REPORT

planetGOLD

Making a world of difference
in small-scale gold mining.

A GEF Initiative

Documenting planetGOLD programme experiences with ASGM supply chain mechanisms

Burkina Faso, Colombia, Ecuador, Guyana, Indonesia, Kenya, Mongolia, Peru, and the Philippines.

3 May 2024 / Final version

Supported by: gef

Led by: UN environment programme

About the Authors

This report was written by Jara Bakx, Blanca Racionero Gómez, and Rosanna Tufo of Levin Sources in the context of a consultancy led by the Alliance for Responsible Mining (ARM) to document and further support the development of ASGM supply chains in the planetGOLD programme. Levin Sources is a B Corp™ certified consultancy that drives the transition to just and sustainable minerals value chains, with a core team of strategists, researchers, project managers, educators and communicators with multidisciplinary abilities and collective expert knowledge in sustainable supply chains, extractives, minerals science & engineering, biodiversity and conservation, human rights and vulnerable groups, responsible business conduct and good governance. Clients include a diversity of players in the minerals system, from Fortune 500 companies and SMEs to industry associations and certification bodies to NGOs and civil society to governments in fragile states and in G20 economies. For more information, please visit www.levinsources.com.

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Abbreviations/Acronyms

Abbreviation/Acronym	Definition
AGC	Artisanal Gold Council
AML	Anti-money laundering
ANEEMAS	National Agency for the Supervision of Artisanal and Semi-Mechanized Mining *(Agence Nationale d'Encadrement des Exploitations Minières Artisanales et Semi-mécanisées)*
ARM	Alliance for Responsible mining
ASGM	Artisanal and small-scale gold mining
ASM	Artisanal and small-scale mining
ASMO	Artisanal and small-scale mining organization
BCE	Central Bank of Ecuador (*Banco Central del Ecuador*)
BVK	*Baatar Vangiin Khishig*
BoM	Central Bank of Mongolia
BSN	National Certification Agency
BSP	Central Bank of the Philippines (*Bango Sentral ng Pilipinas*)
CRAFT	Code of Risk-mitigation for artisanal and small-scale mining engaging in Formal Trade
CSF	Credit Surety Fund

EPRM	European Partnership for Responsible Minerals
FAARF	Support Fund for Women's Income-Generating Activities (*Fonds de soutien aux activités rémunératrices des femmes*)
FATF	Financial Action Task Force
GGB	Guyanese Gold Board
GOLD-ISMIA	Global Opportunities for Long-Term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-Scale Gold Mining
IPR	Community mining permit (*Izin Pertambangan Rakyat*)
LBMA	London Bullion Market Association
LSGM	Large-scale gold mining
LSM	Large-scale mining
MFPS	Mercury-free processing system
MGB	Mines and Geosciences Bureau
MSMEs	Micro, small and medium enterprises
NGO	Non-governmental organization
NPCM	National Programme for Chemical Management (*Programmea Nacional para la Gestión Ambientalmente Adecuada de Sustancias Químicas en su Ciclo de Vida*)
NSBSSMAI	Northern Sagada Barangay Small Scale Mining Association Inc.
OECD	Organization for Economic Co-operation and Development

OECD DDG	OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
OHS	Occupational health and safety
ONASSIM	National Office for the Security of Mining Sites *(Office National de Sécurisation des Sites Miniers)*
OSS	One-Stop-Services
PMRB	Provincial Mining Regulatory Board
RCM	Royal Canadian Mint
RUCOM	Sole Registry of Mineral Traders (*Registro Único de Comercializadores de Minerales*)
SCC	Saving and Credit Cooperative
SMBC	Samahan ng mga Minero sa Barangay Casalugan
SNI	Indonesia National Standard
SONASP	National precious substances company *(Société nationale des substances précieuses)*
SUNAT	Superintendence of Tax Administration (*Super Intendencia de Administración Tributaria*)
UNDP	United Nations Development Program
WGC	World Gold Council
WPR	Mining permit area (*Wilayah Pertambangan Rakyat*)

EXECUTIVE SUMMARY

Artisanal and small-scale gold mining (ASGM) plays a pivotal role in driving local economies and supporting livelihoods globally. However, its predominantly informal nature, regulatory constraints, financial limitations, and difficulties in meeting compliance standards all present challenges for miners to access formal markets. The planetGOLD programme, working in partnerships with governments, the private sector and ASGM communities aims at addressing these challenges and improving production practices and the work environment for ASGM miners. This includes working to close the financial gap, supporting formalization, raising awareness, and connecting miners to mercury-free technology and formal markets. Through the implementation of the planetGOLD Criteria for Environmentally and Socially Responsible Operations, ASGM stakeholders are able to showcase adherence to internationally recognized responsible sourcing standards. This report assesses the efficacy of planetGOLD ASGM supply chain mechanisms, focusing on experiences from country projects funded during the program's first phase, with the objective of distilling key insights for similar ASGM market access initiatives.

The planetGOLD country projects have strategically used various approaches to integrate ASGM actors into formal gold markets, considering the multifaceted challenges of the sector’s informal nature and the diverse economic landscapes in which ASGM operates. Recognizing the broader context of ASGM supply chains, ASGM market access initiatives focus on creating sustainable linkages between ASGM organizations (ASMOs) and formal buyers. Given the prevalence of informality in ASGM operations, efforts extend beyond mere formalization to encompass the application of good organizational and mining practices. Challenges related to informality, such as limited access to formal financing and trading systems, necessitate collaborative efforts with governmental authorities to strengthen legal frameworks and regulations. Moreover, geographic remoteness and centralized gold buying centers pose logistical hurdles, reinforcing reliance on local traders and highlighting the importance of financial services in enabling miners to adopt responsible practices.

The planetGOLD programme's approach to facilitating market access is integrated within its wider framework to support cleaner, safer, and more efficient ASGM practices. Country projects implement various activities under the “access to formal markets” pillar of the programme, including conducting supply chain studies, providing training on the planetGOLD Criteria, and assisting ASGM organizations (ASMOs) in preparing documentation to demonstrate compliance. Activities to facilitate engagement with market actors, pilot supply chain mechanisms, advocate with governments for better regulations, and address logistical barriers were also implemented by

some planetGOLD country projects. In addition, initiatives to support access to finance and the formalization of ASMOs have a complementary and pivotal role to close the gap between miners and formal market participation, ensuring sustainable economic linkages within the ASGM sector.
The analysis found that the planetGOLD country projects face several challenges in fulfilling the programme's objective of increasing miners' access to formal markets. The majority of these challenges are deeply rooted in systemic issues and proved, in many instances, too complex to resolve within the scope of the countries' projects. These barriers include difficulties in formalizing ASGM operations, which can restrict miners' access to formal market and compelling them to operate outside formal channels. Furthermore, continued difficulties for ASGM operators' to access formal financing, partially due to negative perceptions of the ASGM sector that persist at banks, perpetuate miners' reliance on pre-financing arrangements with informal traders or collectors, which in turn has created dependencies that complicate their transition to formal buyers. Other key challenges identified included weak regulatory enforcement and support, difficulties in translating due diligence requirements and benefits to miners and traders as well as in documenting compliance with those requirements, ensuring traceability of ASM gold, and a lack of trust among ASGM supply chain actors. In addition, leveraging compliance with the planetGOLD Criteria into concrete and self-sustaining market linkages has also proven difficult. Focus on compliance alone does not result in transition to formal supply chains but requires specific interventions to support formal market actors' engagement, commercially viable and sustainable market linkages. Geographic remoteness, existing relations with informal traders, logistical trade challenges related to location and accessibility, and gender barriers further complicated the ability of the planetGOLD country projects to facilitate formal market linkages.

Through this assessment and the authors' broader expertise in facilitating market linkages, several key lessons were distilled. Emphasizing a multifaceted approach to overcoming barriers to formal market access, this report underscores the importance for ASGM market access initiatives, including activities under the planetGOLD programme to be designed and implemented on the basis of a supply chain mapping study to better understand the role of local trade dynamics in fostering sustainable market linkages. Furthermore, identifying incentives for ASGM actors to engage with formal markets emerges as a fundamental element, recognizing the often vastly different expectations between miners and programs regarding the benefits of formal market access. Practical solutions to logistical challenges, such as decentralizing essential services and engaging local intermediaries, are also explored, with promising results in several country projects. Moreover, the engagement of market actors beyond miners in ASGM market access initiatives, in particular local traders and downstream market actors, is identified as crucial to ensure market linkages will sustain beyond the life of the project.

This report also includes the analysis of the 9 planetGOLD phase 1 countries. These were central to the outcomes outlined in the four main chapters and to identify common challenges and lessons learned. Each annex then provides further details on the activities, challenges and lessons that each country experienced based on their specific context and level of advancement against programme's objectives.

CHAPTER 1 Introduction

The artisanal and small-scale gold mining (ASGM) sector stands as a crucial economic driver for communities worldwide, supporting livelihoods and fostering local economies. Nonetheless, ASGM production and trading remains largely informal and ASGM producers commonly struggle or feel discouraged to access formal markets due to a variety of reasons, including regulatory constraints, financial limitations, and difficulties in meeting compliance standards. Instead, they often rely on informal trading routes that tend to perpetuate a lack of transparency in the gold supply chain and leave miners vulnerable to a cycle of informality and uncertainty. This restricts their access to fair market prices and essential financial support such as loans and investments, in turn impeding their ability to adopt more socially and environmentally responsible ASGM practices, including transitioning away from the use of mercury.

The challenge does not lie in demand; there is plenty of interest from various formal buyers such as refiners and jewelers, as well as specialized gold buying programmes that offer premium rates, all expressing an eagerness to procure responsibly produced artisanal and small-scale mining (ASM) gold. However, the sourcing of gold from ASGM producers often raises concerns amongst downstream buyers due to perceived high compliance risks[1]. The complex journey of ASM gold, starting from mineral producers to local traders, processing plants, assaying laboratories, and buying centers before reaching domestic or international refiners, impedes the establishment of transparent supply chains. Nevertheless, the ASGM sector has gained increasing recognition for its substantial contribution to global gold production, accounting for approximately 15-20% of the global gold supply. Efforts are being made at national and international levels to advocate for the integration of ASM gold into supply chains, including by several Central Banks[2], the London Bullion Market Association (LBMA)[3], the Organization for Economic Co-operation and Development (OECD)[4], and the World Gold Council[5] (WGC), provided that it is produced according to international standards for responsible sourcing and due diligence like the OECD Due Diligence Guidance (OECD DDG) and the EU Conflict Minerals Regulation. However, without tangible incentives, regulatory support, and oversight for ASGM producers, traders, buyers, and other supply chain actors, meeting these rigorous due diligence standards poses a challenge for ASGM.

To address this challenge, the planetGOLD programme seeks to facilitate miners' access to formal

[1] planetGOLD (2021). Supply Chain Technology Solutions for planetGOLD Projects. Retrieved from: https://www.planetgold.org/sites/default/files/2022%20pG_Report_Supply%20Chain%20Technology.pdf
[2] World Gold Council (2021). Central Bank Domestic ASGM Purchase Programmes. Retrieved from: https://www.gold.org/goldhub/research/central-bank-asgm
[3] LBMA (2022). LBMA Board Response to ASM Feasibility Study. Retrieved from: https://www.lbma.org.uk/publications/lbma-board-response-2022/lbma-board-response-to-asm-feasibility-study
[4] OECD (2023). Artisanal and small-scale gold mining. Retrieved from: https://www.oecd.org/daf/inv/mne/artisanal-small-scale-miner-hub.htm
[5] World Gold Council (2022). Artisanal and Small-scale Gold Mining. Retrieved from: https://www.gold.org/esg/artisanal-and-small-scale-gold-mining

gold supply chains, in partnership with gold buyers and industrial users[6], as one way to incentivize the transition to a mercury-free sector. As an integral part of the planetGOLD programme objectives, the planetGOLD Criteria for Environmentally and Socially Responsible Operations ("Criteria") were established and are intended to be integrated in all projects' implementation. While the Criteria were developed as operational criteria for ASGM actors engaged with the planetGOLD programme, they may also serve to demonstrate conformance with internationally recognized elements of responsible sourcing. The Criteria are aligned with the Code of Risk-mitigation for ASM Engaging in Formal Trade (CRAFT) Code and include additional requirements of the Minamata Convention on Mercury and the Global Environment Facility (GEF)'s Policy on Environmental and Social Safeguards.

