

Documentation of planetGOLD Guyana ASGM Financial Inclusion Interventions

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About the Authors

This report was authored by Cristian Arias, and Kamila Gómez, from the Alliance for Responsible Mining (ARM) in the context of a consultancy led by The Impact Facility for Sustainable Mineral Communities (TIF) to document the finance models implemented by planetGOLD phase one countries in artisanal and small-scale gold mining (ASGM) communities, with a consideration of the gender aspects of the projects. Thank you to the planetGOLD country implementation teams for providing their input and sharing the resources relevant to the write-up of this report.



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Abbreviations/Acronyms

Abbreviation/Acronym	Definition
ASM	Artisanal and Small-scale Mining
ASGM	Artisanal and Small-scale Gold Mining
CESO	Canadian Executive Service Organization
CI	Conservation International
CIDA	Canadian International Development Agency
CIRDI	Canadian International Resources Development Institute
GENCAP	Guyana Environmental Capacity Development Project
GDP	Gross Domestic Product
GGC	Guyana Gold Council
GGMC	Guyana Geology and Mines Commission
IDB	Inter-American Development Bank
IPED	Institute of Private Enterprise Development
GWMO	Guyana Women Miners Organization
SDG	Sustainable Development Goal
SME	Small and medium-sized enterprises
WWF	World Wide Fund for Nature

1. Executive Summary

This case study describes a conceptual framework for a financing mechanism to facilitate the technological transition to cleaner energy in Guyana's artisanal and small-scale gold mining sector (ASGM), developed through the planetGOLD Guyana project. planetGOLD Guyana has conceptualized four financing mechanisms for ASGM in the country. These include (1) the provision of loans through geological knowledge, (2) the creation of a Mining Development Bank, (3) the launch of a support fund, and (4) the introduction of green loans backed by local financial institutions.

planetGOLD Guyana, Executed by Conservation International Guyana, first reviewed the global status of ASGM financial inclusion efforts before undertaking an analysis of the barriers to financial inclusion for the artisanal and small-scale gold miners in the country. planetGOLD Guyana promoted dialogue and discussion among relevant stakeholders on the financial needs and interests of the ASGM sector. These spaces for dialogue were implemented through roundtables, with the participation of mining actors, financial entities, mining sector associations, and government.

However, even though the mining sector is strategic for the country's income, in terms of its involvement with the financial market, it should be noted that (1) there is very limited information on the financial inclusion of the ASM sector, (2) available information indicates that formal financing options to ASGM are quite limited compared to the supply of credit to other Small and medium-sized enterprises (SME) sectors and (3) current ASM financing is done through self-financing and/or through credits that, although intended for mining activity, are obtained through other activities not related to mining.

planetGOLD Guyana has thus not been able to implement any of the four conceptualized mechanisms. This case study highlights the efforts taken by the team, with the support of relevant stakeholders, in the design and socialization of the mechanism.

1.0 Description of the Intervention

1.0.1 Background

Guyana Environmental Capacity Development Project (GENCAPD), supported by the 1998 - 2005 Canadian International Development Agency (CIDA), and the 2008-2016 World Wide Fund for Nature (WWF) Guianas "Gold Mining Pollution Reduction Project," all laid the groundwork for the planetGOLD initiative. These interventions sought to raise awareness of the health impacts of mercury and provide miners with alternative technologies.

Guyana has historically relied on gold mining as its main industry, accounting for the majority of exports. It is estimated that between 17,000 - 18,000 people are directly employed in this sector, although actual figures could exceed 50,000 individuals. Artisanal and Small-scale Mining (ASM) has been a fundamental economic and cultural activity in Guyana for centuries. It is a significant source of employment for indigenous and non-indigenous communities and attracts labor from rural and urban areas along the coast. The recent emergence of oil has changed the landscape,

but ASM remains essential to the livelihoods of rural communities in the interior of the country.

