ASGM sector; there are significant challenges that need to be faced to overcome the barriers to address in the causal chain analysis shown in the previous section. As summarized from the Theory of Change analysis, Figure 3 shows the alternative pathway and solutions, based on the entries proposed by the project:

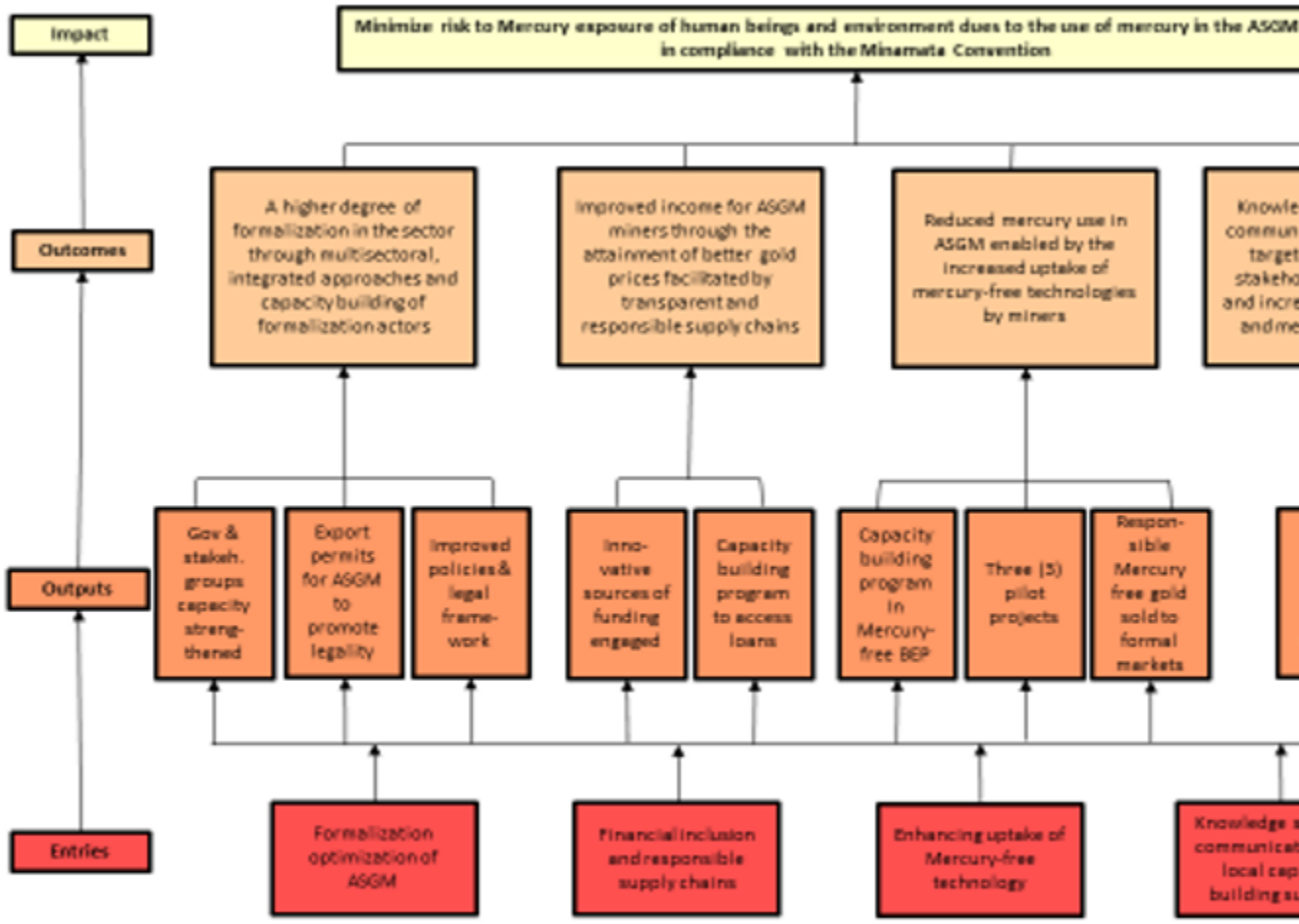

FIGURE 3: THE THEORY OF CHANGE DIAGRAM

79. In turn, the proposed strategy under this FSP will provide economic support to the ASGM sector in Suriname; and the skills diversification that it provides amongst agrarian workers and rural villages is a fundamentally important feature of the mining territories and one that is providing key support during the economic turbulence of the COVID-19 pandemic.

The project approach

80. The Project?s vision is to proceed with direct interventions on the immediate, underlying and root causes previously identified; recognizing the multi-dimensional impacts of artisanal and small-scale gold mining on the environment, health and poverty. The objective of this FSP is to minimize risks to mercury exposure to human beings and the environment due to the use of mercury in the ASGM sector in compliance with the Minamata Convention. This impact is clearly aligned with the UNMSDF/CPD Outcome *?Inclusive and sustainable solutions adopted for the conservation, restoration and use of ecosystems and natural resources. (A Sustainable and Resilient Caribbean)?*. Additionally, this FSP is aligned with UNDP Strategic Plan Output 2.1.1.

81. For this purpose, the project?s strategy is implemented, as accepted by the GEF and the UNDP, through four project components.

82. The area of focus of Component 1 ?Formalization optimization of ASGM? is to enable an ASGM formalization environment through multi-sectoral, holistic and integrated approaches, i.e.: work with the whole mine life cycle, address the social needs of the miners and communities, and empowerment of human rights. As such, accelerating opportunities for ASM-LSM coexistence, in order to ensure that every key stakeholder (policy makers/regulators/miners/financiers) has sufficient capacity to meet the withdrawal of mercury for gold production for artisanal gold miners in Suriname over the long run.

83. Key stakeholders, at national and community levels, will have their capacity strengthened through the implementation of a technical training program ?taking into account the gender dimension-, consolidation of the regulatory framework to advance adequate management and disposal of at least eight (8) tons of mercury currently used by the ASGM sector during the implementation of the FSP, in order to comply with the obligations under the Minamata Convention, and the need to develop long-term relationships with mining entities, as key elements of the successful FSP?s exit strategy.

84. Outcome 1. Component 1 would directly address the immediate cause ?*Limited enforcement of the existing regulations for the sound environmental management of mercury*?; as indicated in Figure 5: Theory of Change Diagram.

85. The area of focus of Component 2 *?Financial Inclusion and Responsible Supply Chains?* is to extend access of ASGM-appropriate, affordable and timely financial services to enable responsible gold supply chains. This approach is established in two ways. The first one creates awareness to educate and collaborate with financial institutions at the community, national and regional levels, and to tailor services and products suited for the ASGM sector; and the second one, to develop capacity

building to assist miners in accessing funds and sustainably grow businesses. Both avenues are interlinked and their establishment are key to the creation of a sustainable ASGM sector.

86. Outcome 2. Component 2 would address the immediate cause *?Need to enhance innovative investment opportunities into the ASGM sector*?; as indicated in in Figure 5: Theory of Change Diagram.

87. Under Component 3 *?Enhancing uptake of Mercury-free technologies?,* the alternative path will be based on reliable sources in order to mitigate potential risks. Alternatives to the business-as-usual practices will be evaluated and compared in light of the identified risks, and the safest, most feasible alternatives that fit the intended users will be selected. Pilot projects will be undertaken to identify the required technological approach as well as environmental and health impacts, to establish necessary control measures; and more challenging, critical risks recently idenfied amid the coronavirus (COVID-19) pandemic. The Geosciences Department at the Anton de Kom University of Suriname (AdeKUS), which has courses specifically catered to ASGM and mercury?free mining, can be involved in this process through research and development. Criteria for the feasible path will be drawn up and aligned with Suriname?s specific needs, recognizing gender needs and implementing ?inclusively- a gender equality action plan.

88. Through this Component, this FSP aims to establish closer interaction and collaboration with the miners who are involved in the use of mercury for gold production. Coordination mechanisms and the implementation of commercially-driven pilot experiences will foster alternative investments; by establishing incentives for the chosen pilot locations and by enhancing dialogue and collaboration along the gold production chain. The ultimate objective of the coordination mechanism will be to balance benefits for each of the participating stakeholders in the mercury elimination chain to deliver maximum gold recovery and transition to mercury free processes.

89. Outcome 3. for Component 3 would address the immediate cause *?Essential need to develop alternative, cost-efficient, mercury-free technologies?*; as indicated in Figure 5: Theory of Change Diagram.

90. Lastly, Component 4 of this FSP ?*Knowledge sharing and communication outreach?* will capture lessons learned, monitor the project?s activities and provide the required feedback, through an awareness raising campaign and information strategy, which includes dissemination at the district, national, Latin America and the Caribbean (LAC) Region and global levels. Annual workshops will be organized to create awareness, and allow the request for and capture of feedback. Information on the

benefits of sustainable ASGM mining operations ?mercury free-; acting directly, in a transversal manner, in all the immediate causes mentioned above; all of this aligned with the GEF planetGOLD+ Global Program and with the other GEF planetGOLD Child projects in Colombia, Ecuador, Peru and Honduras already under implementation in the LAC region; and with the UNDP/GEF EMSAGS, WB SCSD, WWF/CI projects and other initiatives also carried out in Suriname under the leadership of the Ministry of Natural Resources.

Key assumptions

91. The project?s approach is based on various assumptions that will be critical for achieving the expected changes as per the Theory of Change analysis:

? Institutions are willing to receive training on improved environmental management of ASGM and the GoS commits to making the adequate human resources available for the duration of the project and beyond.

? When formalizing mining activities, continuous efforts will be made to integrate consensus-based decision making into local mining communities. An agreement should be reached regarding land use with other women and men users.

? A collaborative approach to policy making that is sustained and continuously improves, integrating gender related issues across the implementation of the proposed activities.

? Implementation of the Gender Action Plan (Annex 11) will help strengthen gender equality and empower women by improving their working conditions when directly participating in the activities related to the environmentally sound management of mercury-free technologies and best practices along the mercury-consumption chain.

? Impacts for the Suriname economy amid the coronavirus situation (COVID-19) will be timely mitigated to guarantee successful completion of the proposed activities and achievement of outcomes.

? A proactive engagement of the PMU with the ASGM miners on the ground will be sustained through FSP implementation in order to ensure that miners and the local mining communities are engaged and willing to adopt the proposed alternative, mercury-free mining techniques.

? The selection of the mercury-free technologies considers BAT/BET aspects and affordability (operation costs, maintenance and waste disposal) as well as the compliance in due time of all the regulations ?at national and district levels- for their proper operation.

? This FSP seeks to promote adoption of technologies that are accessible (financially, geographically and culturally) and locally procured where possible.

? The proposed alternative becomes more efficient (greater gold extractions), therefore it will level off the costs associated with the alternative solutions.

? Success in the implementation of the co-financed planned activities, therefore, mining communities can easily access services.

? Effective synergies and communication created between public authorities at national and district levels and ASGM entities will enable a favorable environment.

Expected outcomes and components of the project

92. The project has four substantive components aligned with four main outcomes and eleven outputs, embracing the *institutional*, *regulatory*, *technological* and *information-outreach* dimensions needed to reach the proposed structural change defined in the Theory of Change analysis, in order to strengthen the national capacity in Suriname to the environmentally sound management of mercury in the ASGM sector within the framework of national and international guidelines, mainly under the guidance of the Minamata Convention.

Component 1. Formalization Optimization of ASGM

93. This project will assist Suriname with policy and institutional planning to address the challenge of a ?weak formalization enabling environment? through supporting frameworks that have a multi-sectoral, holistic and integrated approach in order to comply with its obligations under the Minamata Convention on mercury use reductions in the ASGM sector.

94. Despite commitment and political will to reducing, and where feasible, eliminating mercury use, achieving this will be a major challenge without inclusive finance and investing in human capital (skills, knowledge abilities) of miners and their representative organizations to achieve legalization and facilitate the process of formalization, of which financial inclusion and business readiness are critical elements.

95. Outcome 1 of Component 1 is: *?Opportunities and constraints for peaceful ASM-LSM coexistence institutionalized by the Government of Suriname?*.

The proposed outputs under this outcome seek to develop an ASGM governance framework that is bringing together the interests of different stakeholders, policy makers, district authorities, community leaders, miners, potential financiers, international NGOs, academics and by promoting technical and business-like partnerships with the private sector. This outcome proposes capacity-building through the different levels of organizations to enable technical assistance in the formalization process, either through dedicated ASM zones with known geologic potential or through ASM-LSM coexistence arrangements, defined in Figure 2.

96. Output 1.1: *?Opportunities and constraints for peaceful ASM-LSM coexistence institutionalized by the Government of Suriname?*.

This output aims to advance the capacity of national and district authorities to assess, plan, support, implement and monitor sustainable, mercury-free interventions in the ASGM sector for win-to-win coexistence between ASM activities and LSM operations. It includes interventions at the community level, in those ASM-LSM mining territories willing to implement the proposed activities under this FSP.

97. The following incremental activities will be carried out to achieve Output 1.1:

i. Defining specific categories of ASGM miners based on territorial mining locations.

Within national regulations and based on the geological, social and entrepreneurial features of ASGM mining locations, this activity will classify the different levels of ASM operations at the district level in order to create incentives for improved organization and permitting. During the PPG phase the GOLD+ Team assessed land and mineral tenure security within the areas proposed for pilot sites.

Related to this activity, a review of legislation on mining, especially ASM-LSM[92] coexistence is required as conflict over land, access to and control over mineral deposits and the right to mine is a major barrier of progress. In Suriname, ASGM stakeholder engagement has evolved from forced eviction (exclusionary approaches) to more inclusive strategies, including dialogue, cohabitation (e.g., non-competitive arrangements, often fragile and short-lived) to robust coexistence models where mutually beneficial agreements are operationalized with potential to improve mining practices, de-risk operations and invest in sustainable livelihood programs.

ii. Supporting community health and safety (mercury-free) through a community-based educational program.

Since there is a strong need to connect health and social workers in tackling human health monitoring or community health issues, a hands-on Health Education Programme (HEP) will provide health care public workers and teachers ?at the community level- with the capacity to assess cases of mercury poisoning in a timely fashion and to effectively manage them, by building proper community preventive health education and neatly supplemented efforts to raise awareness of the health consequences of mercury use and exposure, and mobilizing the community ?through teachers and students- in order to lead into a more sustained impact, in close coordination of the Ministry of Health with other umbrella organizations, like the Bureau of Public Health (BOG), Medical Mission (MZ), and Regional Health Services (RGS).

The HEP will address the general risk of mercury, groups at high risk, potential routes of exposure (indirectly via diet for inhabitants and directly for gold miners), related health effects, and possible protective or avoidance measures.

iii. Enhancing peaceful ASM-LSM coexistence.

As part of Responsible Business Conduct (RBC) multinational companies operating in the Suriname?s gold mining industry in Suriname are working together with communities surrounding their concession on peaceful coexistence.

Iamgold Rosebel Gold Mines NV (RGM) has developed protocols for ASM groups to mine on their concession, meanwhile structuring the operations and eradicating the use of mercury. RGM provides training in water management, health and safety, waste management and blasting.

Newmont Suriname (Newmont) has developed an ASM strategy to help formalize the sector and reform it to consider the environment (including mine restoration) and safety in their operations. Newmont will also request a concession together with the ASM cooperation, perform exploration, select the appropriate mercury-free technology and improve bankability of the ASM operations. Newmont will further provide training in the selected Hg-free mining methods, assist with access to finance, and capacity development.

During project inception, the status of exploration (prospecting) and exploitation (mining) concessions will be validated with GoS counterparts and title holders for Tier 1 sites. Stichting Houders Mijnbouw Rechten (SHMR or Foundation Holders Mining Rights) own the majority of mining rights in Suriname and expressed wiliness to partner with the GOLD+ project, thus should be adequately consulted and engaged.

iv. Strengthening Free, Prior and Informed Consent (FPIC).

As a result of the permanent conflicts between local communities and mining concession holders, community engagement is high on the agenda of the MNR and a special division is being established for this purpose, i.e. the Community Engagement & Development Unit at the Ministry of Natural Resources (CE&D-NH). This division is now closely involved in the process of concession issuance but needs further strengthening to increase its capacity, including development of FPIC protocol instruments and an understanding of gender in FPIC processes , regarding activities affecting lands, territories and resources or impacting on cultural identity and to freely give or withhold informed consent. This FSP will support the integration of FPIC principles in the national mining legislation and in the agenda of the MNR.

98. Output 1.2: *?Government capacity strengthened to assess, plan, and implement sustainable mercury-free interventions in ASGM zones?*.

Strengthening the policy/regulatory framework at national and district levels will make the formalization process (application process for local concessions, and the issuing of environmental licenses and other permits) user-friendly, more efficient, and more affordable so that they are accessible to miners and well-functioning ASGM groups within in a reasonable time frame and at reasonable cost.

99. The following incremental activities will be carried out to achieve Output 1.2:

i. Conducting an overall validation of national policies, plans and regulations.

The project, through the PMU, will conduct an assessment of policies, plans, regulations, standards and measures in place pertaining to the formalization of ASGM and mercury phase-out in the ASGM sector. The assessment will identify remaining needs and gaps, overlaps and ambiguities relevant for the ASGM sector, like needs for gender mainstreaming, land tenure, and illegal trading; subsequently, it will provide a list of recommendations and actions to address these under the scope of this FSP, including the participation of key national institutions as needed.

ii. Strengthening regulation to implement sustainable and Hg-free interventions in the ASGM sector.

This activity will enhance the role of the Ministry of Natural Resources on development, adoption, and/or implementation of a regulatory framework for ASGM, in order to develop stronger compliance requirements for the ASGM sector, adapted to the particular characteristics of each mining landscape. At the district level, this activity also embraces the implementation of an institutional strengthening program for public GoS stakeholders and in the Districts of Brokopondo and Sipaliwini, including the creation and strengthening of the mining units in charge of supervision and control at the district level. Tier 1 intervention sites, based on spatial and contextual analysis include Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 sites of Lawa and Selakreek[93].

iii. Carrying out a formalization diagnostic.

Due to geographic and geologic differences in mine production systems, scale and stakeholder relationships; target ASGM communities will be assessed under the project by a ?formalization diagnostic?. This diagnostic will be based on the planetGOLD criteria or the CRAFT Code[94], developed and implemented to assess the potential of ?Tier 1 and 2? ASGM communities in select mining jurisdictions, in line with Conservation International (CI) criteria. Suriname can improve their international image by proactively adopting measures of the CRAFT Code. This Code is a tool adapted by the Alliance for Responsible Mining (ARM) and Resolve Intl. to promote a flexible standard based on OECD due diligence guidelines[95].

This activity will perform surveys/inventories that will include the identification and ranking of the different kinds of mining entities in the intervention sites, by degree of formalization, organization, gender dimensions, socio-demographics, land tenure, gold grades, accessibility to ASGM sites, security, land conflict issues, mercury use/contamination, women participation, child labor, work-related-safety, etc. This diagnostic will serve as a transparent selection criterion for project sites and engage stakeholders early on in the project cycle. While potential for mercury reductions will be the key criteria, other factors (i.e., financial access, ore grade, biodiversity, climate change risks, water gains, etc.) will also be considered when selecting priority sites under this FSP; in accordance with the social and environmental risk analysis (Annex 6).

iv. Preparing and validating Best Available Technologies (BAT) and Best Environmental Practices (BEP) guidelines for the ASGM sector.

This FSP will support the Ministry of Natural Resources in the preparation and further validation with miners of BAT/BEP operational guidelines ?mercury free- in the management of ASGM, focused on gold-bearing rock mining waste and shallow (dig and wash) alluvial operations. This guide will include a chapter dedicated to the environmentally sound management of waste (tailings) as well as of contaminated sites.

Adopting inputs and lessons learned from previous actions, the project will simultaneously promote the definition of technical standards for reduction, management and elimination of mercury in this economic activity, as well as the development of guidelines for introducing best practices within the ASGM production chain, both adapted to the specific conditions of the selected ASGM territories.

This activity will also implement formal training opportunities for the assessment of Hg vapor concentrations in and around gold shops in Paramaribo and other locations and will provide baseline data to assist the GoS to generate air quality standards for Hg emissions.

Also linked to this activity, and pending approval of the Technical Guidelines for ASGM, the Government of Suriname, through the Ministry of Natural Resources, will accelerate efforts on domesticating the CRAFT Code to implement due diligence practices for both national and international regulations, like advancing mineral-supply chain traceability efforts in the country. The Table below visualizes the range of mobile and fixed Hg-free technologies that are most suitable for Tier 1 sites.

MOBILE HG-FREE TECHNOLOGIES MOST SUITABLE FOR TIER 1 SITES

Hg-Free	Technologies	Gold Recovery	Suitability	Financial Cost	Su
Gravity (Only)	Pans (batea) Sluices Improved sluices	Basic-Good Depends on mineralization Good for course alluvial Au Poor for very fine (lode) Au High grading of deposits Quick recovery	Individuals Small organization Informal or formal Low levels of organization	Low cost Low maintenance Low replacement cost Low supervision	
Improved Gravity	Cones Hydrocyclones Spirals Jigs Centrifuges Shaker tables	Good for course and fine Au Poor for ultra-fine Au Quick recovery	Advanced individuals Mining Entities (MEs) Formalized set up Financial literacy Med levels of organization	Medium-High cost Medium maintenance High replacement cost	
Gravity/ Flotation[1]/ Leaching[2]	Mill leaching Centrifuge + Flotation cells Agitation leaching Vat tanks Carbon-in-pulp (CIP)/ Carbon-in-leach (CIL) circuit	Very good Maximum recovery Coarse and fine Au Longer recovery times	Mining Entities (MEs) Formalized set up Financially capable Human resource capacity Tailings management	Medium-High cost High operating costs Supervision required	
Digestion/ Leaching	Cyanide leaching Bioleaching	Very good Maximum recovery Longer recovery times	Mining Entities (MEs) Formalized set up Financially capable Human resource capacity Tailings management	Medium-High cost Supervision required R & D Stage	

[1] Capacity building & Training
[2] Formalization & Legislation needed

v. Building up an official ASGM Registry.

An efficient and reliable registration system, led by the Ministry of Natural Resources, will be set up with the participation of the project, including, among others, the following actions:

? Survey of the cadaster and creation of a sex-disaggregated directory of artisanal and small-scale miners, gold buyers and mercury sellers at the district and national level.

? Registration of the quantities of ore processed per day, processed cake, gold produced by ASM at the mining district level, as well as the total number of people who work in the ASGM sector, based on sex-disaggregated data.

? An automated system to record the quantities of mercury and recovered gold.

? Registry of the different sources of direct and indirect information that allows identifying movements of mercury or acquisition, commercialization, forms of trading and sites contaminated with mercury.

100. Output 1.3: *?Sustainable Landscape Approach (SLA) to advance formalization through ASM-LSM coexistence and tributer systems?*.

Under this output, and adapted to the Suriname context, Sustainable Landscape Approach (SLA) will be piloted to reduce mercury use across the chosen geographic landscapes of intervention (ASGM mining territories). This will involve engaging different actors, such as district authorities, communities, private sector, financiers and downstream actors in deploying mercury free approaches. If needed, in the multisector integrated approach the project will perform climate change vulnerability assessments and implement climate adaptation strategies as part of integrated land-use planning and strengthening mineral tenure for legitimate Mining Entities (MEs). For the Suriname context, MEs refer to mining rights holders (concession owners) and informal infer miners or groups of miners with agreements in place for the exploitation (i.e., extraction and processing) of gold ores within a legal concession through *de facto* tributer systems.

101. The following incremental activities will be carried out to achieve Output 1.3:

i. Implementing a Sustainable Landscape Approach (SLA) to advance formalization in key ASGM territories.

An SLA into ASGM settings will be proposed in Suriname based on a ?phased approach? that allows the GoS to characterize different mining areas based on their potential to produce responsible, mercury-free gold and align Tier 1 sites with GOLD+ criteria promoted by Conservation International (CI)[96]. It is expected that this activity will allow the country to create an approach to assessing a formalization diagnostic tool, identify the challenges that may exist in implementing this approach with the ASGM sector, and customize its application beyond the lifetime of the project. Tier 1 sites will be validated.

Proposed project sites under Tier 1 approach.

Tier 1 Sites	**Proposed Area**	**District**	**Sub-district/ Resort**	**Concession**	**ASGM Hotspot**	**Coordinates WGS84/UTM 21N**	
						E	N

	Njoen Jacobkondre	Sipaliwini	Boven Saramacca	Rosebel Goldmines NV (IAMGOLD)	NJ-I	669843	544492
					NJ-II	664082	554015
				Limestone Mining NV	NJ-III	662941	551498
					NJ-IV	662370	544492
				United Suri-Fast Mining NV	NJ-V	657465	543636
				Suriname Diamond Co N.V.	NJ-VI	656246	536941
				Sarafina N.V.	NJ-VII	671374	550486
				Cirino Reina J.			
				Albert Max Soiri			
	Sarakreek	Brokopondo	Sarakreek	Suriname Gold LLC ? North Amazonia (Newmont)	SaK-I	734662	500860
					SaK-II	743449	492415
				Sarakreek Resources N.V.	SaK-III	724582	481527
					SaK-IV	720281	491087
				Grassalco	SaK-V	752229	486476
				Eagle Resources Mining & Equipment NV			
				Drie M. S. NV			
				Granaat NV			
				Nel Agita			
	Mama	Sipaliwini	Tapanahoni	Robrun NV	MN-I	775519	491891

	Ndjuka				MN-II	776492	487016
				Grassalco	MN-III	766365	480403
				Anapai August Ferdinand			
				NV Sitex Gold			
Tier 2 Sites	**Lawa**	Sipaliwini	Tapanohoni	NV Sitex Gold	L-I	778557	447778
					L-II	774970	451301
				Djodi Rene	L-III	770887	441196
				Maroc Mining NV			
				Cansur golmines NV			
	Selakreek	Sipaliwini	Tapanohoni	Selakriki Okanisi Resources	SeK-I	746392	421424
					SeK-II	753956	420060

Note: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 sites Lawa and Selakreek proposed for GOLD+ intervention. Table 5 shows concession data, labelled ASGM Hotspots and geographic coordinates. No data available during the PPG for highlighted concessions (orange cells).

ii. Carrying out a climate change risk assessment.

As part of the holistic multisector integrated approach the FSP will perform climate change vulnerability assessments and implement climate adaptation strategies. This activity will assess -for the technical design of the mercury-free facilities- a natural disaster risk assessment that could eventually affect operations in the places where the planned pilot projects will be implemented. This assessment will include four steps, as the STAP guidance on Climate Risk Screening, i.e.: hazard identification, assessment of vulnerability and exposure, risk classification and risk mitigation plans. Risks assessments will consider not only the duration of the FSP but also the lifetime of the expected Global Environmental Benefits.

iii. Promoting access to responsible, traceable gold markets.

The project develop a roadmap for the ASGM sector to access differentiated international markets rather than relying on local markets to sell their gold, often resulting in low gold

prices; for instance, to promote access either to the *CRAFT* guidelines or the planetGOLD criteria automatically place legitimate Mining Entities (MEs) in a position to demonstrate risk-based due diligence measures in accordance with OECD Due Diligence Guidance (DDG) for mineral supply chain enabling access to international gold markets. These initiatives, developed by ARM and Resolve Intl. support responsible production and marketing of gold that is more respectful of the environment, human rights and anticorruption efforts. In addition, those who achieve CRAFT compliance or the planetGOLD criteria will receive technical assistance and a better price for their gold in international markets, which may result in the recovery of alternative, Hg-free, technological investments in less time. Complementarily, traceability is also supported by the activities under Output 2.2.

102. Output 1.4: *?Civil Society Organization (CSO) capacity strengthened to engage Maroon and Indigenous groups and facilitate ASGM formalization*?.

With funding from REDD+, representative organizations of the Indigenous and Tribal Peoples (ITP), *Samenwerkingsverband van Tribale volken in Suriname (KAMPOS)* and *Vereniging van Inheemse Dorpshoofden Suriname (VIDS)*, the project will enhance -by working together with all ITP communities- the development of FPIC principles in Suriname.

103. The following incremental activities will be carried out to achieve Output 1.4:

i. Developing FPIC protocol instruments.

Following the national policy supported in Act. 1.1.iv., general FPIC protocols should be formulated for the mining sector tailored to the ASM circumstances, aligned with policy and procedures of MNR for the issuance of mining concessions. In addition, communities should be strengthened in decision-making processes and formulating (legal) agreements.

ii. Disseminating information with MEs for full application of FPIC instruments.

This activity will be fully integrated into the incremental Output 4.1, Act. i., i.e. ?Designing and implementing an information and communication outreach strategy?.

Component 2. Financial Inclusion and Responsible Supply Chains[97]

104. For miners, one of the most significant and pernicious barriers to the development of a responsible ASGM sector, is access to finance. Finance entities do not commonly provide loans to the ASGM sector as the risks are often perceived too high and such entities do not have the expertise and experience to review ASGM loan applications or develop financial products that are tailored to this financial market niche. On the other hand, community-based organizations generally lack experience in record keeping, bookkeeping reporting (e.g. resource exploration and estimation, production tracking, economic modeling, and full life cycle mine planning), nor do they have administrative capacity for the preparation of loan applications, which can increase their access to conventional and alternative financing options.

105. In this regard, Component 2 follows a two-pronged strategic approach. In one way, it will launch a set of activities to educate and collaborate with key potential financiers (upstream and downstream) to design and provide financial products suited to the ASGM sector, integrating several actors in the investment community, such as local rural savings and credit entities, territorial micro-finance institutions (MIFs), international mining corporations, commercial and national development banks, regional development banks, i.e.: WB, IDB and CDB, among others. On the other hand, it will assist miners with capacity building to access funds, including training miners on business and operations management with tools to not only access the finance but also successfully execute their investment plans to create sustainable and more profitable mining operations.

106. Outcome 2 of Component 2 is: *?Improved income for ASGM miners through the attainment of better gold prices facilitated by transparent and responsible supply chains?.*

The deployment of ?mercury-free? infrastructure plans ?over the long-term- will require innovative means of accessing inclusive capital markets, willing to enhance global environmental reasons as well as to deliver local socio-economic benefits for those clusters of populations that depend heavily upon this activity. The term capital markets generally refers to platforms for raising long-term capital ? capital available for more than a year ? in the form of debt or equity, offering a wide variety of options for investors, a pre-condition that it does exist in the current context of the ASGM sector in Suriname.

107. Risks and return are central considerations for financiers when carrying out its investments. A range of variables will have an impact on project success and many that will change over the FSP lifespan need to be understood and managed or mitigated in the context of the deal structure. Before investing, both debt and equity providers will undertake a detailed due diligence assessment of a wide variety of risk factors. Technical financial experts and advisors will be brought in by the project during this process, where specific technical knowledge or insight is needed, a pre-condition that currently does not exist in the local financial markets.

108. Output 2.1: *?Opportunities created for ASGM sector with financial institutions to procure/retrofit equipment and invest in business skills for men and women?*.

This output aims to: i. establish partnerships with financial entities and build their capacity and understanding to develop financial products that would be tailored to this sector and better assess loan applications from miners, ii. work with legitimate MEs (like cooperatives) and individual miners to build their capacity in developing loan/investment applications for Hg-free processing equipment/investments and subsequently apply for loans, social impact investments or any other legally-binding financial scheme, and iii. support vulnerable women with diversified livelihood options and basic financial literacy training.

109. The following incremental activities will be carried out to achieve Output 2.1:

i. Educating and collaborating with local and national financial institutions.

This activity aims at engaging potential/innovative lending sources of green/environmental financing through education and collaboration to provide financial products suited to the ASGM sector, for instance, micro-finance institutions willing to operate or facilitate in the territories of intervention. This includes training of staff of the financial entities in the assessment of ASGM investments (such as gold sales records, records of ore production, risk assessment, evaluation of legal and technical requirements, etc.) as well as the appraisal of loan guarantees to evaluate the economic case for loans, leases or even, equity participation with due attention given to gender equality issues and languages spoken by mining communities.

Lessons from the Global planetGOLD Programme will be used to improve the process of getting these financial products to market by providing case studies and best practices ? in other planetGOLD participating countries- that can then be adopted to suit the local environment. Initiatives that explore new models that assist in capacity building for risk-based due diligence measures at the mine-level are encouraged.

ii. Capacity building to assist organized miners to access funds.