Ultimately, addressing the opacity in the gold supply chain and sharing successful strategies for facilitating market access are crucial steps towards integrating responsible ASGM sources into formal markets. This report therefore presents an assessment of the implementation of the planetGOLD ASGM supply chain mechanisms to date. It focuses on the experiences of the planetGOLD country projects funded during the first phase of the programme.

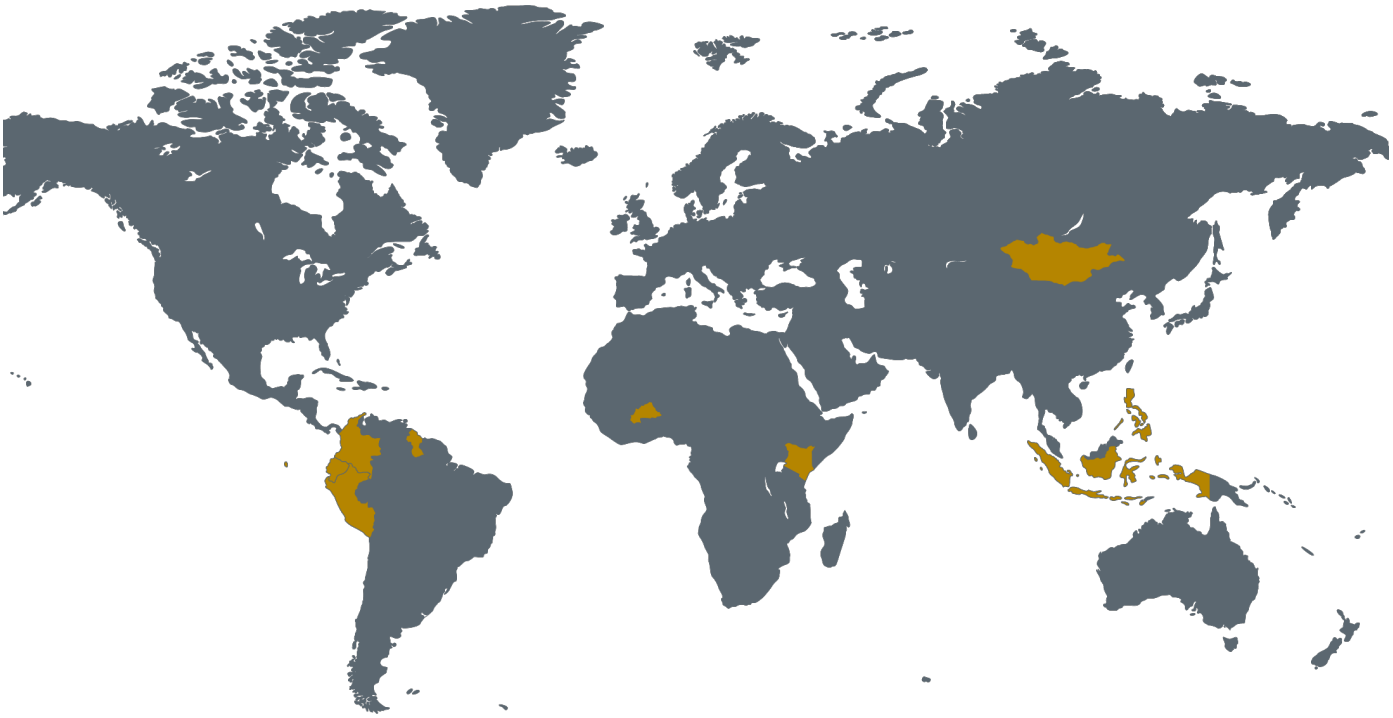
The report is structured as follows:

- Chapter 2 provides the context of ASGM supply chains and sets out the key activities that the Phase 1 planetGOLD country projects have implemented to support miners' access to formal markets. Although all planetGOLD country projects work under the key pillars of the global programme, slight variations in approaches are seen, based on the specific circumstances of each country.
- Chapter 3 analyses the main challenges the planetGOLD country projects experienced in supporting miners' access to formal markets. These challenges are often rooted in systemic issues, obstructing miners' access to formal markets.
- Chapter 4 presents the lessons learned of the planetGOLD programme's access to formal markets work. It should be noted that this report does not present a comprehensive monitoring and evaluation assessment, tracking progress against project indicators. Instead, its purpose is to distill key lessons learned, that may be applicable to similar ASGM market access initiatives.
- Finally, the Annexes detail the progress achieved by each Phase 1 planetGOLD country project in implementing the access to formal markets work. They provide a more comprehensive description of how projects supported miners in conforming with the planetGOLD Criteria and, where applicable, in demonstrating this conformance to potential formal buyers. The Annexes also analyze the dynamics of each country's gold supply chain, outline project activities aimed at supporting miners' access to formal markets and conclude by presenting the significant lessons learned by each planetGOLD country project team.

[6] planetGOLD (2023). About the programme. Retrieved from: https://www.planetgold.org/about

Methodology

This assessment is the result of a series of semi-structured interviews with the Phase 1 planetGOLD country project managers that took place between September – November 2023. Phase 1 planetGOLD countries include: Burkina Faso, Colombia[7], Ecuador, Guyana, Indonesia, Kenya, Mongolia, Peru, and the Philippines. In addition, an extensive literature review of existing planetGOLD documentation (e.g., annual reports, baseline studies, project implementation reports (PIRs)) was conducted.



Map 1: Phase 1 countries of the planetGOLD programme that were in scope for this assessment.

The findings presented in this report are the result of the authors' dedicated efforts to capture the challenges and lessons learned from the planetGOLD country projects. However, it is important to acknowledge certain limitations that affect the comprehensiveness and accuracy of the findings. The depth of this report was limited by the information provided by respondents and the accessibility of documentation from planetGOLD country projects on the implementation and evaluation of initiatives to facilitate access to formal markets. The scope and granularity of the analysis was dependent on the data and information available. In addition, the research focused solely on supply chain mechanisms, and therefore the findings do not delve into the details of other aspects of the planetGOLD country projects.

[7] For Colombia, the authors interviewed experts that worked closely with planetGOLD Colombia in implementing their ASGM supply chain work, as well as with a former planetGOLD Colombia country manager, who led the project until early in 2023.

Glossary of key terms related to “access to formal markets”

Below, Table 1 outlines the definitions of some of the key terms that are relevant in the context of the activities aimed at facilitating miners’ access to formal markets. Based on data collected for the compilation of this report, it emerged that some of these terms are not consistently and explicitly defined in ASGM market access initiatives, including in the planetGOLD programme. Consequently, there might be differing interpretations among organizations and individuals regarding these terms. For consistency across this report, the following definitions, specific to the ASGM supply chains, were applied.

Table 1: Glossary of key terms relevant for the "access to formal markets" component.

Term	Definition
ASGM supply chain mechanism	The activities employed to manage the flow of gold from ASGM sites through various stages, including extraction, processing, refining, and distribution, ensuring traceability, accountability, and responsible sourcing practices.
Continuous improvement	The principle of continuous improvement refers to the iterative progression of formalization and adherence to responsible mining practices, such as the planetGOLD Criteria. It involves assessing, implementing changes, and evaluating outcomes to steadily improve ASM organizations (ASMOs) and individuals to adherence to legal, environmental, and social standards, ensuring a drive towards responsible mining practices.
Formal market	The formal market includes those market actors that fulfill all legal requirements and have obtained all regulatory permissions, including officially licensed, accredited or authorized traders, exporters, and buyers. The formal market is not static and formal market actors may at times act informally or illegally (e.g., when committing an infraction in the law).
Informal market	The informal market includes those market actors that do not yet fulfill all legal requirements or have obtained all regulatory permissions. The informal market is not static and informal market actors may at times act formally (e.g., fulfilling some of the requirements, but not all). Importantly, informal economic actors are not and should not necessarily be defined as illegal. Illegal activities only refer to actions which are prescribed by the law (e.g., mining in protected areas), as opposed to doing an activity that the law permits, but without the required permissions.
Legitimate ASM	The OECD DDG defines ASM legitimate when “they are consistent with applicable laws. When the applicable legal framework is not enforced, or in the absence of such a framework, the assessment of the legitimacy of

	artisanal and small-scale mining will take into account the good faith efforts of artisanal and small-scale miners and enterprises to operate within the applicable legal framework (where it exists) as well as their engagement in opportunities for formalization as they become available (bearing in mind that in most cases, artisanal and small-scale miners have very limited or no capacity, technical ability or sufficient financial resources to do so). In either case, artisanal and small-scale mining, as with all mining, cannot be considered legitimate when it contributes to conflict and serious abuses associated with the extraction, transport or trade of minerals[8]".
planetGOLD Criteria	The planetGOLD programme sets out specific Criteria to govern the operations of ASGM entities engaged with the programme. The planetGOLD Criteria have been aligned to the CRAFT Code and can be recognized as a branched version of CRAFT. In addition to incorporating elements of the CRAFT Code, the planetGOLD Criteria include three criteria that are specific to the planetGOLD programme: ○ Eliminating mercury in the mining process ○ Respecting and protecting the rights of Indigenous Peoples ○ Minimizing impact on biodiversity[9]
Responsible gold	In the context of the planetGOLD programme, responsible gold refers to gold produced in conformance with the planetGOLD Criteria[10].
Traceability	Traceability refers to physical tracking of minerals at all points of the supply chain, from their mine of origin to the refiner or smelter[11].

[8] OECD (2016), OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Third Edition, OECD Publishing, Paris. Retrieved from: https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

[9] planetGOLD (2023). planetGOLD Criteria for Environmentally and Socially Responsible Operations. Retrieved from: https://www.planetgold.org/criteria

[10] planetGOLD (2023). Guidance for Calculation of planetGOLD Cross-Programme Output Indicators.

[11] OECD (2013), An introduction to the OECD Due Diligence Guidance for Responsible Mineral Supply Chains for Upstream Actors. Retrieved from: https://mneguidelines.oecd.org/An-introduction-to-the-OECD-Due-Diligence-Guidance-for-upstream-actors.pdf.

CHAPTER 2 The planetGOLD ASGM supply chain mechanisms

This chapter aims to offer an overview of the strategies and efforts undertaken by country projects to facilitate miners' integration into formal gold markets. The chapter commences with outlining the context of ASGM supply chains and addresses some of the key factors of supporting supply chain mechanisms, thereby contextualizing how planetGOLD has approached the integration of ASGM supply chain mechanisms in the programme. Then, the next section sets out how planetGOLD incorporates "access to formal markets" within its comprehensive programme framework. Finally, the chapter analyses the activities reported by country projects, shedding light on their rationale and perceived impact on miners' access to formal markets.

The context of ASGM supply chains

Programs and initiatives supporting ASGM supply chain mechanisms and access to formal markets seek to create linkages between artisanal and small-scale mining organizations (ASMOs) and formal buyers, under the assumption that access to formal markets can provide incentives for improved mining and trading practices and create economic linkages which are sustainable and outlive the externally funded programs. However, the economic systems in which ASGM producers and buyers operate presents varied characteristics, and acknowledging the reality of the sector is important to address the barriers miners face to access formal markets. This section provides a high-level overview of the key characteristics and factors which ultimately affect ASGM supply chain mechanisms.