Mineral extraction is the third most important sector for Guyana's economy, accounting for 13% of GDP in 2017, with gold production contributing 10% to the GDP. According to the Mining Act 1989, four scales of operation are allowed; (1) a small-scale claim (1500 ft x 800 ft of land) or a river claim consisting of one mile of a navigable river; (2) medium-scale prospecting and mining permits covering between 150 acres and 1200 acres each; (3) prospecting licenses for areas between 500 - 12,800 acres; and (4) permission for geological and geophysical surveys for reconnaissance surveys over large acreages. Nevertheless, considering the country's classification of active mining operations, three types are recognized: pork-knockers/artisanal¹, small-scale, and medium-scale.

However, the manner in which mining is carried out is creating environmental problems. This sector is the main cause of deforestation, which is not only a blow to the country's status as a nation with a high forest cover and low deforestation rate but also compromises Guyana's climate change goals². Other environmental impacts from the sector include soil degradation and mercury pollution.

A study conducted in 2020 found that most miners seek financial support to acquire equipment and facilities to improve the efficiency and productivity of their operations. The current practice is to self-finance, with 80% of miners resorting to this practice, either through personal savings, funds from other companies, or income generated from previous operations. In addition, 50% of the participants indicated that self-financing was the only source of capital available.

1.0.2 General Approach and Main Intervention Activities

The objective to have a "mechanism for financing capital investments for mercury-free technologies established and functional" was defined as one of the main components of the planetGOLD Guyana project. Consequently, Conservation International Guyana, the execution agency for the project, contracted the Canadian International Resources Development Institute (CIRDI/CESO) to design a mechanism for financing capital investments in mercury-free technologies within the ASGM sector in Guyana. The consultancy executed the following main activities:

Baseline Report on Global ASM Financing (September 2020): This document provided an overview of ASM financing mechanisms globally; addressing emerging trends, common challenges for ASM miners' access to finance, and future prospects. It therefore sought to provide a detailed understanding of the access to finance ecosystem, its potential, and the roles of key stakeholders and end-users. The assessment identified stakeholders and analyzed which groups of miners were supported through financing mechanisms. In doing so, the assessment highlights both the gaps and the systems in place that can be innovated upon.

¹ Bulkan, J., & Palmer, J. (2016, June). A pork-knocker is a wandering coastlander prospector for gold and diamonds that uses labour-intensive methods and rudimentary equipment.

² Conservation International Guyana. *ASM financing mechanisms for investments in mercury-free technologies in Guyana* (p. 9). Available at: https://drive.google.com/file/d/1Ax6ugEkYrc_BVIL00v-J0Dh7GOoVdoMk/view

Baseline assessment of ASM financing mechanisms at the national level (November 2020): This document provided an overview of the national ASM landscape in Guyana, as well as available financing mechanisms and approaches to reduce mercury use in the sector. In doing so, it drew on the compilation of information from various sources, including existing literature and results of studies conducted by experts in the field.

First roundtable discussion (February 2021): The objective of this first dialogue space was to gather stakeholder views on existing financing practices and challenges that prevent miners from accessing formal financing, as well as to facilitate the collaborative design of a more suitable financing mechanism for investments in mercury-free technologies in the ASGM sector of Guyana. The roundtable discussions involved several stakeholders, including representatives from the government of Guyana, the mining sector, the financial sector, civil society, and representatives from the Secretariat of the Minamata Convention on Mercury.

Second roundtable discussion (April 2021): Using the information obtained in the first roundtable discussions, this second round sought to present to stakeholders the design of the ASGM financing model to get their perceptions and analysis. Secondly, the space sought additional information from stakeholders regarding potential financial, governmental, technological, and supply chain support for the model.

Design and recommendations for a national ASGM financing mechanism (May 2021): The purpose of this report was to present a conceptual framework for a financing mechanism to facilitate the transition towards eliminating mercury in the ASGM sector in Guyana.