Training miners on business, operations management and financial literacy will provide them with the tools to not only access finance but successfully execute their investment plans - adapted to the local context - to create more sustainable and profitable mining operations, with the aim of improving miner incomes through the attainment of better gold prices facilitated by transparent and responsible supply chains. It includes workshops/awareness raising events conducted to increase miners? awareness (including women miners and women-led MEs) on the value of due diligence, compliance with mining regulations and how compliance can facilitate access to different types of financial products.

iii. Assisting mining districts with technical assistance and financial support for the adoption of sustainable practices.

This activity will provide technical assistance and non-reimbursable financial support for the elimination and replacement of mercury-driven technologies. Interventions along the supply chain will be performed to encourage an understanding and commitment to procuring the benefits of responsible gold mining. Quantifying and communicating the financial benefits of responsible mining to ASGM miners and gold traders is a crucial incentive and will be used to encourage the adoption of sustainable practices. Engagement with gold traders, both, at the global and national levels, in deploying gold provenance solutions and associated business benefits to ensure their buy-in will be key to the success of responsible mineral supply chain interventions. Where sustainable landscape approaches are used, the project will facilitate knowledge sharing on ASGM topics amongst relevant stakeholders of the landscape.

110. Output 2.2: ?Proof of concept for technology-assisted mineral supply chain due diligence developed and tested in target locations?.

To build the confidence of financial intermediaries in supporting change through investment (providing financing for upgrading processing plants and eliminating mercury use), while also providing miners with insights in the economic opportunities such upgrades can bring about, the project will develop evidence based on economic models of processing plant upgrades integrating BEP and mercury-free pilot plants installed as part of this project, as well as previously established and well-functioning mercury-free processing plants. The results will present strong economic arguments (including payback periods) to miners and financiers to encourage change through suitable investments. Traceability technologies, including physical and chemical systems in accordance with leading practice from legitimate gold buyers and LBMA refiners will be assessed for proof-of-concept mineral supply chain due diligence pilot suitability at Tier 1 sites, combined with adequate mine-level due diligence.

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

112. The following incremental activities will be carried out to achieve Output 2.2:

i. Carrying out a technical-economic analysis of the most feasible technologies.

In addition to completing an inventory of mercury-driven practices in the ASGM sector throughout the country (Output 1.2, Act. iv), the identification of cost-benefit assessments for the alternative technologies more suitable to the Suriname mining sector, risk assessments and management arrangements; this FSP will allow defining a set of criteria for the selection of the most viable substitution alternatives for this chemical substance, in order to define and launch a long-term path, technology speaking, under Component 3.

ii. Assisting the ASGM miners and financiers in closing the suitable deals.

Although the project will not have full control over the approval process of the loan applications or any other suitable market-driven lending mechanism, the project will regularly (on a yearly basis), conduct an assessment of the number of project-supported loan applications that have been approved, the percentage of approvals as well as other relevant statistics (total amount of funding, funding per loan approved, gender-specific information on receivers and amounts of loans, etc.). The results of these assessments will provide an indication of the success of the project in supporting mining entities in the development of their loan applications.

The project will keep track on a yearly basis of the number of loan applications approved with project support. If at the time of the Mid-Term-Review, it appears that insufficient loans are being approved, the project will assess whether it must provide loan application training, or whether additional financial support to mining communities/groups should be in place. The recommendations coming out of the Mid-Term-Review will then reshape the direction of the project in this regard.

iii. Preparing and validating standard covenants between financiers and organized miners.

This activity will assess existing financial products and lines of credit of financial partners in terms of accessibility and suitability for women and men mining entities and recommendations for their improvement and reconversion processes, like access to local rural savings and credit entities, commercial, national and regional development banks (WB, IDB, CAF), pre-financing from downstream gold buyers, impact investors, and donors and philanthropic investors.

iv. Setting up solidarity microfinance funds aimed at financing women's ventures in ASM communities.

The project will work with local financiers (for instance, with local rural savings and credit entities) to bring their interest to this sector and at the same time, with formal miners? groups and organizations (MEs) to build their capacity in developing loan/investment applications for mercury-free processing equipment/investments, based on a variety of financial mechanisms suitable for both parties. This activity includes crafting a guidebook for the gold miners in a user-friendly manner to help them with their loan applications.

Component 3. Enhancing Uptake of Mercury-free Technologies

113. The area of focus of Component 3 is the creation of supportive, ASGM mercury-free business models. These models will be applicable to different levels of ASGM organizations within mining territories, financial and technical capacity to achieve high gold recoveries through safe, resource efficient practices. Under a holistic approach, the development of a model operation includes prospecting, environmental licenses, relevant registration, analysis of ore, development of work flows, design of processing equipment train, and suitable financing of equipment.

114. In order to avoid, reduce, mitigate and manage potential impacts as identified in the SESP (Annex 6) like worker health and safety and pollution risks resulting from project activities, a targeted assessment and management of potential social and environmental risks through a*n Occupational Health and Safety Plan* will be prepared and mitigation measures put in place, prior to the initiation of any project activity that may cause adverse impacts, in particular any actions that may lead to or cause environmental and health effects and impacts on indigenous tribal peoples, as clearly indicated in Annex 10, *?Environmental and Social Management Framework?*.

115. The identification of the current and projected climate vulnerabilities at the project pilot locations is of critical importance ?as indicated in Risk 5 of Annex 7 of the ProDoc -including information on the overall vulnerability[98] (the product of exposure, sensitivity and adaptive capacity) of targeted natural resources in the pilot?s areas to climate change. The selection of sites will take into consideration short and long term risks associated with climate change and natural disasters.

116. In order for mercury elimination efforts and the adoption of alternative technologies to be cost-effective and sustainable, the project will also support ASGM miners in their regularization and formalizing processes under Outcome 1. This is important as miners will need to reach the stage of formalization to be able to access formal financing to access mercury-free technologies. Formalization also leads to more sustainable income opportunities and safer working conditions and this will benefit

the sustained phase-out of mercury in the long-term. Finally, to further increase income for ASGM miners who produce mercury-free gold, the project will also work on establishing partnerships with gold buyers and refiners to establish routes to market for mercury-free mined gold.

117. Outcome 3 of Component 3 is: *?Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by miners?.*

This outcome aims to address the challenge that mercury-free technologies exist but largely remain under-deployed by the Suriname miners or hardly used. In addition, it will seek to develop models that are applicable to different levels of ASGM organizations (mining entities ?ME-), financial and technical capacity as well as to achieve high gold recoveries, in order to:

? Demonstrate innovative technologies to reduce and eliminate mercury use in ASGM;
? Pilot community mining concept in three selected landscapes;
? Pilot remediation of degraded and contaminated mining areas using proven models;
? Support community investments in alternative livelihoods enterprises that seeks to reduce unsustainable and harmful mining practices; and
? Document knowledge and promote networking to support policy development and influence.

118. The pilot projects aim to conduct a deep assessment for identifying *?the best available techniques****[99]****?* and determine business models for mercury-free use in the ASGM sector and enable a sustainable environment beyond project?s duration.

119. Output 3.1: *?National and district government institutions strengthened to support sustainable mercury reductions and invest in mining organizations?.*

This output aims to strengthen technical national capacity for sound management and elimination of mercury by developing and implementing three pilot projects to demonstrate how to face different technical, financial and logistics gaps and challenges for the environmental disposal of mercury in Suriname?s territory, as a means of deviating from the business-as-usual scenario.

120. The following incremental activities will be carried out to achieve Output 3.1:

i. Validating Tier 1 pilot sites and map of key government and mining institutions.

This activity is intended to assess and verify political commitment and alignment to the promotion of mercury-free processing techniques in selected villages/areas in Tier 1 sites. Wherever possible representative MEs or informal miner associations should be consulted through facilitated government outreach to verify arrangements between title-holders and miners, and to build trust and confidence between ASGM stakeholders. As appropriate, representatives from IAMGOLD, Newmont and the SHMR should be actively engaged in sites verification of formal status. Such 'formalized spaces' offer a framework for facilitating dialogue between legitimate MEs and miners while engaging government and enforcement agencies through a decentralized platform to build local capacity.

In this regard, the GoS, through MNR provided during the PPG a list of GOLD+ intervention sites: Njoen Jacobkondre, Sarakreek, Mama Ndjuka, Lawa and Selakreek. Due to COVID-19 related travel restrictions, detailed definition of the baseline at each site was not possible during the PPG stage. Recommendations for site-level due diligence are provided in Annex 3 to guide project teams early on during FSP implementation noting that additional data on workforce dynamics, hazardous chemicals, concession status, mining rights and multi-stakeholder collaboration criteria are critical for GOLD+ site verification.

ii. Training needs assessment of national government institutions on BAT/BEP strategies in ASGM.

This activity will focus on strengthening technical capacity for mercury-free processing techniques through implementation of pilot projects to help eliminate worst environmental practices under Article 7/Annex C of the Minamata Convention. Basic modules on exploration, ore characterization, crushing, milling and grinding, gold liberation and process optimization will be presented in accessible workshop formats with complimentary field visits. Mobile Demonstration Units (MDUs) may be used to demonstrate BAT for sluicing of alluvial deposits in more remote areas to reach mining communities.

iii. Developing awareness raising materials resource efficient returns of responsible mining.

This activity is intended to build upon technical-economic analysis of the most feasible technologies for Tier 1 sites and develop corresponding awareness raising materials for national and district stakeholders. In addition to completing an inventory of mercury-driven practices in the ASGM sector (Output 1.2, Act. iv), awareness raising materials (i.e., infographic posters, animated videos) on the financial, OHS and environmental benefits of resource efficient alternative technologies, including examples from Tier 1 sites. Utilizing examples of the most feasible technologies, scenarios will focus on optimizing systems for different ores, and understanding environmental hazards (i.e., physical, chemical, biological and occupational). Financial scenarios will be developed based on business as usual and optimized production systems through legally established mining entities (MEs); valuing the experience gained by other child projects under the GEF planetGOLD Global Programme in this matter.

iv. Raising awareness on resource efficient returns of responsible mining.

This activity will actively engage national and district government institutions to participate in miner-government joint training with the aim to education, professionalize and formalize Suriname?s ASGM sector as an emerging economy, pandemic constraints and driver of local economic growth. Simplified modules of the CRAFT Code and the planetGOLD criteria will be introduced as field-based mitigation

measures for social, technical and economic risks observed in different mining scenarios select from Tier 1 sites. The Knowledge, Skills and Attitude (KSA) approach to institutional strengthening will engage government and MEs aiming to build relations as well as enhance awareness, ability and attitudes of government as extension service providers to sustain responsible, profitable gold mining operations. Miners will improve relations and build trust with public authorities.

121. Output 3.2: ?Assay lab, processing plants and training center(s) established to promote resource efficient gold mining in ASM-LSM zones/areas, with clear provisions for sound tailings and waste management?.

122. The project will provide technical assistance to the installation of at least three (3) mercury-free ore processing pilot plants in three (3) different project locations (with funding structured by the FSP under an innovative financial mechanism or a project co-financier). These training plants will be mercury-free processing facilities where miners can engage in hands-on mineral processing experiments with their own ore, determine gravity of recoverable gold yields (and prepare samples for analysis in a lab using best practices and technologies), and decide on methods for all the different ores produced. As an alternative to toll mills, off take of direct ore purchase from miners following grade verification with assay technology. These pilots will serve as a proof of concept for technology-assisted mineral supply chain due diligence developed and tested in each of the target locations.

123. The selection of the project demonstration sites have followed a set of criteria as described in Annex 14, which includes compliance with overall governance, gender, technical requirements, community participation, climate change vulnerability, potential improvement and security and safety; complementing the geological and technical aspects. During the PPG, the analysis of the proposed sites also considered that the project should not infringe on the protection of critical habitats and biodiversity; as well as cultural heritage. Additional criteria on gold production, workplace dynamics, hazardous chemicals, formalization, multi-stakeholder collaboration, logistics and impact are outlines in Table 6.

124. The following incremental activities will be carried out to achieve Output 3.2:

i. "Verifying GOLD+ intervention sites with social and environmental criteria".

Based on the proposed TIER 1 sites and through consultation with stakeholders, the targeted project pilot/demonstration sites will be verified. Due to geographic, geologic and differences in the mine production system, scale and stakeholder relations, mining communities will be assessed under the project by a ?formalization diagnostic? (Output 1.1, Act. iii). Based on the assessment of ?formalization readiness?, the project plans to pilot a commodity-specific approach to reduce mercury use, support inclusive finance of miners organizations (MEs), certify origin and enhance mineral supply traceability for responsible gold through simple technology-assisted measures in Tier 1 sites.

ii. Characterizing ore a verified Tier 1 pilot sites.

To optimize technical interventions strategies for Tier 1 sites, geologic analysis and ore characterization is required early on in project implementation. Geologic analysis can be undertaken through fire assay or with support from handheld X-ray fluorescence spectroscopy (XRF) devices purchased under the project to asses ore grade, process controls and verify sound chemicals management interventions. Before undertaking ESIAs, this activity is intended to verify the mineralogy of ores in Tier 1 deposits identified during the PPG.

iii. Carrying out an Environmental and Social Impact Assessment (ESIA).

An *Environmental and Social Impact Assessment* (ESIA) will be conducted prior to commencement of the field project activities, guaranteeing that no activities may cause adverse social and environmental impacts are to proceed until assessments are completed and appropriate mitigation and management measures are in place; however, implementation and monitoring of identified risk management and mitigation measures is required throughout the life-cycle of the project.

During the ESIA, selection of the locations of the proposed processing plants and other facilities will be undertaken taking into account proximity to protected areas and villages to ensure that they will not be adversely impacted. The ESIA will address the issue of wastewater discharge from project activities including mining operations and each processing plant. Treatment before discharge into any water bodies will be undertaken to ensure the reduction of suspended solids, chemicals and fuel residues to acceptable limits in line with national or international standards. This will ensure that water quality does not represent a risk for the health and the livelihoods of other water users or a serious ecosystem risk. The impact of suspended solids, chemicals and fuel residues (as applicable) on other water users is evaluated, contamination of wastewater with pollutants that represent a high risk is monitored, and technical improvements to reduce emissions are designed and implemented. This assessment will deal with the temporary storage of by-products of the mining business, specifically for mercury; the ESIA will propose alternative mitigation means of handling this substance along the ASM mercury management cycle.

The ESIA will also assess the likelihood of participation of minors in hazardous activities and prevalence of child labor within the ASGM sector in the target mining territories and propose measures to reduce it and find working persons under the age of 18 perform tasks appropriate to their age.

iv. Carrying out three (3) pilot interventions at Tier 1 sites with secure mineral tenure.

It is important to recognize that ASGM communities in Suriname are dynamic and can change very rapidly. New land claims (legal or customary), changes in national mining policies and regulation can change who is mining where, redistributing mining hotspots and land-use intensity. As this activity will be implemented beginning in the second year, the PMU will remain flexible in its intervention site selection strategy. The ASGM hotspots (mine level) in the regions of were initially identified in Njoen Jacobkondre, Sarakreek and Mama Ndjuka as shown in the Table below. Contextual analysis carried

out during the PPG, has also considered how COVID has influenced workforce dynamics (gender disaggregated), gold production, and average gold price in these key areas in response to lockdowns/market disturbances. Annex 3 includes a summary of findings on TIER 1 and 2 ASGM activity hotspots that could serve as potential sites under this planetGOLD+ Child Project.

Proposed FSP demonstration sites (TIER 1)

Criteria	Description	Site		
		Njoen Jacobkondre	**Sarakreek**	**Mama Ndjuka**
Gold production	Access to economically viable gold deposit	Yes	Yes	Yes
	Established gold extraction and processing units	Yes	Yes	Yes
	Basic estimates of monthly gold production data	Concession Owners	Concession Owners	Concession Owners
Workplace Dynamics	Primary ASGM workforce (miners, processors, trade)	Confirmed	Confirmed	Confirmed
	Secondary ASGM workforce (services, equipment)	Mining camp	Mining camp	Mining camp
Hazardous Chemicals	Confirmed Mercury use	According to MNR	According to MNR	According to MNR
Formalization	Presence of illegal extraction units (groups/teams)	Yes	Yes	Yes
	Presence of legally registered Mining Entities	Yes	Yes	Yes
	Legal right to exploit a mineral deposit/concession	Yes	Yes	Yes
	Permission from concession owner to exploit deposit	Concession Owners	Concession Owners	Concession Owners
Multi-stakeholder Collaboration	Favourable attitude of concession owner to partner / sell	Yes	Yes	Yes
	Political will of Government to partner	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
	Political will of Traditional/Customary Authorities	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
Biodiversity	Avoidance/mitigation of adverse impacts on critical habitats	IBAT/Google Earth	IBAT/Google Earth	IBAT/Google Earth
Logistics	Reasonable distance/ travel time from Urban center	Jacobkondre, Lemmiki, Banaondro	Baikoetoe, Duwatra, Lebidoti and Zoewatta	Gakaba
	No presence of non-state insurgents/terrorist groups	No security threats	No security threats	No security threats
	Access to road infrastructure and basic services.	4WD vehicle	4WD vehicle	No
	Access to air strip or boat access (remote regions)	Boat; airstrip	Sarakreek airstrip; Boat	Boat; airstrip Bravo Kamp; Gakaba airstrip

Impact	Opportunities to partner with complimentary projects	SHMR, IAMGOLD	SHMR, Newmont	SHMR, French Embassy

Source: PPG Team, 2021.

v. On-going field pilot project monitoring and reporting.

The project will keep track on a continuous basis of the risks for human health and the environment due to the implementation of these pilot interventions with project support. If at the time of the Mid-term Review, it appears that insufficient risk management measures are in place and partial revision of results, the project will assess whether it has to provide additional support. The recommendations coming out of the Mid-term Review will then reshape the direction of the project in this regard.

125. Output 3.3.: *?Accredited ASGM-specific education programs scaled up to professionalize mining operations in cooperation with the University of Applied Sciences and Technology/School of Geology & Mining Technology (UNASAT/SGMT)*?

Embedding an academic partner is an advantage as they are less vulnerable to political turnover. In this regard, the project will enhance the role of *UNASAT/SGMT* by setting up accredited ASGM-specific education programs gear at benefiting community-based mining organizations. It will also include in the curricula other key aspects such as regulatory environment, gender equity, among others.

126. To develop a sound and sustainable shift in the current paradigm, the project will establish partnerships with existing training centers at the global level and assess the availability of ASGM training materials and resources (the Minamata Convention, the GEF planetGOLD Global Program, OECD, ARM, etc.) as well as the national level (e.g. universities, vocational and training centers, private miners, etc.), to identify which materials can be used by the project, and which additional resources/materials should be developed to ensure successful project implementation.

127. The following incremental activities will be carried out to achieve Output 3.3:

i. Setting up institutional arrangements with training centers.

Partnerships will be established with training centers that could provide training on sound ASGM practices. These facilities will support the technology-assisted mineral supply chain due diligence and traceability developed and tested in three (3) target regions.

ii. Developing a training program for miners for mercury-free BEP.

At least 255 miners will be trained during FSP execution by professional trainers at existing plants and laboratory installations at *UNASAT/SGMT*, using existing and newly developed training materials and resources, including the use of practical on-site liberation tests to give them the opportunity to observe results firsthand and learn how to obtain such results themselves. The availability of training materials and resources globally assessed in partnership with training centers can be used by this project, and which new ones should be developed with project support, including a module on gender in ASGM.

Among others, this program will consider the following topics:

? Obtaining mining right.

? Impact of ASM on the environment.

? Recognizing safety aspects in the sector.

? Carrying out a prospecting / exploration plan using a manual and mechanical auger, locating ore deposits and reporting on them.

? Developing a small scale mine taking into account ore placement, drainage and storage of processed ore.

? Setting-up and using mercury-free concentration methods.

? Extraction of gold from concentrate in a mercury-free manner or mercury use in a closed system.

? Smelting and purification of gold.

Component 4. Knowledge sharing and communication outreach

128. The area of focus of Component 4 provides support on knowledge management and communications, particularly on the topics of formalization and market access and technology transfer to adopt mercury-free recovery technologies. It includes the design of an awareness-raising campaign and information strategy and a programmatic monitoring of FSP global indicators (specifically, GEF Core Indicators 9 and 11 and indicators of the GEF planetGOLD Global Programme), together with a broad dissemination of on-going activities to ensure successful project implementation in accordance with UNDP and GEF procedures. Awareness-raising and gender sensitive training materials will be developed and made widely available in English, Dutch and relevant spoken languages of Suriname, as needed.

129. Outcome 4 of Component 4 is: ?*Knowledge sharing and communication strategies aimed at all ASGM stakeholders to support and increase formalization and mercury reduction developed*?.

130. Close coordination and exchange of information and sharing of best practices will be ensured with the GEF planetGOLD+ Global Programme and with the GEF planetGOLD child projects in Colombia, Ecuador, Peru and Honduras. Knowledge products and lessons learned at local and national levels will be shared with the Global Programme, 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. This Child Project will participate actively in international meetings and events, such as the periodic Global Forums (organized by the Global Programme),, which are meetings between ASGM experts and practitioners, governments, gold buyers and miners to support ongoing experience exchanges, as well as the development of global expertise and capacity-building on ASGM issues and networking and learning, to influence the global ASGM dialogue agenda and policy development (in line with COVID protocols). The project will also participate in annual program meetings designed for exchange among planetGOLD program participants.

131. The focus of planetGOLD?s global component ? ?knowledge management, communication and outreach? is to ?unify and coordinate efforts among all the GEF GOLD child projects and disseminate knowledge generated to a wider audience to help Parties achieve the Minamata Convention obligations to reduce and where feasible eliminate mercury use in ASGM. Under this sub-component, a dedicated planetGOLD website has been developed, hosting a knowledge repository which has materials in the knowledge areas of formalization, technical solutions, awareness raising and access to finance. The website also has links to each of the child project countries, like this FSP, and will be an important source of information for the ASGM situation in Suriname. The project will ensure that lessons learned, case studies and other knowledge and communications project are made available through the planetGOLD website.

132. Coordination with Outcome 4 of the EMSAGS, WB, and WWF/CI projects to avoid overlap with this FSP is critical. As the Ministry of Natural Resources is responsible for/involved in implementation of all above mentioned projects, intra-ministerial coordination will be required at least twice a year between implementing actors. A GOLD+ project advisory board consisting of representatives from these projects and organizations should be considered. This will also allow for a holistic approach of efforts regarding ASGM, also benefitting from supplementary activities which will increase overall success of the different projects.

133. Output 4.1: *?M&E and adaptive management applied to capture lessons learned, emphasizing prospecting, sustainable mercury-free gold methods, and sound tailings management?.*

This output will support capacity building, knowledge sharing and communication across the different components and will include a focus on maximizing the impact of communications at the local miner level. This output proposes 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; given the sanitary measures imposed by the health authorities, due to the COVID-19 pandemic.

134. Since the general level of knowledge on mercury is moderate in the Suriname ASGM sector and the surrounding communities, it is recommended to develop effective communication aiming at a reduction of exposure in the ASGM sector, resulting in improvements of levels of knowledge and awareness. It will also incorporate important lessons learned from the Minamata disease, in particular the serious adverse health and environmental effects from mercury contamination, and the need to ensure proper mercury management. The information and communication outreach strategy that will be developed and implemented as part of the project will contain important elements related to gender.

135. The project results as outlined in the Project Results Framework (Section V), will be monitored periodically during implementation to ensure the project effectively achieves these results; these will be reported in a public Mid-term Review and the Final Evaluation Report. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP?s Evaluation Policy. The project will also provide information to the planetGOLD global project on an a quarterly and annual basis, reporting on project progress, particularly with reference to the planetGOLD cross-programmatic indicators.

136. As a standard practice for every UNDP project, continuous monitoring of FSP results and achievements will be ensured, while the application of adaptive project management after conclusion of the Mid-Term Review will be also warranted. The Project Management Unit (see Section VII below on Governance and Management arrangements for detailed information) will design the project?s Monitoring and Evaluation (M&E) system and will be responsible for implementing the project?s M&E plan, including the project?s Inception Workshop, annual planning workshops and the GEF Project Implementation Report (PIR).

137. For M&E, technical and institutional capacity, and information will be needed to address climate vulnerability and enhance project and place-based resilience. This Output will develop a Monitoring, Evaluation and Learning (MEL) strategy, implementing and evaluating the selected

climate vulnerability management options in the selected project pilot locations over the project lifetime and evaluating the projected impact uncertainties beyond that period.

138. As indicated in Output 3.2, Act. v, implementation and monitoring of identified risk management and mitigation measures is required throughout the life-cycle of the project. During project implementation, certain circumstances require the revision of the completed design-stage screening. These include, but are not limited to: (a) where new information becomes available such as through a social and environmental assessment, (b) where there are substantive changes to the project (e.g. changes in design, additional components), or (c) where changes in the project context might alter the project?s risk profile. If the revised screening results in a higher risk category then the revised SESP needs to be reviewed by the Project Board or a subsequent Project Appraisal Committee (PAC) process (and where relevant by the GEF). The UNDP Risk Register (Annex 7) should be updated accordingly.

139. The following incremental activities will be carried out to achieve Output 4.1:

i. Designing and implementing an information and communication outreach strategy.

This activity will develop and maintain extensive social media coverage and campaigns for a range of audiences that provide awareness of the social (like the FPIC principles), economic and environmental dimensions of the sector; in alignment with the planetGOLD Global Communications Strategy[100]. Media campaigns and communication tools will be used to inform the general public, ASGM communities and local schools on the dangers of mercury and possible solutions, also, highlighting the significant development potential of formal ASGM, taking gender-based risks and the unique circumstance of Suriname into account; at the end, public entities, mining communities and the general public have a shared and more sophisticated understanding of the ASGM sector. Among others, this approach will include:

? Take advantage of different spaces such as local cable/television, community radio broadcast, internet, mobile telephony, written press and spaces such as community meetings, fairs and festivals to share messages with the mining population, and in general, about how to carry out sustainable mining that is friendly to the health and to the environment.

? Setting up an interactive platform on artisanal mining (such as telecentres) in ASM communities ?where available- to be permanently informed, as a knowledge management space where miners and the community have free access to information about technologies on artisanal mining, on dangerous

effects of mercury, the practical processes to eliminate mercury completely from mining and the need to undertake collective actions towards reclaiming degraded landscapes in mining territories.

? FSP communications utilize planetGOLD country logo and brand assets for all communication materials, adhere to planetGOLD style guide and messaging guide in production of external materials, adapting global messages to national context, 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.

? Country project communications officer will 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.

? Publish at least one original blog article per year on planetgold.org, notifying global project for incorporation in global editorial calendar.

? 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 (for instance, gender in ASGM).

? 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.

ii. Creating synergism with the global planetGOLD platform.

The Project Management Unit will ensure that the global project will support the online community of practitioners in Suriname that will be established under the planetGOLD Global Programme which promotes and maintains channels of communication among all planetGOLD project teams, and important external but related initiatives on ASGM, in order to share project results and lessons learned from this Child Project. Under this activity, this FSP will contribute to the planetGOLD knowledge sharing by the following:

? Provide narrative reporting quarterly to the global project on key activities and areas of progress.

? Provide narrative reporting quarterly to the global project on key activities and areas of progress.

? Participate in inception/ implementation orientation with global program staff.

? FSP Manager attend bimonthly programme coordination calls.

? At least two project staff will also participate in each Annual Program Meeting and Global Forum.

? FSP Manager participate in quarterly Programme Advisory Group (PAG) calls, and attend or delegate attendance of relevant staff to PAG subcommittee meetings.

iii. Following up on monitoring indicators.

This monitoring will include the Project Results Framework with outcome indicators, GEF Core Indicators, planetGOLD Global Programme, baseline and annual target indicators. The monitoring will capture and track progress regarding attainment of the program?s results, adherence to the results framework, program functioning as an integrated effort, and how well this Child Project is working together with the other child projects and complementing each other.

iv. Carrying out the ?Mid-term Review? (MTR).

The MTR will be carried out after the second submission of the Project Implementation Report (PIR); it will assess the progress of each project activity and attainment of the project?s indicators presented in the Project Results Framework (Section V) and Multiyear Workplan (Annex 4). This review will also consider one Gender Assessment of project impact completed as part of MTR and the disbursement of financial resources and co-financing provided by project partners, and it will monitor and assess administrative aspects for the execution of the project. The MTR will also inform the adaptive management of the project and improve its implementation for the remainder of the project?s duration.

v. Carrying out the Terminal Evaluation (TE).

The TE aims to evaluate whether all planned project activities have been developed, resources granted by the GEF have been disbursed and spent in line with GEF and UNDP policies and rules, and in accordance with the activities as set out in this Project Document. The Terminal Evaluation will also extract and identify lessons-learned, how to disseminate them most efficiently, and make recommendations to ensure that project results become sustainable.

140. Output 4.2: *?*Miner*, investment and CSO focused communication strategies explored, tested, deployed and scaled up?*.

The objective of this output will be to implement an awareness raising campaign and information strategy targeting key stakeholders among miners, investors and committed CSOs to create awareness, allow request for and capture of feedback, both at national and mining-community-levels.

141. The following incremental activities will be carried out to achieve Output 4.2:

i. Implementing a strategy on gender perspective that includes a Gender Action Plan on the elimination of mercury.

The project?s gender expert, to be retained by the project, will ensure that all activities meet the differentiated needs of female and male miners. Annex 11 presents the Gender Action Plan, as such, the gender aspect should consider triggering entrepreneurial opportunities for women to improve family income and meet basic family needs and avoid exposure to mercury, as well as the protection of populations at risk, especially the most vulnerable (elder population, boys, girls, women of childbearing age and pregnant women), through health-care regulations.

ii. Carrying out technical workshops to disseminate the main findings of the FSP with miners, investors and CSOs.

Among others, the following actions will be implemented duly programmed on an annual basis:

? *Miner-to-miner* exchange in order to discuss and share experiences related not only to the implementation of sustainable mercury-free interventions in ?Tier 1? sites but also to resolving grievances related to the enforcement of national and district regulations.

? Training workshops so that miners can learn about improvements in gold liberation, crushing and grinding of gold ores, simple and at the same time more technologically advanced methods to concentrate the ore and eliminate the minerals that are not of interest, appropriate disposal of the by-products, and best management practices to create a safer and more productive mining area.

? Publication of technical, economic, and legal information on mercury and mercury compounds, including toxicological, eco-toxicological and safety information (in accordance with Article 17 of the Minamata Convention). This information needs to be adapted to the educational level of the target audience in Suriname.

? Systematization of the experiences of artisanal and small-scale miners, their communities, obtaining lessons learned, rescuing all the knowledge accumulated over years, testimonies and life stories and good practices of the sector, for the generation of guides and/or manuals on best practices implemented in the sector, for the knowledge of users. These experiences should integrate technical, financial and social aspects of the ongoing activities and FSP progress.

? Strengthening the capacities of district primary education directorates, teachers and parents on the risks children run when exposed to mercury.

142. By project closure, it is expected that from an investment standpoint, innovation embraces a multilevel governance approach to reduce releases of mercury in the ASGM sector in Suriname. It is

also estimated that this FSP project will enable the conditions to integrate national policies on the full compliance of the Minamata Convention.

The aggregation of these initiatives -endorsed politically at the highest level- will result in a set of actions that are likely to create positive local impacts and large environmental benefits over the long run and have a full transformative impact on ASGM activities in the country in conjunction with the overall objective of the GEF planetGOLD Global Programme, as well as for other similar initiatives implemented by UNDP.

4) Alignment with GEF focal area and/or Impact Program strategies;

143. This Program is directly aligned with the Chemicals and Waste Focal area, Industrial Chemicals Program which seeks to eliminate or significantly reduce chemicals subject to better management, 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, Program 1, is the reduction and elimination of mercury from the ASGM sector, which requires high levels of innovation and integration, with holistic interventions capable of sustaining impact beyond the lifetime of a GEF project. It responds to GEF 7 program principles of building on or using existing networks, regional, national and sub-national institutions.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF and co-financing;

144. As follows, these are the expected contributions from the Baseline, the GEFTF and Co-financing for each component.

Component 1: Formalization optimization of ASGM.

5.1 Contributions from the baseline:

? The Government of Suriname (GoS) signed the Minamata Convention and entered into force on 31 October 2020, noting that the vast majority of total estimated emissions and releases of mercury of anthropogenic origin in Suriname (97%) is due to primary gold production.