The ASGM sector is generally characterized by organizations that largely operate informally. While this does not necessarily result in all miners operating outside the scope of the law, the informal character can inhibit the development potential of the sector by precluding ASGM actors from obtaining mining rights, access to formal financing mechanisms, and access to formal markets. However, it deserves to be acknowledged that the ASGM sector often operates in countries with predominance of informal economies. Therefore, ASMOs should not be seen as exceptional, but rather, as actors operating in wider informal economic systems and employment structures[12]. Beyond the formalization status of ASMOs, ASGM producers might also be faced with limited formalized systems of gold trading, including accessible registered traders. Generally, formalization should be considered as a broad concept – beyond merely obtaining mining licenses, but instead involving the application of good organizational and mining practices, including employment and management of environmental impacts. Notably, in many jurisdictions the operation of ASMOs

[12] Barreto M.L., Schein P., Hinton J., Hruschka F. (2018). The Impact of Small-Scale Mining Operations on Economies and Livelihoods in Low- to Middle-Income Countries. Retrieved from: https://assets.publishing.service.gov.uk/media/5a3929b640f0b649cfaf86ce/Pact__DFID_EARF_Overarching_Synthesis_Jan2018VF.pdf

within the formal sector is impeded by structural challenges. For this reason, leading standards in the sector, such as the OECD DDG and therefore the CRAFT Code, introduce the concept of legitimacy to recognize ASMOs who behave consistently with applicable laws, considering the good faith and efforts of miners in cases where the applicable frameworks are weak or not enforced[13]. The major challenges related to the informality of ASGM supply chains faced by the planetGOLD country projects are further outlined in Chapter 3.

In response to formalization and governance challenges, ASGM market access initiatives often aim to build strong relationships with relevant governmental authorities with the aim of supporting them in strengthening the legal framework and regulation of the ASGM sector. The absence of a robust legal framework and regulatory guidelines, particularly regarding gold traceability, commonly imposes significant hurdles and significant administrative burdens in establishing transparent and accountable gold supply chains. This leads to challenges in demonstrating the legality and reliability of gold production, hindering access to financial resources and investments for ASGM entities. It might also disincentivize formalization, as benefits become less evident if legalization is not coupled with governmental support to the sector and only seen as a vehicle for taxation. This includes going beyond the definition of laws and regulations but looks at its implementation as well. This is where challenges can arise (as discussed in Chapter 3).

Additionally, geographic remoteness of ASGM operations and centralized formal gold buying centers typically hinder miners' access to formal market channels. The inaccessibility of these centers, crucial for aggregating gold, poses challenges due to ASGM operations yielding smaller quantities compared to large-scale gold mining (LSGM) operations. Exporting these smaller quantities is often not economically viable. This leads to extended travel, causing logistical complexities and security risks. As a result, many miners resort to selling to traders available in proximity to their operations, regardless of them operating formally or informally. These existing relationships with local traders commonly limit ASGM integration into formal markets due to entrenched (financial) dependencies, business transactions based on trust, and established practices. Understanding these relationships helps uncover what miners need regarding gold trade and how they choose to work with certain market actors.

Financial services can provide consistent incentives and are fundamental in enabling miners to invest in improvements, for instance to enable them to move to mercury-free processing systems (MFPS). Access to capital allows the adoption of better practices and technologies, ensuring compliance with responsible sourcing and other market standards and enhancing overall productivity.

[13] OECD (2016). OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Third Edition, OECD Publishing, Paris. Retrieved from: https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf

Finally, access to formal markets, especially when involving international buyers, would bring due diligence and responsible sourcing requirements ASGM operations are expected to meet. This is where the implementation of standards such as the planetGOLD Criteria can not only improve miners' working conditions and minimize negative impacts on the environment, but also empower them to adhere to international responsible sourcing standards.

The planetGOLD programme's approach to facilitating miners' access to formal markets

Given this context, the planetGOLD programme was developed on four key pillars that build on each other (see Figure 1). The rationale of these pillars is as follows:

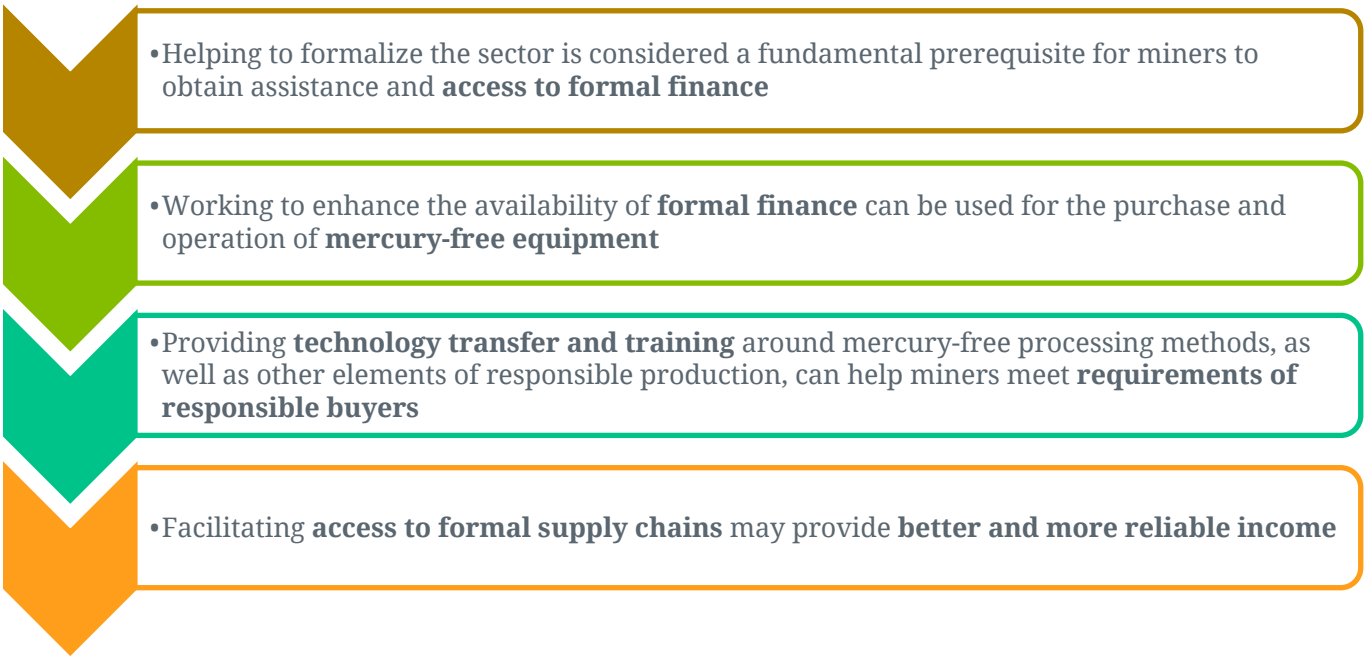


Figure 1: The four key pillars of the planetGOLD programme. Source: planetGOLD (2023). Guidance for Calculation of planetGOLD Cross-Programme Output Indicators.

Each country project under the planetGOLD programme aims to implement actions and obtain results along the four programme components. Although reporting on project implementation progress is structured along the four key components of the planetGOLD programme, activities in reality are rarely isolated under a single component. Rather, as illustrated by the Theory of Change (Figure 2) of the planetGOLD programme, the actions undertaken within one pillar tend to serve as a foundation for activities within another. In essence, the efforts across these pillars are interrelated and interconnected, rather than siloed.

The overarching objective (mission) of the programme is to demonstrate a pathway to cleaner, safer and more efficient ASGM practices with a focus on reducing and, where feasible, eliminating the

use of mercury in the sector. In the Theory of Change, access to formal markets is depicted as an important component in this progression, reflecting how the efforts aimed at ensuring responsible mining practices also contribute to access to formal markets.

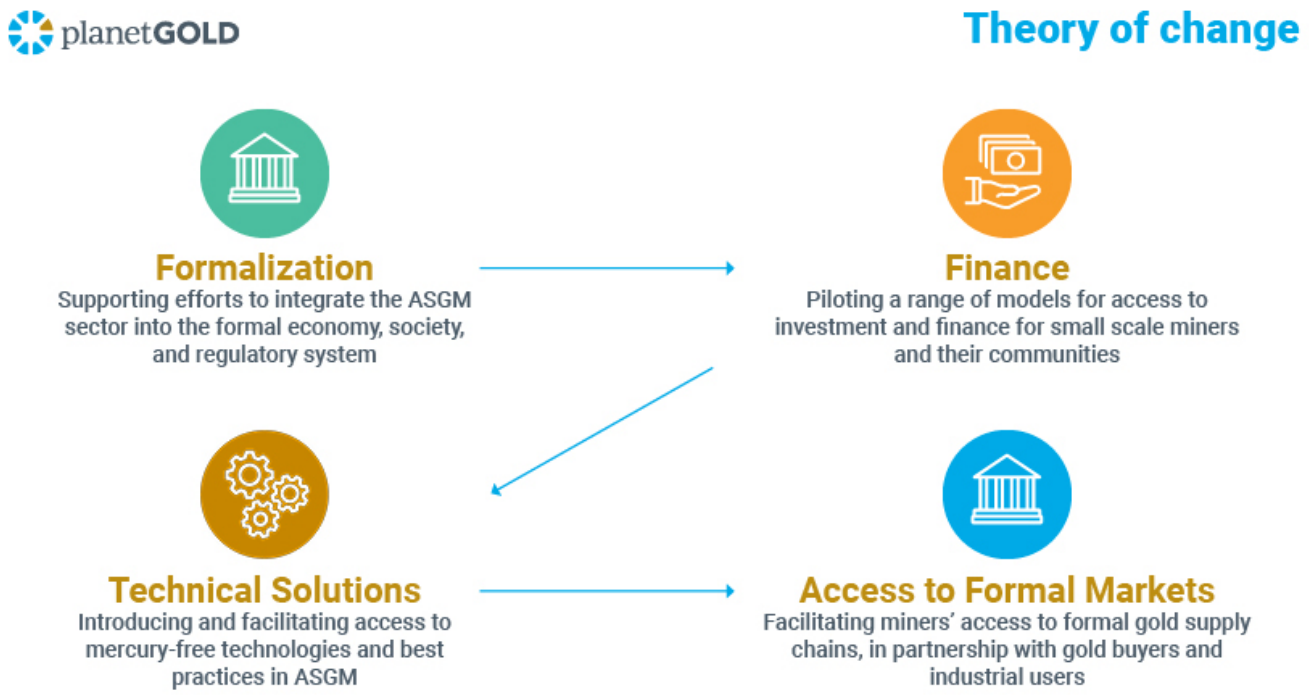


Figure 2: The planetGOLD programme Theory of Change. Source: planetGOLD (2023). Guidance for Calculation of planetGOLD Cross-Programme Output Indicators.

The planetGOLD country project activities to support miners' access to formal markets

Activities related to the four pillars under the planetGOLD programme are implemented by the planetGOLD country projects. In the planetGOLD annual progress report 2021/2022, activities under the access to formal markets section include: 1) engaging local, national, and international stakeholders (market actors) to establish a transparent gold supply chain and 2) supporting mining organizations to comply with the planetGOLD Criteria, including through training and local and national workshops, and demonstrating verified compliance[14]. However, the planetGOLD country projects indicated they consider a myriad of other (sometimes indirect) activities as facilitating and enabling miners' access to formal markets as well.

As mentioned above, slight variations in approaches to the access to formal markets pillar were seen in this study. In some of the countries, facilitating miners' access to formal gold supply chains was not a project priority. For that reason, in this overview of key activities, we differentiate

[14] planetGOLD (2023). 2021/2022 Annual Progress Report. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD_2021-2022_Annual_Progress_Report.pdf

between activities explicitly reported by country managers as supporting miners' access to formal markets, and activities falling under the other planetGOLD programme pillars which would measurably (empirically) or potentially (in the future) contribute to miners' access to formal markets. The following section combines different approaches observed across the nine planetGOLD country projects reviewed – though it should be noted that not all countries are in the process of implementing or have implemented every single one of these activities. Rather, common or key activities were identified and, in the sections below, it is specified in which countries the specific activities were developed. Further details on country-specific activities are found in the Annex.

Activities supporting access to formal markets:

Conduct supply chain studies

Several of the planetGOLD country projects conducted studies to better understand the existing gold supply chain. Such studies typically involved assessing gold trading practices of ASM gold supply chain actors, understanding the legal environment and regulations governing the ASM gold supply chain, mapping the key stakeholders and their respective roles and interests, understanding the needs of ASGM actors in order to adopt responsible mining and sourcing practices, and identify potential incentives. These studies are seen as a key step in designing and implementing activities aimed at facilitating miners' access to formal markets as it allows the project teams to understand the existing supply chain dynamics and the potential challenges and opportunities for the project. For example, planetGOLD Mongolia published a report detailing the Mongolian ASM gold supply chain in January 2022.