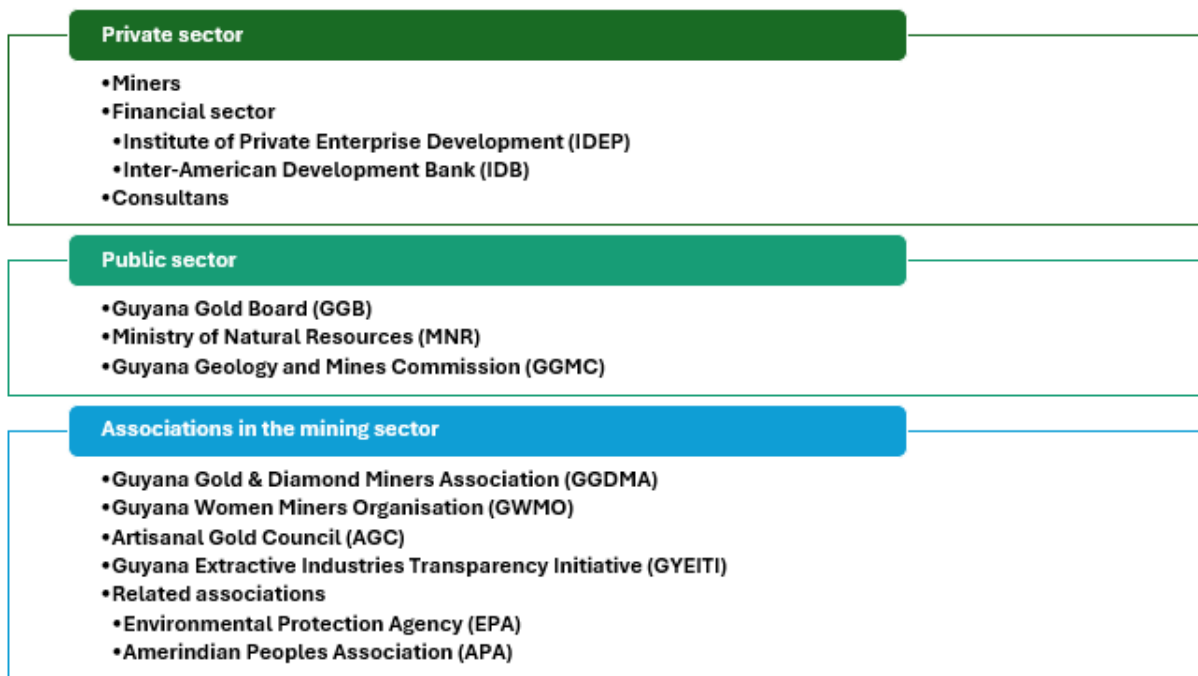


Illustration 1: Roundtable stakeholders in the financial component.

Source: CIRDI's ASM financing mechanisms for investments in mercury-free technologies in Guyana report³.

³ Conservation International Guyana. *ASM financing mechanisms for investments in mercury-free technologies in Guyana*. Available at: https://drive.google.com/file/d/1Ax6ugEkYrc_BVIL00v-J0Dh7GOoVdoMk/view

1.0.3 Target Areas and Target Groups

The roundtable discussions included institutions from the private, public, and civil society sectors that are directly or indirectly part of the country's gold value chain.

The participation of miners, financial sector institutions, and consultants from the private sector was highlighted. The Ministry of Natural Resources, the Guyana Geology and Mines Commission, and the Guyana Gold Council are stakeholders from the public sector. Finally, from the civil society, the participation of mining women's collectives, indigenous groups, gold supply chain groups, and environmental groups is noteworthy. Although the project carried out an ASGM baseline survey identifying ASM presence in six of the ten districts in the country, no specific area or regions were defined as such to develop a pilot program⁴.