? ASGM operations represent a major economic sector for Suriname, accounting for approximately two thirds of national gold exports which are mainly performed on an informal basis, and where mercury use in gold extraction remains a major issue of concern for the country as a whole.

? However, Suriname needs to overcome a sectorial context that encompasses a series of institutional, legal, social, financial, and environmental gaps that delay the national capacity to comply with the obligations under the Minamata Convention, in an environmentally sound management approach.

5.2 Contributions from GEFTF:

? Support capacity building of environmental authorities through the establishment of a programme will provide public environmental authorities with the tools to enhance the reduction/elimination of the use of mercury for ASGM operations over the long term.

? Notwithstanding commitment and political will to reducing, and where feasible, eliminating mercury use, achieving goals of this project will be major challenge without inclusive finance and investing in human capital (skills, knowledge, abilities) of miners and their representative organizations to achieve legalization and facilitate the process of formalization. Of which, financial inclusion, business innovation and technology-assisted mineral supply chain due diligence are critical elements.

? Support, through the Ministry of Natural Resources, to the enforcement of new regulations in order to enhance a higher degree of formalization in the sector that are in the process of being issued and/or already released/adopted.

5.3 Contributions from co-financing:

? In Component 1, capacity-building activities, including training and better information management through the promotion of inter-institutional coordination, will allow for the incorporation of innovative approaches along the project continuum not only taking into account the decision making process of the high-level authorities at the national level with policy and regulatory instruments but

also including specific actions for the proactive participation of the miners, mainly Maroon and Indigenous groups, in order to level off the ground for putting in place an overall approach for Suriname to comply with the Minamata Convention, Article 7/Annex C.

? The project?s approach will require commitment and collaboration (technically and financially) from the private sector and Civil Society Organizations to achieve the projected outputs, outcomes and project targets. In particular, support from the LSM operators will be critical to enhance peaceful ASM-LSM coexistence zones and tributer systems.

Component 2: Financial Inclusion and Responsible Supply Chains.

5.4 Contributions from the baseline:

? As described in the Theory of Change, for miners, one of the most significant and pernicious barriers to the development of responsible ASGM practices, is access to finance. The deployment of ?mercury-free? investments ?over the long-term- will require innovative means of accessing inclusive capital markets and capacity building for capital mining investments -under a holistic approach- to enhance global environmental reasons for those clusters of populations that depend heavily upon this commercial activity.

5.5 Contributions from GEFTF:

? The GEF funding will assure Global Environmental Benefits in terms of mercury reduction that are additional to the baseline by creating meaningful financial opportunities suitable to the ASGM miners.

? Addressing issues related to small-scale gold mining has required, and will continue to require, mobilization of resources, from government budgets as well as assistance from the GEF. Furthermore, innovative financial mechanisms need to be instituted in order to ensure that miners can purchase mercury-free technologies and maintain financial sustainability. GEFTF resources will be applied to support the advancement of ASGM formalization efforts by piloting a Landscape Approach on responsible gold production and promoting peaceful and symbiotic ASM-LSM coexistence.

5.6 Contributions from co-financing:

? The GoS and project partners, mainly the private sector, will provide substantial and significant co-financing for the execution of pilot projects related to the proposed mercury-free interventions including funding in capacity building for reducing mercury contamination related to the ASGM sector.

Component 3: Enhancing uptake of Mercury-free technologies.

5.7 Contributions from the baseline:

? Notwithstanding commitment and political will to reducing, and where feasible, eliminating mercury use, achieving this will be a major challenge without inclusive finance and investing in human capital (skills, innovative knowledge) of miners and their representative organizations to facilitate the process of formalization, of which financial inclusion, business innovation and technology-assisted mineral supply chain due diligence are critical elements.

? In Suriname, no other technology than the traditional intensive use of mercury for gold amalgamation is known, with inefficient artisanal plants. Therefore, in the current context, economically viable options under the principle of Best Available Techniques/Best Environmental Practices (BET/BEP) for reduction and elimination of mercury and contaminated tailings need to be found, provided and validated.

5.8 Contributions from GEFTF:

? The alternative pathway supported by the GEF should facilitate the lack of access to finance to the deployment of BEP/BAT options. A substantial part of the project resources is budgeted under Component 3, accounting for 37% of the GEF funding (excluding project management) which is dedicated to this Component. This action is justified by the need to level off throughout the different complexities of the ASGM mining territories, requiring the involvement of a variety of technical services, territorial approaches and governance issues in the different places.

? Being ASGM the largest intentional use sector and source of mercury-emissions in Suriname releases contributing to about 88 tons of Hg/year[101], reduction and elimination costs will be allocated with GEF funding to support the disposal of eight (8) tons of mercury used by the miners who do not have sufficient capital neither access to alternative means to cover mercury-free alternatives. As such project resources will be used in the most cost-efficient way, while optimum effectiveness of the project is achieved by bundling project and private sector resources and efforts.

5.9 Contributions from co-financing:

? In partnership with key stakeholders, the project will establish a support programme to implement pilot projects for individual financially retrained mining entities. The project will subsidize at least three pilot projects identified in the proposal (Annex 3 of ProDoc, TIER 1), but it is important to note that the main share of the costs will be borne with key stakeholders, like ASM/LSM partnerships, CSOs, and bilateral cooperation partners also enhancing mercury-free alternatives in Suriname.

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

5.10 Contribution from the baseline:

? In the diverse context of Suriname, with insufficient institutional coordination between the ASGM and public sectors, complex cultural and territorial environments and uneven development within the country, the flow of communication will help the Ministry of Natural Resources to identify complementarity at the beneficiary level, in order to make the execution of this project very cost-effective.

5.11 Contribution from GEFTF:

? A knowledge management system will contribute to a cost-effective expansion and reproduction of project results, by unifying and coordinating efforts between this project and all the GEF planetGOLD child projects in Latin America; and disseminate knowledge generated to a wider

audience to help Parties achieve the Minamata Convention obligations to reduce and where feasible, eliminate mercury use in the ASGM sector.

? The FSP will build on the GEF planetGOLD program that is currently being implemented, through the use of an existing knowledge platform, lessoned learned, capacity building materials, data bases, proven technologies and market opportunities. It will also build on existing efforts of the UNEP Global Mercury Partnership.

5.12 Contribution from co-financing:

? The proactive participation of stakeholders at all levels will contribute to the cost/effectiveness of the project. A communication and dialogue platform will ensure adequate planning and execution of activities in line with the project's objectives, environmentally sound management and the deployment of mercury-free technologies, as well as the complementarity with national environmental policies.

6) Global Environmental Benefits (GEFTF)

145. The GEF funding will assure global environmental benefits in terms of mercury reduction that are additional to the baseline in each country. The following Global Environmental Benefit (GEB) of the project at the CEO Endorsement stage is the same as presented at the PIF stage, i.e.: eight (8) tons of mercury avoided by the project.

146. The methodology to monitor the Global Environmental Benefits of this project related to this GEB will be implemented as follows. Under Component 3 ?*Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by miners*?, it is estimated that this amount of mercury will be eliminated during the lifetime of the project. Article 7/Annex C of the Minamata Convention states that each Party should report the measures for the elimination of mercury; on behalf of the GoS, is the Ministry of Natural Resources and at the same time the Implementing Partner of this FSP. Under this capacity, quantities of mercury eliminated by the mining entities in charge of the pilot projects will be directly reported to the MNR through the monitoring plan carried out by the Project Management Unit, in accordance with Annex 5 ?Monitoring Plan? of the ProDoc.

147. Furthermore, improved mining techniques will reduce negative impacts from unsustainable mining methods on freshwater, globally significant biodiversity (like fresh fish variety) and natural habitats, due to better management of mining processes can reduce erosion and sedimentation.

148. Recognizing that mercury pollution from the ASGM sector is one of several adverse impacts on landscapes, this Child project aims to integrate additional environmental co-benefits through a landscape approach to achieve jurisdictional sustainability. A Landscape Approach (LA) refers to a type of integrated landscape management with one major distinguishing feature: the landscape is defined by policy-relevant boundaries with the underlying strategy to achieve high levels of governmental and multi-stakeholder involvement. Detailed assessments of co-benefits will be carried out through the implementation of the FSP. Where co-benefits are anticipated in Child projects, environmental co-benefit baseline will be established during the first year of FSP project execution in [Honduras] for target areas including data on: Deforestation rates (Hectares per year); Carbon stocks (Tons of CO2 eq); Biodiversity values, and Areas of degraded forests and other lands (Hectares). Measure of these co-benefits will be reported during the MTR and also for the TE.

149. The number of beneficiaries is estimated based on the number of miners that will be targeted and the average family size. It is assumed that all family members of a household with a miner will benefit from the project. The total number of beneficiaries is 91,182 (45,446 women and 45,736 men). This number will be further revised during the implementation phase and duly reported in the annual PIRs.

7) Innovativeness, sustainability and potential for scaling up. ?

150. For the global environment, the strategy of this FSP for greater results is intended to seize opportunities for higher impact in three ways:

151. Innovation: This is based on a market driven approach based on a holistic approach adapted to the Suriname context, which means taking into account all facets of gold production and the supply chain and how they work together optimally for viable ASGM operations.

152. Sustainability: through integration, this project will harness synergies to trigger local capacity for sustainable change in order to institutionalize efforts based on the need to develop long term relationships with miners and LSM operations, as well as to mobilize access to finance ASGM

miners, within the framework of national and international guidelines, in order to sustain the foreseen change for mercury reduction.

153. Scale up: this innovative approach will also reflect the fact that this FSP will generate significant lessons and best practices for knowledge sharing and communications that can be intensified in the planetGOLD Global Program, in a way to increase the potential to deliver significant global environmental benefits (mercury-free in the ASGM sector worldwide).

Innovativeness

154. Component 1 with respect to formalization optimization, the innovative project aspects are related to the fact that the project is based on the assumption that most of the necessary public institutional capacity and regulatory structures need to be enhanced to eliminate the use of mercury in the ASGM sector over the long run; additional support will be predominantly required for the end-users, i.e.: the miners that do not have the educational, technical and financial capacities to trigger a sustainable change for their current practices.

155. The proposed FSP is enhancing formalization in its approach. The approach proposed here is based on the notion that holistic multisectoral integrated formalization innovations can deepen mercury reduction in ASGM operations, considering the following factors:

- Appropriate legal framework, which promotes management of territorial spaces, not people.

- A holistic integrated approach, which means taking into account all facets of the gold production and supply chain and how they work together optimally for viable ASGM operations.

- Multisectoral, which means considering all sectors (e.g. forestry, water, health, environment that are important for enabling an optimally functioning ASGM sector with capacity to reduce mercury-free use and support sustainability).

- Inclusivity in policy formulation processes that include all stakeholders, including gender mainstreaming.

- Inclusion of local context in the institutional arrangements (i.e. miners? organizations, national and local authorities).

- Local capacity at the district and territorial levels for sustainable change.

156. Under Component 2, the project will put in place a programme that will provide financial and technical support to financially deprived individual business-as-usual technology holders (the miners), to enable and allow them to operate mercury-free in an environmentally sound manner. An additional innovative aspect of Component 2 is the launch of financial schemes targeting the diverse variety of ASGM operations in Suriname.

157. Much of the effort with regards to financial inclusion will be to educate local financial institutions on the opportunity that ASGM presents, de-risking strategies for the sector and how to provide it with appropriate financial products. This is important for the long-term sustainability of the project as it institutionalizes access to finance for ASGM miners at the local level and recognizes that GEF donor funds can only go so far.

158. Under Component 3, the innovation related resides predominantly in the aspect that with this FSP?s support, Suriname would be able build the necessary capacity to launch ?for the first time in a holistic manner- very innovative aspects in terms of capacity building and by the implementation of mercury-free pilot projects, following a cost-benefit analysis based on the selection criteria of the Minamata Convention, recommended feasible alternatives and technological requirements that should be put in place.

Sustainability

159. The project has been designed to create an enabling framework for strengthening the national capacity for ASGM industry formalization in Suriname to minimize risk to mercury exposure of human beings, in an environmentally sustainable market approach within the framework of the Minamata Convention, Article 7. Local stakeholder engagement should demonstrate that the priority for action is alignment of the artisan gold mining activity with government support under the appropriate regulated context. This step is critical for advancement of community-level issues, advocacy, and long-term sustainability.

160. In this sense, the sustainability of interventions proposed as part of Component 1 lie in the fact that after this project has been fully executed, Suriname has made substantive efforts to ensure that ASGM mining operations in several community-based, officially formalized areas, can be managed in a cost-effective, sustainable way. The approaches provide strategies that will integrate ASGM formalization into community land use planning, biodiversity preservation and livelihood security as well as drawing stronger political and stakeholder commitments. The use of these approaches will provide an additional pathway to ensure the sustainability of this Child Project over the long-term. The establishment of a support programme for individual gold miners who are technically and financially restrained, will be fully engaged; ensuring also a significant reduction of the use of mercury for these stakeholders over the long run.

161. For Component 2, this FSP has considered the fact that current technologies will be modified and updated thanks to the availability of fresh and innovative financial schemes with the proactive role of impact financiers, guaranteeing the sustainability of the project, which aims to phase out the use of these technologies and replace them with feasible, safe and cost-effective alternatives, if feasible. In accordance with these actions, the project will build the necessary incremental capacity for the validation over time of the alternative technologies, and after the project ends, these financiers will continue to finance ASGM operations in a sustainable way, as stipulated by the mining regulation (Mining Decree S.B. 1997 No. 44) and other environmental regulations, ensuring sustainability.

162. Through the financial scheme developed under Component 2, it is foreseen that legally-established community groups (MEs) will increase investments in alternative technologies by fostering their business activities in terms of gold recovery, environmental management and by enhancing the collaboration between these groups and interested financiers. The ultimate objective of this component will be to balance benefits for each of the stakeholders to ensure its sustainability.

163. Under Component 3, the Program should be an opportunity to test new solutions to address the objective of reducing mercury emissions from ASGM, the results of these holistic approaches will be documented in a systematic manner similar to the planetGOLD Global Program where lessons learned from the interventions of the child projects are made available through the planetGOLD Knowledge Management Platform. Documentation and systematization of lessons learned will also apply to Components 1 and 2. This allows other ASGM participating countries to identify the management and technical options that best fit their local conditions.

164. In short, the sustainability after completion of this FSP depends on four main effects aligned with the Development Challenge:

i. Improve the institutional and regulatory frameworks. This is in tune with its commitments under the Minamata Convention and in accordance with the Minamata Initial Assessment of Suriname;

ii. Increase the flow of local and international investment capital and impact-oriented lenders to launch alternatives to the deployment of mercury-free technologies to sustain the change over time once this FSP is completed;

iii. Formalization and mercury-free models linking ASGM with private sector and responsible mining CSOs have greater prospects for sustainability and upscaling, decoupling the intervention from long term donor dependence; and

iv. Mercury-free gold processing units will bring three main benefits to the miners and their communities: a) It will increase miner?s income by increasing gold recovery rates compared to the current practices and tools used (so more gold from the same amount of ore), b) it will decrease health risks by reducing miners' exposure to chemical and physical hazards, and c) it will eliminate the negative environmental impacts of using mercury for gold processing.

Potential for scaling up

165. The capacity building approach mainstreamed in all components is to ensure knowledge and experiences stay in country within relevant institutions. Under Component 1, to increase the capacity of national and district authorities to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector and by creating an enabling environment for mercury-free ASGM through improving the national ASGM policy and regulatory framework. When the project comes to an end the increased capacity of national entities and district authorities and the improved policy and regulatory enabling environment for mercury-free ASGM will continue to serve the ASGM sector and encourage continued phase-out of mercury.

166. For Component 2, the project will partner with banks, MFIs and other impact financiers to make loans/investments for the purchase of mercury-free processing equipment/investments available, more affordable and more easily accessible to formalized ASGM miners. The project will do this by supporting lending institutions/entities to develop or improve financial products for the ASGM sector and build their capacity to undertake financial risk assessments, with the purpose of eventually increasing the amount of financing made available through these new or improved financial

mechanisms to the ASGM sector. These financial products/mechanisms will continue to exist after the project comes to an end; banking miners is a private sector sustainability proposition that goes beyond donor funds. The project, through the PMU, will gear this process in a way that financial returns and repayment rates are well documented and broadly disseminated to help de-risk the SGM sector in Suriname. Where gold deposits exist and miners are well banked, financiers will be available to provide credit and hence continuity and scaling up of program results.

167. As part of the project, miners will also be trained in how to develop loan/investment applications for their entities/communities and how to apply for loans. Results of this support will be captured in simple lessons-learned flyers so that information can be easily disseminated and replicated by other mining communities.

168. The project will demonstrate, by supporting three (3) pilot projects in Component 3, that it will be possible to eliminate/avoid the use of mercury to extract gold while increasing the income of miners and their communities. The project will achieve this by supporting three (3) community-based groups in introducing more efficient and environmentally friendly mining and processing practices and supporting miners in their regularization and formalization processes leading to more sustainable income opportunities and safer working conditions.

169. Throughout this process, not only miners and their communities will be trained, but the project will also support the Training-of-Trainers. These trainers will be selected from the mining territories supported by the project but also from project partners (including but not limited to the Ministry of Natural Resources, academic institutions, like UNASAT/SGMT and AdeKUS, as well as relevant CSOs partners who liaise with or provide services to the ASGM sector frequently. These events will take place at the pilot plants built early in the project that will serve as hands-on training facilities, field gravity recovery analysis and testing laboratories, and will directly eliminate mercury use. This will allow these partners to observe and practice firsthand improved practices and apply gained knowledge and expertise to support other mining communities in the future. Furthermore, the project will help establish a route to market for mercury-free gold which will allow miners to obtain better prices for their mercury-free gold.

170. Even though capacity building support will come to an end when the project is closed, the project will have demonstrated that more efficient mercury-free processing and mining practices can increase income. An increase in income is by itself the most convincing argument for replication by other mining territories. Furthermore, trainers will have been trained who can pass on hands-on knowledge about more efficient mercury-free processing and mining practices. Results of the support to the district

authorities will also be captured in simple lessons-learned flyers so that information can be easily disseminated and replicated by other mining territories.

171. Throughout the project?s implementation, project results, experiences, lessons-learned and best practices will be captured, published, and taken up by the GEF GOLD Global Dissemination Platform, considering the activities planned under Component 4, Output 4.1. The objective of the (UNEP led) GEF planetGOLD Global Dissemination Platform is to unify and coordinate efforts among all the GEF planetGOLD child projects and disseminate knowledge generated (e.g. experiences in formalization, access to finance and market and technology transfer) to a wider ASGM audience to help Parties to the Minamata Convention meet their obligations to reduce and where feasible eliminate mercury use in ASGM. When the project comes to an end these materials and resources will continue to remain available and to serve the wider ASGM community.

172. In summary, scaling up of project results is being ensured by improving the capacity of the GoS, the district authorities in the mining territories, private sector and miners (among others) in more efficient and lucrative ASGM practices (that also happen to be more environmentally friendly and use less or no mercury) and by facilitating the access of miners to financing/loans that allow them replicate these practices that make sense from a financial point of view (social impact investors) throughout the ASGM Mercury Lifecycle in Suriname.

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[1] Romero, R. ?*Inventories in Mercury Releases, Suriname Case*?. Webinar NAP Project. Nov. 28, 2020.

[2] ABS (Ed.). (2020). 9e Milieu Statieken Publicatie?9th Environment Statistics Publication 2015-2019. Algemene Bureau voor de Statistiek, Suriname.

[3] United Nations Suriname. (2020). ?Socio-economic impact assessment and response plan for COVID-19 in Suriname?.

[4] Seccatore, J., & de Theije, M. (2017). ?Socio-technical study of small-scale gold mining in Suriname?. *Journal of Cleaner Production*, *144*, 107?119. https://doi.org/10.1016/j.jclepro.2016.12.119

[5] IDB. 2020. Suriname in Times of COVID-19: Navigating the Labyrinth.

[6] Data on employment in Suriname?s ASGM sector vary significantly and due to high rates of migration are unreliable. Values presented here compile different sources including Veiga (1997);

Heemskerk, 2010; ? CIRDI 2016; Seccatore, 2017; OGS, 2018; cross-referenced with GEF-financed projects (MIA, NAP on ASGM).

[7] Heemskerk, M. Negulic, E. and Duijves C. (2016).

[8] Idem, paragraph 3.2.1.

[9] Idem, p. 13.

[10] Idem, p. 13.

[11] Article: *?Exposure to total and methylmercury among pregnant women in Suriname: sources and public health implications?*, Journal of Exposure Science & Environmental Epidemiology, https://doi.org/10.1038/s41370-020-0233-3

[12] **Immediate causes** are the most evident manifestation of the development challenge and determine the current status of the problem to be analyzed.

[13] **Underlying causes** are the consequence of a lack of policies and laws, institutional factors and unavailability of resources.

[14] **Root causes** are pervasive and long-standing development performance issues, often related to historical and cultural legacies, which affect development outcomes through attitudes and behavior at different levels, often regardless of policy and legislative changes.

[15] It is important to note that ?*formalization*? refers to the overall governance of the ASGM sector; miners themselves are not licensed but rather the site in which they are operating.

[16] GoS:?*2017-2021 Policy Development Plan. Part 1 Development priorities of Suriname?*, page 47.

[17] These include, mainly licensing, monitoring, and compliance with other existing regulations.

[18] Gender represents an intersection of identity factors, including sex, age, ethnicity, race, nationality, or indigenous status.

[19] IDB and IFC. ?*IDBG Country Strategy with The Republic of Suriname 2016?2020*?, page 07, Nov. 2016**.**

[20] http://data.un.org/CountryProfile.aspx?crName=suriname

[21] General Bureau of Statistics, 2016. 7th Environment Statistical Report 2016.

[22] IDB and IFC. ?*IDBG Country Strategy with The Republic of Suriname 2016?2020*?, page 06, Nov. 2016.

[23] UNEP. 2018. ?Global Mercury Assessment 2018?. Available at:

https://wedocs.unep.org/bitstream/handle/20.500.11822/27579/GMA2018.pdf?sequence=1&isAllowed=y

[24] Metal Focus. 2019. Gold Focus 2019. Available at: https://www.europeangoldforum.org/wp-content/uploads/sites/8/2019/04/Gold-Focus-2019-compressed.pdf

[25] UNEP Global Mercury Assessment, 2018.

[26] *National Inventory of Mercury Releases in Suriname* (2019).

[27] ?Heemskerk, M., (2000). Driving Forces of Small-scale Gold Mining Among the Ndjuka Maroons: a Cross-scale Socioeconomic Analysis of Participation in Gold Mining in Suriname, Graduate School of the University of Florida. University of Florida.

[28] ASGM activities occur predominantly in Northeast and Central regions throughout the trans-Amazonian Greenstone Belt.

[29] Gold mineralisation includes: Primary deposits are generally associated with quartz/quartz-carbonate veins. Secondary or placer accumulations occur as colluvial and alluvial deposits from weathered material in terraces, rivers and streams.

[30] Heemskerk Consultants in Social Sciences (2011). *?Small-Scale Gold Mining in the Transboundary Areas of Brazil, Suriname and French Guiana. Social and Environmental Issues?*. UNDP/GSF.

[31] Kioe-A-Sen, N., Van Bergen, M., Wong, T., & Kroonenberg, S. (2016). Gold deposits of Suriname: Geological context, production and economic significance. *Netherlands Journal of Geosciences - Geologie En Mijnbouw, 95*(4), 429-445.

[32] ?Suriname, Centrale Bank van. (2014). Leading Sectors of Suriname: The Impact of Mining, Agriculture and Tourism Activities on the Economy. Paramaribo.

[33] See notes Stakeholder Engagement Report Ministry of Natural Resources (February, 12 2021)

[34] Workforce estimates in Suriname?s ASGM sector vary significantly across sources and due to high rates of migration are unreliable. Values presented are a compilation sources including Veiga (1997); Heemskerk (2010); ? CIRDI (2016); Seccatore & de Theije (2017); OGS (2018); Ottenbros et al., (2019); Government of Suriname (2020), further cross-referenced with GEF-financed projects (MIA, NAP on ASGM).

[35] Ottenbros, B., Boerleider, R.Z., Jubitana, B., Roeleveld, N., & Scheepers, P.T. (2019). Knowledge and awareness of health effects related to the use of mercury in artisanal and small-scale gold mining in Suriname.

[36] Heemskerk, M., Negulic, E., & Duijves, C. (2016). *Reducing the Use and Release of Mercury by Artisanal and Small- Scale Gold Miners in Suriname*. Retrieved from: http://www.artisanalgold.org/past-projects/ Heemskerk, M. Negulic, E. and Duijves C. (2016).

[37] US Department of Labour. (2019). Findings on the Worst Forms of Child Labor: Suriname. Retrieved online.

[38] Evidence shows that a multiplication factor of 5-6 indirect livelihood benefit for every direct livelihood provide a conservative estimate.

[39] Meeting with the Ministry of Natural Resources on 26 May 2021.

[40] Heemskerk, M. Negulic, E. and Duijves C. (2016). *Reducing the Use and Release of Mercury by Artisanal and Small-Scale Gold Miners in Suriname*. Report produced for the Artisanal Gold Council, Canada.

[41] ESMSAGS ProDoc, page 7.

[42] ESMSAGS ProDoc, page 7.

[43] Tributer systems refer to on-concession sharing fee-for-service arrangements between ~~informal~~ illegal ASGM operations and legal rights holders. While common in Suriname these systems are in a violation of existing laws as mineral rights cannot be transferred to small-scale gold miners.

[44] Observations by the UNDP GOLD+ PPG Team during spatial and contextual site assessment and stakeholder consultation.

[45] ESMSAGS ProDoc, page 7.

[46] Ministry of Natural Resources (2020). Beleidsnota 2020 ? 2025.

[47] Ministry of Natural Resources (2020). Holistic Implementation of FPIC principles in complying with sustainable environmental management standards. Community Engagement & Development Unit Ministry of Natural Resources.

[48] Seccatore, J., & de Theije, M. (2017). Socio-technical study of small-scale gold mining in Suriname. *Journal of Cleaner Production*, *144*, 107?119. https://doi.org/10.1016/j.jclepro.2016.12.119

[49] See notes Stakeholder Engagement Report IAMGold (March, 2 2021).

[50] Hydraulic mining is where high pressure monitors are employed to break down the bank, excavate gravel and sweep slurry into sluices.

[51] Heemskerk, M. Negulic, E. and Duijves C. (2016). *Reducing the Use and Release of Mercury by Artisanal and Small-Scale Gold Miners in Suriname*. Report produced for the Artisanal Gold Council, Canada.

[52] Landburg & Mol (2018) and Mol & Ouboter (2004).

[53] NIMOS, (2017).

[54] Rahm, (2015).

[55] Formalization can be understood as a process of progressively building the capacity of governments and ASM actors (i.e., miners, traders, and all other participants along the gold value chain) to enable compliance with applicable regulations, and ultimately access and equitably benefit from participation in formal local and global commodity markets.

[56] ?Smith, N. M., Smith, J. M., John, Z. Q., & Teschner, B. A. (2016). Promises and perceptions in the Guianas: The making of an artisanal and small-scale mining reserve Keywords: Artisanal and small-scale mining Large-scale mining Formalization Guianas. https://doi.org/10.1016/j.resourpol.2016.11.006

[57] ?Steinm?ller, K. (2017). Concepts and Strategies for the Designation and Management of ASM zones: A Contribution to the Formalization of the ASM Sector. Retrieved online.

[58] Veiga, M. M., Angeloci-Santos, G., Meech, J. A., & Keevil, N. B. (2014). Review of barriers to reduce mercury use in artisanal gold mining. *Biochemical Pharmacology*, *1*, 351?361. https://doi.org/10.1016/j.exis.2014.03.004

[59] Interviews with Bryan Hoever (Chairman of the Association of Gold Buyers and Exporters) and Ryan Tjon Poen Gie (Director Kaloti Suriname Mint House) 1 & 3 June 2021

[60] Defined by OECD DDG as geographic regions where ASGM is affiliated with human rights abuses, finance armed conflict or war crimes.

[61] The OECD Due Diligence Guidance (DDG) provides detailed recommendations to help companies respect human rights and avoid contributing to conflict through their mineral purchasing decisions and practices. See more online here.

[62] The LBMA is an independent authority which ensures the highest levels of leadership, integrity and transparency for the global precious metals industry by advancing standards and developing market solutions. Retrieved online: https://www.lbma.org.uk

[63] https://www.artisanalgold.org/southamerica/

[64] https://www.dna.sr/media/291351/SB_2020___97.pdf

[65] https://www.dna.sr/media/21188/decreet_mijnbouw.pdf

[66] IGF. Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2017). *IGF Mining Policy Framework Assessment: Suriname.* Winnipeg: IISD, page 8.

[67] IGF: Page 08.

[68] Heemskerk, M., Negulic, E., & Duijves, C. (2016). Reducing the Use and Release of Mercury by Artisanal and Small- Scale Gold Miners in Suriname, 82.
[69] Toelichting organogram en Taken NH, August 2020.

[70] Mol, J. H., Ramlal, J. S., Lietar, C., & Verloo, M. (2001). Mercury contamination in freshwater, estuarine, and marine fishes in relation to small-scale gold mining in Suriname, South America. Environmental Research, 86(2), 183?197.

[71] Gold and silver extraction (using mercury-amalgamation processes) account for 89% of total Hg releases to air, alongside informal waste dumping and burning (including tailings residue and dumping from ASGM and LSGM), which contributes 6%, and initial gold processing techniques not using mercury account for 3%.

[72] Data provided by UNDP Country Office in Suriname (February, 2020) as per draft Minamata Initial Assessment (MIA) National Inventory Inventory of Mercury Releases in Suriname.

[73] Asner, G. P., Llactayo, W., Tupayachi, R., & Luna, E. R. (2013). Elevated rates of gold mining in the Amazon revealed through high-resolution monitoring. Proceedings of the National Academy of Sciences of the United States of America, 110(46), 18454?18459. https://doi.org/10.1073/pnas.1318271110

[74] Steinm?ller, K. (2017). Concepts and Strategies for the Designation and Management of ASM zones: A Contribution to the Formalization of the ASM Sector. Retrieved from: https://www.bgr.bund.de/EN/Themen/Min_rohstoffe/Downloads/studie_management_ASM_zones.pdf?__blob=publicationFile&v=2

[75] Heemskerk, M. Negulic, E. and Duijves C. (2016). *Reducing the Use and Release of Mercury by Artisanal and Small-Scale Gold Miners in Suriname*. Report produced for the Artisanal Gold Council, Canada, page 24.

[76] Final memorandum 2020-2025 and explanatory memorandum 2021 of the Ministry of Natural Resources.

[77] Initially named Mining Code in 2004 and changed to Mining Law in 2016.

[78] Environmental Framework Law. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/wetten-na-2005/milieu-raamwet/

[79] Although the law has been adopted in 2020, implementation of the law will take a while since the implementing decrees still need to be formulated. A plan has been set out to formulate the most urgent decrees in the coming 5 years.

[80] Freight Traffic Act. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/geldende-teksten-tm-2005/wet-goederenverkeer/

[81] Conservation Law. Retrieved online: https://www.dna.sr/media/20485/besluit_negatieve_lijst_2003.pdf

[82] Conservation Law. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/geldende-teksten-tm-20052005/natuurbeschermingswet-1954/

[83] Labour law. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/geldende-teksten-tm-2005/arbeidswet/

[84] Act on Labor of Children and Juveniles. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/wetten-na-2005/wet-arbeid-kinderen-en-jeugdige-personen/

[85] Law on Minimum Wage. Retrieved online: https://www.dna.sr/wetgeving/surinaamse-wetten/wetten-na-2005/wet-minimumloon-2019/

[86] Draft law on collective rights. Retrieved online: https://www.dna.sr/wetgeving/ontwerpwetten-bij-dna/aanhangige-wetsontwerpen/ontwerpwet-wet-collectieve-rechten-inheemse-en-tribale-volken/

[87] Memorie van Toelichting: Wet van tot vaststelling van de 9de afdeling van de begroting van uitgaven en ontvangsten voor het dienstjaar 2021 betreffende het Ministerie van Natuurlijke Hulpbronnen (in dutch).