Provide training on planetGOLD Criteria along the supply chain

Almost all of the planetGOLD country projects provided comprehensive training on the planetGOLD Criteria to various stakeholders along the ASGM supply chain (mostly focused on miners but, on some occasions, also on traders, processors, or other actors). These training efforts aimed to improve alignment to responsible mining practices and standards, thereby strengthening miners' capacities to engage with formal markets. The trainings focused on advancing miners' capacities and knowledge in areas such as mercury-free processing systems (MFPS), occupational health and safety (OHS), environmental management, and compliance with regulatory frameworks. Training was tailored to specific needs and situations of ASMOs, emphasizing practical tools for managing production, sales, and establishing connections with formal market buyers. The training initiatives encompassed workshops, advisory services, capacity-building sessions, and targeted meetings conducted with ASMOs. These trainings included modules on legislation and regulations, production enhancements, financial literacy, and management. Moreover, continuous consultations and collaboration were employed to facilitate the improvement and revision of internal rules and mechanisms within ASMOs.

Support miners in demonstrating compliance with the planetGOLD Criteria

Several of the planetGOLD country projects prioritized not only ensuring adherence to the planetGOLD Criteria, but also actively supported miners in meticulously documenting their verified compliance. Demonstrating compliance plays a crucial role as formal market actors require this information to align with their responsible sourcing standards. Country projects such as Burkina Faso, and the Philippines provided miners with diverse structured tools and resources, such as booklets or digital applications, to assist them in recording certain types of their activities related to their commitment to the planetGOLD Criteria. These records included equipment purchases, production data, and expenses, essential for demonstrating adherence to required standards.

As part of this activity, capacity-building initiatives were often deemed vital, aiming to enhance miners' capabilities in record-keeping and due diligence reporting. Furthermore, these projects also aimed to bridge the gap between miners and formal buyers. They developed digital applications like Jari Emas (Indonesia) and Qori (Peru), enabling miners to share public information and showcase their adherence to specific criteria, such as mercury-free gold production or traceable gold supply chains. These tools are deemed instrumental in not only meeting strict requirements for mining permits, but also meeting the requirements of formal buyers.

For example, in both Mongolia and the Philippines, compliance with the CRAFT portion of the planetGOLD Criteria was demonstrated through monthly reporting prepared by trained CRAFT officers. These officers receive training from the planetGOLD country teams and have access to the necessary resources to document compliance. Both country projects share this information with buyers (Central Banks). They expect that this documentation will continue even after the project concludes, as the CRAFT officers are paid through their ASMOs, ensuring ongoing adherence to standards.

Facilitating engagement with market actors

Some of the planetGOLD country projects actively engaged diverse market actors, such as traders, processing plants, jewelers, international refiners, Central Banks and other stakeholders such as NGOs, and the media, in efforts to facilitate trade / export relationships and promote developments of the ASGM sector. These engagements took the form of multistakeholder training / workshop sessions, awareness-raising activities, organized events, collaborations, forums, and study trips.

For instance, in the Philippines, planetGOLD engaged the Central Bank of the Philippines (*Bango Sentral ng Pilipinas* – BSP) to support associations in obtaining gold trader accreditation. By assisting these associations in meeting accreditation standards and navigating legal procedures, the project facilitated their formal participation in gold trading. Additionally, in Indonesia, events involving jewelers, refiners, banks, NGOs, and media aimed to advocate for the ASGM sector integration in

formal supply chains. In Mongolia, study trips and forums allowed stakeholders to explore the gold supply chain, discuss challenges, and highlight investment opportunities. In Peru, the project team engaged with processing plants and refineries to facilitate market linkages for aggregating and exporting ASM gold.

Piloting a supply chain mechanism

The mine-to-market initiatives within planetGOLD involved several key activities aimed at establishing formal, mercury-free value chains in the ASGM sector - most notably in Colombia. The first step involved identifying (local and/or international) traders and establishing direct connections between miners and international refiners. The Colombia project acknowledged that involvement of local traders was needed, as they play a crucial role in ensuring the legitimacy of gold origins and facilitating commercial relationships between miners and international actors.

In Colombia, the project leveraged the existing network of Fairmined Authorized Buyers and international buyers that were interested in working with planetGOLD-supported ASMOs (including several without Fairmined certification). Nine potential buyers were vetted through background checks and risk assessments. Among these were seven international buyers, while others operated within "free trade zones" in Colombia, enabling purchases in national currency. Once credible actors within the value chain were identified, interactions were facilitated by Fairmined Connect – which had been adapted in 2022 by ARM to record planetGOLD responsible gold sales while ensuring compliance with planetGOLD Criteria for gold purchases. The project eventually piloted four mercury-free gold supply chains (see Annex 2 Colombia for a detailed description).

Advocating for better regulations and government support

Some of the planetGOLD country projects focused on advocating for improved regulations and government support to enhance miners' access to formal markets within the ASGM sector, such as Burkina Faso, Kenya, and Mongolia. Key activities included collaborating with governmental bodies to develop and refine regulations concerning gold trading, licensing, and monitoring.

Addressing logistical barriers to trading

Some of the planetGOLD country projects worked on addressing logistical barriers by recommending strategic locations for gold buying offices, including those supported by the government, closer to ASGM production sites, thus facilitating easier access for miners to sell their gold to official institutions. Moreover, engagements with Central Banks were undertaken to discuss the need to identify incentives for miners, support training on due diligence, and explore financing opportunities to foster their participation in formal markets.

For instance, the planetGOLD Ecuador project sought to address challenges faced by miners in

selling gold to the Central Bank due to logistical constraints. Recommendations from planetGOLD led to the establishment of additional gold buying offices, strategically located near ASGM production sites. This change alleviated the complications miners encountered in selling their gold, reducing the distance they had to travel to reach Central Bank facilities. By creating closer access points for gold sales, this initiative streamlined the process for miners and enhanced their ability to engage with formal institutions.

Interlinked activities from other components

Support miners' access to finance

The planetGOLD country projects undertook several measures to support miners' access to finance. The country projects worked on the assumption that supporting miners' access to financial opportunities would enable them to professionalize operations such as adopting MFPS. Such professionalization would in turn allow them to better meet due diligence standards, thus facilitating their engagement in formal markets. In addition, data collected confirms that in many instances miners retain relationships with informal traders based on pre-financing dynamics which ties them to sell gold to these traders who have provided working capital and financial support to run mining operations, subsequently limiting the miners' ability and interest to engage with other buyers, included formal ones. The access to finance activities are currently piloting various strategies such as facilitating financial assessments for miners, establishing partnerships with financial institutions, and creating mechanisms to enable credit access for acquiring MFPS. Projects are collaborating with Central Banks, ministries, and financial entities to shape initiatives like microcredit mechanisms, building capacity for loan applications, and establishing savings and credit cooperatives (SCCs), and forming alliances between ASMOs and processing plants and financial institutions to streamline credit access for miners.

The projects aimed to bridge the gap between miners and formal finance, addressing issues related to perceived risks, lack of expertise in reviewing ASGM loan applications, and challenges associated with accessing bank credits due to their informal status.

For example, the planetGOLD Philippines project is in the process of creating a supplier agreement between the BSP and an ASMO that stipulates a commitment from the BSP to continue buying gold from the association. This agreement recognized that access to finance is often a primary reason miners turn to informal markets. The project team therefore aims to leverage the supplier agreement as collateral for miners when seeking loans, thereby enabling access to formal financial facilities, and supporting their participation in formal markets.

Support the formalization of ASMOs

All Phase 1 planetGOLD country projects engaged in various initiatives to support the formalization

of ASMOs. These efforts aimed to address the barriers preventing miners from operating within formal channels, understanding that formalization is a crucial step for accessing formal finance as well as formal markets. The projects believed that formalization of miners' operations would enable them to commit to legal standards, ensuring responsible, mercury-free gold production and proper waste management.

Activities included evaluating the organizational capacity of artisanal miners and addressing administrative shortcomings through capacity-building initiatives. Support programmes were designed to guide miners through progressive regularization schemes, ensuring continuous improvement with formalization requirements. Additionally, projects worked towards facilitating accreditation for miners' associations as accredited gold traders, establishing legal frameworks to enable their formal participation within formal market structures.

CHAPTER 3 Challenges to supporting access to formal markets in planetGOLD projects

Chapter 3 summarizes the key challenges faced by the planetGOLD country projects in supporting miners to access formal markets. The analysis highlighted that most of these challenges are deeply entrenched within systemic issues, posing barriers for ASGM integration into formal supply chains. It is important to highlight that systemic challenges rarely exist in isolation. The barriers outlined in this chapter thus cannot be assessed as stand-alone issues; instead, the unique combinations of barriers are what create complexities for ASGM producers trying to access formal markets. Each barrier is examined to grasp its challenges, including an assessment of how it impacted the planetGOLD country projects in fulfilling their market access objectives.

Limitations to supporting ASGM formalization

As reported by several Phase 1 planetGOLD country projects (including Burkina Faso, Ecuador, Indonesia, Kenya, and the Philippines), the most challenging barrier for the programme to support miners' access to formal markets relates to the persistent difficulties in formalizing ASGM operations. Bureaucratic hurdles (e.g., delays in licensing processes and complex permitting systems), insufficient awareness, and resistance among miners due to a perceived or actual lack of incentives impede formalization efforts. In many of the Phase 1 planetGOLD countries, despite efforts by the projects to raise awareness about the benefits of formalization, ASGM producers on the planetGOLD-support sites continue to operate largely informally due to a variety of reasons, including concerns of heightened regulations, taxes, or lack of understanding of tax systems. As discussed in Chapter 2, limited formalization restricts formal market accessibility, compelling miners to operate outside formal channels.

Reportedly, formalization challenges have also affected planetGOLD' s collaboration with local traders within the supply chain. Although this report focuses primarily on the experience of planetGOLD with the ASMOs, based on information collected, it can be deduced that also local traders encounter difficulties in meeting the government requirements and formalities necessary for formal (licensed) trading and exporting, partially due to the informality within ASGM operations and the complexity of obtaining essential permits. Traders may refrain from declaring gold production to evade taxes or association with informal activities, hindering their inclination towards formalization. This has further impeded the planetGOLD country projects in supporting miners access to formal markets as formal buyers require not only ASMOs to operate formally and demonstrate compliance with due diligence requirements, but also traders and other (sub)suppliers. So even where planetGOLD country projects largely succeeded in supporting miners' formalization, the absence of formal traders operating locally complicated their ability to integrate ASM gold in formal supply chains. Bypassing local (informal) traders and other intermediaries from

ASM gold supply chain, and instead working directly with formal traders that did not have established relationships with the ASGM sites, did not prove to be the solution either as this came with a new set of challenges (see section "Existing relationships with informal traders"). Detailing the barriers for all actors along the supply chain to formalize requires a broader assessment.

In the planetGOLD countries where operators lack basic formalization, project teams had to prioritize interventions on formalization of ASGM activities, including in some circumstances supporting the formation of cooperatives as a first step. Facilitating miners' access to formal markets for these countries has been treated as something to address later, after formalization processes advance further. In other countries, such as Ecuador and the Philippines, miners on the planetGOLD ASGM sites are making good progress on meeting all requirements to operate formally. Nevertheless, challenges related to delayed permitting processes and other burdensome administrative steps affected the formality statuses of the ASGM sites. This makes the concept of legitimacy very important, as lack of legalization is not necessarily due to limited willingness of ASMOs, but rather, also due to administrative hurdles. Unfortunately, these challenges inhibited meeting country projects' targets in supporting ASGM producers' integration in formal supply chains as well.