1.0.4 Partners and Key Stakeholders

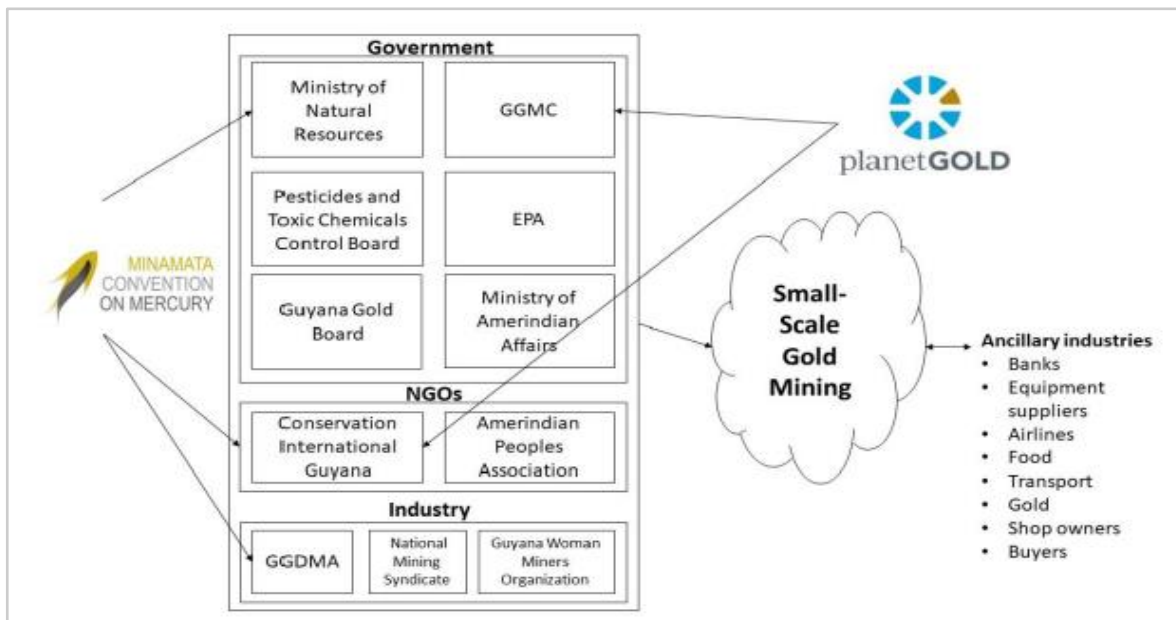


Illustration 2: Stakeholder map of Guyana's SSGM sector.

Source: CIRDI ASM financing mechanisms for investments in mercury-free technologies in Guyana report.

According to the design of the mechanism, the main stakeholders are the entities in charge of the country's compliance with the Minamata Convention commitments, which include public institutions, civil society, and gold industry associations. However, no specific role or responsibilities were envisaged for each of these actors in materializing the financial component.

⁴ Mining districts identified by the program: 1) Berbice Mining District, 2) Potaro Mining District, 3) Mazaruni Mining District, 4) Cuyuni Mining District, 5) North West Mining District, and 6) Rupununi Mining District.

1.0.5 Status of ASGM financing prior to intervention and financial needs assessment

The Institute of Private Enterprise Development (IPED) is Guyana's leading small business (SME) lender, with a total of 11 branches and 95 full-time employees.⁵ The IPED 2014 Annual Report indicates that of the 5,472 loans granted that year, only 8 were directed to the mining sector. According to IPED staff, the situation has not changed substantially since then: most IPED loans to the sector have been granted to individuals and companies with prior credit history in non-mining activities. In addition, according to an Inter-American Development Bank (IDB) report, there is very little information available on the financing sources ASM miners use in their operations. IPED and the Republic Bank of Guyana suggest that informal financing is the primary source of capital for the sector. This would include direct loans from family members, money lenders, commercial credit from equipment suppliers, and logistical support.

ASM miners may also be using bank loans, but these are most likely to be obtained through retail credit arrangements in the form of personal loans or mortgages, with the justification for the loan focused on non-commercial considerations. Finally, according to information from the Bank of the Republic of Guyana, by 2020, the percentage of loans made to mining sector companies in the country was approximately 3.2% of the total to the private sector, showing the sector's difficulty in obtaining formal credit.