[88]Netherlands Commission for Environmental Assessment. (2021). Retrieved online: https://www.eia.nl/en/countries/suriname/sea-profile

[89] The NAP (pending, October 2021) addresses baseline estimates of the qualities of mercury used and techniques applied; strategies to eliminate worst practices and promote Hg-free products; steps to facilitate formalization; public health strategy on the exposure of miners and their communities to mercury; sstrategies to prevent the exposure of vulnerable populations; and strategies for managing Hg trade.

[90] Shared Resources Joined Solutions (SRJS). (2019). The political ecology of mercury within the small-scale gold sector. Retrieved online: https://www.iucn.nl/app/uploads/2021/03/regional_mercury_report_suriname.pdf

[91] Please, note that for the Suriname GOLD+ Child Project, this criteria has been adapted to ?*Optimizing formalization strategies through a Sustainable Landscape Approach (SLA)?*. SLAs refer to land-use planning efforts are moving away from sectoral approaches and embracing the more integrated, holistic approach of a landscape as a series of interdependent natural and human systems.

[92] Artisanal Small-Scale Mining ? Large-Scale Mining.

[93] For further details, please refer to Annex 3.

[94] The Code of Risk mitigation for ASM engaging in Formal Trade (CRAFT) aims to facilitate the relationship between the gold industry and the ASM sector, as an enabling tool to advance OECD Due Diligence Guidance while laying out a progressive path toward the mitigation of risks and promoting of responsible mining.

[95] https://www.responsiblemines.org/en/project/model-of-responsible-artisanal-and-small-scale-mining/

[96] For further information, please refer to the following Report: *Review of Jurisdictional Approaches and Considerations for ASGM Programming for the GOLD+GEF Global Program to Reduce/Eliminate Mercury from ASGM. January 2020. NMutemeri Consulting.*

[97] ?Financial inclusion? is proffered as the solution for the unbanked; ?unbanked? refers to people/entities who do not have access to useful and affordable financial products and services that meet their needs and are delivered in a sustainable and responsible way. https://www.worldbank.org/en/topic/financialinclusion/overview

[98] Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt, from *?GEF AGENCY RETREAT: guidance on climate risk screening of GEF projects?*.

[99] ?Techniques? means technologies used, operational practices and the ways in which installations are designed, built, maintained, operated and decommissioned; as defined by Art. 2, of the Minamata Convention.

[100] Please, refer to *?planetGOLD Communications Strategy 2020?* Report.

[101] National Inventory of Mercury Releases in Suriname (2019).

[102] https://www.dna.sr/media/21188/decreet_mijnbouw.pdf

1b. Project Map and Coordinates

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

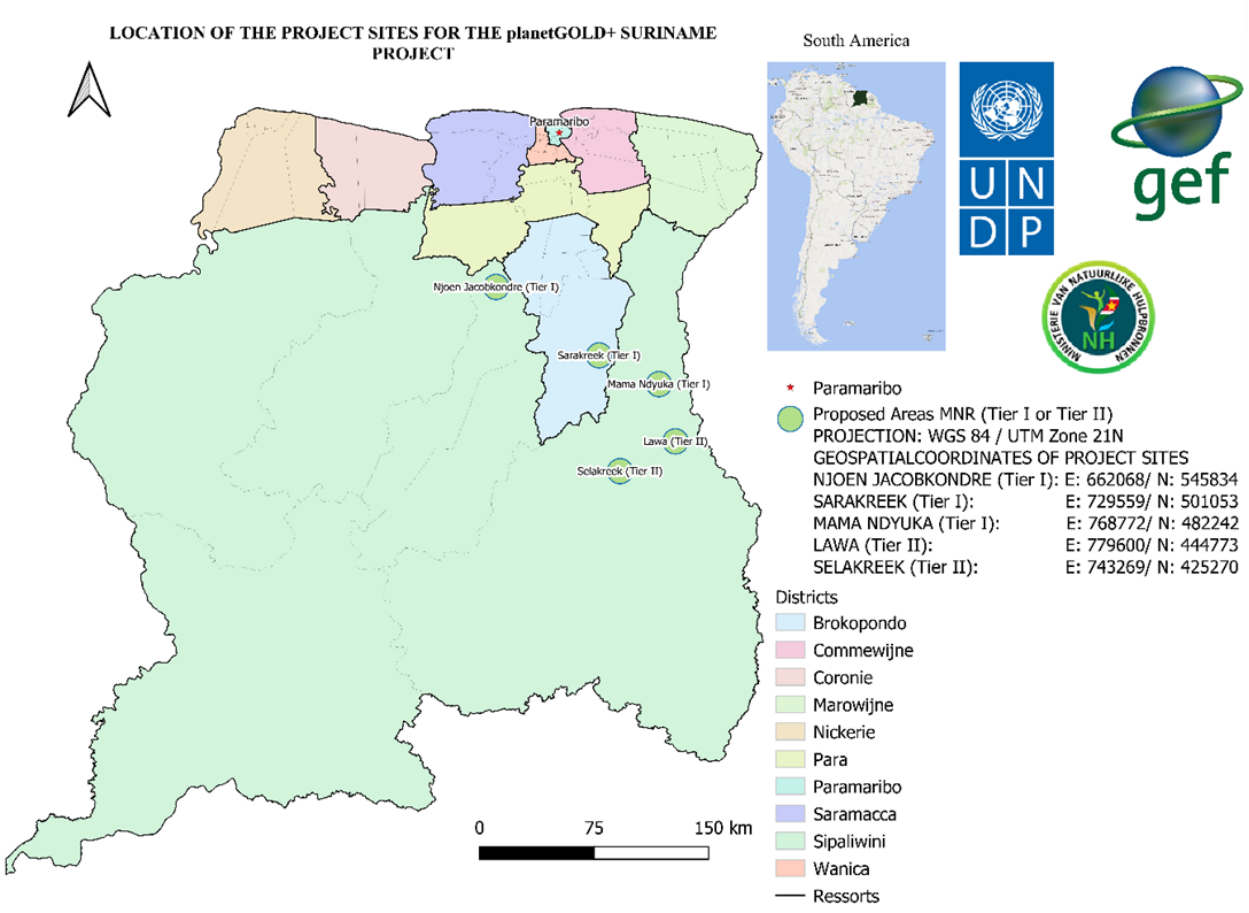

Figure 3.1: Suriname GOLD+ intervention sites overlain on Administrative (Resort) boundaries. Figure shows Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 Sela Kreek and Lawa sites are overlain on an administrative map of Suriname with circular boundaries indicating the geographic location of mining landscapes in line with national priorities for the ASGM sector.

In line with the site selection strategy spatial and contextual analysis within mining landscapes (defined by legally demarcated exploitation and exploration titles) in Suriname serve as final selection of pilot projects. Additional due diligence is required by the Project Management Unit (PMU) prior to project implementation to verify Tier 1 intervention sites.

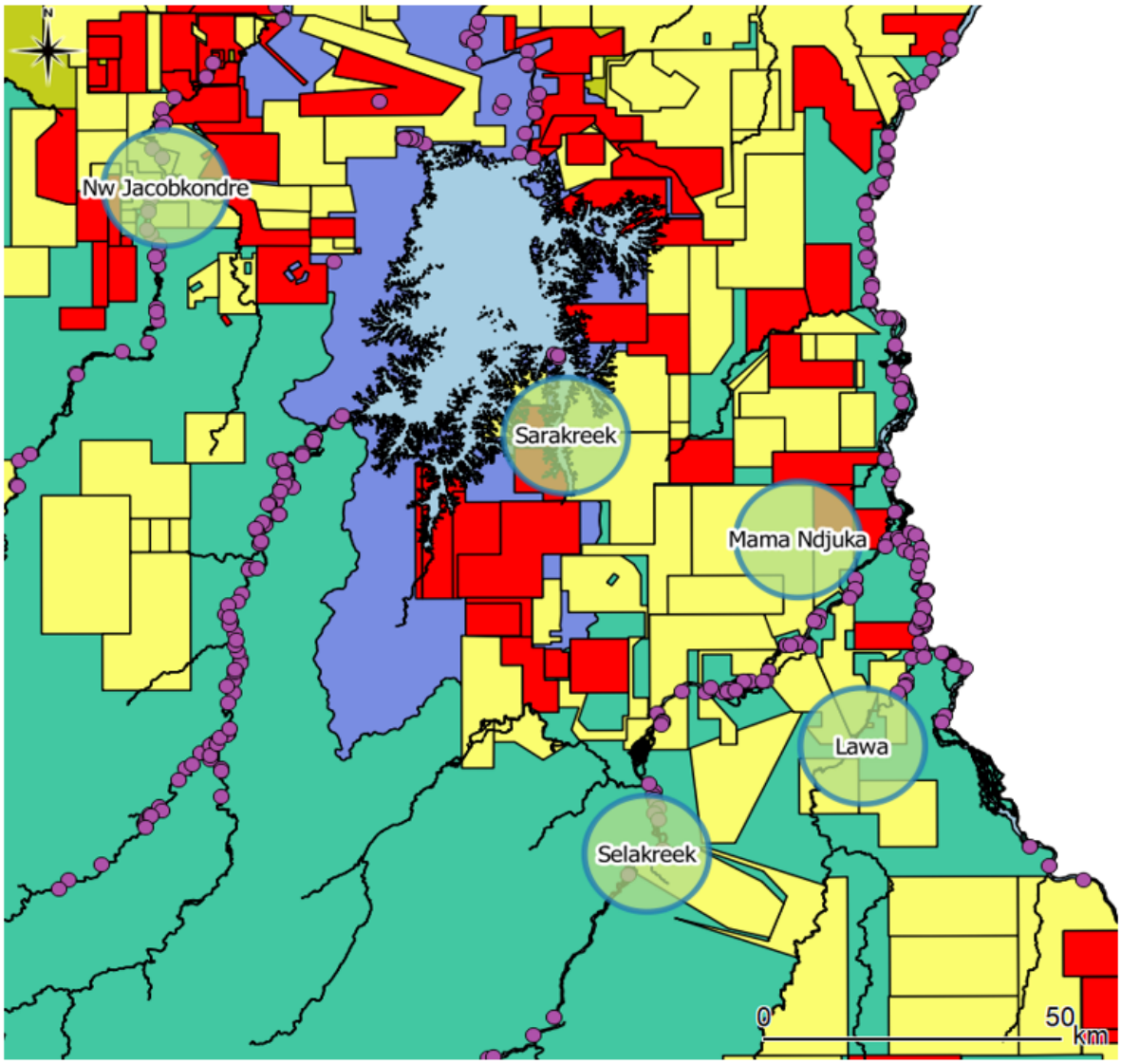

Figure 3.2.: Proposed sites provided by the Ministry of Natural Resources (MNR) on top of the layers (districts, resorts, concessions). Yellow blocks = exploration licenses and Red block = exploitation (mining) licenses. Hydrographic relief is plotted with rural villages as lilac dots. Figure shows Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 Sela Kreek and Lawa sites with circular boundaries around mining landscapes.

Table 3.1. Overview of Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 sites Selakreek and Lawa proposed for GOLD+ intervention. Table shows concession data, labelled ASGM Hotspots that correspond with maps 3.3. - 3.7 and geographic coordinates No data available yet for highlighted concessions (orange cells).

	Proposed Area	District	Sub-district/ Resort	Concession*	ASGM Hotspot**	Coordinates WGS84/UTM 21N	
						E	N
Tier 1 Sites	**Njoen Jacobkondre**	Sipaliwini	Boven Saramacca	Rosebel Goldmines NV (IAMGOLD)	NJ-I	669843	544492
					NJ-II	664082	554015
				Limestone Mining NV	NJ-III	662941	551498
					NJ-IV	662370	544492
				United Suri-Fast Mining NV	NJ-V	657465	543636
				Suriname Diamond Co N.V.	NJ-VI	656246	536941
				Sarafina N.V.	NJ-VII	671374	550486
				Cirino Reina J.	n.d.	n.d.	n.d.
				Albert Max Soiri	n.d.	n.d.	n.d.
	Sarakreek	Brokopondo	Sarakreek	Suriname Gold LLC ? North Amazonia (Newmont)	SaK-I	734662	500860
					SaK-II	743449	492415
					Sak-VI	741893	511820
				Sarakreek Resources N.V.	SaK-III	724582	481527
					SaK-IV	720281	491087
				Grassalco	SaK-V	752229	486476
				Eagle Resources Mining & Equipment NV	n.d.	n.d.	n.d.

				Drie M. S. NV	n.d.	n.d.	n.d.
				Granaat NV	n.d.	n.d.	n.d.
				Nel Agita	n.d.	n.d.	n.d.
	Mama Ndjuka	Sipaliwini	Tapanahoni	Robrun NV	MN-I	775519	491891
					MN-II	776492	487016
				Grassalco	MN-III	766365	480403
				NV Sitex Gold	MN-IV	773523	474618
				Anapai August Ferdinand	n.d.	n.d.	n.d.
*to be confirmed by GMD **to be confirmed by SHMR & field visits: hotspot names & exact coordinates **Tier 2 Sites**	**Lawa**	Sipaliwini	Tapanohoni	NV Sitex Gold	L-I	778557	447778
					L-II	774970	451301
					L-V	780510	452664
				Djodi Rene	L-III	770887	441196
				n.d.	L-IV	775173	443728
				Maroc Mining NV	n.d.	n.d.	n.d.
				Cansur golmines NV	n.d.	n.d.	n.d.
	Selakreek	Sipaliwini	Tapanohoni	Selakriki Okanisi Resources	Sela-Paaston	745981	426122
					SeK-I	746391	421853
					SeK-II	753948	421452
					Sek-III	755410	417712

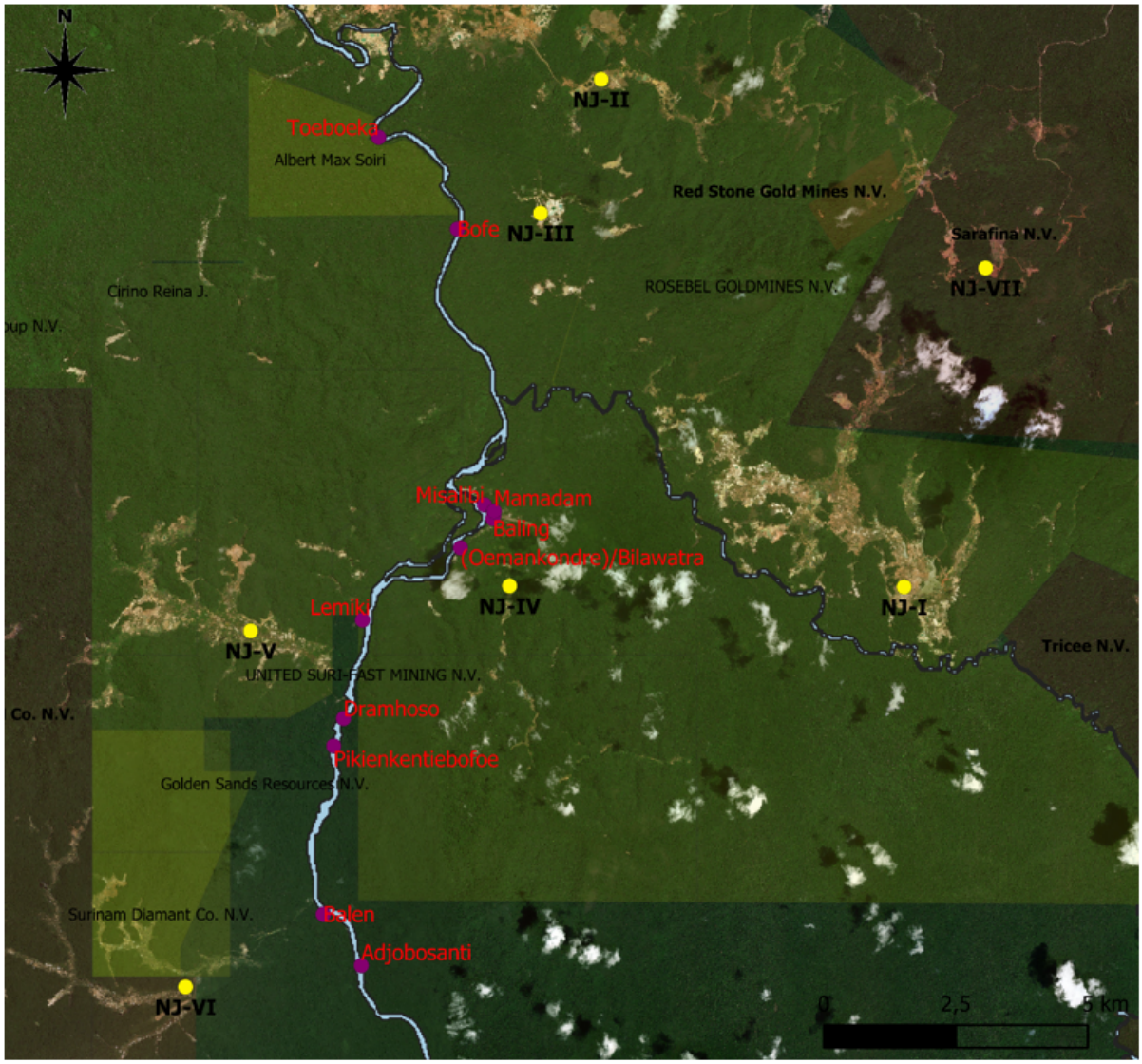

Figure 3.3: Detailed map area Njoen Jacobkondre (Tier 1 site for intervention). Red = exploitation rights, yellow = exploration rights, lilac = villages along the Pikin Saramacca river. Deforestation show the area of mining with numbered hot-spot areas (blue dots).

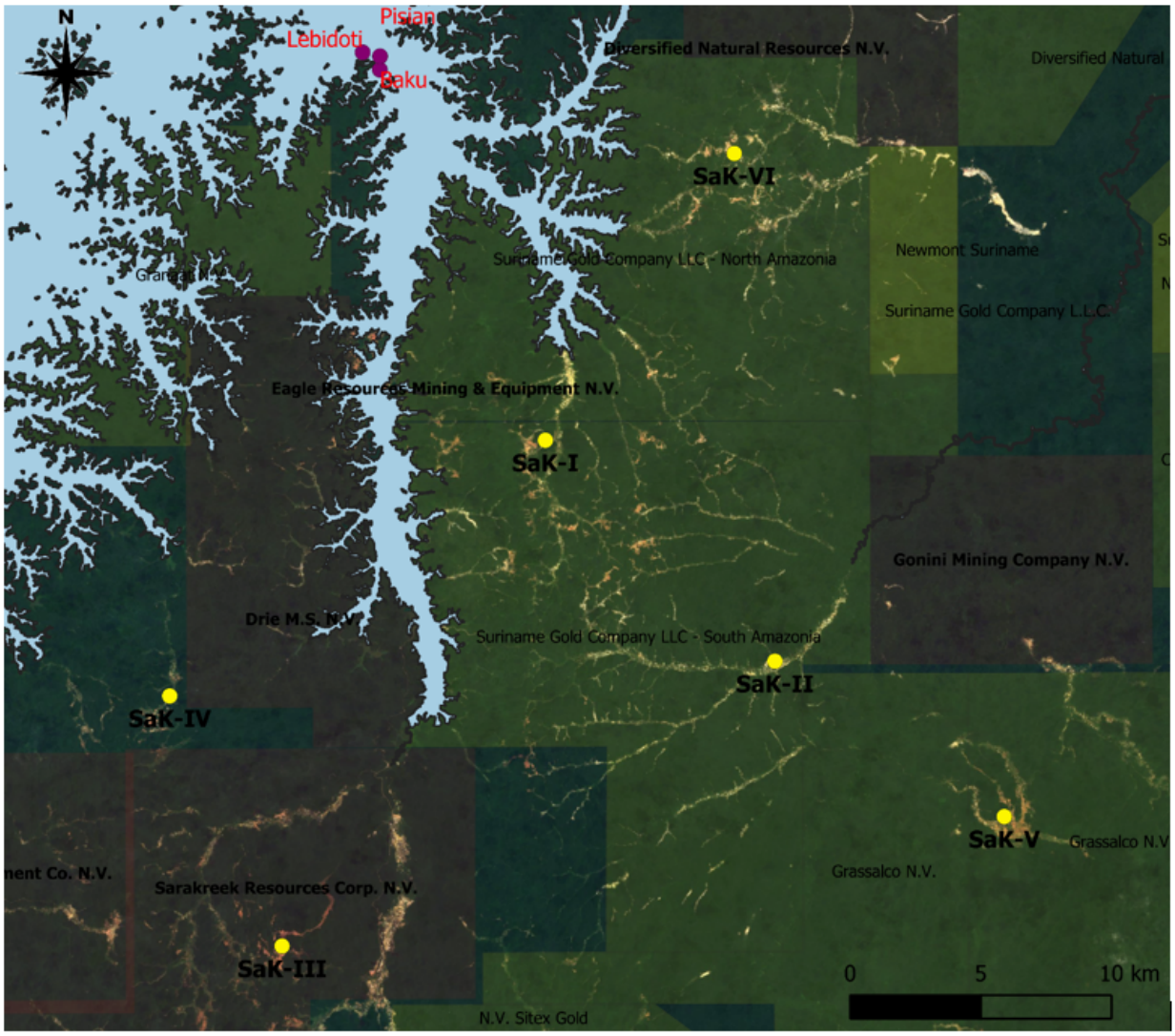

Figure. 3.4: Detailed map area Sarakreek (Tier 1 site for intervention). Red area / yellow text = exploitation rights, yellow area / black text = exploration rights, no villages. Deforestation show the area of mining with numbered hot-spot areas (blue dots & red text).

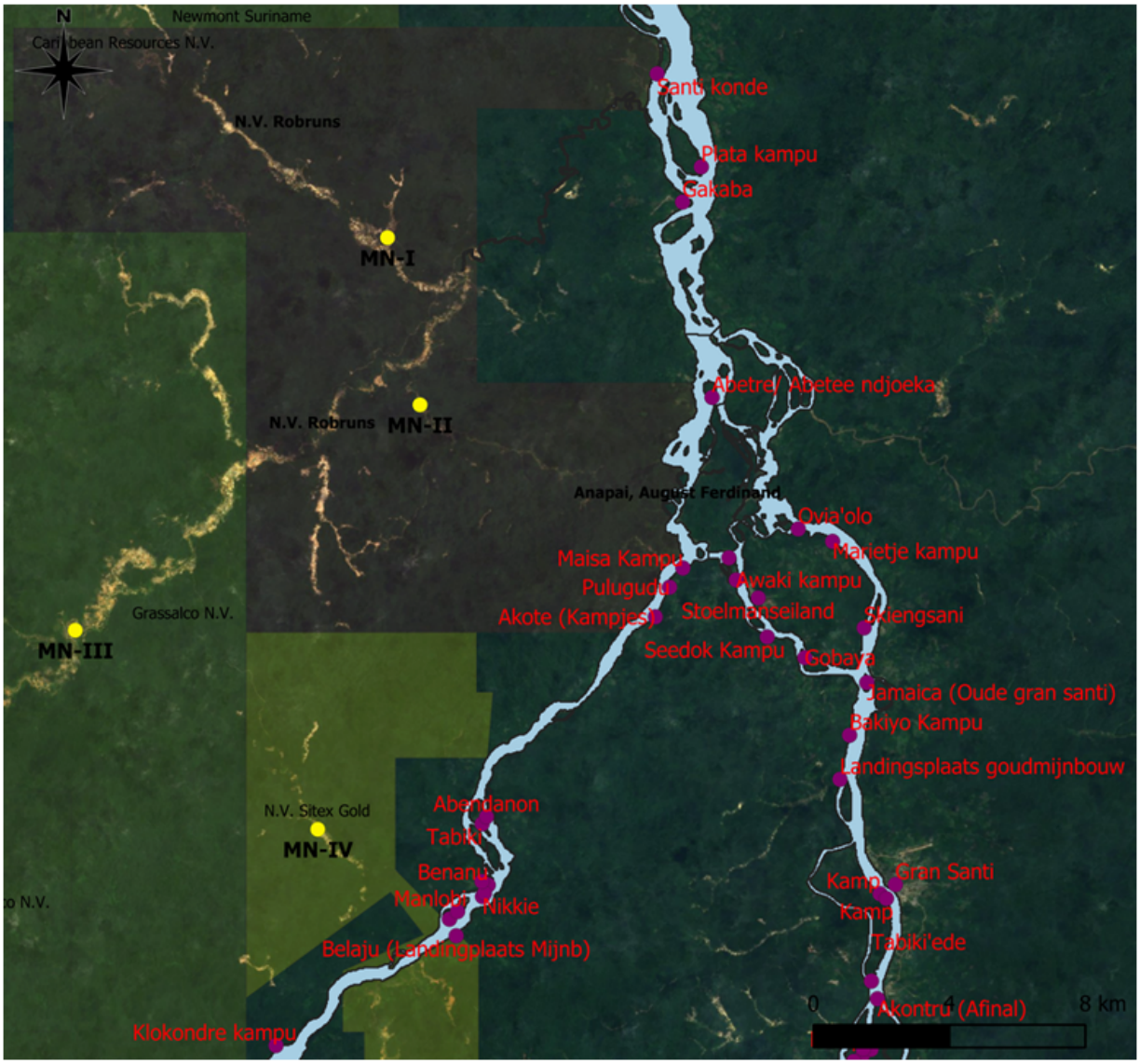

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Figure 3.5: Detailed map area Mama Ndjuka (Tier 1 site for intervention). Red = exploitation rights, yellow = exploration rights, lilac = villages along the Marowijne river (not on concession). Deforestation show the area of mining with hot-spot areas (blue dots).

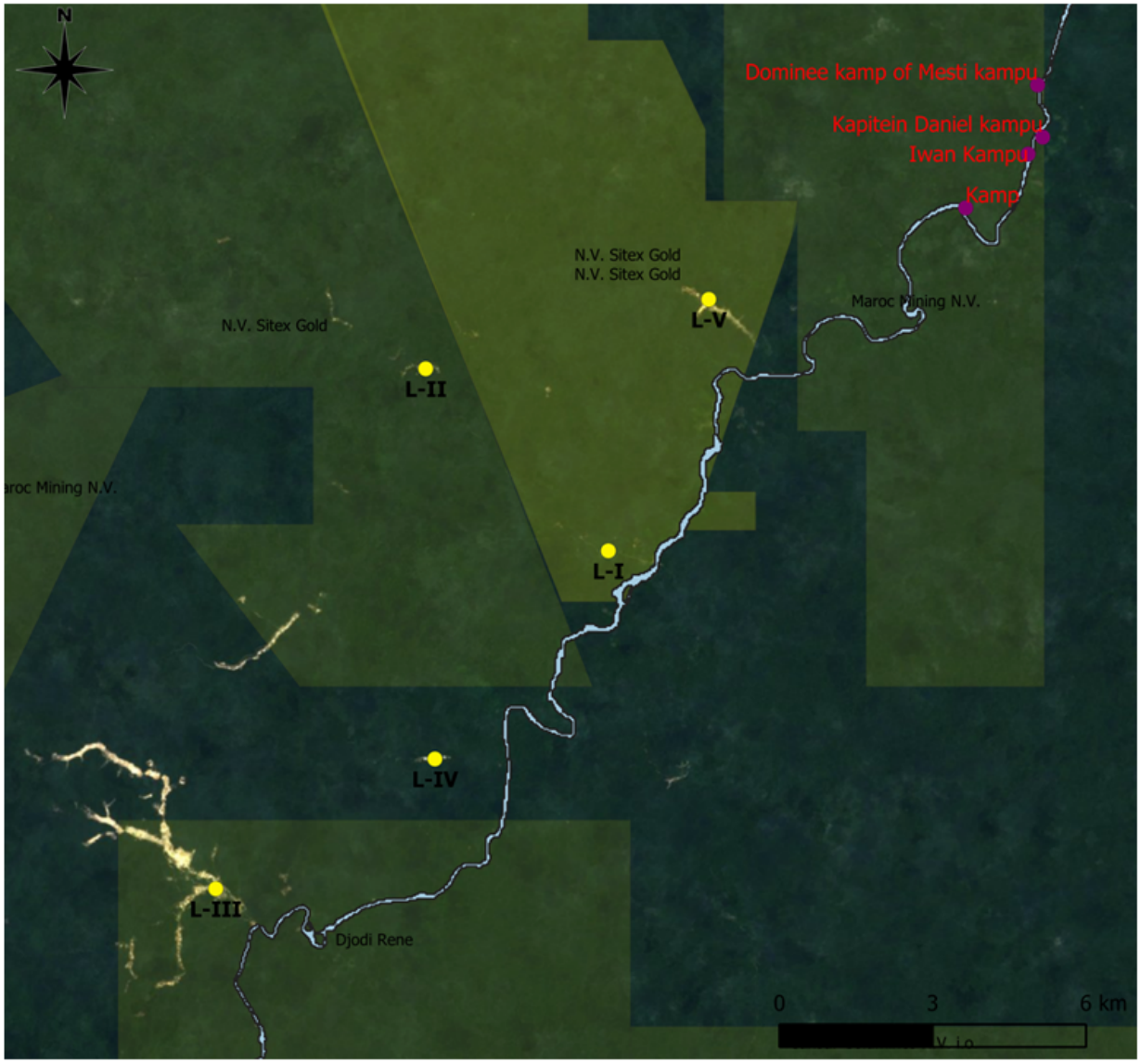

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Figure 3.6 : Detailed map area Lawa (Tier 2 site for intervention). Yellow = exploration rights, lilac = villages along the Lawa river (not on concession). Deforestation show the area of mining, in south western part of the map with hot-spot areas (blue dots).

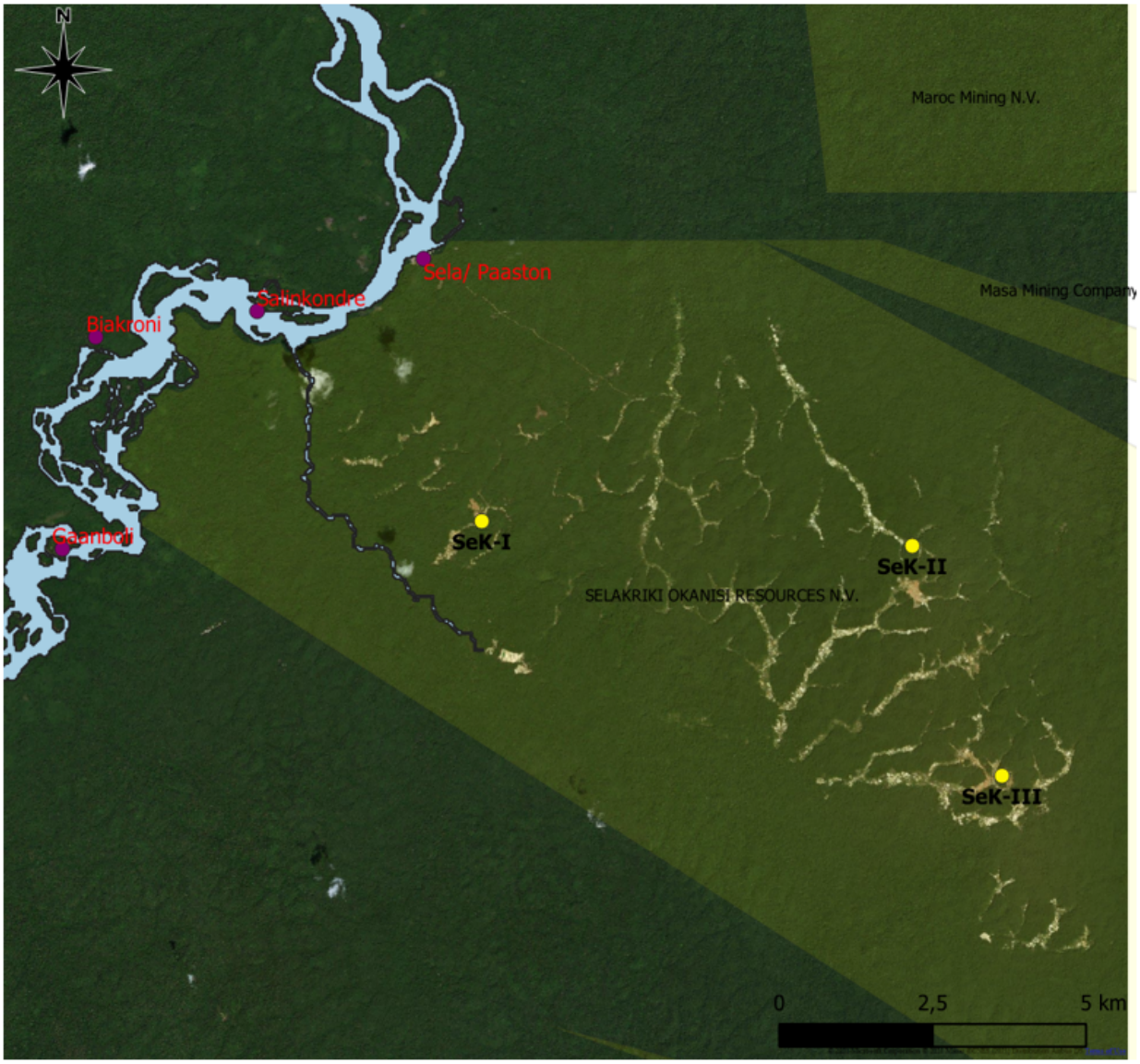

Figure 3.7: Detailed map area Selakreek (Tier 2 site for intervention). Yellow = exploration rights (on newer maps exploitation rights), lilac = villages along the Tapanahoni river (border of concession). Deforestation indicates gold mining with hot-spot areas (blue dots).