> "The project can benefit from addressing some or most of the formalization issues first... The lack or delay of formalization in the extraction side of mining creates a domino effect on other economic activities, such as mineral processing and gold trading" – planetGOLD Philippines

Limited access to formal financing mechanisms

As described in the Theory of Change in Chapter 2, the planetGOLD programme recognizes financial capital as one of the key prerequisites to accessing formal markets, as this is necessary to allow the professionalization of mining operations and support compliance with responsible souring standards. All Phase 1 planetGOLD country projects shared how, in their experience, access to formal finance and markets are strongly interlinked whereby the absence of one perpetuates challenges in accessing the other. Continued difficulties accessing formal financing from banks, primarily due to negative perceptions linking ASGM to illegal activities, organized crime, and money laundering, perpetuate the reliance on unregulated, unreliable, and often insufficient financing methods. For instance, informal pre-financing arrangements, often reliant on informal traders or collectors, create dependencies and complicate miners' transition to formal markets, as they are tied to specific informal buyers or financiers. In practical terms, such arrangements mean that

miners are simply unable to sell their gold to other (formal) buyers as this would cause them to lose out on necessary financial support to maintain their operations unless they have access to capital through other means. This financial limitation prevents their ASM gold from investing in mining and organizational practices which would result in meeting responsible sourcing standards. Although in several planetGOLD country projects, measurable progress has been made in supporting miners' access to finance, progress within the project lifetime remains challenging and is thereby recognized as a persisting barrier for miners to access formal markets.

Weak regulatory enforcement and support

Many of the planetGOLD country projects have worked closely with the government to support the improvement of ASGM regulatory frameworks, as described in Chapter 2. Nonetheless, in several of these countries, governmental oversight continues to face challenges as governments have limited resources and lack capacity, and thus struggle to trace the ASM gold supply chain, to enforce compliance with responsible sourcing standards, or to adapt their legal frameworks and regulations to better suit the realities of the ASGM sector and to effectively incentivize miners to formalize their operations. This in turn has complicated the planetGOLD country projects' ability to facilitate formal pathways for miners to sell their gold to recognized entities. The planetGOLD country projects have acknowledged that governments are crucial partners in supporting the monitoring of and reporting on gold production, compliance with social and environmental safeguards, and gold trade flows, as well as in the provision of services essential for miners to access formal markets, such as assaying laboratories or gold buying offices, that are easily accessible to miners (see also section "Trade challenges related to location and accessibility"). The sustainability of planetGOLD-supported ASGM's supply chain mechanisms rely significantly on sustained governmental support beyond the lifetime of the programmes. Continuous government commitment and capacity are crucial to guarantee an enabling regulatory environment, transparency, and the formalization of ASGM actors.

Difficulties in translating due diligence requirements and benefits to miners and traders

The next challenge relates to ASGM producers and traders' ability to adopt and demonstrate adherence with the planetGOLD Criteria, which could respond to the due diligence requirements of formal buyers. This issue is well-known across the planetGOLD country projects and the planetGOLD Criteria were created specifically to support miners in making progress against and demonstrating how their practices align to responsible sourcing standards. However, most planetGOLD country projects indicated that ASGM producers struggle to realize the purpose of implementing the planetGOLD Criteria and recognize the benefits these can bring to them. In several country projects, supply chain due diligence and traceability are rather new concepts and might not immediately speak to established social norms. As a result, conveying the message that this is the direction the sector is progressing towards, proved more challenging than initially anticipated. For example, in Burkina Faso, the concept of due diligence was completely new to

miners and the project team indicated that there remains a need to conduct substantive awareness-raising activities to ensure miners and other supply chain actors take in the reporting expectations of formal buyers. Moreover, in some other countries (e.g., Mongolia and Guyana), planetGOLD project teams had to convince miners that, although formal buyers might not necessarily offer financial premiums for complying with the Criteria, there are important health and economic benefits to the adoption of responsible mining practices. Also, in the Philippines, the project team witnessed how there was widespread misinformation about formal buyers' requirements that proved difficult to tackle. These country projects observed miners harboring skepticism about progressing towards Criteria compliance without clear incentives in the form of financial and technical support.

Though it should be noted that an extensive assessment on the technical and financial barriers for miners to comply with the planetGOLD Criteria is not in scope for this report, it bears acknowledging that the majority of planetGOLD country projects indicated that slow progress towards compliance as well as demonstrating that progress (described below) remains among the key barriers for miners to access formal markets. Limited technical and financial resources and organizational capacity hinder ASGM entities from implementing robust measures to control and monitor environmental, social, and other risks effectively.

Documenting adherence to planetGOLD Criteria and communication to buyers

Considering the challenges outlined above, specifically related to formalization, it becomes evident that documentation practices, such as record-keeping and monitoring systems, can prove challenging to realize in ASMOs. As a result, the planetGOLD project teams faced difficulties developing sustainable solutions to documenting alignment of practices to responsible sourcing requirements, considering ASMOs limited operational capacities (technical and human resources) to monitor and report compliance to planetGOLD Criteria. Even for those planetGOLD-supported ASMOs who were able to make positive progress towards compliance with the planetGOLD Criteria, demonstrating good practices to the quality required by most formal buyers often remained challenging. Miners were, on many sites, initially unfamiliar with the methods and tools to monitor and report on their (progressive) adherence to responsible sourcing standards such as the Criteria. Challenges to the use of these tools include illiteracy, inexperience in accounting, record-keeping, or other relevant skills, no designated focal person(s) in the ASMOs with the responsibility to manage demonstrating progress, lack of access to computers / smartphones / internet, and a general apprehension towards recording gold production and operational methods out of fear for increased taxation. Though training miners on the use and benefits of such methods and tools was often one of the key activities under the access to formal markets pillar of the planetGOLD country projects, many indicated that there remains a strong need for additional capacity-building support to ensure miners can continue the effective use of these reporting tools.

Ensuring traceability of ASM gold

Moreover, traceability reportedly remains of concern as well, as tracking the ASM gold supply chain is considered challenging in most regions due to the high mobility of ASM gold supply chain actors, complicating the ability of traders to record their purchases. As also discussed above, electronic record-keeping is not always feasible for miners in remote mining areas where internet and telephone connections are often limited, necessitating reliance on paper documentation, which, (although generally more accessible) increases the margin for error or potential dishonesty. Aside from Colombia, the challenges related to ASM gold traceability were not specifically unaddressed in most other planetGOLD country projects due to a variety of reasons (including difficulties in receiving adequate government support in the formal monitoring of gold production and trade and a lack of engaging supply chain actors such as (formal and informal) traders).

Leveraging planetGOLD Criteria implementation for market access

Several countries also reported that leveraging adherence to the Criteria into concrete and self-sustaining market linkages is a unique challenge on its own. For most planetGOLD-supported ASMOs, local, often informal, traders remain their main market counterpart. Reportedly, most of these intermediaries do not take into account responsible mining practices in their gold trading decisions. The assumption that compliance automatically attracts the interest of the supply chain, in reality, does not hold true in many instances, especially at the local trader level. This creates a first break between ASGM mining practices and responsible sourcing expectations, where these are not yet implemented across the whole supply chain and therefore, adherence to planetGOLD Criteria does not necessarily translate into concrete formal market linkages. This issue stems directly from the fact that most ASM gold supply chain actors, including traders, continue to struggle experiencing the benefits of supply chain transparency and due diligence. However, these traders are key intermediaries and without their involvement in due diligence and traceability efforts, linking ASMOs with formal market actors becomes incredibly challenging (as further described in the section "Trade challenges related to location and accessibility").

Existing relationships with informal traders

Though intermediaries such as informal traders are often vilified in ASGM market access initiatives, several of the planetGOLD country projects explained that ASGM operators on some of their supported ASGM sites continue to express content or demonstrate a preference for engaging with these intermediaries over unknown or less trusted (formal) traders or buyers. This was seen in, for instance, Burkina Faso, Colombia, and Indonesia. Miners' reliance on informal traders in such regions stems from various factors. Informal traders often play multiple roles - providing pre-financing for mining operations and serving as suppliers of crucial resources like mercury, explosives, or mining equipment. Accessibility and trust play a pivotal role in perpetuating these ties with informal traders. Established trust-based relationships, often built on mutual

understanding and simplified, documentation-free transactions, contribute to miners' continued preference for informal traders. Moreover, informal traders' flexibility in providing cash payments and offering services without stringent requirements like identification or retention fees, further entrench reliance on informal channels. These factors reinforce the comfort and ease of engagement with informal traders, preventing miners from exploring formal market opportunities.

These relationships established over time between miners and informal traders contribute to a level of comfort, reliability, and familiarity that proved difficult to change in the lifetime of the planetGOLD projects. Despite claims from miners about informal traders giving low prices and stringent loan conditions, the established rapport and convenience they offer in transactions influence miners to opt for these familiar channels over less-known formal market actors. Several planetGOLD country projects admitted how an inadequate recognition or comprehension of these pre-existing ties with informal traders has impeded their efforts to support market linkages between miners and formal buyers. Some planetGOLD country projects recognized that it remains crucial to better understand these nuances and analyze the existing trade practices to spot any unfair mechanism (e.g., miners not receiving fair payments based on quantities produced) in their efforts to design interventions and identify incentives to enhance access to formal markets. The projects acknowledged that urging miners to shift away from informal traders would demand the identification of incentives and costs and continual sensitization to raise miners' awareness about the benefits of engaging with formal traders and gradually accompany changes, taking into account that these might cause a degree of supply chain disruption (i.e., existing traders not being able to source gold from miners anymore).

Lack of trust

The lack of trust among ASM gold supply chain actors has presented a profound challenge for several planetGOLD country projects to support miners in engaging with formal markets, primarily rooted in social and cultural dimensions, and because working through long-term relationships with trusted partners reduces transaction costs for miners. Miners express apprehension towards various entities involved in the gold trade, including fellow miners, government agencies, processing plants, and support programmes like planetGOLD. This distrust manifests in multiple ways: miners prefer individual gold processing (often using mercury) and sales due to fears of exploitation by others (also impeding efforts to organize miners in ASMOs); negative perceptions stemming from historical experiences, such as agencies offering unfairly low prices; widespread skepticism about government integrity and the perceived absence of public services; mistrust in the price assessment of untreated ore by processing plants; and a lack of confidence in the transparency and fairness of formal buyers' pricing mechanisms, causing reluctance to accept fluctuating prices. Establishing credibility and rapport demands sustained, on-the-ground engagement, understanding miners' practices, organizational structures, and needs to offer tailored technical support.

Building trust to facilitate formal market linkages is a crucial yet challenging undertaking for the planetGOLD country projects. Persistent misinformation regarding formal market requirements has reportedly complicated matters, contributing to miners' hesitancy and skepticism. Several planetGOLD country projects indicated that building trust takes a lot of time and commitment, and progress very much depends on the existing supply chain dynamics when the project commenced.

> "For miners, the problem is trust. Trusting each other. Some are afraid they will be taken advantage of by each other. They do not really know the power of coming together. Through training, we showed them the importance of coming together. We also tried to build trust with them. [...] We are in contact with artisanal miners in the field, we build trust. Now, when we bring the government in the picture, [the miners] are more open to listen" – planetGOLD Burkina Faso

Trade challenges related to location and accessibility

The geographic remoteness of ASGM operations and centralization of gold buying offices and assaying laboratories represent practical barriers that continued to affect the efforts of several planetGOLD country projects, including in Burkina Faso, Ecuador, Kenya, Mongolia, and the Philippines, despite efforts that aimed to address these (as discussed in Chapter 2). Several logistical challenges related to the inaccessibility of these services were mentioned. Firstly, miners shared with planetGOLD country projects their reservations with transporting their gold across long distances (either themselves or traders) to reach formal buyers (such as representatives of Central Banks, e.g., in the Philippines) or assaying laboratories to determine the gold value - a legal requirement for some formal buyers (e.g., in Mongolia, where miners are required to assay their gold at the government assay offices). The discontent among miners stems not only from the financial burden associated with transporting relatively small quantities of gold - a common issue in ASGM due to their low production rates and need to sell regularly to sustain a consistent income - but also from the security risks involved. This concern is particularly heightened in regions where criminal or non-state armed groups are known to target vehicles transporting gold (e.g., in Colombia, and Ecuador). To circumvent these issues, several planetGOLD country projects shared that they continue to see miners preferring to sell to local (often informal) traders. While this choice might entail miners accepting a lower price for their gold, as informal traders commonly factor transportation costs into their pricing, it does guarantee immediate cash payment without the

complexities of travel and the associated security risks. As a result, the planetGOLD country projects expressed difficulties in supporting miners access to formal buying entities.