1.0.5.1 Description of the financial mechanisms.

The financial mechanism proposed so far by planetGOLD Guyana towards financial inclusion of the ASM sector is conceptually based on four main strategies, presenting elements that, if developed, could provide a basis for formal financial inclusion of the sector. Each of these is presented below:

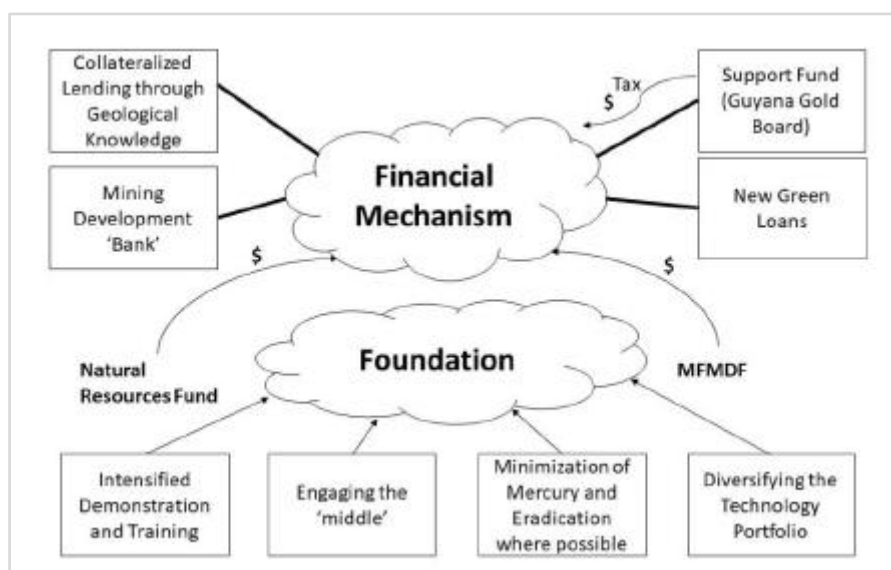


Illustration 3: Conceptual Framework of a Financial Mechanism for ASGM in Guyana.

Source: CIRDI ASM financing mechanisms for investments in mercury-free technologies in Guyana report.

⁵ IPED is a Microfinance and Microcredit Institution in Guyana.

1. **Loans secured by geological knowledge:** Following an approach experimented with in several African countries, this strategy highlights the potential use of geological data as collateral for formal financial institutions. This means getting a feasible estimate of the amount of gold in a concession, along with guarantees of security of tenure and the accounting details of the holder, to reduce lending risks. Two strategies are proposed focused on geological data collection.
 - a. Mapping alluvial sites: Data collection would provide certainty to investors and demonstrate government proactivity in prospecting and land demarcation.
 - b. The second strategy suggests using this data to 'block out' areas for ASM.

This zoning and sharing of geological information would provide certainty to lending institutions about the production and resource quantity of gold in the ground. Using geological knowledge as collateral to obtain financial services compares to using future crops in agriculture, establishing a platform and some level of certainty for lenders on the financial security of the miners.

2. **Mining Development "Bank":** another option is a mining development bank, which would catalyze financing for the ASM sector. This could be similar to an agricultural bank, anchored in an entity such as the Guyana Gold Council (GGC) and the Guyana Geology and Mines Commission (GGMC). A dedicated mining development bank would provide the security for financing clean technologies promoted at the three demonstration sites⁶ of the planetGOLD Guyana project. While the source of funding is still under debate, this is one way to finance and subsidize the delivery of green technology for ASGM in Guyana, while establishing a lasting presence in rural miner communities. It also provides a neutral intermediary for commercial banks that wish to finance/subsidize technology but cannot yet directly participate in lending to the sector.
3. **Launch of a Support Fund:** This initiative could be established in the same spirit as the mining development bank but used for specific purposes and operating on a much smaller scale. It is proposed that the GGC would administer this fund; purchasing gold from miners and charging them a 5% royalty in addition to an income tax of 2% - 3.5% percent, depending on the price of gold.
4. **New "green loans":** Commercial banks and microfinance institutions are increasingly showing interest in strengthening their links with the ASGM sector despite initial reluctance. Although it was initially considered too risky to lend to miners, the situation could change as Guyana recovers from the COVID-19 pandemic. It is suggested that rather than being selective with clients, loans offered to miners could focus on environmental issues, an idea that has been supported by most of the lending institutions in Georgetown and the Georgetown Chamber of Commerce.