Table 3.1. GEF GOLD+ Tier 1 intervention sites and corresponding criteria used to support decision making with emphasis on mineral tenure.

Criteria	Description	Tier 1 Intervention Sites

		Njoen Jacobkondre	Sarakreek	Mama Ndjuka
Gold production	Access to economically viable gold deposit	Yes	Yes	Yes
	Established gold extraction/ processing units	Yes	Yes	Yes
	Basic estimates of monthly Au production data	Concession Owners	Concession Owners	Concession Owners
Workplace Dynamics	Primary ASGM workforce	Confirmed	Confirmed	Confirmed
	Secondary ASGM workforce	Mining camp	Mining camp	Mining camp
Hazardous Chemicals	Confirmed Mercury use	According to MNR	According to MNR	According to MNR
Formalization	Presence of informal extraction units (groups/teams)	Yes	Yes	Yes
	Presence of legally registered Mining Entities	Yes	Yes	Yes
	Legal right to exploit a mineral deposit/concession	Yes	Yes	Yes
	Permission from concession owner to exploit deposit	Concession Owners	Concession Owners	Concession Owners
Multi-stakeholder Collaboration	Favourable attitude of concession owner to partner	Yes	Yes	Yes

	Political will of Government to partner	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
	Political will of Traditional/Customary Authorities	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
Biodiversity	Avoidance/mitigation of impacts on critical habitats	IBAT/Google Earth	IBAT/Google Earth	IBAT/Google Earth
Logistics	Reasonable distance/ travel time from Urban center	Jacobkondre, Lemmiki, Banaondro	Baikoetoe, Duwatra, Lebidoti and Zoewatta	Gakaba
	No presence of non-state insurgents/terrorist groups	No security threats	No security threats	No security threats
	Access to road infrastructure and basic services	4WD car	4WD car?	No
	Access to air strip or boat access (remote regions)	Boat; airstrip	Sarakreek airstrip; Boat	Boat; airstrip Bravo Kamp; Gakaba airstrip
Impact	Opportunities to partner with complimentary projects	SHMR, IAMGOLD	SHMR, Newmont	SHMR, French Embassy

1c. Child Project?

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

•

- 174. The integrated approach proposed for the Suriname Child Project fully responds to and reflects the planetGOLD+ Programme?s ToC as can be deducted from the child project?s results framework, around the following components:

- - Optimizing formalization strategies through integrated, holistic, and multi-sector approaches at the landscape scale through commodity-specific Jurisdictional Approach;
- - Accelerating financial inclusion and creation of responsible supply chains;
- - Enhancing uptake of mercury-free technologies through sustainable business models;
- - Foster knowledge sharing, learning, and synthesis of experiences.

175. All Suriname?s project components fully align with the programme components, and the child project outputs directly contribute to the PFD and child project outcomes as described in the project?s results framework (Section V of the ProDoc). As such the proposed child project proposes suitable and appropriate options to tackle systematic challenges for Suriname where the ASGM sector is a more than significant source of mercury and environmental harm.

176. This child project will achieve tangible and desired transformation including multiple global environmental benefits, highlighting co-benefits of environmental management and compliance of the gold mining sector toward accelerating progress on the Minamata Convention, REDD+, the United Nations Convention on Biological Diversity (UNCBD), the United Nations Framework Convention on Climate Change (UNFCCC), the Treaty for Amazonian Cooperation (ACTO), and the RAMSAR Convention in Suriname. As mentioned above, gender mainstreaming will be critical to all project activities, and a Gender Action Plan has been developed to support this.

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.

177. UNDP has formed mutually beneficial long-standing relationships with senior policy makers at the national level and has assisted the strengthening of the Ministry of Natural Resources during the formulation of the PIF and in the implementation of the PPG. It has also created a synergy with key stakeholders in the private sector, academic and CSO sectors during the formulation of the ProDoc and will continue in the upcoming execution phase.

178. A stakeholder engagement plan was undertaken in order to identify key stakeholder institutions and relevant beneficiaries to be involved in the project implementation process. Annex 9 of the ProDoc ?Stakeholders Engagement Plan- describes the process of assessing the project's key stakeholder?s interests and the ways in which these stakeholders may influence the project?s outcomes, how stakeholders will be consulted in project execution, the means and timing of engagement. This Plan is important because it enhances local ownership, strengthens project integrity and design, and helps to create foundational relationships that may contribute to constructive problem solving if difficulties or challenging issues arise.

Stakeholder Engagement Plan attached.

179. The ?Stakeholder Engagement Plan? seeks to strengthen UNDP institutional partner capacities for managing social and environmental risks and ensuring full and effective stakeholder engagement, including appropriate mechanisms to respond to complaints from project-affected people. This Plan follows the Guidance Note UNDP Social and Environmental Standards (SES). For regulations and requirements in Suriname, public consultation and disclosure requirements related to the social and environmental assessment process is a key element of public policies overall, as a guiding process to execute the compliance with ?the Harmonized Commodity Description and Coding System?, in this specific context, for the use of mercury for artisanal mining operations. Under this regulation, mercury importers are responsible for classifying the hazards, labelling and generating the respective Safety Data Sheet. Thus, given the regulatory framework in which the project will be implemented, it is fully recognized that there are inherent risks for the beneficiaries that FSP interventions will deal with decisions by other stakeholders that may affect them.

180. Due to the presence of this high risk in Suriname, a diverse group of stakeholders was engaged during the project preparation stage and their roles clearly stated during its execution, as described in Annex 9. Stakeholders are the miners and public institutions with an interest in the project or the ability to influence project outcomes, positively or negatively and which are directly or indirectly affected by the project. This Annex also provides an overview of stakeholder interests, importance and influence on project outcomes. Transversally, from the gender perspective, the ?Stakeholder Engagement Plan? provides an overview of stakeholder interests, importance and influence on project outcomes or operations that were validated at the PPG stage through a participatory exercise with stakeholders.

181. The grievances will be geared directly to Ministry of Natural Resources, through the institutional mechanisms by which people concerned with or potentially affected by the project can express their grievances to the following address:

Address: Mr.Dr. J.C. de Mirandastraat 13-15
Phone numbers: +597 474666 / +597 410160 / +597 477487

182. It is also possible for the district authorities to expand its citizen service channels, improving its services and, thus, offering the citizen personalized service, in the districts located in the mining territories of Brokopondo and Sipaliwini.

183. To achieve the planned outputs and outcomes of this FSP, it will be necessary to engage various stakeholders, i.e.: National and District policymakers, mainly the Ministry of Natural Resources with support from other ministries. Their main interest is the achievement of the project?s overarching objective of development by carrying out the necessary implementation of national policies, under the mandate of the Minamata Convention, already ratified by Suriname and timely reporting of the Global Environmental Benefits (GEBs) to the GEF, private sector players (mining companies, impact investors, and participants in the ASGM mercury market) committed to becoming greener partners as well as integrating gender equality, socio-economic issues and considering relevant risks, including those amid the coronavirus (COVID-19) pandemic.

184. In short, the implementation of this FSP requires the active participation of numerous and diverse partners. The responsibility of these partners in project implementation and their support for the FSP?s development challenge, are presented in the Table below.

Partnerships of the FSP

Type	Group	Stakeholder	Role
Public Entities	National Government	Ministry of Natural Resources (MNR) through the Geology and Mining Department (GMD)	The Ministry of Natural Resources is involved in numerous activities regarding reform of the ASGM sector and has installed special divisions within its structure for this purpose. The Geology and Mining Department (GMD) is responsible for issuing mining permits. The Ministry will therefore serve as *Implementing Partner* for the PlanetGOLD+ Child Project to ensure a holistic approach and alignment with other related initiatives.
		OKGS (*Ordening Kleinschalige Goudsector*)	The Commission, in the MNR, will work on formalizing the ASGM sector by registering ASGM miners/mining operators, creating access to finance in collaboration with a bank at Brownsweg (Brokopondo) specifically catered to the sector, and testing a mercury-free gold extraction method for adoption and training throughout the sector.

Type	Group	Stakeholder	Role
		Community Engagement and Development Unit in the Ministry of Natural Resources	This Unit will integrate FPIC principles in national legislation and in all ministries; promotes awareness on the role and rights of Indigenous and Tribal Peoples and also closely involved in the process of concession issuance. (Outcomes 1 and 4).
		Ministry of Health (VG)	The Ministry of Health is involved in numerous activities concerning mercury use in gold mining areas. This FSP will seek alignment with the public health strategy, prioritizing vulnerable populations as defined in the Minamata Convention text (i.e., women of childbearing age, pregnant women and young children). This Ministry will coordinate capacity building of communities, schools, ASGM workers, workers in gold shops, and government officials about the health risks of mercury exposure and tools to handle the risks through collaboration with the Bureau of Public Health (BOG), Medical Mission (MZ), and Regional Health Services (RGD). This Ministry is also a member of the Project Steering Committee.
		Ministry of Spatial Planning and Environment (ROM)	The Ministry is responsible for the implementation of the Minamata Convention in Suriname. For this purpose an activity list is formulated and priorities are set, which will determine their course of action. This Ministry should be involved in M&E of the project to evaluate whether targets are reached in line with the National Action Plan. This Ministry is a member of the Project Steering Committee.

Type	Group	Stakeholder	Role
		Ministry of Economic Affairs, Entrepreneurship and Technological Innovation	This Ministry will develop technology-assisted supply chain due diligence; microfinance funds aimed at financing microenterprises in ASM communities under Component 2. This Ministry is also a member of the Project Steering Committee.
		Ministry of Regional Development and Sport (ROS)	The Ministry of Regional Development will participate with Indigenous Tribal Peoples and development of rural and hinterland areas. The Ministry will liaise with key Tribal and Indigenous traditional authorities where necessary, and enhance their participation in decision making for project implementation. This Ministry is also integrated in the Project Steering Committee.
		Ministry of Home Affairs	This Ministry, through the Bureau for Gender Affairs (BGA, formulates national gender policy and annual work plans; can help to include a gender perspective on the elimination of mercury. This Ministry is also a member of the Project Steering Committee.
	State Public Agencies	Foundation for Forest Management and Production Control (SBB) in the Ministry of Land and Forestry Management	Manages the National Forest Monitoring System (NFMS), of which the Sustainable Forestry Information System Suriname (SFISS) is part of. SBB also has a GIS Unit that collects field data and produces maps in support of this FSP.
		Central Bank of Suriname (CBvS)	The Bank will participate in the project's activities under Outcome 2 to design and explore financial, fiscal and other economic incentives for environmentally responsible management of mining sites, as well as on activities under Outcome 3 related to increasing the demand for gold that meets international standards and activities targeting gold buyers.

Type	Group	Stakeholder	Role
		National Institute for Environment and Development (NIMOS)	NIMOS, as the executing agency of the EMSAGS project, it will provide complementary advice at the district level ?through its field branches- on environment and mining community development matters; conduct environmental monitoring activities through the Environmental Planning and Information Office.
International Organizations	Development Agencies	UNDP	UNDP will be the GEF Implementing Agency and will oversee all activities of the project, in collaboration with the Project Steering Committee, the Project Management Unit and other partners. UNDP will be a member of the Project Steering Committee as Senior Supplier. UNDP will undertake supervision and oversight, monitoring and evaluation in support of all project outcomes, technical backstopping, and provide targeted services to support the National Implementation Modality.
		UNFPA	UNFPA promotes maternal and adolescent health, gender awareness and equality in its activities. UNFPA works closely with the Bureau of Gender Affairs on capacity strengthening activities for government agencies and the National Assembly, as well as the finance sector. (Gender Plan and outcomes 1 and 4)
	Embassies	Embassy of France	Agreement between Suriname and France on gold mining activities on the Marowijne River and to stop further pollution; working with the National Assembly through a project of French Development Agency to develop legislation to facilitate better enforcement for the illegal AGSM sector in Suriname. The Embassy is also willing to support pilot sites within the catchment of the Marowijne River under Components 1 and 3.

Type	Group	Stakeholder	Role
	Development Banks	World Bank	The Bank will help sstrengthen legal, regulatory and institutional frameworks; establishment of the Minerals Institute under Component 1 of the WB project.
Private sector	Large-scale Mining Companies	Iamgold Rosebel Gold Mines NV	This large mine operations will support by giving permission to introduce environmentally responsible mining techniques in their concessions. There is also an opportunity to engage LSM actors in their operation solutions at the frontline of the ASM-LSM interface.
		NEWMONT GOLDCORP Suriname	
		Grassalco Mining Company	Grassalco will work on establishing a mercury-free processing facility at Maripaston. Opportunities for knowledge exchange between Grassalco and ASGM operations might exist.
	Mining Alliances	Artisanal Gold Council (AGC)	This international agency will help establish two mercury free ASGM pilot sites within the concession of Iamgold, introducing a shaking table model; as well as information and knowledge sharing.
		Alliance for Responsible Miners (ARM)	Develop an economically, socially acceptable and feasible model for mercury free mining in collaboration with WWF-Guianas.
	ASGM and medium-sized mining organizations	Stichting Makamboa	Organization of artisanal miners working in the Nieuw-Koffiekamp area in/near the Iamgold Rosebel Mine.
		Stichting Houders Mijnbouw Rechten	Umbrella organization of registered small to medium-sized mining companies with official mining permits to be engaged under components 1 and 3.

Type	Group	Stakeholder	Role
		Suriname Environmental and Mining Foundation (SEMIF)	This Foundation works with the GoS to make mining operations more sustainable, responsible, and environmentally sound. SEMIF might be able to fund capacity strengthening of both the Ministry of Natural Resources and Indigenous and Tribal Peoples (ITP) communities for the implementation of Free, Prior and Informed Consent (FPIC) at community level.
	Banks and credit cooperatives	Credit cooperatives (e.g. De Schakel and cooperative bank Godo)	Opportunities to procure/retrofit equipment and invest in business under Component 2.
		Vereniging van Bankiers in Suriname	Umbrella organization of commercial banks. Opportunities for loans to procure/retrofit equipment and invest in business under Component 2.
	Public-Private alliances	Suriname Business Forum (SBF)	Set up microfinance funds; collaborates with Women in Business to train and finance women's ventures in ASM communities under Component 2.
		Suriname Extractive Industries Transparency Initiative (SEITI)	SEITI promotes transparency of extractive industries in general. For its reporting it requires more data and information and will promote data gathering on gold mining, which will help to build up an official ASGM Registry in Suriname, under Component 1.
Civil Society	Gender-oriented organizations	Stichting Projekta	Promotes democracy, human rights and gender equality; coordinates the BINI network of local NGOs; member of SEITI Board; can help to include gender, for the Gender Action Plan and components 2 and 4.
		Women in Business Network (together with the Suriname Business Forum, see above)	Network organization of female entrepreneurs; can provide capacity strengthening for women who want to establish microenterprises, for the Gender Action Plan and Component 2.

Type	Group	Stakeholder	Role
		Bureau Dienstverlening aan NGOs (BFN)	Provides (gender) training, assistance and micro-grants to small CSOs in rural areas and the interior, as well as individual (female) micro-entrepreneurs, for the Gender Action Plan and components 2 and 4.
	Environment-oriented organizations	Conservation International Suriname (CI-S) (Responsible Partner)	Support for upgrading outdated nature legislation; climate change adaptation; sustainable landscape approach to biodiversity conservation. CI?S can potentially form a bridge for sharing of knowledge and experiences between the GOLD projects in Guyana and in Suriname under components 1 and 4.
		Probios	Biodiversity conservation; environmental activism, in particular against illegal hunting and poaching, illegal gold mining and logging, mercury use, for Component 4.
		World Wildlife Fund Guianas (WWF-Guianas) (Responsible Partner)	Supports the GoS in alignment of national policy and legislation with regard to the Minamata Convention; promotes responsible mining; develops awareness raising materials; collects and makes available data.
Academy	Universities	Anton de Kom University of Suriname (AdeKUS) through the Departments of Environment, Geology, Herbarium and National Zoological Collection	The different departments at the AdeKUS will be involved in research and development, with access to laboratories for environmental analyses. AdeKUS will also be represented on the project's technical working groups to provide ongoing technical guidance for the implementation of the pilot projects.
		University of Applied Science and Technology (UNASAT) through the Mining School	To provide vocational training courses in mercury-free mining methods to people in the ASGM sector as well as training courses to national and district level supervisory bodies to enable effective supervision and auditing of the sector.
	Vocational education and training	NATIN	Secondary vocational training institute. Mining is offered as a field of study in the school?s 4-year program.

Type	Group	Stakeholder	Role
		Stichting Arbeidsmobilisatie en Ontwikkeling (SAO)	Vocational training for adolescent school dropouts and retraining for adults.
Other Relevant Groups	Women and youth	Organizations and companies working with women and youth in mining sites	Capacity strengthening and entrepreneurship skills.
	Indigenous and Tribal Peoples (ITP)	KAMPOS (umbrella organization of Tribal Maroon Peoples) and VIDS (umbrella organization of Indigenous Peoples)	Given the presence of indigenous people in the geographic areas of the project, the targeting strategy will also include provisions for a Free, Prior and Informed Consent (FPIC) procedure. In addition, an indigenous peoples? participation plan will be developed before implementation of activities in the demonstration sites under Outcome 1 as necessary. The organizations will be working together with all ITP communities in Suriname to develop FPIC protocols. These general protocols will be supplemented with a mining annex, to make it applicable to the sector, aligned with policy and procedures of MNR for the issuance of mining concessions. In addition, communities will be strengthened in decision making processes and formulating (legally binding) agreements. Given the presence of Maroon tribal communities near some of the identified pilot sites and the involvement of Maroon and Indigenous individuals in ASGM, a Free and Prior Informed Consent (FPIC) procedure will be developed with Tribal and Indigenous people?s participation, under Component 1.

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

185. As indicated above, Outcome 4 of this FSP is fully dedicated to raise awareness of project stakeholders on the elimination of mercury in the ASGM sector. Planned outputs 4.1 and 4.2 to achieve

this outcome include the design of an awareness raising campaign and information strategy and a programmatic monitoring of FSP global indicators (specifically, GEF Core Indicators 9 and 11), together with a review of on-going, activities to ensure successful project implementation in accordance with UNDP and GEF procedures, integrating awareness raising and gender sensitive training materials. As well noted above, these actions will be implemented considering a interactive communication with the GEF planetGOLD program, the UNEP Global Mercury Partnership, and other knowledge management platforms worldwide through the support of the UNDP Regional Coordination Unit/Chemicals for LAC.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

186. Gender equality is intrinsically linked to sustainable development and fundamental in transforming the ASGM sector into a vehicle for inclusive growth. Gender is an overarching variable, in the sense that it is often an intersection of identity factors, including sex, race, class, age, ethnic group, education level etc. Gender norms are established in different socio-cultural contexts, which ultimately determine what is expected, allowed and valued in a woman/man and girl/boy in specific settings. In ASGM systems, gender roles are learned through socialization processes that can change over time. Gendered perspectives will be captured, including data collection through baseline surveys documenting risks and opportunities for men, women, elders, boys and girls, or tribal and indigenous peoples affected by the project.

187. From the gender perspective, women and men in Suriname participating in the ASGM sector need more information on environmental stresses and more data?disaggregated by sex, age and other factors?is urgently needed to build policies that are more comprehensive. ASGM markets, specifically in the context of this project, are usually male oriented, from the supplier and the producer

perspectives, however, the final treatment of the amalgam demands a high level of protection of women from hazardous fumes and this end-use needs to be strengthened. Annex 11 (Gender Analysis) of the ProDoc describes the process of assessing the gender challenges for the project and how these may influence the project?s outcomes.

188. This FSP presents an opportunity to educate women on gender-related risks and maximize the potential benefits from participation in the ASGM sector. The project will mainstream gender equality and women?s empowerment throughout its components by ensuring that formalization efforts, access to finance and responsible markets and access to mercury free technologies benefit both men and women. Capacity building of ASGM actors will target both men and women through training and skills transfer.

189. To ensure that gender is mainstreamed effectively throughout the project, the PPG stage and the Social and Environmental Screening Procedure have identified all potential risks. In the PPG, this aspect was examined through extensive engagement and a Gender Action Plan developed to mainstream gender throughout the project?s activities, to upscale the opportunities for women to benefit from training and employment opportunities and develop gender-disaggregated data, accounting for multiple factors (i.e., race, ethnicity, nationality, education level, indigenous status). To ensure equality of results, the project will actively engage women and other vulnerable groups, as change agents and participants, not only as victims of inequalities or forms of discrimination.

190. The gender analysis (centered on sex and gender variables) is presented in Annex 11, allowed for the identification of the different roles and tasks that men and women perform in daily life and in the ASGM sector that put them at risk of exposure to mercury. The gender assessment also identified irregularities and power relations, inequities and inequalities and helped to recognize the causes of these inequalities.

191. Based on the outcomes of the Gender Analysis, a Gender Action Plan was formulated to help design project interventions (component/outcomes and activities) that would contribute towards women empowerment and to overcoming gender inequality. The findings from the gender analysis and the project interventions proposed as part of the Gender Action Plan, have been integrated into the overall project?s approach and the Project Results Framework. The main elements of the gender action plan, as related to the project?s four components, are summarized below:

Component 1: Formalization Optimization of ASGM

? Outcome 1: The trainings and workshops provided to the FSP stakeholders as part of their capacity building efforts and formalization process, will include gender sensitization training.

Component 2: Financial Inclusion and Responsible Supply Chains

? Outcome 2: Existing financial products of project partners will be assessed in terms of accesibility and suitability for women involved in ASGM mining activities; staff of the financial entities will be trained in the (re)design of these financial products so they suit women and men mining entities? needs; new financial products will be launched that meet the need of women mining entities, while the

awareness of women miners will be increased on the availability of various incentives and loan facilities that meet their needs (through awareness raising events).

Component 3: Enhancing Uptake of Mercury-free Technologies
? Outcome 3: The socioeconomic baseline surveys and mercury/gold mass balance inventories conducted for each of the three (3) priority project sites, will also collect sex-disaggregated data; of the mining entities selected for project participation at least 20% will contain women miners that will be supported in formalization efforts and in improving ASGM practices; the comprehensive ASGM training curriculum that will be developed with project support and will be used to train miners (men and women), will contain a module on gender awareness and gender responsive assessments in ASGM to encourage a culture change in how women are being viewed in the mining sector; women miners will also receive separate leadership training.
Of the project mining entities supported in their formalization efforts (e.g. gaining access to legal subsurface rights, obtaining a permit to establish/operate a processing plant; designing processing and waste management plan) at least 20% will contain women miners or be women mining entities; the project will also support women?s groups interested in mining and the establishment of ASGM associations/cooperatives.

Component 4: Knowledge Sharing and Communication Outreach
? Outcome 4: The awareness raising plan that will be developed and implemented as part of the project will contain important elements related to gender. The project?s gender expert will ensure that the developed awareness raising plan and its activities meet the needs of female and male miners.
The project will conduct a Gender Assessment of project impact as part of the Mid-Term Review. Based on the results of the Gender Assessment and other recommendations coming out of the MTR, the project might further improve its gender related interventions.
On a quarterly basis, project results and information on project progress will be communicated to the GEF planetGOLD Global component. The project?s gender expert will support the project in identifying gender specific results and how to present these in reports and publications that summarize results, lessons-learned, best practices and experiences.

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

192. For this purpose, and in accordance with the proposed Gender Action Plan:

? Each activity was analyzed to include the necessary elements to guarantee the reduction of identified gaps and establish more pro-active actions when appropriate.
? Specific activities that focus on the empowerment of women have been included (capacities, and access to planning and decision-making processes).
? Two indicators have been included to help measure progress in this field and will be monitored as part of the M&E process .
? A budget has been included to guarantee the measures and actions to be taken. The strengthening of the project team's capacities is planned to ensure the adequate mainstreaming of the gender perspective into all project activities.

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

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes
4. Private sector engagement

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

193. The project has a significant number of private sector partners (please, refer also to Section 2 ?Stakeholders?). A good sign of private sector engagement in the project?s implementation is that 52% of the project?s co-financing (USD10 million) is being provided by the private sector; as such it can be concluded that Private Sector Engagement for this project is substantial.

194. The involvement of the private sector in the project will be two-fold. Firstly, regulatory, enforcement and awareness raising activities supported by the project will have as the main target the private sector through various avenues including large scale mining operators, financiers, technology suppliers, among others. The private sector partners who are engaged in the project?s implementation along the ASGM supply chain can be grouped as follows:

Private sector and sectors to intervene:
? Large-scale mining companies like NEWMONT GOLDCORP Suriname and Iamgold Rosebel Gold Mines NV
? Banks and credit cooperatives like Vereniging van Ba, De Schakel and Cooperative Bank Godo
? Gold refineries, like ARCOR-HERAEOUS

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):

195. A group of risks has been identified and must be taken into account during the execution of the project. As per standard UNDP requirements, the National Project Coordinator will monitor risks quarterly and report on the status of risks to the UNDP Country Office (CO) in Suriname. The UNDP CO will record

progress in the UNDP ATLAS risk log (UNDP Risk Register). Risks will be reported as critical when the impact and probability are HIGH (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual Project Implementation Report (PIR).

196. The key risks that could threaten the achievement of project results have been summarized in the Table below. For further details of this analysis, please refer to the UNDP Risk Register in Annex 7, and an assessment of the social and environmental risks identified in the SESP (Annex 6).

Risk Class	Type of Risk	Description of the Risk (Summary)
Social and Environmental (SES)	The project could inadvertently exacerbate or reinforce existing inequalities or discrimination on affected populations, particularly people living in poverty or marginalized individuals (including Indigenous and Tribal Peoples).	This FSP may have adverse effects in terms of inequality or discrimination on the affected populations, particularly people living in poverty or marginalized individuals.
	Exclusion of certain groups of miners including indigenous peoples from participating in project demonstrations exacerbating human rights issues and leading to conflict.	The Project?s pilot activities, however, will not lead to physical displacement or resettlement of people because pilot projects under the proposed TIER 1 project sites have been selected by a rigorous screening of existing ASGM operations willing to switch to mercury-free processing techniques, following the due diligence regarding selection and validation.
	Potential loss of income for miners who decide not to take part in the Project or otherwise transition to sustainable mining practices.	The project does not foresee a displacement or resettlement risk and it is not anticipated that the project would lead to a restriction in access to land or resources that are important to means of livelihood or economic well-being. Therefore, while Standard 5 is not triggered, a precautionary approach is applied as there is a chance that some miners and workers may experience a loss of livelihoods because they decide not to participate in the project activities or otherwise transition to sustainable mining practices.
	Project inadvertently perpetuates or increases risk of sexual violence and harassment against women.	This practice is common and widespread in workplaces in the ASGM sector and may persist during and after project implementation if not specifically addressed.

	Project inadvertently exacerbates or reinforces existing discrimination against women.	Existing discriminations against women may be recreated, especially regarding access to opportunities and benefits and/or could entail restrictions vis ? vis access to resources and assets.
	Natural disasters could eventually affect the locations and operations where the planned pilot interventions are carried out	Depending on the location of the gold processing plants, the adverse impact could be on natural habitats if near a protected area, near areas with important biological significance (e.g. areas with many endangered species/unique habitats, restricted range endemics, etc.), or local community if near residences.
	Negative impact of construction and operation of new processing plants and other facilities supported through the project on natural areas.	The gold processing plants may be located on or near natural habitats or protected areas or near areas with important biological significance (e.g. areas with many endangered species/unique habitats, restricted range endemics, etc.). Within mining, this creates risks for deforestation of the country?s vast forest coverage (more than 90 percent of national territory) due to illegal gold mining, as well as widespread contaminative usage of mercury for gold extraction by artisanal and small-scale miners.
	Construction of new processing plants and other facilities supported through the project negatively affect community health and safety.	Depending on the location of the gold processing plants, may be near a local community (including ITP). This creates risks of potential accidents and injuries during construction, contamination of air and water nearby leading to detrimental health impacts on the local community.
	Damage to cultural heritage sites from construction and operation of new processing plants and other facilities supported through the project.	Demonstration sites where new processing plants or other facilities are planned may be located on or near sites of cultural heritage importance (possibly for ITP), risking causing damage to these sites either from excavation works during constructions or air pollution during operation.
	Pollution and emission risks from mining operations or processing.	The main environmental risks and health risks are posed by the use of mercury in the ore extraction process, in tailings, and in siltation of rivers.
	Health and safety risk for the workers in mines and processing plants whose construction and operation is supported by the project.	This could occur if miners and workers do not abide by a safety protocol and use the essential Personal Protective Equipment (PPE) appropriate for the work they perform. Miners may also be exposed to a range of emergency and non-emergency health issues that result from working conditions and the social context of work. In addition, health and safety of workers may be impacted during construction and operation if proper measures are not implemented and adequate PPE are not worn by the workers.

	Participation of minors in hazardous activities and other working conditions in contravention with national standards and ILO conventions at pilot sites.	Child labour is common in poor and rural areas in general and in the ASGM sector in particular.
	Potential community spread of COVID-19 during project implementation.	The frequent illegal entrance by gold miners from COVID-19-prone neighboring countries (i.e. Brazil and French Guyana) increases the risk to ITPs in contracting the virus, putting additional pressure on their already vulnerable position.
Financial	Uncertainties due to cost recovery	Current operational costs of the miners include a substantial amount to cover the costs due to the use of mercury, however, mercury-free gold extraction processes may indicate a heavier burden in order to cope with higher upfront costs or unable to cope with their already debt condition.
	Stressful national economic context	A very critical context may be observed during the FSP execution related to the performance of the national economy, particularly considering unexpected civil unrest, as well as and population migration to rural areas increasing pressure on natural ecosystems and the risk of more contacts between human and wildlife.
	Corruption as collateral practice in the ASGM value change	Vested interests a series of illegal economic activities such as prohibited trade of mercury, labor exploitation of women and children, and illicit gold transactions.
Operational	Limited capacity development of national partners	This project, while being highly innovative, may require new knowledge and skills from the stakeholders involved at the national level. This could generate technical difficulties for the development of the project activities.
Organizational	Limited capacity in project monitoring	Lack of adequate implementation of the project's follow-up and monitoring plan, deficiency in the evaluation of indicators, non-compliance or failure to elaborate action plans, leading to deviations in the expected results of the project.
Strategic	Poor information outreach throughout the project implementation	Public opinion and the media may generate an unfavorable perception of the project.

197. It is important to note that, if required, the risk analysis should be adjusted when more information becomes available during project implementation.

198. This FSP has also considered, as part of its risk management assessment carried out during the PPG, several coronavirus (COVID-19) pandemic threats. Incremental project activities will require, by the PMU, regularly scanning for emerging risks across the FSP?s activities to ensure to continue delivering the expected outputs, prevent unintended harm because of the planned activities, and proceed quickly with adaptive management response under this rapidly changing context.