Another related issue to this inaccessibility of formal gold buying entities, is the difficulties for planetGOLD country projects to support the formal export of ASM gold. In most countries, export of ASM gold is only economically viable if done in larger quantities and as mentioned above, ASGM operators typically need to sell their (relatively low quantities of) gold on a regular basis to have a steady flow of income. While a few countries permit individual miners, ASMOs, or traders to export gold upon obtaining the necessary permits, the need for aggregation remains crucial to offset the expenses associated with export - such as royalty payments and transportation costs. However, in most countries, the formal export of ASM gold is exclusively entrusted to specific government institutes or private entities that aim to aggregate ASM gold before exporting (e.g., in the Philippines and Mongolia, the Central Banks hold the exclusive authority for formal gold export, while in Burkina Faso, only designated comptoirs possess this authorization). This means that miners' access to these entities is paramount to support the formal export of ASM gold – which is complicated by the centralized location of these entities. It should be noted that the planetGOLD country projects shared little information and learnings on the challenges related to exporting ASM gold, as the majority of these countries were not yet at a stage where they had attempted to support such export.

Considering the complex and systemic nature of these challenges, most planetGOLD country projects did not report concrete measures to address these practical issues directly, but rather focused on advocating with the relevant government institutes to decentralize essential services. Decentralization has, however, proven to be a slow and administratively cumbersome process, as administrative capacity is often limited at decentralized locations, and further necessitates robust regulatory enforcement to ensure that decentralized buying and trading services operate according to the legal requirements and conduct traceability and due diligence efforts. Unfortunately, in several Phase 1 planetGOLD countries, the pace and comprehensiveness of developing these supporting services were not sufficient to significantly improve miners' geographic accessibility to formal markets.

Gender-specific barriers

Cultural norms and discriminatory practices restrict women's participation in formal trading activities, limiting their engagement in formal markets. Women encounter substantial challenges in obtaining legal rights and permits due to cultural restrictions, often limiting their access to mining areas or formal trading spaces. This curtails their ability to engage in formal market transactions, hindering their economic advancement within the sector. Moreover, limited access to training and technical knowledge in gold mining perpetuates their exclusion from formal markets, preventing them from competing equally with men.

The prevalent male dominance in the ASGM sector marginalizes women, relegating them to ancillary roles or informal activities and often limiting their representation in formal trading environments. Discriminatory practices, such as receiving lower prices for gold or facing unfair trading conditions compared to men, deter women from engaging with formal market entities. To address these gender-specific barriers for women in accessing formal markets, the planetGOLD programme has focused on organizing women miners and providing technical education and training. Facilitating women's access to formal spaces for trading and ensuring equitable opportunities within formal markets are crucial steps to empower women in the ASGM sector and promote their economic participation. Although these gender-specific issues to formal markets were not identified by the planetGOLD country projects as key challenges to their access to formal markets work, it bears recognizing that the majority of them have also not directly addressed these barriers for women either. This lack of targeted action to support women’s access to formal markets could hinder the programme’s gender equity commitments from being fulfilled.

CHAPTER 4 Lessons learned and conclusions

Chapter 4 draws on the previous chapters and the annexes to summarize lessons learned, as well as the expertise of the authors to distill and apply wider lessons from ASGM market access initiatives to the planetGOLD programme. Besides addressing barriers to access to formal markets, this section will particularly reflect on those factors that were identified as potentially contributing to market linkages between ASGM producers and formal markets while implementing responsible mining and sourcing practices. The analysis presented in this report clearly points to a multifaceted approach when addressing access to formal markets, which includes, but also goes beyond, implementation of the planetGOLD Criteria.

Supply chain and market actors mapping

Several country projects (e.g., Colombia, Guyana, and Mongolia) that supported miners' access to formal market actors commenced the work under this pillar by mapping the country's ASM gold supply chains and broader market system, by identifying who is involved, which key transactions take place, the existing linkages between actors (e.g., ASGM producers depending on local traders for pre-financing), who represent support functions (e.g., suppliers of inputs, assaying laboratories), and which rules apply (i.e., what makes the market formal or informal). In the context of ASGM supply chains, while access to formal markets often focuses on international actors, recognizing and working with local trading dynamics was acknowledged as fundamental to identifying sustainable supply chain mechanisms. The more information is available to programme teams on the functioning of the existing markets, the more effective they can be in engaging the right supply chain actors and subsequently, in identifying and addressing bottlenecks. Finally, such an exercise ideally also identifies vulnerable or marginalized groups within trading practices. From the analysis of the Phase1 planetGOLD country projects, it became apparent that women are often at a disadvantage when trading gold. It is therefore important to ensure that gender dynamics are considered in these supply chain mapping exercises, specifically identifying challenges faced by women in accessing formal markets. Being able to identify such challenges early on in programmes provides the opportunity to design activities aimed at supporting specific vulnerable groups' access to market (e.g., awareness raising, engagement of women associations, trainings targeted to women, etc.).

Incentives identification

The absence of incentives for ASGM sector engagement with the formal market is a common underlying theme across most of the challenges described in Chapter 3. The analysis highlights different expectations between miners and the programme about the benefits that access to formal markets can bring. Incentives identification did not come across clearly from the different planetGOLD country projects, limiting the effectiveness of addressing the challenges which ultimately are a priority for miners.

Market system development approaches, aimed at addressing market barriers sustainably and at scale, recognize incentives as a critical elements of intervention design. Understanding and defining incentives follows the identification of market actors and aids the selection of organizations and individuals to engage in the activities to support access to formal markets. Importantly, onboarding not only ASMOs, but also traders or other local supply chain actors – which play a functional role in linking ASGM production to national refineries, export or downstream industries, after which it reaches international market actors such as refineries or jewelry companies (when available) – is a crucial step in implementing a comprehensive supply chain approach to incentives identification. As was seen in Colombia, if traders are not incentivized to dedicate time and effort into following a training on a traceability app (such as Fairmined Connect) and eventually upload their gold purchases and substantiating evidence into the application, they will not use it, putting at risk the sustainability of supply chain mechanism pilots. Incentives go beyond financial benefits and encompass knowledge transfer, technical assistance, fair pricing and access to formal financing mechanisms. These incentives should be meaningful enough to encourage implementation of responsible mining practices as per the planetGOLD Criteria.

Identifying and engaging local market actors for remote ASGM operations

The geographical remoteness of many ASGM operations coupled with the centralization of formal gold buying entities has been recognized as presenting practical challenges to the formal trade of gold, specifically related to the potentially high transportation costs, complex logistics, and increased security risks. To address these logistical issues, practical solutions embedded in local realities need to be formulated. In several planetGOLD countries, collaboration with local governments and stakeholders to strategically decentralize essential services, such as gold buying and assaying, has started to show promising results, for instance, in Ecuador and Mongolia. Another solution, which is currently being tested in the Philippines, is to involve commercial banks as gold trading hubs. There, a financial institution with branches across the country (including near two of the planetGOLD-supported ASGM sites) has received accreditation as a gold trader for the BSP. This simplifies the process for miners to sell gold to the country's only formal gold buyer (the BSP), as they previously had to travel long distances to reach their buying centers. Such a solution could be explored in other countries as well – it generally needs to involve the identification of suitable locations near ASGM production sites for establishing additional gold buying offices, ensuring proximity and accessibility for miners.

Furthermore, to circumvent the practical barriers associated with transporting gold over long distances, planetGOLD countries increasingly recognize a need to actively involve local traders who already have established relationships with ASGM operators. These individuals or entities can act as key intermediaries. By empowering local intermediaries, planetGOLD can bridge the gap between miners and formal markets. Identifying and formalizing partnerships with these local

actors is crucial, recognizing their existing relationships with miners and understanding of the local context. Moreover, building on the lessons learned from the Colombia project, planetGOLD teams need to prioritize collaborating with local aggregators, especially those operating in remote areas. This involves providing support to these aggregators, potentially including training on responsible sourcing standards and traceability, to ensure they can bridge the gap between miners and formal supply chains.

In essence, the lesson learned emphasizes the need for planetGOLD to implement tangible measures that directly address the practical challenges associated with geographic remoteness.

Engaging market actors beyond the mining operations

The experience of some of the Phase 1 planetGOLD country projects confirms that engaging market actors beyond miners can represent a success factor in supporting access to formal markets. For example, this was the experience of, for example, Mongolia, the Philippines, and Colombia, who engaged national and / or international market actors. Because miners depend on local traders with whom they have established relationships, formalization and access to market activities design should also address market actors as identified in the mapping exercise. This was, for instance, a key lesson in both the planetGOLD Colombia and Guyana projects; cutting out local intermediaries proved to be an unsustainable approach and made it difficult (in Colombia) to scale the commercialization pilots to other ASGM sites, as these actors play a key role in establishing commercial relationships between miners and international buyers. Although it might be resource-intensive for programmes to engage many actors, a selection process can take place to focus on those partners in the supply chain who show most willingness to engage and formalize. Such a selection process should consider a variety a factors, including gender dynamics to ensure that women along the ASM gold supply chain are proactively included as well. Practical examples of interventions include knowledge transfer to traders and general awareness raising for market actors on sourcing from ASGM, helping to address some of the perceived barriers and risks.

Trainings to traders, processing facilities, or aggregators could include guidance on formalization and standards such as the planetGOLD Criteria and how they could be an opportunity for traders themselves to access formal markets, empowering them to play a role in the formal markets. This recognizes that gold trading represents a livelihood opportunity as well, and reducing their role might not always be feasible or desirable. Because traders are often the first and main intermediaries for miners, they could play a role in promoting a broader understanding, awareness, and application of the planetGOLD Criteria, including elimination of mercury (provided that traders also have the right incentives for doing so).

Finally, downstream market actors - not only international, but also national ones such as Central

Banks, refineries, and jewelers – might also benefit from more awareness and guidance on how to source gold from ASMOs and how to compare responsible sourcing requirements with information provided by ASGM actors who might be progressing toward adherence to the Criteria, but who are not yet in full compliance, emphasizing the importance of continuous improvement and of assessing the legitimacy of ASM actors. The planetGOLD resources on due diligence for suppliers and buyers already present useful informational that could be leveraged.

Sustainable supply chain mechanisms

Despite working with market actors, programmes like planetGOLD do not have a permanent function in the economy, and therefore interventions designed to support access to formal markets should seek to implement models which will not be dependent on the existence of the programme. As such, some of the planetGOLD country projects acknowledged that the programme should work as a facilitator and provide technical assistance (e.g., planetGOLD Criteria, mercury-free processing) as relevant, but not substitute for any other actor in the supply chain. This can be perceived as more challenging to achieve as implementing interventions directly might seem more efficient at first, but in practice, it risks undermining the sustainability of the interventions (e.g., subsidizing the transport of gold from mining production areas to trading center rather than identifying supply chain actors who could and would play that role beyond the life of the project). The model applied by planetGOLD country projects like the Philippines and Mongolia, which appoint and train CRAFT officers within ASMOs, represents a good example of an intervention that should be able to continue even after the life of the project. Once trained and onboarded in risk identification, assessment, monitoring, and documentation, these officers would also play an important role in maintaining relations with buyers.

Moreover, the lessons shared in this Chapter each represent key elements to support the sustainability of supply chain mechanism. By mapping the supply chain and identifying existing market actors, programmes have the chance to direct support to ASGM, traders, and other actors who already have a stake in the supply chain and an interest in maintaining their livelihood. Incentives identification, although challenging, contributes to the willingness of supply chain actors to continue with the practices promoted by the programme. For example, if trust is built between miners and formal traders and perceptions of high taxation are addressed, miners will continue to be interested in selling to these formal actors (if prices prove to be more advantageous, for example due to a fairer assessment of gold content, despite applicable taxations).

Another approach enhancing the sustainability of supply chain mechanisms is found in the facilitation of partnerships, not only with supply chain actors but also with relevant support functions, who could potentially continue providing services and assistance to miners, traders, or other actors beyond the life of the project. For example, the planetGOLD Burkina Faso country project engaged local vocational and technical schools to support training activities for ASMOs.