Additionally, planetGOLD Guyana contemplated strategies that, although not part of the scope or direct relationship aimed at financial inclusion, will strengthen the implementation of the conceptualized mechanisms. These four complementary strategies are highlighted as part of the component towards the sectors' formal financial inclusion in the country:

1. **Mercury minimization as a start and not eradication:** It is important to carry out pragmatic initiatives that focus on mercury reduction and improved management as an initial goal

⁶ planetGOLD Guyana Mining sites: Barima–Waini, Cayuni Mazaruni and Potaro Saparuni.

- before pursuing alternatives for complete eradication.
2. **Involve the middle:** It is essential to involve intermediary actors in the supply chain to reduce risks in lending directly to miners. Working hand-in-hand with gold exporters and suppliers to the sector, who, having more structured businesses and financial statements, could access loans from banks to lend to miners. These suppliers and buyers have the ability to lower the risk of financing miners.
 3. **Diversify the technological portfolio:** The diversification of the technological portfolio is key to involving miners from different segments. This approach considers two major actors in the country's ASM: the "elite" miners who control the sector and the "pork knockers" (informal miners) who need more affordable solutions.
 4. **Intensification of demonstration and training:** It is imperative to continue improving the current mercury gold processing method firmly entrenched and popular in the sector. This process has proven to be polluting, and a change to more environmentally friendly options is needed. This will only happen with more practical demonstration sites in the country, starting with the three planetGOLD Guyana demonstration sites.

1.0.5.2 Socialization of mechanism

This section highlights some of the socialization sessions of the financial inclusion component of the Program.

- (1) First round of discussions (February 2021)⁷
 - Main topics addressed:
 - Market perspectives on the available ASGM financing options.
 - Shortlist of financing options for acquiring mercury-free technology.
 - The case for a financing mechanism specific for investments in mercury-free ASGM technologies in Guyana.
 - Panel discussion on challenges and opportunities for financing the transition to mercury-free technology in Guyana's ASM Industry.
 - Modeling contextualized solutions for de-risking and enhancing financing for mercury-free technologies in Guyana's ASM industry.
- (2) Webinar "Transition to mercury-free mining," organized by the Georgetown Chamber of Commerce and Industry (April 2021)⁸. The main topic addressed was the financial alternatives toward a mercury-free transition.
- (3) Second round of discussions (April 2021)⁹
 - Main topics addressed:
 - Presentation of the Model Design Report on the proposed National ASM Financing Mechanism.

⁷ The first roundtable was held on February 17-19, 2021, in Georgetown, Guyana. This was a hybrid session with some participants engaged online. However, the roundtable was also accompanied by participants through digital platforms. Conservation International Foundation Guyana. (2021). *Report on the roundtable discussions held on February 17-19, 2021*. Report available at: https://drive.google.com/file/d/1gEb97wVLLIYyT1Y_Dfa3NJQ2cevg1DlN/view?usp=sharing

⁸ Taking advantage of the dissemination of activities (1) and (2), 25 interviews were conducted to gather additional perspectives on the characteristics a financial mechanism for greener technology in ASM should have.

⁹ The second roundtable was held on April 15, 2021, in Georgetown, Guyana. The roundtable also had participants engaged through digital platforms.

1.0.5.3 Performance and sustainability of the mechanism.

There is no evidence of specific activities for the application of the financial mechanisms described, nor were any strategies for its sustainability identified.

1.1 Cross-cutting Issues

1.1.1 Gender

There is no official gender-disaggregated data available on the ASM industry in Guyana. The Guyana Women Miners Organization (GWMO) supports women miners and works to expand opportunities for women in the sector through inclusive decision-making. More recently, the GWMO has embarked on a mission to stop illegal activities through the use of new technologies, such as drones and monitoring apps that allow women in the field to report such activities.

In the ASM space, the lack of data on women's roles and participation in the ASM workforce and a gap in information on gender-specific financing needs speaks to the extent of continued ignorance of women's roles and work in the sector.