199. For this project, the following three risks have been identified due to this pandemic:

Social (COVID-19) risk: Potential harm to people and the environment.
Description: Potential health and safety, including contagious exposure for stakeholders the FSP has planned to engage with, including the staff of the PMU and institutional partners, plus third party workers where the field project demonstrations will take place.
Management strategy: This strategy will be implemented in twofold: i. develop innovative virtual and remote methods for working and implementation, as much as possible, and ii. since the World has not yet found a vaccine for this virus, for the implementation of those activities that require social gathering, the FSP?s PMU, with assistance from the UNDP CO, will look at COVID-19 as a public health crisis, implementing the solutions for which are social distancing, careful sanitization, widespread testing, access to safety equipment, and immediate competent medical care, if needed.

Financial (COVID-19) risk: Reduce the committed cofinancing by the project partners.
Description: Potential delays of anticipated cofinancing, both in kind and cash sources, due to COVID-19 corporate response, especially from the private sector stakeholders that need to react immediately to adjust their cash flows to cover unexpected labor costs and significant drop of business revenues.
Management strategy: Regular monitoring of this risk by the PMU and carry out period assessment of changing the market context, both at the national and international levels, to ensure the project remains a relevant and trusted partner of the private sector stakeholders.

Organizational (COVID-19) risk: Limited domestic travel.
Description: Immediate impacts from domestic travel restrictions per United Nations and the Government of Suriname requirements and unavailability of land and air transport means.
Management strategy: Develop innovative virtual and remote methods for working and implementation, as much as possible.

200. During the project implementation, these three COVID-19 related risks should be regularly screened, managed and reported to ensure the Project Coordinator has relevant data from across all activities for timely and effective decision-making and to determine when escalation is required. As part of its track-monitoring role of GEF projects, UNDP, through the Country Office, will track and monitor this global outbreak and its immediate implications for this FSP; if necessary, the UNDP Atlas Risk Register (Annex 7) will be updated consequently. Likewise, indicators convened under the Project Results Framework (Section V) will be adjusted. These two actions will be also tracked, monitored and reported in the Mid Term Review.

201. Environmental and social risks have been discussed with the executing partners and with a variety of stakeholders through the workshops held during the PPG . These risks were discussed and were analysed in

the ?Social and Environmental Screening Procedure? (SESP, Annex 6) and the ones rated as MODERATE have been reviewed in more detail within the ?Environmental and Social Management Framework? (ESMF, Annex 10). An assessment and ESMP (and site-specific plans if necessary) must be prepared and mitigation measures in place, prior to the initiation of any project activity that may cause adverse impacts, in particular any actions that may lead to or cause environmental and health impacts and impacts on indigenous peoples.

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.

210. The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. In order to ensure UNDP?s ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.

211. In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

212. Specific responsibilities of the Project Board include:
? Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
? Address project issues as raised by the project manager;
? Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
? Agree on project manager?s tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager?s tolerances are exceeded;
? Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
? Ensure coordination between various donor and government-funded projects and programmes;
? Ensure coordination with various government agencies and their participation in project activities;
? Track and monitor co-financing for this project;
? Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
? Appraise the annual project implementation report, including the quality assessment rating report;
? Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
? Review combined delivery reports prior to certification by the implementing partner;

? Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
? Address project-level grievances;
? Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
? Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

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

a. Project Executive: It is an individual who represents ownership of the project and chairs the Project Board. The Executive is normally the national counterpart for nationally implemented projects. The Project Executive is the Secretariat of Environmental Quality of the Ministry of the Environment, who will chair the Steering Committee.

b. Beneficiary Representatives: Individuals or groups representing the interests of those who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often civil society representative(s) can fulfil this role. The Beneficiary Representatives are the large power utilities, large private industries and sensitive sites. If necessary, and in face of specific contexts, other institutions could be invited to collaborate on time with Board.

c. Development Partner: Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project. The Development Partner is UNDP.

d. Project Assurance: UNDP performs the quality assurance role and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. UNDP provides a three ? tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels. Project assurance is totally independent of the project execution.

e. Technical Working Group / Advisory Committee: This is a group of technically oriented stakeholders, that will voluntarily provide support and advisory services to the PMU for the carrying out of specific activities. The Technical Working Group will be established during the initiation phase; after that, it will meet once a year, including but not limited to:

- Ministry of Health (VG)
- Ministry of Spatial Planning and Environment (ROM)
- Ministry of Regional Development and Sport (ROS)
- Ministry of Economic Affairs, Entrepreneurship and Technological Innovation
- LSM representatives
- NGO representatives
- Anton de Kom University of Suriname (AdeKUS)

- Stichting Houders Mijnbouw Rechten
- University of Applied Science and Technology (UNASAT)
- ARM
- AGC
- EMSAGS

214. Project extensions: The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs during the extension period must be covered by non-GEF resources.

Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

215. There is a group of GEF-financed projects and other initiatives in Suriname currently under implementation related to the development challenge that this project is also addressing, which could provide some additional support to strengthening this institutional partnership approach. Thanks to the involvement of the institutional partners in some of them, under the leadership of the Ministry of Natural Resources, it seems of mutual benefit the achievement of the outcomes for this project Specifically, this FSP will ensure coordination and count on the capacity built and knowledge gathered from the concurrent projects that are already in progress, as shown in the Table below:

Project	Agency	Main relevance for this FSP
The planetGOLD Global Program	GEF/CI	This Program aims to support the participating countries in fulfilling their commitments under the Minamata Convention. Cost-effective knowledge management practices related to formalization, technical solutions access to financing and awareness raising developed by the first group of participating countries will be adapted to the Suriname context through this FSP. One of the key inputs of this Program to this FSP is ?innovation?, i.e.: the market does not see mercury usage in isolation, but rather as one of many factors that need to be tackled if they are to trade gold as ?ethical?. This FSP will build on the GEF planetGOLD Global Program through the use of an existing knowledge platform, lessoned learned, capacity building materials, databases, proven technologies and market opportunities. Through outputs of Component 4, it also enhances the scope of this global platform.

Global Knowledge Management and Exchange of Child Project Results Through Networking and Outreach Activities for the GEF GOLD Program	GEF/UNEP	This GEF project, implemented by UNEP, together with the National Resources Defense Council (NRDC) and UNIDO, aims to facilitate the sharing of technical information and engage in outreach to relevant stakeholders to reduce and where feasible eliminate mercury use in ASGM. It has been initially designed to ensure that lessons learned from the eight individual planetGOLD+ country child projects will be captured and shared between the child projects and other ASGM stakeholders globally. This knowledge sharing platform is assisting countries where ASGM is present to increase capacity to formalize ASGM and approach the process in a holistic manner; provide technical advice with respect to access to finance for the ASGM sector; and increase technical capacity to support mercury reduction efforts through a broad range of guidance material to implement practical projects, which will be consulted during the implementation of the pilot projects of this FSP.
The planetGOLD Global Forum	GEF/UNEP	This FSP will be engaged in the planetGOLD Global Forum by participating in a two-yearly learning and sharing event that will facilitate face-to-face meetings (in line with COVID-19 safety protocols) between ASGM experts and practitioners, governments, gold buyers and miners in support of ongoing of experience exchanges and development of global expertise and capacity building on ASGM issues in Suriname, in order to influence the global ASGM dialogue agenda and policy development.
Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas	OECD	OECD, which launched in 2016 the ?Sourcing Gold from Artisanal and Small-Scale Miners? policy, will provide practical guidance on how companies should engage and source gold from ASGM miners; reference material that this FSP will access during its implementation.
Fairmined and Fairtrade Gold	ARM	The Alliance for Responsible Mining (ARM) and Fairtrade International have developed international standards for best ASGM best practices, i.e.: ?Fairmined? and ?Fairtrade Gold?, in a move to raise public awareness on the positive impact of their consumer choices. These standards require communities to be formalized and respect social and environmental minimum requirements. ARM has further developed with Code for Risk Mitigation for ASGM engaging in Formal Trade (CRAFT), which is a code for progressive compliance for ASM producers. The above actions will also serve as guidance to the implementation of the activities foreseen in this FSP.

Improving Environmental Management in the Mining Sector of Suriname, with Emphasis on Artisanal and Small-Scale Gold Mining (EMSAGS/GEF-ID 9288)	GEF/UNDP	The objectives of EMSAGS are to improve environmental management in the mining sector of Suriname, with the emphasis on independent and artisanal small-scale gold mining and to promote uptake of environmentally responsible mining technologies, focusing on the following outcomes: institutional and technical capacity of the main stakeholders; uptake of environmentally responsible artisanal and small-scale gold mining practices and increase knowledge availability and sharing at national and regional scales on environmentally responsible artisanal small-scale gold mining. Overall coordination between this FSP and EMSAGS will be a major responsibility of the Project Management Unit, in close coordination with the Implementing Partner, MNR.
Suriname Competitiveness and Sector Diversification (SCSD)	World Bank	This WB project, also implemented through the Ministry of Natural Resources and the Ministry of Trade, Industry and Tourism, has one main component, i.e.: ?*Strengthening the mining sector governance, transparency, accountability, and Administration*?, which focuses on supporting improvements to the legal, regulatory, and institutional framework governing mining in Suriname. Overall coordination between this FSP and WB/SCSD - regarding the activities related to ASGM- will be a major responsibility of the Project Management Unit, in close coordination with the Implementing Partner, MNR.
The Amazon Sustainable Landscapes (ASL)	GEF/UNDP	This initiative is to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover. In Suriname, the project will be implemented by the Ministry of Land and Forest management and will focus on four strategic project components: (1) improved management of protected landscapes, (2) strengthened, gender-inclusive, participatory management o productive landscapes, (3) policies/incentives for protected and productive landscapes, and (4) knowledge management, learning, and monitoring and evaluation. This project will be executed in two major landscapes of the Surinamese Amazon Biome: the Saamaka-Matawai and the Coeroeni-Paroe Landscapes.

World Wildlife Fund Guianas	WWF-Guianas	Project WWF with the objective ?*to reduce mercury contamination in the Guianas by phasing out mercury use in the gold mining sector and contributing to reduce mercury emissions from mining deforestation by 2025*? and includes three components: i. Support the government in alignment of national policy and legislation with the Minamata convention. WWF?Guianas will also establish national and regional platforms to facilitate implementation; ii. Develop an economically, socially acceptable and feasible model, with support from the Alliance for Responsible Mining (ARM), for mercury free mining, including the establishment of two pilot sites in Suriname and two in Guyana; iii. Collect, analyze and make mercury related data available for the public through an online repository.

216. UNDP organizes on a yearly basis face-to-face South-South exchanges among all UNDP GEF Chemicals and Waste projects and programmes in the Latin American and the Caribbean region. These allow government counterparts, project coordinators and experts to exchange experiences and lead to long-term collaboration, exchanges and partnerships between projects and countries. Projects that participate in these exchanges include UNDP/GEF projects like those implemented in Colombia, Ecuador, Honduras and Uruguay (among others), which also focus specifically on Mercury issues and other POPs.

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.

217. This project is consistent and aligned with National Priorities taken up in the Minamata Initial Assessment Report of Suriname (MIA) under the Minamata Convention, published in 2018, which represents an important opportunity to address mercury pollution problems in the country, by putting un place emission and release control measures of mercury containing mercury containing waste, and reduce and where feasible, phase out the use of mercury and mercury compounds in, with particular focus on the Artisanal and Small-Scale Gold Mining (ASGM) sector.

218. For the global development agenda, this FSP is aligned with the recently developed Agreement of the Principle 10 of the Rio Declaration, which states that environmental issues are best handled with the participation of all concerned citizens, at the relevant level, recognizing that information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes.

219. Improving the sound life-cycle management of chemicals and, in particular, the management of mercury, and other hazardous chemicals will help the Government of Suriname to work towards achievement of the Sustainable Development Goals (SDGs). The SDGs most relevant to this project are:

SDGs and their relevance to this FSP

SDG	Relevance to this FSP
SDG 1: End poverty in all its forms everywhere.	By introducing alternatives, best practices and techniques to minimize the use and release of mercury, and improve miner incomes thus alleviating poverty and address some of the underlying socio-economic challenges that are at the core of existing practices that use mercury in the ASGM sector.
SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.	By decreasing the use of mercury and its release into the environment from the ASGM sector, indirectly halting and reducing the build-up of mercury in aquatic food chains that indigenous and traditional local communities disproportionately upon as sources of protein.
SDG 3: Ensure healthy lives and promote well-being for all at all ages.	By reducing the use of mercury in the ASGM sector, and minimizing its releases, to ultimately protect human and environmental health.
SDG 5: Achieve gender equality and empower all women and girls.	At the policy formulation level, inclusivity and gender mainstreaming have been included to highlight that women and girls as historically vulnerable populations must be a part of this process and have their interests and concerns accounted for in ASGM related policies. This FSP provides an opportunity to ameliorate some of the inequities in political power and access to and control over resources that women in this sector encounter.
SDG 6: Clean Water and Sanitation.	By protecting sea and freshwater resources from mercury contamination, especially nearby rivers, fresh water community intake facilities and marine zones through promotion of environmentally responsible practices that reduce siltation and avoid the use of Hg in mining activities.
SDG 8: Decent work and economic growth.	Through supporting the development of workplace safety standards and procedures, introducing personal protective measures, and addressing the underlying socio-economic causes that lead to vulnerability due to livelihood informality and limit transition from mercury in the ASGM economy. More recently, of relevance is to contribute to the mitigation of COVID-19 impacts in ASGM mining communities and including mine-level safeguards and containment measures.
SDG 12: Ensure sustainable consumption and production patterns.	Through the reduction of mercury pollution and mercury-containing wastes by introducing alternative processes and technologies that are mercury-free, cost-effective and in line with responsible mining practices that are resource efficient and reduce pollution hazards.
SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	Through decreasing the use and release of mercury from ASGM activities, preventing mercury from entering water sources, and reducing the build-up of mercury in the food chain.
SDG 15: Life on land.	By optimizing old mine sites instead of venturing into new mines and further clearing forests, reducing biodiversity loss and by planning for mine closure and thus promoting revegetation through cost effective approaches, such as applied nucleation and assisted regeneration.

220. The project is also consistent with national strategies and plans or reports and assessments under relevant conventions from below:
? American Convention on Human Rights (including the jurisdiction of the Inter-American Court on Human Rights (IA Court) binding and applicable specifically to Suriname)
? Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)
? United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
? Minamata Convention on Mercury
? Stockholm Convention On Persistent Organic Pollutants
? United Nations Framework Convention on Climate Change (UNFCCC)
? United Nations Convention on Biological Diversity (UNCBD)
? Rotterdam Convention on the Prior Informed Consent
? Cartagena Protocol on Biosafety
? Amazon Cooperation Treaty (ACT)

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.

221. The global project of planetGOLD focuses on knowledge management and increased access to information among project partners and the wider ASGM community, particularly on the topics of formalization, market access and technology transfer; this Child Project falls under this guidance. Through the implementation of communication strategies and activities, it will also inform and educate the general public and decision makers in Suriname on the mayor issues, challenges and solutions related to the ASGM sector.

222. The knowledge management approach will build on the planetGOLD platform, which will continue to be the hub of the knowledge gathered by the planetGOLD and GOLD+ child projects. Learning and exchange amongst different country projects will be enabled by global events supported by the GOLD+ global project, such as the Global Fora (continuing the Global Fora that are organized by planetGOLD). The Knowledge and Communication component of GOLD+ will also include an increased focus on maximizing the impact of communications at the local level within countries through the implementation of Component 4 of this FSP. This component proposes 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.

223. Under the foreseen activities in Output 4.1, the project will implement a ?M&E and adaptive management applied to capture lessons learned, emphasizing prospecting, sustainable mercury-free gold methods, and sound tailings management?, making use of social media, the preparation of publications, scientific papers, articles, lessons learned reports, among else, (detailed in Annex 9 ?Stakeholder Engagement Plan?). In particular, knowledge ?both at the national and international fora- will be gathered, managed and disseminated through the list of incremental activities which will capture lessons-learned and experiences and publish them in publications and lessons-learned reports (Output 4.1, Activities i. and ii.).

The timeframe for the implementation of these activities can be found in Annex 4 -Multi-year Work Plan- (attached to the UNDP Project Document).

224. This FSP in Suriname will provide access to information and opportunities for exchange among Parties and other ASGM Practitioners by informing the GEF planetGOLD projects as well as the wider ASGM community about experiences in formalization, access to finance and market and technology transfer, including but not limited to access and use information, technical materials, guidance, and lessons learned to assist the development and implementation of the Global Program.

225. Component 4, Output 4.1, will also help educate the general public in Suriname about ASGM as a global issue. This output will use targeted communication to garner support among the public, gold consumers, governments, and the financial sector, for sector reforms, increased access to finance and improved markets for ASGM gold. It will create outreach materials that are highly accessible to both specialized and general audiences, and deploy these assets through a carefully planned media strategy. This Output will also coordinate a specific public relation campaign in conjunction with a downstream user or users of gold, specifically jewelers, to increase awareness and demand for responsible gold trade.

226. The communication strategy should serve as a platform for dissemination, providing lessons learned and technical information material for other countries to implement large-scale, best practices for the elimination of mercury, with broad dissemination at the state level. All knowledge management activities will be gender mainstreamed; this includes integration of gender dimensions into the FSP?s training activities, for instance, through the presentation of sex-disaggregated data, activities related to reducing gender, and gender mainstreaming in training programs in line with the Gender Action Plan.

227. In addition to that, it should be noted that UNDP annually organizes meetings for Government Officers and Project Coordinators of all the UNDP-GEF funded Chemicals and Waste Projects in Latin America and the Caribbean. In these meetings, lessons learned, and best practices are shared among all the projects in this region.

228. Finally, UNDP will ensure that relevant information and lessons learned will be collected as input for the Mid-term Review and Terminal Evaluation.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

229. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation, supported by Component 4: (Output 4.1, Activities i.). If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex 5 details the roles, responsibilities, and frequency of monitoring project results.

230. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is

responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

231. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[1][1]. The costed M&E plan included below, and the Monitoring plan in Annex 3, will guide the GEF-specific M&E activities to be undertaken by this project.

232. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

233. The project results as outlined in the Project Results Framework (Annex A) will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

2343. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report.

GEF M&E requirements	Indicative costs (US$)	Time frame
Inception Workshop	*$15,000*	Within 60 days of CEO endorsement of this project.
Inception Report	None	Within 90 days of CEO endorsement of this project.
M&E of GEF core indicators and project results framework	*$10,000*	Annually and at mid-point and closure.
GEF Project Implementation Report (PIR)	*$10,000*	Annually typically between June-August
Monitoring of Stakeholder Engagement Plan, Gender Action Plan, Environmental and Social Safeguards	*$60,000*	On-going.
Supervision missions	None	Annually.
Independent Mid-term Review (MTR)	*$30,000*	March, 2024
Independent Terminal Evaluation (TE)	*$30,000*	January, 2027

TOTAL indicative COST	*$155,000*	

[1] See https://www.thegef.org/gef/policies_guidelines

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)?

235. The project?s goal is to minimize risks to mercury exposure to human beings and the environment due to the use of mercury in the ASGM sector in compliance with the Minamata Convention, recognizing the multi-dimensional impacts of artisanal and small-scale gold mining on the environment, health and poverty.

236. At the district level, the implementation of coordinated demonstration actions with the private sector in the field will show the opportunities of institutional integration and coordination, private-driven investments, will demonstrate that the positive results of these pilot interventions would serve to improve and enforce current regulation for environmentally sound management of mercury in the ASGM sector. Innovative market interventions offer alternative solutions to other LAC parties of the Minamata Convention and will follow and integrate these strategies in their efforts to phase out chemical hazardous substances. For this, a public awareness and communication strategy for the elimination of mercury, related wastes and safer alternatives should result in direct gains for the citizens and the environment.

237. Additional economic and social benefits that will be brought on by the project:

? Reduced health impact from the exposure to hazardous chemicals, particularly the use of mercury for the amalgamation of gold for gold mining as well as for gold extraction. The project estimates to increase awareness of about 300,000 people, of which 150,000 females and 150,000 males.
? Considered newly identified risks related to the global pandemic amid the COVID-19 virus that may affect the implementation of the project, especially to Indigenous and Tribal Peoples.
? Job creation through opportunities enhanced in the deployment of mercury-free technologies.
? Improved policy, regulatory, monitoring and analysis frameworks, to safeguard human health and the environment.

How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

238. In the BAU national context of the Suriname economy, limiting the country?s capacity on elimination of mercury in the ASGM sector will put a heavy burden in the compliance of international regulations committed by this country with the Minamata Convention. The Global Environmental Benefits (GEB) of

the project at the CEO endorsement stage, are the same as presented at the PIF stage. The positive impacts of the project will include the following reduction:

- Eight (8) tons of mercury avoided.

The GEF GOLD+ mercury reduction target for Suriname is 8 t over five years. Components on formalization, financial inclusion and knowledge sharing are measures to ensure results are sustained, resulting in 24 t of mercury avoidance 10 years after project. In Suriname, for every Kg of gold produced, an estimated 3 Kg of mercury is emitted into the environment (NAP). To reach the GEF reduction target an estimated 2.6 t of mercury free gold would need to be produced during the project life span.

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
	High or Substantial		

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.

This ESMF has been prepared for the submission of the UNDP project proposal to the GEF for the purposes of assisting in the assessment of the project?s potential environmental and social impacts. Preliminary analysis and screening conducted during the project development phase via UNDP?s Social and Environmental Screening Procedure (SESP) identified potential social and environmental risks associated with project activities including in particular, to maximize the potential of the Artisanal and Small-scale Gold Mining (ASGM) sector in Suriname in a way that the use of mercury for gold production will be reduced and banned overtime.

This screening resulted in the identification of 13 risks of which one was considered ?low?, six were considered ?moderate? and six were considered ?substantial?; resulting in an overall social and environmental risk categorization of ?Substantial? for this planetGOLD+ Project.

This ESMF has been developed based on this project risk categorization to specify the processes that will be undertaken by the Project Management Unit (PMU) for the additional assessment of potential impacts and identification and development of appropriate risk management measures, in line with UNDP?s Social and Environmental Standards (SES).

This ESMF identifies the steps that will be followed during the inception phase of the project implementation:

i) An Environmental and Social Impact Assessment (ESIA) for the pilot demonstrations under Component 3;

ii) Based on the assessment, preparing and approving appropriate management plans for avoiding, and where avoidance is not possible, reducing, mitigating, and managing adverse impacts, via preparation of site-specific Environmental and Social Management Plans (ESMPs), to be carried out during the implementation of each pilot demonstration. The pilots will not commence until the respective site-specific ESMP is in place,

iii) Ensuring that compliance with the *?Environmental Framework Law?* which specifies that strengthening Free, and Prior Informed Consent (FPIC) is being applied in decision making processes concerning habitats and living areas of indigenous and tribal peoples.

This ESMF also details the roles and responsibilities for its implementation and includes a detailed budget and monitoring and evaluation plan.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
PIMS_6557_GEFID_10615_PlanetGOLD2_Child_Suriname_Annex 10 -ESMF	**CEO Endorsement ESS**	
PIMS_6557_GEFID_10615_PlanetGOLD2_Child_Suriname_Annex 6 -SESP	**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).

This project will contribute to the following Sustainable Development Goal (s): SDG 1 (End poverty in all its forms everywhere), **SDG 2** (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), **SDG 3** (Ensure healthy lives and promote well-being for all at all ages), **SDG 5** (Achieve gender equality and empower all women and girls), **SDG 6** (Clean Water and Sanitation), **SDG 8** (Decent work and economic growth), **SDG 12** (Ensure sustainable consumption and production patterns), **SDG 14** (Conserve and sustainably use the oceans, seas and marine resources for sustainable development), **SDG 15** (Life on land).				
This project will contribute to the following country outcome (UNDAFUNMSDF/CPD, RPD, GPD): *Inclusive and sustainable solutions adopted for the conservation, restoration and use of ecosystems and natural resources. (A Sustainable and Resilient Caribbean)* *i. Output 3.1: National and subnational institutions enabled to define and implement policies/plans/strategies for sustainable management of natural resources, ecosystem services, chemicals and waste.* *UNDP Strategic Plan Output: 2.1.1.* *Output: 1.4.1 Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains/ 1.4.1.2 Additional natural resources that are managed under a sustainable use, conservation, access and benefit-sharing regime: (f) Amount of chemicals reduced or disposed (metric tons)*				
	Objective and Outcome Indicators **(no more than a total of 20 indicators)**	**Baseline[1]** *Must be determined during PPG phase*	**Mid-term Target[2]**[2] *Expected level of progress before MTR process starts*	**End of Project Target** *Expected level when terminal evaluation undertaken*

Project Objective: To reduce the use of mercury and increase incomes in the ASGM sector in the participating countries through a holistic, multisectoral integrated formalization approach, and increasing access to finance leading to adoption of sustainable mercury free technologies and access to traceable gold supply chains.	*Indicator 1* (Mandatory GEF Core Sub-indicator 9.2) Tons of mercury avoided. *(In accordance with Indicators 1.1.1 and 3.2.1 of the planetGOLD Programme Indicators)*	88 tons of Hg used annually.	One (1) ton of Hg avoided by the project.	8 tons of Hg avoided by the project[3][3].
	Indicator 2 (Mandatory GEF Core Indicator 11) Number of direct project beneficiaries disaggregated by gender as co-benefit of GEF investment[4][4].	In the framework of the PPG phase workshops, 111 direct project beneficiaries have participated: Female: 60 Male: 51	1,100 direct project beneficiaries (miners and local community members) for which the risk of mercury exposure has been reduced. Female: 505 Male: 595	91,182 direct project beneficiaries (miners and local community members) for which the risk of mercury exposure has been reduced. Female: 45,446 Male: 45,736
Project component 1 ***(no indicators required)***	**Formalization optimization of ASGM**			

Project Outcome[5][5] 1 A higher degree of formalization in the sector through multisectoral, integrated approaches and capacity building of formalization actors	*Indicator 3* Number of miners supported in their formalization process (disaggregated by gender). *(In accordance with Indicator 2.1.1 of the planetGOLD Programme Indicators)*	Insufficient institutional capacity at the regional and local levels for the implementation of policies and regulations that support formalization in the ASGM sector.	200 miners (150 men/50 women) have strengthened their capacities to assess, plan and implement formal mercury-free interventions in the ASGM sector.	500 miners (400 men/100 women) have strengthened their capacities to assess, plan and implement formal mercury-free interventions in the ASGM sector.
	Indicator 4 Number of policies, policy instruments, or regulatory frameworks influenced (at national or sub-national level) to improve ASGM formalization. *(In accordance with Indicator 2.1.2 of the planetGOLD Programme Indicators)*	Mining Act Proposal provides for ASGM but regulations to make it operational are yet to be put in place and fully implemented.	One (1) instrument revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.	3 instruments revised and/or developed to improve the enabling environment for ASGM and mercury phase-out in the ASGM sector.
Outputs to achieve Outcome 1	1.1. Opportunities and constraints for peaceful ASM-LSM coexistence institutionalized by the Government of Suriname. 1.2. Government capacity strengthened to assess, plan, and implement sustainable mercury-free interventions in ASGM zones. 1.3. Landscape approach to advance formalization through peaceful ASM-LSM coexistence zones and tributer systems. 1.4. Civil Society Organization (CSO) capacity strengthened to engage Maroon and Indigenous groups.			
Project component 2 ***(no indicators required)***	**Financial Inclusion and Responsible Supply Chains**			

Outcome 2 Improved income for ASGM miners through the attainment of better gold prices facilitated by transparent and responsible supply chains.	*Indicator 5* Loans/investments for the purchase of mercury-free processing equipment/investments are accessible to legitimatized ASGM miners. *(In accordance with Indicator 4.1.2 of the planetGOLD Programme Indicators)*	*0*	One (1) new/improved financial product/mechanism (including women friendly financial products) established for the ASGM sector.	Three (3) new/improved financial products/mechanisms (including women friendly financial products) established for the ASGM sector.
	Indicator 6 Amount of funds (in USD) made available to ASGM through financial mechanisms (disaggregated by gender and indigenous people). *(In accordance with Indicators 3.2.1 and 4.1.1 of the planetGOLD Programme Indicators)*	In the ASGM selected pilot project areas, none of the ASGM miners have been trained on how to access financing. 0 ASGM loan applications developed. 0 ASGM loan applications approved.	USD400,000 made available to ASGM through financial mechanisms (disaggregated by gender and indigenous people). 35 of loan applications developed (with technical support of the project). 30% of loan applications (developed with technical support of the project) approved.	USD1,200,000 made available to ASGM through financial mechanisms (disaggregated by gender and indigenous people). 100 of loan applications developed (with technical support of the project). 50% of loan applications (developed with technical support of the project) approved.
Outputs to achieve Outcome 2	2.1. Opportunities created for ASGM sector with financial institutions to procure/retrofit equipment and invest in business skills for men and women. 2.2. Proof of concept for technology-assisted mineral supply chain due diligence developed and tested in target regions.			

Project component 3 ***(no indicators required)***	**Enhancing uptake of Mercury-free technologies**			
Outcome 3 Reduced mercury use in ASGM enabled by the increased uptake of mercury-free technologies by miners**.**	*Indicator 7* Number of miners trained in mercury-free processes (disaggregated by gender). *(In accordance with Indicator 1.1.3 of the planetGOLD Programme Indicators)*	*0*	100 Female:25 Male: 75	255 Female: 50 Male: 205
	Indicator 8 Number of pilot projects implemented and operationalized in target jurisdictions. *(In accordance with Indicators 1.1.2 of the planetGOLD Programme Indicators)*	*0*	*1*	*3*
	Indicator 9 Amount of responsible gold sold to formal markets without mercury (in kilograms) *(In accordance with Indicators 3.1.1 and 3.2.2 of the planetGOLD Programme Indicators)*	*0*	500 Kilograms of gold produced without mercury.	2,000 Kilograms of gold produced without mercury.

Outputs to achieve Outcome 3	3.1. National and district government institutions strengthened to support sustainable mercury reductions and invest in mining organizations. 3.2. Assay lab, processing plant and training center(s) established to promote resource efficient gold mining in ASM-LSM zones/areas, with clear provisions for sound tailings and waste management. 3.3. Accredited ASGM-specific education programs scaled up to professionalize mining operations in cooperation with ?the University of Applied Sciences and Technology/ school of Geology & Mining Technology (UNASAT/SGMT).			
Project component 4 ***(no indicators required)***	**Knowledge sharing, communication and local capacity building support**			
Outcome 4 Knowledge sharing and communication strategies targeted at all ASGM stakeholders to support and increase formalization and mercury reduction.	*Indicator 10* Number of people reached with awareness raising materials, by mode of communication (e.g. online, in-person, via SMS, WhatsApp, etc.) and by gender. *(In accordance with Indicator 5.1.1 of the planetGOLD Programme Indicators)*	To date none of the miners and inhabitants of the three project priority sites and local communities have been made aware of the dangers of mercury and ways to eliminate/avoid its use in ASGM.	150,000 people (75,000 females and 75,000 males) of whom awareness has been raised on the dangers of mercury and ways to eliminate/avoid its use in ASGM.	300,000 people (150,000 females and 150,000 males) of whom awareness has been raised on the dangers of mercury and ways to eliminate/avoid its use in ASGM.
	Indicator 11 Percentage of project expenditure spent on the FSP planned activities.	0%	40%	100%
Outputs to achieve Outcome 7	4.1. M&E and adaptive management applied to capture lessons learned, emphasizing prospecting, sustainable mercury-free gold methods, and sound tailings management. 4.2. Miner, investment and CSO focused communication strategies explored, tested, deployed and scaled up.			

[1] Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

[2] Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

[3] The GEF GOLD+ mercury reduction target for Suriname is 8 t over five years. Components on formalization, financial inclusion and knowledge sharing are measures to ensure results are sustained, resulting in 24 t of mercury avoidance 10 years after project. In Suriname, for every Kg of gold produced, an estimated 3 Kg of mercury is emitted into the environment (NAP). To reach the GEF reduction target an estimated 2.6 t of mercury free gold would need to be produced during the project life span.

[4] Provide total number of all direct project beneficiaries expected to benefit from all project activities until project closure. Separate the total number by female and male. This indicator captures the number of individual people who receive targeted support from a given GEF project and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.

[5]Outcomes are medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

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).

Suriname: Responses to the PIF Reviews at the Council Approval Stage

Introduction:

This document submits the responses to the different reviewers of the screening process for the *Global Opportunities for Long-term Development of artisanal and small-scale gold mining ASGM) Sector Plus- GEF GOLD+*, specifically for Suriname Child Project, in the following order:

#1. GEF Council Members,
#2. STAP, and
#3. Minamata Secretariat.