Other examples from the Phase 1 planetGOLD country projects have included partnerships and linkages with financial institutions and assaying laboratories.

Moreover, a gender-responsive approach in ASGM supply chain mechanisms is critical for their sustainability as well. Ensuring equitable participation and benefit-sharing for women in supply chain interventions contributes to the long-term viability and success of formal market access initiatives. Promoting gender-responsiveness in ASGM supply chain mechanisms fosters a more inclusive and resilient market ecosystem, diversifying labor pools, reducing dependencies on a single demographic, and mitigating risks associated with social or economic disparities.

Finally, as many of the Phase 1 planetGOLD country projects highlighted, recognizing the interlinkages between access to formal financing and access to formal markets represents another fundamental consideration for the sustainability of desired outcomes.

Skill set to support market linkages

Lessons learnt so far focused on implementation approaches and activities. However, this last section looks at the skills needed to support projects and programmes aimed at supporting market linkages. Facilitating access to formal markets requires skill sets which differ from more traditional and direct intervention models, such as supporting formalization, setting up of cooperatives, or adherence to responsible mining standards. Specific skills, accompanied by implementation tools include:

1) **Market analysis**: as outlined in various sections of this report, understanding how the market works, who is part of it, and its challenges, is a precondition to support market linkages. Therefore, experts need to have the knowledge of and the right tools to map supply chains, determining each step from mine site production, trade, up to export. Such analysis ideally expands beyond exports from initiatives looking at creating linkages with internal markets. Such analysis should also include the identification of applicable rules and procedures of trade gold formally (e.g., who can trade, which permits are required, which fees apply), existing (or lack of) supporting functions making the supply chain work, analysis of barriers and rules, and all mapping out all actors including their incentives. Ultimately, such an expert, or team, is expected to be able to have a clear picture of the current supply chain and why it does not work in line with the desired model, i.e., formal trade of ASM gold in line with responsible mining standards, including the planetGOLD Criteria.
2) **Business and economics**: although programmes supporting the ASGM sector often focus on social, governance, and environmental performance, recognizing ASMOs as economic actors is crucial to considering their motivations and needs as producers who expect to earn an income from their work and services. As a result, experts need to have basic knowledge of economic

systems, as this would be beneficial to comprehend the realities of miners as economic actors with other social, governance, and environmental indicators.

3) **Facilitation and engagement**: interventions supporting access to formal markets need to acknowledge that they are external actors from the supply chain, and therefore refrain from substituting any function in the market (e.g. actively trading gold, taking care of transport and logistics) because once the project ends, the supply chain actors would struggle from the missing support or resume their way of working before the project. A more sustainable approach envisions the projects supporting market actors to change behavior, which in the case of the planetGOLD projects means trading mercury-free gold formally rather than informally. As a result, facilitation and engagement become essential skills for project teams, who would be required to involve the right stakeholders to address the identified challenges (from the market analysis), and facilitate change led by market actors themselves (including government and other supporting functions), so that changes can be sustained once the project ends.
4) **Skills specific to barriers identified** (as part of the market analysis): lastly, it is important to adapt skill set needs based on what has been observed from the analysis of the market and which trading functions require support. This might include seeking specific skills, for example logistics and finance (like in the case of planetGOLD which has a component focused on access to finance). It could also mean that training on the integration and implementation of gender-responsive targets and activities into ASGM market access interventions is needed, including building a deeper understanding of and addressing gender-specific barriers. Training project teams on gender integration and providing tools for gender analysis can enhance the effectiveness of market linkage initiatives in promoting gender equality.

Finally, besides skills and tools, projects need to reserve enough time and resources to work on access to formal markets components, recognizing that facilitating market linkages is a process which requires long-term trust building, enforcement of incentives, and awareness raising.

In conclusion, the insights learned through this analysis, focusing on how the Phase 1 planetGOLD country projects tried to support miners' access to formal markets, underscore the complexity of formalizing ASGM supply chains. Many of the challenges experienced by the country projects proved to be deeply rooted in systemic issues that require innovative and collaborative solutions, emphasizing the ongoing need for sustained engagement with stakeholders across ASM gold supply chains and programmatic focus and specific skills. ASGM miners should ultimately experience the benefits from operating in the formal economy and market linkages, including fairer pricing, increased access to formal financing, and more opportunities for sustainable development.

ANNEX 1 Burkina Faso

Introduction

The planetGOLD Burkina Faso project, implemented between March 2019 – 2025, works to improve formalization, access to finance, and the traceability of artisanal gold along the following four key components:

Support formalization of the ASGM sector.

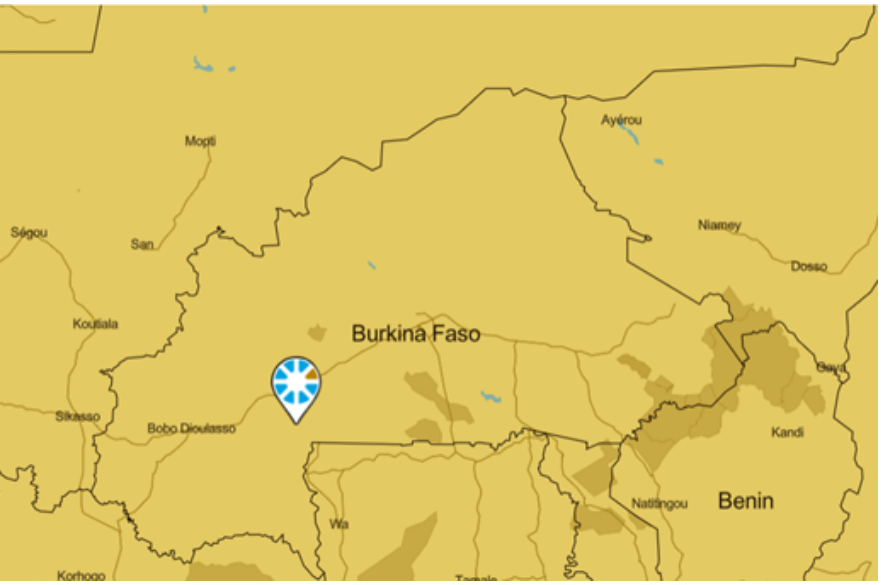
Help miners access financing and international gold markets.

Educate, raise awareness, and transfer knowledge to the global ASGM community.

Train national ASGM specialists on implementation and scaling of best practices, including mercury-free technologies and formalization.

Profiling ASGM organizations

The planetGOLD Burkina Faso project is implemented on one large ASGM site, Gnikpière, in southwestern Burkina Faso (Dano). The artisanal mining site is legally recognized, with a semi-mechanized mining permit. About 5,000 artisanal gold miners work on and off the site. When planetGOLD Burkina Faso commenced the project in Gnikpière, artisanal miners were working largely individually, and they were not organized in formal associations or cooperatives. Due to a lack of trust, miners were afraid they would take advantage of each other and preferred to process and sell their gold ore on an individual basis. However, as explained in Chapter 2, formalization is considered as an important precondition for miners to access formal finance and formal markets. Through a process of sensitization and awareness-raising, emphasizing the advantages for miners to organize themselves, planetGOLD Burkina Faso facilitated the forming of a cooperative in August 2022, representing approximately 2,000 miners (of which 920 are women) and supported its formalization in collaboration with the *Société Nationale des Substances Précieuses (SONASP) former Agence Nationale d'Encadrement des Exploitations Minières Artisanales et Semi-mécanisées* ANEEMAS) - the government branch regulating the country's ASM sector. In addition, planetGOLD



Map 2: The planetGOLD project sites in Burkina Faso.

Burkina Faso also works with a women's cooperative to formalize its organization and support the preparation of loan applications[15].

Implementation of the planetGOLD Criteria

To support the implementation of the planetGOLD Criteria, planetGOLD Burkina Faso is conducting training with miners on the Criteria. In addition, the project provided a training, in collaboration with ANEEMAS and the Artisanal Gold Council (AGC), for trainers on standards relevant for ASGM in May 2023[16].

The planetGOLD Burkina Faso project team recognizes that currently, the Burkinabe ASGM sector would not be able to show records of gold production and demonstrate compliance with the planetGOLD Criteria, including the use of mercury, to potential buyers in the international market. Implementing the planetGOLD Criteria in Burkina Faso has proven challenging for several reasons:

- Miners rely heavily on the use of mercury. Transitioning to MFPS is technically challenging and costly. Many gold ASMOs lack access to alternative technologies and the training required to adopt them.
- Many ASGM operations are informal and operate outside the legal framework. Achieving formalization is considered challenging due to bureaucratic hurdles, lack of awareness, and resistance from miners who fear increased regulations and taxes. ASMOs, including the planetGOLD-supported cooperative, lack the knowledge and understanding of the tax system and reporting requirements.
- ASMOs, including the planetGOLD-supported cooperative, lack the supervision and organizational capacity to enforce OHS and environmental guidelines.

The management committee of the cooperative uses a register to report on issues and incidents. Depending on the nature of the incident, the management committee will report to local authorities (local district, police, or *Office National de Sécurisation des Sites Miniers* (ONASSIM) – the body responsible for securing ASM sites in the country). This register was designed by the government as a requirement for mining permit holders and does not align with the planetGOLD Criteria, though some of the indicators overlap (mostly on environmental protection). Most notably, mercury use is not measured through the register. Making progress on compliance with the planetGOLD Criteria and documenting compliance is considered a work in progress in Burkina Faso, as priority was placed on supporting miners' organization and building trust.

[15] planetGOLD Burkina Faso (2023). Project Implementation Report (1 July 2022 – 30 June 2023). Unpublished.
[16] planetGOLD Burkina Faso (2023). Project Implementation Report (1 July 2022 – 30 June 2023). Unpublished.

Access to formal markets in the planetGOLD Burkina Faso project

ASGM supply chain dynamics in Burkina Faso:

The gold value chain in Burkina Faso typically looks as follows: artisanal gold miners sell the gold to a local collector, who in turn sells the gold to a comptoir[17]. There are both private and government comptoirs, including one that belongs to ANEEMAS, which operates as a state gold buying scheme[18]. Government comptoirs issue collectors' cards, enabling these collectors to buy gold directly from the ASGM sites under a site management agreement. The control method used is hydrostatic weighing, which makes it possible to control the gross weight in grams, then to measure density, carat, and weight of fine gold in grams. Collectors selling to ANEEMAS travel from the sites to Ouagadougou. The journey from Gnikpière to Ouagadougou takes half a day. Collectors are paid in cash and are often pre-financed by the comptoirs. Comptoirs have a responsibility to trace the gold and conduct due diligence. However, capacity and knowledge at comptoirs to carry this out is limited. Comptoirs are the only entities in Burkina Faso authorized to export artisanal gold. A more detailed description of the licensing and exporting regulations can be found in the planetGOLD report titled "Improving formalization, access to finance and traceability of artisanal gold".

Comptoirs typically export artisanal gold to international refineries, primarily in India and Dubai. Reportedly, most ASMOs struggle to implement or demonstrate commitment towards the requirements of the OECD DDG, CRAFT Code, or planetGOLD Criteria, as described above. As a result, this inhibits access to formal markets where buyers assess their suppliers based on these responsible mining and sourcing frameworks.

In many instances, miners do not wish to sell gold to ANEEMAS, as the agency is not able to offer competitive prices (largely due to high taxation) compared to informal traders, smugglers, and criminal actors engaged in money laundering. There is also a lot of distrust towards ANEEMAS: its predecessor had a particularly negative reputation amongst miners as they felt taken advantage of since the agency offered exceptionally low prices for the gold. ANEEMAS recently transformed into *Société nationale des substances précieuses* (SONASP). SONASP is a state-owned company with the mission to produce, process, and market gold[19]. The hope is that with the creation of SONASP, miners are less distrustful and more willing to sell to state comptoirs. For this reason, planetGOLD

[17] A comptoir in Burkina Faso is a buying agency that plays a crucial role in the gold supply chain by purchasing and aggregating gold from local artisanal miners for further processing and export.