Efforts have been made to encourage financing programs to be designed with a gender perspective in mind and to include government and private sector actors as crucial stakeholders to allow the collection of gender-disaggregated data and contribute comprehensively to the fulfillment of Sustainable Development Goal (SDG) 5 in the country. This is based on the strategic approach of CIRDI's ASM program, which promotes a cross-cutting approach to gender equality (SDG 5)¹⁰ and human rights (SDG 16)¹¹ implemented through sustainable governance frameworks. The current data shows that the proportion of gender participation in disbursed loans is 35% women compared to 65% men.¹²

1.2 Findings, Observations, Lessons Learned

1.2.1 Project Highlights

The implementation of planetGOLD Guyana's financial inclusion component made it possible to gather global ASGM financial inclusion efforts that informed the design of the financial mechanisms proposed for the country. In addition, the design of a financial inclusion mechanism was achieved, built jointly through the dialogue with key stakeholders in the country's gold value

¹⁰ Sustainable Development Goal 5 is Gender Equality.

¹¹ Revised 2023 Country Progress Report.

¹² IPED statistics on loans granted to SMEs.

chain. Consequently, as a result of all the work carried out under the financial mechanism component, a necessary debate was launched to highlight the role that local and regional banking sector institutions can play in promoting green credits, capital investments, and equipment for ASM that will progressively transform the sector and enable investment into mercury-reduction technologies.

So far, the result of all efforts has been in conceptualizing the four potential mechanisms for future project implementation. 1) loan guarantees through geological knowledge; 2) the establishment of a mining development "bank"; 3) the launch of a support fund; and 4) the design and implementation of new green loans. However, the challenges in putting in place a financial mechanism to implement green technology in Guyana's ASM sector are significant and often underestimated. Despite this, most stakeholders in the country are interested in moving the sector onto a greener path but must realize that achieving this will require commitments from all sides.

1.2.2 Suitability of the intervention design

This aspect can be evaluated once one of the proposals for promoting financial inclusion proposed by the planetGOLD Program in Guyana is implemented since there is no information available to evaluate the "suitability" of the designed financial mechanism.

1.2.3 Specific Factors for Success

- The promotion of important spaces for dialogue around the challenges of ASM in obtaining financing that can allow them to transition to cleaner processing technologies and gradual reductions in the use of mercury.
- Diversity in the design of alternatives in the financial inclusion component. This fact allows for adaptability and flexibility in the face of changes in the opening of the financial sector to the mining sector in the country.

1.2.4 Potential Factors for Failures

The challenges associated with the ASM industry's access to formal financing are fourfold: financing, legal, and reputational risks, as well as political/infrastructure gaps. These exist in the form of weak governance structures, lack of eligible collateral, marginal returns to finance loan repayments, environmental and health violations through the use of mercury, illegal mining and smuggling, as well as a deficiency of enabling frameworks. Therefore, these factors harmed the implementation of the proposed financial mechanisms, especially considering that government institutions could play a direct role in building trust between the mining and financial sectors and, in turn, promoting financing mechanisms led by the public sector, administered by banks and provided to miners.

In addition, there is still an important gap in information and data on the gap between the mining sector and the supply of financial services, especially for artisanal and small-scale mining. In terms of gender, due to a limitation of data on the reality of women miners, the financial mechanisms conceptualized may not align with their needs.

1.2.5 Recommendations for Future Interventions

Despite showing considerable enthusiasm for facilitating the implementation of green technology in ASM gold mining, lenders are still hesitant to move forward due to the perceived risks; they are likely to be even less enthusiastic about lending to smaller groups of miners, who are even more difficult to locate. Due to multiple loan defaults during the pandemic, these lenders recognize that expanding their portfolios into mining in ways that have never been done before could be a feasible solution and potentially provide long-term financial stability for both themselves and miners.

Furthermore, it is important to implement actions that increase women's access to financial products. Women have a 35% disbursement of loans compared to 65% of male miners, demonstrating persistent gender-related barriers that are not being addressed.

Documents Reviewed

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