#1. Responses to GEF Council Members.

FRANCE

Q. #1 from the GEF Council: France supports the GOLD+ program, which addresses a number of areas of concern for France.

For information purposes, the FGEF is co-financing, for example, a project that is being implemented by the WWF in the Guyana Plateau (Guyana, Suriname, and French Guiana). This project aims to reduce the use of mercury in gold mining.

Response (R): Indeed, this comment has been fully acknowledged in the design of the project. The WWF Guianas project aims at supporting the Guyana Plateau governments to align national policy and legislation with the Minamata Convention in order to reduce the use of mercury in the ASGM sector; WWF?Guianas will also establish national and regional platforms to facilitate implementation.

During the PPG stage, the following means of collaboration, exchange of communication and awareness in the ASGM sector of Suriname have been proposed:

Component 3: Enhancing Uptake of Mercury-Free Technologies.

Action: The WWF implemented project will develop an economically, socially acceptable and feasible model, with support from the Alliance for Responsible Mining (ARM), for mercury-free mining, including the establishment of two pilot sites in Suriname and two in Guyana. The planetGOLD+ Suriname will also develop three pilot projects, in different locations, but knowledge learning from both projects will be shared as well as best practices - through the Ministry of Natural Resources - for overall success of both initiatives.

Component 4. Knowledge Sharing, Communication and Local Capacity Building Support.

Action: Collect, analyze and make mercury related data available for the public through an online repository. The planetGOLD+ in Suriname will channel meaningful information gathered with the WWF Guianas project, as needed, for the success of both initiatives.

In addition, as the Ministry of Natural Resources of Suriname is responsible for or involved in implementation of both projects, intra-ministerial coordination will be required at least twice yearly between implementing actors, i.e.: WWF and the UNDP/GEF planetGOLD+ Child project, allowing a holistic approach of efforts regarding the entire ASGM sector.

UNITED STATES

Q. #2 from the GEF Council: Please see the US comments on the GOLD+ program below which will need to be addressed at CEO Endorsement.

? *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.*

R: According to *National Inventory of Mercury Releases in Suriname* (2019), primary mining and processing of gold ores represent the largest source of releases to land (44.858 Kg Hg/year), releases to water 24.346 Kg Hg/year, and to air 18.244 Kg Hg/year; for a total of 88,019 kg HG/year (88 tons). This FSP aims to achieve a Global Environmental Benefit by avoiding six (6) tons of mercury over a 5-year period.

? *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.*

R: Indeed, this comment has been fully acknowledged in the design of the project. Through the Mercury Program carried out by the Office of Environmental Quality of the U.S. Department of State, communication was facilitated with the Artisanal Gold Council's work in Suriname (AGC) in order to enhance the uptake of Hg-free technologies, knowledge sharing and local capacity building support.

AGC will establish two mercury free ASGM pilot sites within the concession of Iamgold mining operation, at Mama Kriki and Roma pits. Shaking tables will be used at these sites as a mercury free alternative for processing ore. These will be added to the already existing set-up of the operations, which include crushers and sluice boxes; incorporating the national university UNASAT, recognizing that this has become a complex matter due to COVID-19 pandemic. AGC has also planned to send one of their experts to the ASGM sites to provided on-the-job training during several months; all this knowledge base will be also shared with the planetGOLD+ project in due time. As a result, coordination basis has been set up for the benefit of the ASGM sector as a whole, between the U.S. Department of State project and the UNDP/GEF Child project.

? *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.*

R: Comment well received. Indeed, this comment has been fully acknowledged in the design of the project. With an outreach communication strategy, the design of this planetGOLD+ FSP makes a clear

differentiation between upstream and downstream stakeholders. Private sector engagement has been triggered during the PPG in two avenues: the first avenue is mainly related to the creation of strategic alliances with the two main LSM gold producers, i.e., Newmont Suriname and Rosebel Gold Mines as well as small and medium scale enterprises (SMEs) represented by the *Stichting Houders Mijnbouw Rechten* (SHMR or Foundation Holders Mining Rights) who own the majority of mining rights in Suriname. Collectively, these private sector partners account for diverse production scales that encounter artisanal miners in Suriname.

With Newmont Suriname, the following activities are foreseen:

? Component 1: Newmont formally launched its ASM strategy in November 2020. The goal of the strategy is to formalize the sector and its economy; Newmont has worked with the traditional authorities of the Paamaka Tribe region to establish an ASM platform (cooperation), which can serve as a counterpart to Newmont?s mining operations. This platform has given Newmont permission to continue with the strategy as set out, which will be enhanced during the FSP execution.

? Component 2: Newmont will facilitate contact with banks and equipment suppliers in order to explore suitable financing mechanisms for ASGM investments.

? Component 3: Another goal of Newmont?s strategy is to help reform the sector to consider the environment (including mine restoration) and safety in their operations. Newmont is looking into an opportunity to collaborate with ASM to request a concession and perform exploration to select the appropriate mercury-free technology and improve bankability of the mine operations. Newmont will hire a consultant to assess the appropriate mercury-free mining method/technology based on the local ore and provide a training based on this.

? Component 4: Newmont will provide alternative livelihood training to miners who want to shift to another sector.

With Rosebel Gold Mines (Iamgold mines), the following activities are foreseen:

? Component 3: The current contribution of Iamgold is mainly in the form of facilitating ASGM within the Rosebel mining concession, providing expertise to structure the mine operations, providing training in water management, health and safety, waste management, and more recently, blasting.

? There are three ASGM locations (within the Iamgold concessions) which are facilitated by Iamgold:

i. Mamakreek: a yet unstructured site, which will serve as a pilot site for the project of the Artisanal Gold Council (AGC) focusing on eradication of mercury within the operations. Within this AGC project, Iamgold contributes mainly through ground logistics (? US$20.000);

ii. Roma East and East Tailings Road: these two locations operate according to a protocol developed by Iamgold. At these sites, the community of Nieuw Koffiekamp is facilitated through coordination with the Multi Stakeholder Platform of the Government. Lessons learned from the mercury free pilot at

Mamakreek can be expanded into the pilot projects to be carried out by the UNDP/GEF planetGOLD+ project.

With *Stichting Houders Mijnbouw Rechten* (SHMR) the following activities are foreseen:

? Component 1: Exploration and exploitation title holders represent a key stakeholder group to understand the nature of tributer systems and allocate land for ASGM activities. Given SHMR?s close proximity to ASGM hotspots the foundation is especially useful in collecting data on gold production, primary and secondary workforce dynamics, socio-economic aspects and other important items including COVID impacts on gold prices, supply chains and patterns of mining activity. This data is often required to support supply organization and enhance transparency to meet downstream expectations. SHMR will play a key role as a coordinated voice for mineral rights holders, and support engagement processes with artisan gold miners in Tier 1 sites.

? Component 2: De-risking investment in the ASGM sector begins with improved access to information and building the capacity of mining entities to comply with mine-level due diligence standards related to planetGOLD criteria for socially and environmentally responsible operations. Under Output 2.1. activity i, educating and collaborating with local and national financial institutions, SHR represents a collective of small businesses in gold mining who generate direct and indirect jobs, and help diversify Suriname?s economic base. Despite these benefits, small enterprises in Suriname?s mining sector remain significantly underserved by financial institutions, creating recurrent challenges in bringing mines to international markets.

? Component 3: As mine operators who actively engaging with miners and their communities beyond Newmont and Iamgold concessions, SHR provides a conduit to reach miners and sustainably transition from mercury. SHR as a private sector entity can engage miners in capacity building, outreach and build confidence with novel production systems, and thus enabling transition from mercury use through a progressive strategy by working with established, trust-based relationships.

? Component 4: SMEs represented by the SHR (foundation) provide a critical voice to raise awareness of the ASGM sector?s development potential. In line with the planetGOLD communications strategy, SHR can help to shift narratives from negative, damaging views of the sector which focus on environmental degradation, mercury pollution alongside other social and governance risks. Reframing narratives toward a positive outlook for small-scale mining operations and mining communities can influence perceptions of financial institutions and enable small-scale gold miners to have reliable, transparent and responsible supply chains aligned with downstream expectations.

The second avenue is precisely to engage the private sector gold buyers and users through large companies (refiners, jewelers, electronics) like ARGOR-HERAEUS. Group that it is a key interested partner in the value chain for all those engaged in the precious metal business: mines, traders, bullion houses, central and commercial banks, mints and jewelry, as well as industrial consumers. This Group

has committed a cofinancing amount of at least USD10,000,000 in investment mobilized for the purchase of responsible produced gold over the duration of the planetGOLD+ Suriname project.

All these three key relevant private-sector stakeholders have been identified and engaged during the PPG and have provided, as a means of interest, letters of cofinancing that can be found in Annex 14 of the ProDoc.

Due to the complexities of organizing face-to-face encounters with selected participants and field visits to the ASGM sites, the PPG team organized online a round of encounters with these stakeholders; to present the scope of the project and to engage them for active participation. Ii is important to note that Annex 9 of the ProDoc presents the Stakeholder Engagement Plan, designed to ensure effective engagement among stakeholders throughout the lifecycle of the project.

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

R: Comment well noted. Financial inclusion and responsible supply chains are linked, as shortfalls in access to legitimate finance for artisanal miners creates cycles of debt bondage, exploitation, human rights abuses and propagates elite benefit capture. The PPG has carried out an in-depth elaboration of the baseline conditions including evidence demonstrating the magnitude of the problem, based on a broad participatory approach with representatives of different ministries, financial institutions, large scale gold mining operations, large private holdings, ASGM mining entities and downstream actors (refiners) in the gold supply chain in Suriname. This overall analysis (including an in depth-analysis of gender and indigenous and tribal people issues in the ASGM sector[1]) now describes how addressing the Development Challenge (based on a Theory of Change analysis) which is consistent with recent national environmental strategies as well as with the National Action Plan (NAP) under the Minamata Convention.

Based on these assessments, activities for outputs under Component 2 were structured following a two-pronged strategic approach. In one way, it will launch a set of activities to educate and collaborate with key potential financiers (upstream and downstream) to design and provide financial products suited to the ASGM sector, integrating all critical supply issues for this sector. On the other hand, to couple the large issue to assist miners with capacity building to access funds, including training mining entities and miners on business and operations management with tools to not only access finance options but also successfully execute their investment plans to create sustainable and more profitable mining operations.

#2. Responses to STAP Comments

? *What activities will be implemented to increase the project's resilience to climate change?*

R: This is a key topic for Suriname, a coastal country located in the Caribbean. As a matter of fact, Risk 6, identified during the PPG (please refer to Annex 7: UNDP Risk Register, of the ProDoc), is described as *?Natural disasters could eventually affect the locations and operations where the planned pilot interventions are carried out?*. Risk and management measures were proposed in Output 1.3, Activity ii) of the ProDoc to be implemented during the FSP execution in order to mitigate this risk.

? *1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.*

R: Please, refer to Annex 3 of ProDoc, i.e.: ?Annex 3 Project Map and Project Sites -Suriname-? for full description of the project interventions.

? *What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?*

R: A Stakeholder Engagement Plan was developed during project preparation. Please, refer to Annex 9 of ProDoc.

? *What overall approach will be taken, and what knowledge management indicators and metrics will be used?*

R: As a Child Project, the Knowledge Management for the Suriname FSP is a key element ?under Component IV- of the global knowledge management component of PlanetGOLD. A group of activities has been integrated under the following outputs for Outcome 4:

4.1. M&E and adaptive management applied to capture lessons learned, emphasizing prospecting, sustainable mercury-free gold methods, and sound tailings management.

4.2. Miner, investment and CSO focused communication strategies explored, tested, deployed and scaled up.

The indicator associated to this outcome is Indicator 10 ?*Number of people reached with awareness raising materials, by mode of communication (e.g. online, in-person, via SMS, WhatsApp, etc.) and by gender*?, which is in accordance with Indicator 5.1.1 of the planetGOLD Programme Indicators.

#3. Responses to comments received from the Minamata Secretariat

Related comment: *?Because improved health awareness and health surveillance can be strong incentives for formalization and technology uptake, and will be ever more important in light of Covid-19, it will be important to include community-based health and social actors in all aspects of the program?.*

R: The ProDoc has developed full stakeholder engagement plans during the PPG phase and has taken this recommendation into account. Please, refer to Annex 9 of ProDoc.

Related comment: *?Barriers - This section presents a very good discussion of formalization. It would be useful to also include the Minamata Convention definition of ASGM for the purposes of the Convention: "gold mining conducted by individual miners or small enterprises with limited capital investment and production".*

R: This definition has already included in the ProDoc, Page 13.

Related comment: *?Gender - Is the gender distribution noted here a widely used metric when very specific community-based data is not available? Or is it simply a placeholder? We note that gender impacts will be more thoroughly evaluated in the child projects. It would also be useful to ensure good estimates of populations "directly" involved (working in ASGM) as well as impacted by ASGM?.*

R: The ProDoc has developed a thorough gender analysis and has developed action plans during the PPG phase and has taken this recommendation into account. Please, refer to Annex 11 of ProDoc.

Related comment: *?Component 2: The activities on collaborating with local financial institutions should also involve linkages with the formalization efforts, such that formalization schemes and financial products are mutually reinforcing?.*

R: We agree with this observation and will ensure that this is the case. The Suriname Child project has integrated this comment under the activities to be carried under Component 2.

Related comment: *?Component 3: In section on enhancing uptake of mercury-free technologies, we note that cyanide is appropriately listed as one of the technologies in the chart. However, no mention is made of the Convention?s requirement that ASGM National Action Plans elaborate actions to eliminate ?cyanide leaching in sediment, ore or tailings to which mercury has been added without first removing the mercury.? This requirement should be prominently featured such that any support for cyanide operations focuses on this critical need?.*

R: Indeed, the use of cyanide to process mercury-contaminated tailings is an emerging risk to human health and the global environment. While the environmental fate of cyanide has been well studied, the risks associated with mercury-cyanide complexes remain largely unknown. Techniques for mercury removal from tailings prior to cyanidation are outlined in UN Environments forthcoming guidance document on tailings (in prep). PlanetGOLD Criteria A: Mercury-Free Processing and Management of Chemicals and Wastes (cyanide, mercury tailings) requires that all Mining Entities (ME) operate without mercury and align with Annex C of the Minamata Convention on Mercury (UNEP 2013), including elimination of the worst practice of using cyanide on mercury-contaminated tailings, which may remain from previous operations that used mercury. Responsible cyanide use for small-scale

operators is part of technical guidance in development by the planetGOLD global knowledge component, which emphasizes mining principals and standards of practice as defined by the International Cyanide Management Code.

As a highly regulated substance in gold mining, cyanide risk management, emergency response, operations and waste management are well documented. Responsible cyanide use in GOLD+ will require appropriate capacity building support for governments, policy makers, MEs and the public to understand major risks and mitigation strategies. To avoid unintended consequences, in the specific circumstances of Suriname during the implementation of the pilot projects, if pilot responsible cyanidation and leaching circuit is needed, the project will be required to develop clear standards of practice for responsible sourcing, transport, handing and storage, use in leaching circuits, disposal and decommissioning in accordance with planetGOLD cyanide guidance (in preparation).

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[1] For further analysis, please refer to the following documents elaborated during the PPG:

1. ?*Global Opportunities for Long-term Development of ASGM Sector Plus - GEF GOLD+ in Suriname?,* PPG, May 2021.

2. ?*ITP engagement framework for Gold+project*?, PPG, April 2021.

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

PPG Grant Approved at PIF: **150,000**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
GEF GOLD+: Advancing Formalization and Mercury-Free Gold in Suriname	150,000	108,803.25	41,196.75
Total	150,000	108,803.25	41,196.75

GEF Outcome/Atlas Activity	Responsible Party	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount 2020	Amount 2021	Total	Budget Notes	Expenditure	Commitments
Project preparation grant to finalize the UNDP-GEF project document for project *Global Opportunities for Long-term Development of ASGM Sector Plus - GEF GOLD + in Suriname*	**UNDP**	**62000**	**GEF TRUSTEE**	71200	International Consultants	**50,000.00**	**10,500.00**	**60,500.00**	**A1-A5**	**60,500.00**	**0.00**
				71300	Local Consultants	**27,500.00**	**7,500.00**	**35,000.00**	**B1-B3**	**45,425.99**	**0.00**
				71600	Travel	**19,000.00**	**14,000.00**	**33,000.00**	**C**		**25,000.00**
				74200	Audio Visual&Print Prod Costs	**2,000.00**	**3,000.00**	**5,000.00**	**D**		**5,000.00**
				74500	Miscellaneous Expenses	**1,000.00**	**1,000.00**	**2,000.00**	**E**		
				75700	Training, Workshops and Confer	**8,500.00**	**6,000.00**	**14,500.00**	**F**	**2,877.26**	**11,196.75**
					PROJECT TOTAL	**108,000.00**	**42,000.00**	**150,000.00**		**108,803.25**	**41,196.75**

Budget Note	Items	Total estimated person weeks	Budget US$	Budget Note
A1	71200 - International Consultants	14	28,000.00	International Expert to provide overall guidance on project preparation to National Consultants engaged by the project and preparation of the UNDP-GEF Project Document, the GEF CEO Endorsement, the SESP, the GEF Tracking Tools). Costs of the **International Project Development Specialist** (GEF PPG Team Leader) are estimated to USD$ 28,000.00 and includes one (5) day mission (travel and DSA).
A2	71200 - International Consultants	10	20,000.00	International ASGM Specialist to provide key expertise and technical inputs on ASGM issues required to assess the baseline situation and support the design and preparation of the GEF/UNDP project and other supporting documents to the **National ASGM Expert** engaged by the project. Costs of the International ASGM Expert are estimated to USD$ 20,000.00 and includes one (5) day mission (travel and DSA).
A3	71200 - International Consultants	4	5,000.00	International Expert to provide overall guidance on project preparation to National Consultants engaged by the project and preparation of the UNDP-GEF Project Document, the GEF CEO Endorsement, the SESP, the GEF Tracking Tools). Costs of the **International Gender Specialist for ASGM** are estimated to USD$ 5,000.00. No travel is foreseen for this consultancy.
A4	71200 - International Consultants	4	2,500.00	International Expert to provide overall guidance on project preparation to National Consultants engaged by the project and preparation of the UNDP-GEF Project Document, the GEF CEO Endorsement, the SESP, the GEF Tracking Tools). Costs of the **International Safeguards Specialist for ASGM** are estimated to USD$ 2,500.00. No travel is foreseen for this consultancy.
A5	71200 - International Consultants	4	5,000.00	International Expert to provide overall guidance on project preparation to National Consultants engaged by the project and preparation of the UNDP-GEF Project Document, the GEF CEO Endorsement, the SESP, the GEF Tracking Tools). Costs of the **International Financial Expert** are estimated to USD$ 5,000.00 . No travel is foreseen for this consultancy.
B1	71300 - National Consultants	10	15,000.00	National Consultant for the oversight and coordination of the PPG process throughout its entire duration and be responsible for the overall coordination of processes and consultations needed for project development and the preparation of the UNDP-GEF Project Document and the GEF CEO Endorsement Form, in direct collaboration with the international coordinator and national/international consultants. Costs of the **National PPG Coordinator**, institutional and policy Expert are estimated to USD$15,000.00. Travel costs related to travel for fieldwork and exchange of experiences.
B2	71300 - National Consultants	10	15,000.00	National Consultant for the oversight and coordination of the PPG process throughout its entire duration and be responsible for the overall coordination of processes and consultations needed for project development and the preparation of the UNDP-GEF Project Document and the GEF CEO Endorsement Form, in direct collaboration with the international coordinator and national/international consultants. Costs of the **National ASGM Expert** are estimated to USD$15,000.00.
B3	71300 - National Consultants	4	5,000.00	National Consultant for the oversight and coordination of the PPG process throughout its entire duration and be responsible for the overall coordination of processes and consultations needed for project development and the preparation of the UNDP-GEF Project Document and the GEF CEO Endorsement Form, in direct collaboration with the international coordinator and national/international consultants. Costs of the **National Gender Specialist** are estimated to USD$5,000.00
C	71600 - Travel	N/A	33,000.00	Travel costs related to travel for fieldwork and exchange of experiences
D	74200 - Translation costs	N/A	5,000.00	Includes the translation relevant documents (PRODOC, SES…) from English to Dutch to facilitate consultation and validation process
E	74500 - Miscellaneous Expenses	N/A	2,000.00	Coffee breaks, PPE for COVID protection during fieldwork.
F	75700 - Trainings, workshops	N/A	14,500.00	Includes the organization of the two Workshops (PPG Inception Workshop and Project Document Validation Workshop), training of national experts on establishing the project's baseline as well as four working meetings with national stakeholders.

ANNEX D: Project Map(s) and Coordinates

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

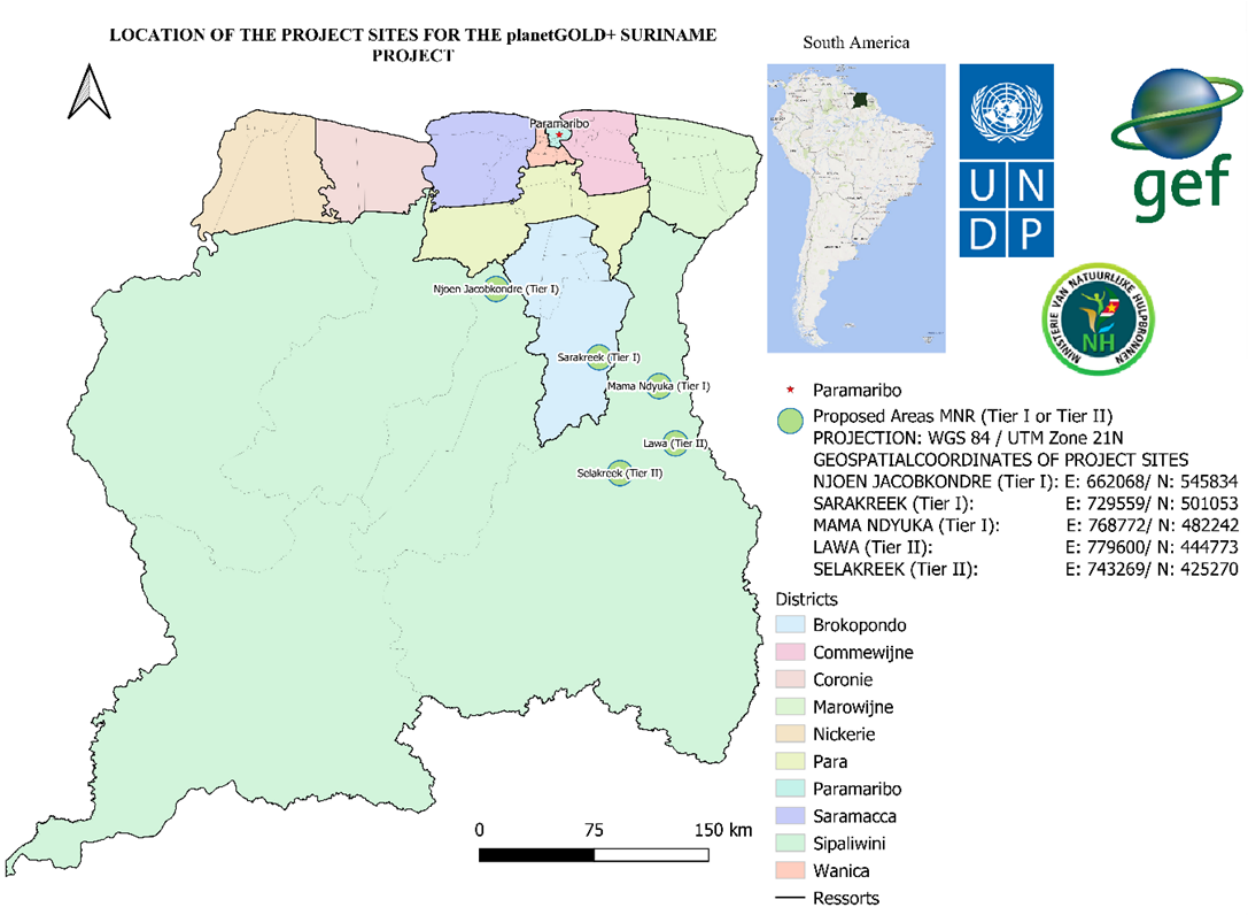

Figure 3.1: Suriname GOLD+ intervention sites overlain on Administrative (Resort) boundaries. Figure shows Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 Sela Kreek and Lawa sites are overlain on an administrative map of Suriname with circular boundaries indicating the geographic location of mining landscapes in line with national priorities for the ASGM sector.

In line with the site selection strategy spatial and contextual analysis within mining landscapes (defined by legally demarcated exploitation and exploration titles) in Suriname serve as final selection of pilot projects. Additional due diligence is required by the Project Management Unit (PMU) prior to project implementation to verify Tier 1 intervention sites.

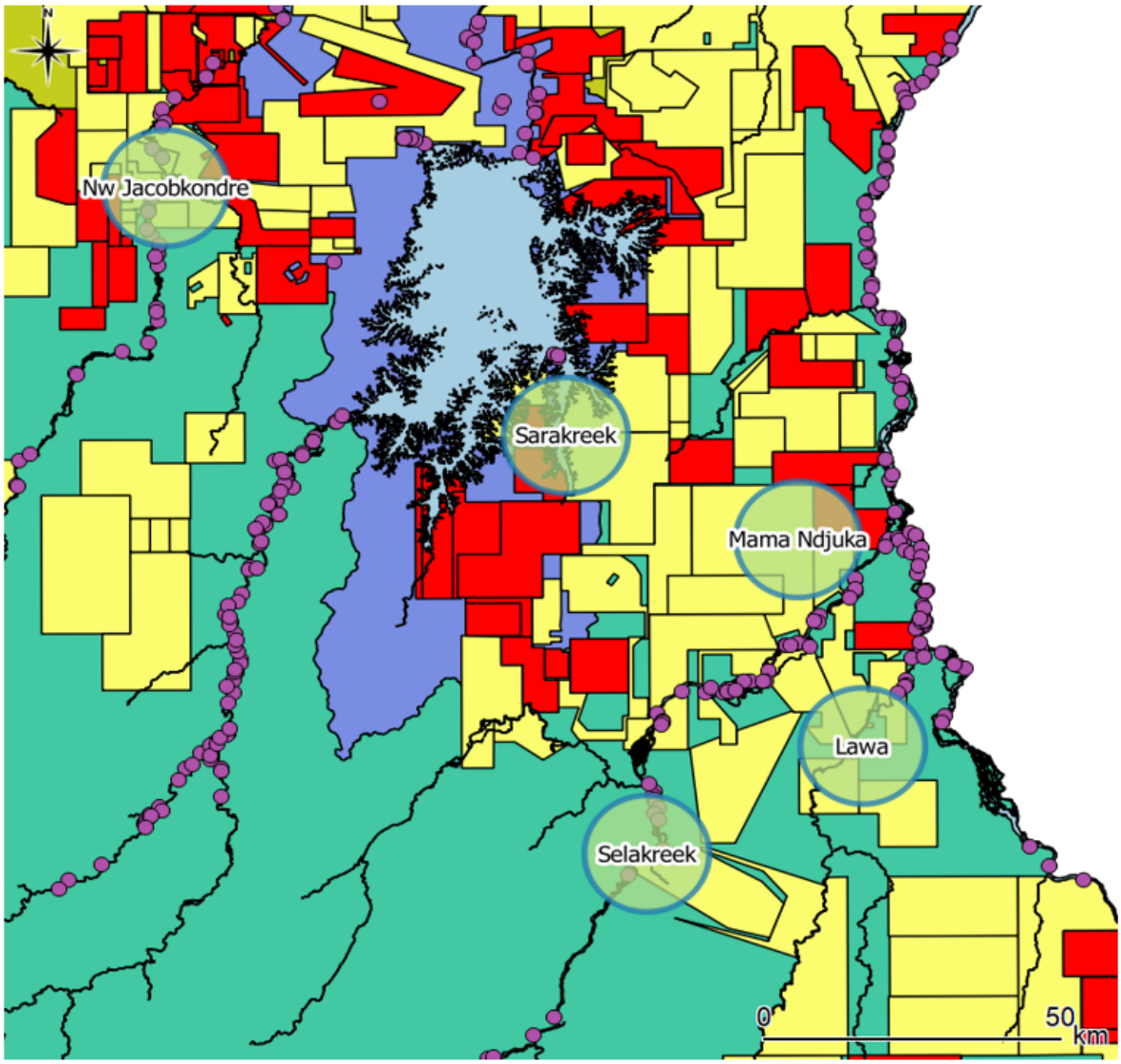

Figure 3.2.: Proposed sites provided by the Ministry of Natural Resources (MNR) on top of the layers (districts, resorts, concessions). Yellow blocks = exploration licenses and Red block = exploitation (mining) licenses. Hydrographic relief is plotted with rural villages as lilac dots. Figure shows Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 Sela Kreek and Lawa sites with circular boundaries around mining landscapes.

Table 3.1. Overview of Tier 1: Njoen Jacobkondre, Sarakreek and Mama Ndjuka, and Tier 2 sites Selakreek and Lawa proposed for GOLD+ intervention. Table shows concession data, labelled ASGM Hotspots that correspond with maps 3.3. - 3.7 and geographic coordinates No data available yet for highlighted concessions (orange cells).

	Proposed Area	District	Sub-district/ Resort	Concession*	ASGM Hotspot**	Coordinates WGS84/UTM 21N	
						E	N
Tier 1 Sites	**Njoen Jacobkondre**	Sipaliwini	Boven Saramacca	Rosebel Goldmines NV (IAMGOLD)	NJ-I	669843	544492
					NJ-II	664082	554015
				Limestone Mining NV	NJ-III	662941	551498
					NJ-IV	662370	544492
				United Suri-Fast Mining NV	NJ-V	657465	543636
				Suriname Diamond Co N.V.	NJ-VI	656246	536941
				Sarafina N.V.	NJ-VII	671374	550486
				Cirino Reina J.	n.d.	n.d.	n.d.
				Albert Max Soiri	n.d.	n.d.	n.d.
	Sarakreek	Brokopondo	Sarakreek	Suriname Gold LLC ? North Amazonia (Newmont)	SaK-I	734662	500860
					SaK-II	743449	492415
					Sak-VI	741893	511820
				Sarakreek Resources N.V.	SaK-III	724582	481527
					SaK-IV	720281	491087
				Grassalco	SaK-V	752229	486476
				Eagle Resources Mining & Equipment NV	n.d.	n.d.	n.d.

				Drie M. S. NV	n.d.	n.d.	n.d.
				Granaat NV	n.d.	n.d.	n.d.
				Nel Agita	n.d.	n.d.	n.d.
	Mama Ndjuka	Sipaliwini	Tapanahoni	Robrun NV	MN-I	775519	491891
					MN-II	776492	487016
				Grassalco	MN-III	766365	480403
				NV Sitex Gold	MN-IV	773523	474618
				Anapai August Ferdinand	n.d.	n.d.	n.d.
*to be confirmed by GMD **to be confirmed by SHMR & field visits: hotspot names & exact coordinates **Tier 2 Sites**	**Lawa**	Sipaliwini	Tapanohoni	NV Sitex Gold	L-I	778557	447778
					L-II	774970	451301
					L-V	780510	452664
				Djodi Rene	L-III	770887	441196
				n.d.	L-IV	775173	443728
				Maroc Mining NV	n.d.	n.d.	n.d.
				Cansur golmines NV	n.d.	n.d.	n.d.
	Selakreek	Sipaliwini	Tapanohoni	Selakriki Okanisi Resources	Sela-Paaston	745981	426122
					SeK-I	746391	421853
					SeK-II	753948	421452
					Sek-III	755410	417712

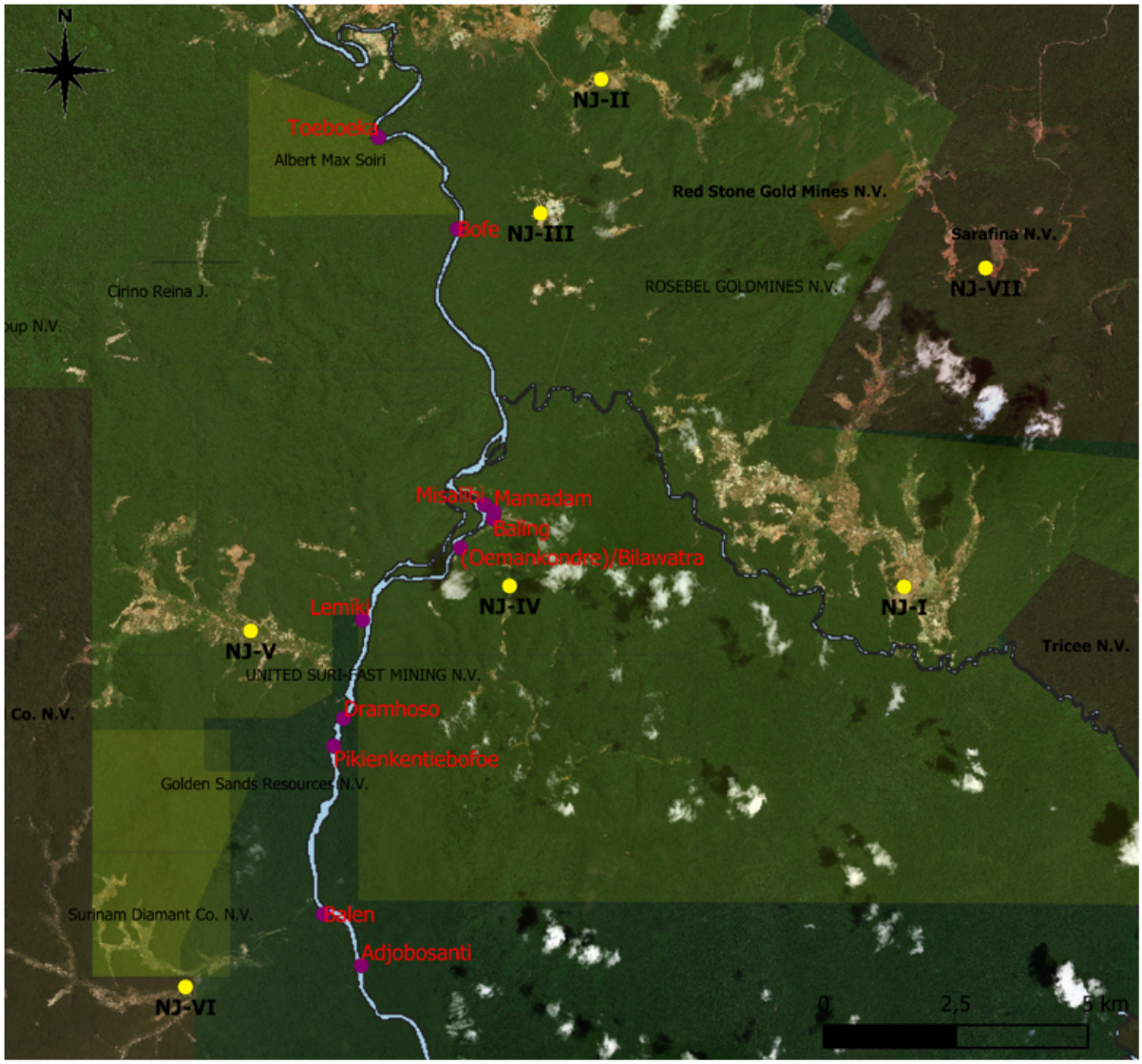

Figure 3.3: Detailed map area Njoen Jacobkondre (Tier 1 site for intervention). Red = exploitation rights, yellow = exploration rights, lilac = villages along the Pikin Saramacca river. Deforestation show the area of mining with numbered hot-spot areas (blue dots).

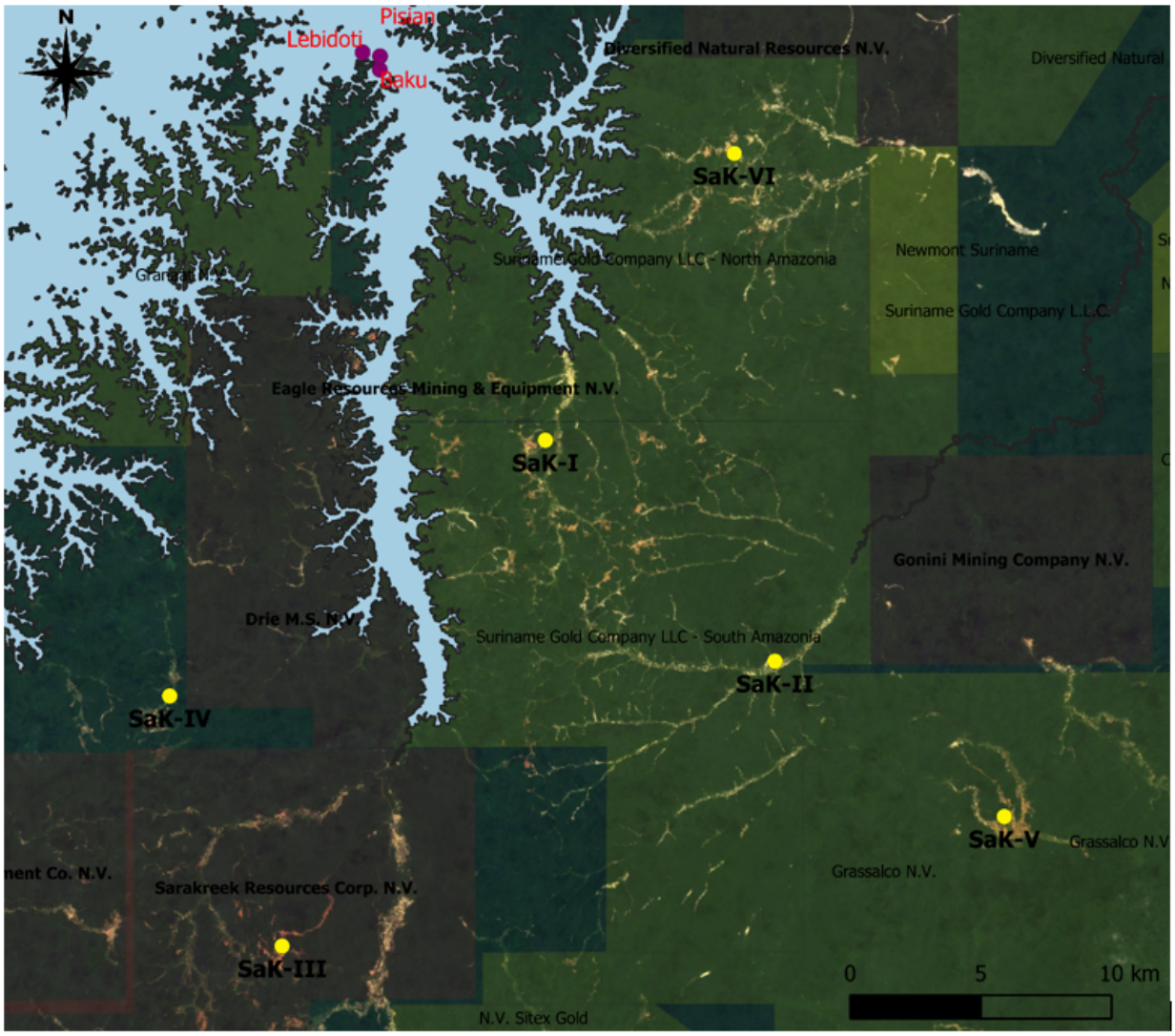

Figure. 3.4: Detailed map area Sarakreek (Tier 1 site for intervention). Red area / yellow text = exploitation rights, yellow area / black text = exploration rights, no villages. Deforestation show the area of mining with numbered hot-spot areas (blue dots & red text).

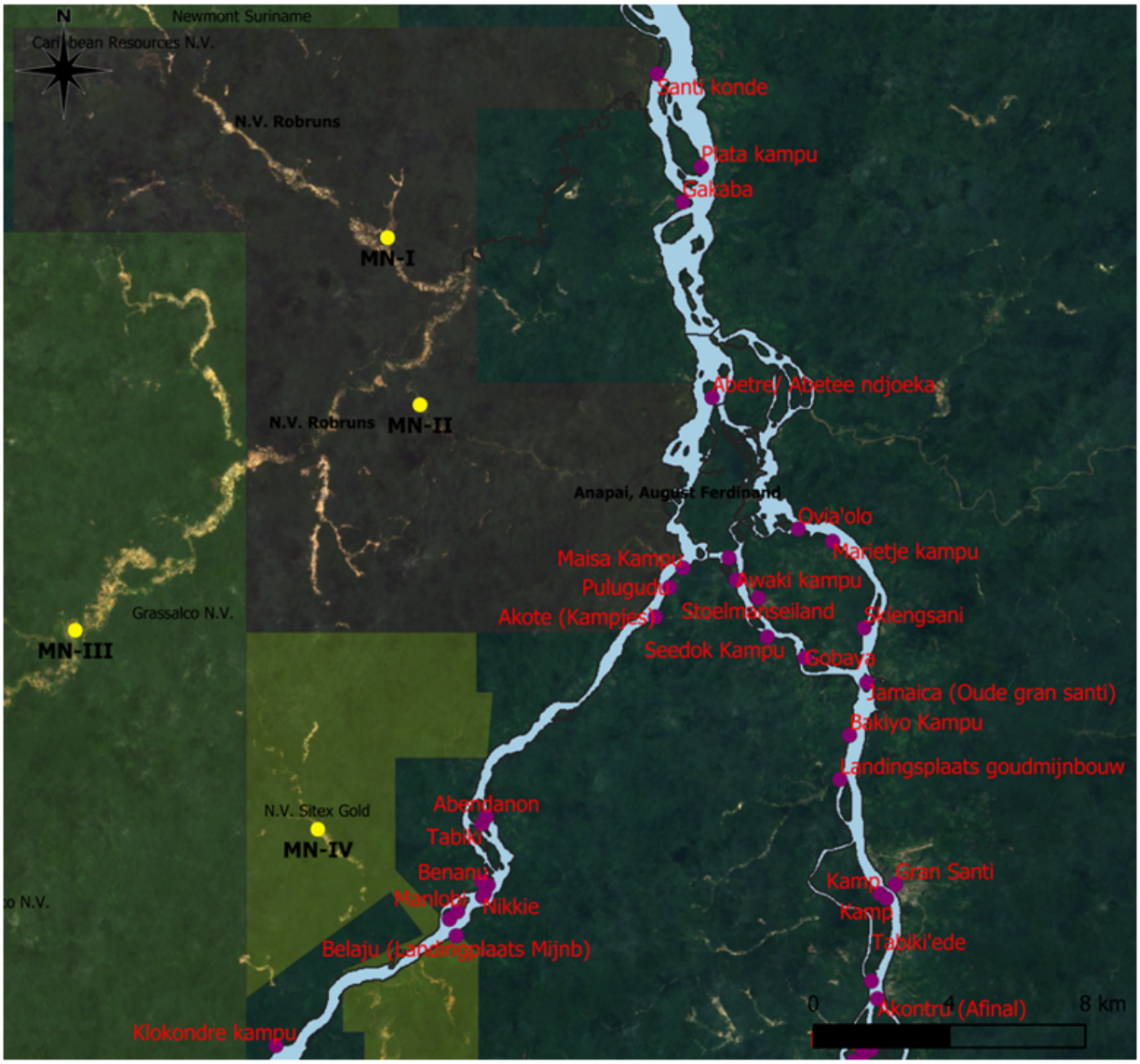

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Figure 3.5: Detailed map area Mama Ndjuka (Tier 1 site for intervention). Red = exploitation rights, yellow = exploration rights, lilac = villages along the Marowijne river (not on concession). Deforestation show the area of mining with hot-spot areas (blue dots).

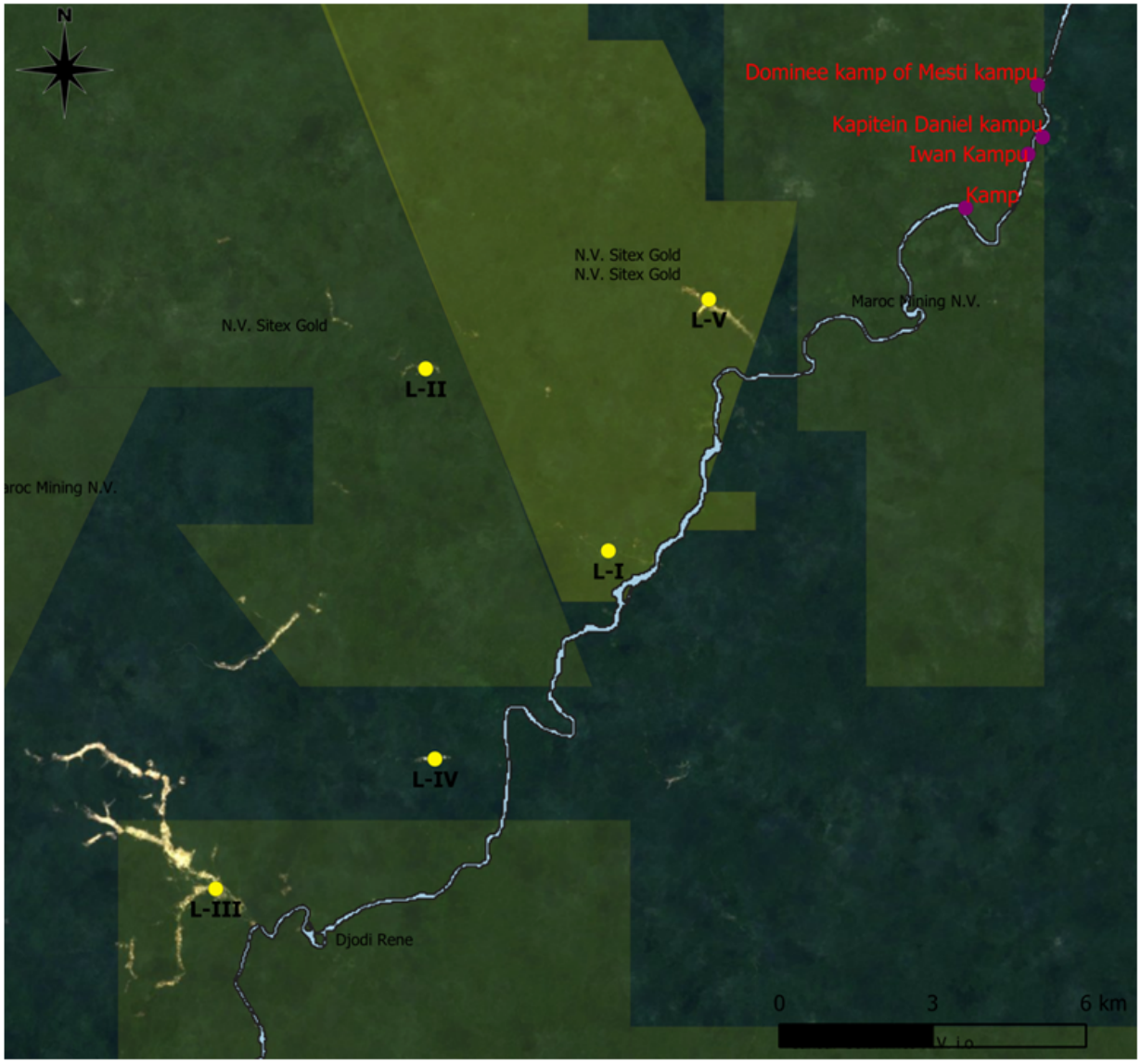

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Figure 3.6 : Detailed map area Lawa (Tier 2 site for intervention). Yellow = exploration rights, lilac = villages along the Lawa river (not on concession). Deforestation show the area of mining, in south western part of the map with hot-spot areas (blue dots).

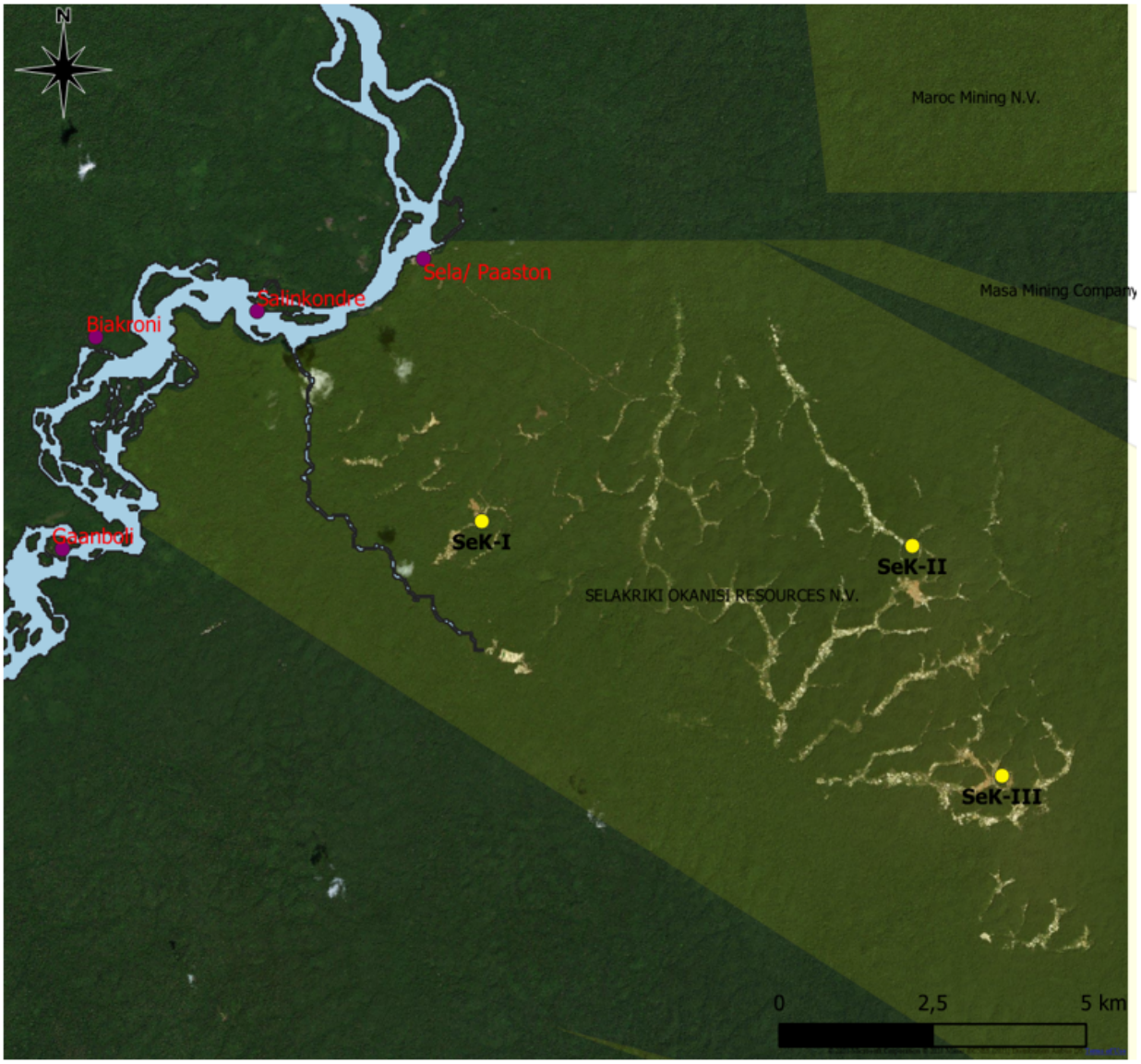

Figure 3.7: Detailed map area Selakreek (Tier 2 site for intervention). Yellow = exploration rights (on newer maps exploitation rights), lilac = villages along the Tapanahoni river (border of concession). Deforestation indicates gold mining with hot-spot areas (blue dots).

Table 3.1. GEF GOLD+ Tier 1 intervention sites and corresponding criteria used to support decision making with emphasis on mineral tenure.

Criteria	Description	Tier 1 Intervention Sites

		Njoen Jacobkondre	Sarakreek	Mama Ndjuka
Gold production	Access to economically viable gold deposit	Yes	Yes	Yes
	Established gold extraction/ processing units	Yes	Yes	Yes
	Basic estimates of monthly Au production data	Concession Owners	Concession Owners	Concession Owners
Workplace Dynamics	Primary ASGM workforce	Confirmed	Confirmed	Confirmed
	Secondary ASGM workforce	Mining camp	Mining camp	Mining camp
Hazardous Chemicals	Confirmed Mercury use	According to MNR	According to MNR	According to MNR
Formalization	Presence of informal extraction units (groups/teams)	Yes	Yes	Yes
	Presence of legally registered Mining Entities	Yes	Yes	Yes
	Legal right to exploit a mineral deposit/concession	Yes	Yes	Yes
	Permission from concession owner to exploit deposit	Concession Owners	Concession Owners	Concession Owners
Multi-stakeholder Collaboration	Favourable attitude of concession owner to partner	Yes	Yes	Yes

	Political will of Government to partner	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
	Political will of Traditional/Customary Authorities	MNR Proposed Sites	MNR Proposed Sites	MNR Proposed Sites
Biodiversity	Avoidance/mitigation of impacts on critical habitats	IBAT/Google Earth	IBAT/Google Earth	IBAT/Google Earth
Logistics	Reasonable distance/ travel time from Urban center	Jacobkondre, Lemmiki, Banaondro	Baikoetoe, Duwatra, Lebidoti and Zoewatta	Gakaba
	No presence of non-state insurgents/terrorist groups	No security threats	No security threats	No security threats
	Access to road infrastructure and basic services	4WD car	4WD car?	No
	Access to air strip or boat access (remote regions)	Boat; airstrip	Sarakreek airstrip; Boat	Boat; airstrip Bravo Kamp; Gakaba airstrip
Impact	Opportunities to partner with complimentary projects	SHMR, IAMGOLD	SHMR, Newmont	SHMR, French Embassy

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Categor	Detailed Description	Component (USDeq.)	Total (USD eq.)	Responsible Entity

y		***Component 1***	***Component 2***	***Component 3***	***Component 4***	***Sub-Total***	***M&E***	***PMC***		**(Executing Entity receiving funds from the GEF Agency)[1]**

Equipment	Equipment to support Output 3.2: ?Assay lab, (2) processing plants and training center(s) established to promote resource efficient gold mining in ASM-LSM zones/areas, with clear provisions for sound tailings and waste management? . Equipment includes (but is not limited to): TIER 1 Pilot Plant #1, TIER 1 Pilot Plant #2, TIER 1 Pilot Plant #3, Handheld XRF analyzer for ADEKUS, Handheld XRF analyzer for UNASAT, Technical Demonstration Unit (TDU) Milling, Sieving, gravity concentration and gold extraction, FiLab costs for fire assay measurements within several particle size fractions of the ore.			800,000		800,000			800,000	Ministry of Natural Resources (MNR)

Equipment	Standard office equipment					-		7,500	7,500	Ministry of Natural Resources (MNR)
Equipment	Standard IT equipment					-		19,000	19,000	Ministry of Natural Resources (MNR)
Grants	Maximum 3 Grant instruments for Output 2.1: ?Opportunities created for ASGM sector with financial institutions to procure/retrofit equipment and invest in business skills for men and women?, focusing on women's access to finance. UNDP policies on Low-Value Grant will be followed.		800,000			800,000			800,000	Ministry of Natural Resources (MNR)

Grants	Grants with Training Centers for the development of Output 3.3.: ?Accredited ASGM-specific education programs scaled up to professionalize mining operations in cooperation with the University of Applied Sciences and Technology/ School of Geology & Mining Technology (UNASAT/SGMT). UNDP policies on Low-Value Grant will be followed			475,000		475,000			475,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One KM assistant to document and share, in a user-friendly manner, information, lessons, best practices, and expertise generated during implementation; plans for strategic communications; and knowledge outputs at USD$15,000 / yr., and 20% of the Project Manager's costs: the Project Manager will undertake day-to-day project implementation, administration, procurement and management activities at USD$45,000 pear year (USD$9,000 per year will be charged to this component)				120,000	120,000			120,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One Project Administrative Assistant at USD$25,000/yr for 5 years, and 20% of the Project Manager's costs: the Project Manager will undertake day-to-day project implementation, administration, procurement and management activities at USD$45,000 pear year (USD$9,000 per year will be charged to this component)					-		170,000	170,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One Project Monitoring & Evaluation Officer engaged for the coordination, implementation, oversight and follow-up of the Gender Action Plan, Social and Environmental Risks Management and the Stakeholder Engagement Plan follow-up as well as Mandatory reports production at USD$16,000/ year. Activities include M&E of GEF core indicators and project results framework, GEF Project Implementation Report (PIR), and Monitoring of Environmental Social and Management Framework and Plan. See M&E table for additional details					-	80,000		80,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One National Individual to support enforcement of the law for mercury abatement in the ASGM sector at USD$25,000/ year. See annex 8 for additional details, and 20% of the Project Manager's costs: the Project Manager will undertake day-to-day project implementation, administration, procurement and management activities at USD$45,000 pear year (USD$9,000 per year will be charged to this component). See annex 8 for additional details.	170,000				170,000			170,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One National Individual to support the Financial Inclusion and Responsible Supply Chains at USD$27,000/year, and 20% of the Project Manager's costs: the Project Manager will undertake day-to-day project implementation, administration, procurement and management activities at USD$45,000 per year (USD$9,000 per year will be charged to this component). See annex 8 for additional details		180,000			180,000			180,000	Ministry of Natural Resources (MNR)

Contractual services-Individual	One National Individual to support the reduction of mercury use in ASGM sector by enabling the increased uptake of mercury-free technologies by miners at USD$30,000/ year, and 20% of the Project Manager's costs: the Project Manager will undertake day-to-day project implementation, administration, procurement and management activities at USD$45,000 per year (USD$9,000 per year will be charged to this component). See annex 8 for additional details			195,000		195,000			195,000	Ministry of Natural Resources (MNR)
Contractual services-Company	Consulting firm for the development of Output 2.2 Proof of concept for technology-assisted mineral supply chain due diligence developed and tested in target regions		55,000			55,000			55,000	Ministry of Natural Resources (MNR)

Contractual services-Company	Consulting firms to support: Development of policies, policy instruments, or regulatory frameworks influenced (at national or sub-national level) to improve ASGM formalization USD$120,000, FPIC Protocol instruments aligned with policy and procedures of MNR for the issuance of mining concessions at USD$150,000, Sustainable Landscape Approach (SLA) to advance formalization in key ASGM territories at USD$100,000, Climate change vulnerability assessments and implement climate adaptation strategies at USD$120,000	490,000				490,000			490,000	Ministry of Natural Resources (MNR)

Contractual services-Company	One Environment and Social Impact Assessment Consulting Firm at USD$52,500. See annex 8 and annex 10 for additional details			52,500		52,500			52,500	Ministry of Natural Resources (MNR)
International Consultants	One International Consultant for the MTR $18,000 and One International Consultant for the TE $18,000. See M&E budget table on PRODOC section VI					-	36,000		36,000	Ministry of Natural Resources (MNR)
International Consultants	One International Consultant on Formalization at USD$100,000. See annex 8 for additional details	100,000				100,000			100,000	Ministry of Natural Resources (MNR)
International Consultants	One International Specialist on Enhancing uptake of Mercury-free technologies at USD$60,000. See annex 8 for additional details			60,000		60,000			60,000	Ministry of Natural Resources (MNR)

International Consultants	One International Specialist on Financial Mechanisms at USD$100,000. See annex 8 for additional details		100,000			100,000			100,000	Ministry of Natural Resources (MNR)
Local Consultants	One Local Consultant for Gender Awareness training at USD$15,000. See annex 8 for additional details			15,000		15,000			15,000	Ministry of Natural Resources (MNR)
Local Consultants	One Local Consultant for Gender-Disaggregated Analysis at USD$20,000.				20,000	20,000			20,000	Ministry of Natural Resources (MNR)
Local Consultants	One Local consultant for MTR $12,000 and one Local Consultant for TE $12,000. See M&E budget table on PRODOC section VI					-	24,000		24,000	Ministry of Natural Resources (MNR)
Local Consultants	One Local Consultant for Promoting Women?s Participation at USD$34,000. See annex 8 for additional details	34,000				34,000			34,000	Ministry of Natural Resources (MNR)

Local Consultants	One Local Consultant for the Incorporation of Gender Equity Criteria in Financial Inclusion and Responsible Supply Chains at USD$17,250. See annex 8 for additional details		17,250			17,250			17,250	Ministry of Natural Resources (MNR)
Training, Workshops, Meetings	Inception workshop (see M&E budget table for additional details)					-	15,000		15,000	Ministry of Natural Resources (MNR)
Training, Workshops, Meetings	Training and Workshops aimed to increase formalization and mercury reduction				70,000	70,000			70,000	Ministry of Natural Resources (MNR)
Training, Workshops, Meetings	Training on mercury-free processes for Gold mining for ASGM miners and Awareness raising for National and district government institutions to support sustainable mercury reductions and invest in mining organizations.			64,750		64,750			64,750	Ministry of Natural Resources (MNR)

Training, Workshops, Meetings	Training to strengthen capacities to assess, plan and implement formal mercury-free interventions in the ASGM sector.	190,000				190,000			190,000	Ministry of Natural Resources (MNR)
Training, Workshops, Meetings	Training workshops, seminars and meetings to strengthen project management capabilities					-		27,500	27,500	Ministry of Natural Resources (MNR)
Training, Workshops, Meetings	Training, workshop and conferences on access to finance for the promotion of Mercury-free Gold.		97,750			97,750			97,750	Ministry of Natural Resources (MNR)

Travel	Travel to support Output 3.1. National and district government institutions strengthened to support sustainable mercury reductions and invest in mining organizations , Output 3.2. Assay lab, processing plant and training center(s) established to promote resource efficient gold mining in ASM-LSM zones/areas, with clear provisions for sound tailings and waste management, and Output 3.3. Accredited ASGM-specific education programs scaled up to professionali ze mining operations in cooperation with the University of Applied Sciences and Technology/ school of Geology & Mining Technology (UNASAT/S GMT).			142,75 0		142,7 50			142,7 50	Ministry of Natural Resourc es (MNR)

Travel	Travel to support activities carried out under Component 4. Knowledge sharing, communication and local capacity building support				100,000	100,000			100,000	Ministry of Natural Resources (MNR)

Travel	Travel to support Output 1.1: Opportunities and constraints for peaceful ASM-LSM coexistence institutionalized by the Government of Suriname, Output 1.2: Government capacity strengthened to assess, plan, and implement sustainable mercury-free interventions in ASGM zones, Output 1.3: Sustainable Landscape Approach (SLA) to advance formalization through ASM-LSM coexistence and tributer systems, and Output 1.4: Civil Society Organization (CSO) capacity strengthened to engage Maroon and Indigenous groups and facilitate ASGM formalization.	166,000				166,000			166,000	Ministry of Natural Resources (MNR)

Travel	Travel to support Output 2.1. Opportunities created for ASGM sector with financial institutions to procure/retrofit equipment and invest in business skills for men and women, and Output 2.2. Proof of concept for technology-assisted mineral supply chain due diligence developed and tested in target regions.		95,000			95,000			95,000	Ministry of Natural Resources (MNR)
Office Supplies	Basic office supplies for duration of project period					-		18,000	18,000	Ministry of Natural Resources (MNR)
Other Operating Costs	Mandatory Audit Services (USD$2,000 per year for 4 years)					-		8,000	8,000	Ministry of Natural Resources (MNR)
Other Operating Costs	Audio Visual and Print Production Costs to raise stakeholders' awareness on the dangers of mercury and ways to eliminate/avoid its use in ASGM				35,000	35,000			35,000	Ministry of Natural Resources (MNR)

Other Operating Costs	Audio Visual and Print Production Costs for Education Programs in Cooperation with Training Institutions (Output 3.3)			45,000		45,000			45,000	Ministry of Natural Resources (MNR)
Other Operating Costs	Audio Visual and Print Production Costs to support awareness-raising on access to finance for Mercury-free Gold		55,000			55,000			55,000	Ministry of Natural Resources (MNR)
Other Operating Costs	Audio Visual and Print Production Cots to support the development of policies, policy instruments, or regulatory frameworks influenced (at national or sub-national level) to improve ASGM formalization.	100,000				100,000			100,000	Ministry of Natural Resources (MNR)
Grand Total		**1,250,000**	**1,400,000**	**1,850,000**	**345,000**	**4,845,000**	**155,000**	**250,000**	**5,250,000**	

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).