[18] USAID (2019). Desk review of artisanal and small-scale gold mining (ASGM) in Burkina Faso artisanal mining and property rights (USAID AMPR) task order under the strengthening tenure and resource rights ii (STARR II) IDIQ. Retrieved from: https://www.land-links.org/wp-content/uploads/2019/10/USAID-AMPR-Burkina-Faso-ASGM-Desk-Review_FINAL.pdf

[19] Kabore, E. (2023). Transformation of ANEEMAS into the National Precious Substances Company (Société nationale des substances précieuses – SONASP): What are the institutional implications? Mines Actu Burkina. Retrieved from: https://minesactu.info/en/2023/08/10/transformation-of-aneemas-into-the-national-precious-substances-company-societe-nationale-des-substances-precieuses-sonasp-what-are-the-institutional-implications/

Burkina Faso engages continuously with the government to raise awareness on the barriers for miners to sell gold to SONASP.

Another reason miners often prefer to sell their gold to informal buyers is because they have a pre-financing relationship and purchase mercury through them.

Production of gold at ASGM sites is currently not being monitored by state authorities, including on formal ASGM sites. Reportedly, regulations are not sufficiently enforced. Given that the miners themselves also have limited capacity to record their gold production and sales, this would make it more difficult for formal buyers to trace ASM gold in Burkina Faso as the volume of gold produced in the country is often unclear, compounding the challenge of tracing gold sales.

Activities supporting access to formal markets

The planetGOLD Burkina Faso project has not implemented activities that directly aimed to support miners' access to formal markets. Several interlinked activities from other components were executed, though, which could later support miners' integration into formal markets. The project has focused primarily on supporting miners to organize into cooperatives and on strengthening the capacity of the ASMOs.

As of October 2023, the planetGOLD Burkina Faso project has not recorded any responsible gold as being sold into formal markets, even though the initial goal was to sell 500 kg of responsibly produced gold into a transparent supply chain by project closure. There are several key reasons for this:

- There were delays in importing equipment for the MFPS and providing the training to operationalize these systems due to a) two military coups (January and September 2022) and b) frequent closure of ASGM sites due to accidents or for regulatory reasons (unclear).
- There was a revision of the Mining Code of Burkina Faso, which is currently being validated by the National Assembly. The restructuring of the regulatory authorities affected the collaboration between planetGOLD and the government entities.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Burkina Faso include:

- **Gap assessment of the ASGM policy framework in Burkina Faso**[20]: From this assessment, planetGOLD Burkina Faso concluded that the existing regulations were not in

[20] planetGOLD Burkina Faso (2021). Améliorer la formalisation, l'accès au financement et la traçabilité de l'or artisanal. Retrieved from: https://www.planetgold.org/sites/default/files/Am%C3%A9liorer%20la%20formalisation%2C%20l%27acc%C3%A8s%20au%20financement%20et%20la%20tra%C3%A7abilit%C3%A9%20de%20l%27or%20artisanal.pdf

favor of ASM, complex to enforce, and did not promote formalization, environmental stewardship, or other requirements.

- **Assessing the financial institutions and feasibility of providing financial support to miners**: One bank, Coris Bank International (CBI), agreed to invest in a revolving fund for miners. Subsequently, planetGOLD Burkina Faso signed a Memorandum of Understanding (MoU) with the bank, set up a committee to manage the fund, and supported miners in the development of a business plan to apply for loans from the fund. At the moment of writing, the business plan is with the bank for final approval and the project team expects to have credit available for the ASGM cooperative by late November 2023.
- **Designing a booklet for miners to record their activities**[21]: This records equipment purchases, weekly and monthly ore and gold production, capital expenditures and operational expenses. Through a process of awareness-raising and training, the planetGOLD Burkina Faso team sensitized miners on the advantages of recording this information for formalization and loan applications (inc. for the revolving fund). A survey in March 2022 showed that many planetGOLD miners were using the booklet with ease.
- **Provide training:** Training 116 miners in MFPS, OHS, and cooperative organization and management. The AGC is also implementing a training programme aimed at supporting SONASP officials, though more information on the contents and status of this training programme was not shared with the authors of this report by the time of writing.
- **Knowledge sharing:** Through continuous engagement with government officials. planetGOLD Burkina Faso works particularly in close collaboration with SONASP.

Cross cutting themes

Gender

Women in the ASGM sector of Burkina Faso face several challenges to access markets or receive a fair price and trading conditions. Discrimination and limited access to resources, including financial and technical support, generally hinder their ability to engage in ASGM, especially in remote areas. Though there are laws concerning gender equality in Burkina Faso, cultural norms often mean women have restricted access to mining areas and it is difficult to obtain the legal rights to own or work on mining permits, which severely limits their participation in the sector. Moreover, women may have limited access to training and technical knowledge in gold mining and processing techniques, making it difficult for them to compete with men. Women miners often face exploitative practices when selling their gold, such as receiving lower prices for their gold compared to men or being subjected to unfair trading conditions. Women's voices and perspectives are often underrepresented in decision-making processes that affect ASGM, leading to policies and regulations that do not address their specific needs.

[21] planetGOLD Burkina Faso (2021). Livret de poche del'artisan minier. Retrieved from: https://www.planetgold.org/sites/default/files/Livret%20de%20poche%20de%20l%27artisan%20minier.pdf.

As mentioned above, planetGOLD Burkina Faso supports the formalization of a women's cooperative in Gnikpière. However, this cooperative struggles to compete with men, particularly in access to finance. A sensitization campaign on the *Fonds de soutien aux activités rémunératrices des femmes* (FAARF) hosted by the Ministry of Women was held in March 2022, aimed at informing women about the existence of the fund and familiarizing them with the procedure of applying for it.

Key lessons learned

- Access to finance is seen as a key prerequisite for access to formal markets. The planetGOLD Burkina Faso team states that artisanal miners do not have the financial means to invest in other technology that could increase their production, and therefore rely on informal traders to pre-finance their activities and take out loans with strict conditions, creating dependencies and complicating their ability to move to other markets (i.e., pre-financiers obligate miners to sell gold to them rather than to SONASP or other formal buyers).
- Consequently, a lack of finance also makes it difficult for miners to move to MFPS on their own (e.g., MFPS equipment typically requires a USD 40,000 upfront investment). As long as miners continue to use mercury in their gold processing, they are unable to access formal markets.
- Government support to formalization and tax reform is needed to tackle smuggling and loss of revenue issues. Sensitization among government officials on the barriers for miners to sell gold to SONASP has had positive results as the agency became more directly involved in the formalization process and is in continuous dialogue with planetGOLD and the miners to tackle further administrative and financial burdens.
- The project team identified certain training gaps. Specifically, more training is needed that focuses on building an understanding of due diligence requirements and traceability – aimed at actors along the supply chain. Such training should ideally be practical, ensuring miners, collectors, and comptoirs understand the reporting and documentation expectations and requirements. This should also include risk management, informed decision-making, and compliance with regulations. It should involve the co-development of reporting templates. In addition, SONASP officials need to be capacitated to conduct traceability and due diligence monitoring activities and train miners and other supply chain actors as well. This would increase chances that after project closure, the gold traceability database remains functional, and the gold supply chain is self-sufficient and capable of demonstrating compliance to potential (international) buyers.

ANNEX 2 Colombia

Introduction

The planetGOLD Colombia project, which began implementation in March 2019, works to improve formalization, access to finance, and the traceability of artisanal gold along the following four key components:

Support formalization of the ASGM sector.

Help miners access financing for mercury-free technologies.

Provide technical assistance and training on new technologies.

Raise awareness and disseminate best practices.

Profiling ASGM organizations

The planetGOLD Colombia project team has worked with 11 ASGM sites in the western side of the country, in the regions of Cauca, Bolívar, Nariño, and Antioquia. The project has worked with artisanal / subsistence miners (*barequeros* and mineral selectors) in Cauca (municipalities of Timbiquí, Guapi, Suárez, and Buenos Aires), and with small-scale miners in Antioquia, Cauca, Bolívar, and Nariño. Most of these miners are organized as individuals (Natural Persons) or in companies (Simplified Joint Stock Companies), although some are organized in ASGM cooperatives[22]. Sixty-three percent of the ASGM operations on the planetGOLD project sites are informal[23], and formalization remains the planetGOLD country project's biggest challenge. As of 2023, more than 700 miners were supported in their formalization process (although not all are formalized yet), 20% of which are women. This was done through: awareness-raising workshops for subsistence miners on the process of formalizing; supporting miners in obtaining a Single Tax Registers as well as other necessary documentations and a bank account; and organizing training sessions on the process of registering in the Genesis platform of the Ministry of Mines and Energy.

Map 3: The planetGOLD project sites in Colombia.

[22] More information on these ASMOs can be found in the reports: planetGOLD Colombia (2021). Entregable 1. ARM. Unpublished (Chapter 2) and planetGOLD Colombia (2022). Entregable 5. ARM. Unpublished (Chapter 2).
[23] planetGOLD Colombia (2023). Colombia. Retrieved from: https://www.planetgold.org/es/colombia.

The amount of gold produced varies from site to site, and from type of operation. Artisanal miners are estimated to produce between 5 to 20 grams of gold per month, whereas small-scale miners supported by planetGOLD Colombia are estimated to produce between 1 and 3 kilograms of gold per month[24].

Implementation of the planetGOLD Criteria

The planetGOLD Colombia project conducted a viability study to evaluate the technical, legal and risk management strategies of ASGM sites interested to participate in the programme. Of those:

- 22 ASMOs complied with all the legal, technical, and commercial characteristics and were selected to both implement the planetGOLD Criteria and to be considered for the commercialization pilot with the support of ARM[25],
- 3 ASMOs were selected to receive support to implement the planetGOLD Criteria,
- 3 ASMOs complied with basic documentation requirements. Due to widespread mercury use, planetGOLD Colombia supported miners in adopting MFPS.
- 3 ASMOs had not made sufficient progress in complying with a few legal, technical or commercial requirements and were therefore not selected for further engagement.

ARM monitored and documented compliance against planetGOLD Criteria of at least 24 ASGM sites[26]. Following tailored technical and organizational support, the project has seen an increase of ASMOs continuously improving compliance with the planetGOLD Criteria[27]. The organizational capacity of the ASMOs was also evaluated in the feasibility studies, which was observed to be robust and in accordance with Colombian regulations in most of the small-scale operations. However, many of them presented difficulties in accessing finance and had issues with strengthening their due diligence schemes and traceability[28]. 11 ASMOs fully complied with the planetGOLD Criteria, including mercury-free operations[2930]. These ASMOs were already not using mercury at the start of the project. The planetGOLD Colombia team aimed to support these ASMOs in continuing the mercury-free processing, preventing them from backsliding to mercury use, and to help them access formal markets. Only 3 ASMOs that were supported by planetGOLD Colombia used mercury at the start of the project (as mentioned above).

In order for several of the ASMOs to make progress against the planetGOLD Criteria, the planetGOLD project team identified that technical and organizational support was needed for artisanal miners

[24] More information on gold production can be found in the report: planetGOLD Colombia (2022). Entregable 6. ARM. Unpublished (Chapter 4).
[25] ARM was subcontracted to implement certain workstreams of planetGOLD Colombia, working closely with UNDP Colombia.
[26] More information is available in the report: planetGOLD Colombia (2022). Entregable 6. ARM. Unpublished.
[27] planetGOLD Colombia (2023). Entregable 8. ARM. Unpublished.
[28] More information can be found in the reports: planetGOLD Colombia (2021). Entregable 1. ARM. Unpublished (Chapter 2) and planetGOLD Colombia (2021). Entregable 2. ARM. Unpublished (Chapter 2).
[29] planetGOLD Colombia (2023). Entregable 8. ARM. Unpublished and planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.
[30] See more information in: ARM (2022). Presentacion planetGOLD ARM cómo implementa_14July2022. Unpublished.

to first address formalization and organizational shortcomings. The organizational capacity of artisanal miners was evaluated in the feasibility studies and shortcomings were addressed by strengthening artisanal miners' administrative capacities and accompanying them on a progressive regularization scheme. However, regularization proved challenging due to the low operational capacity of municipal offices and other governmental entities responsible for registering artisanal miners[31].

Based on the progress made in complying with the planetGOLD Criteria, a report was prepared by ARM to aid the planetGOLD-supported ASMOs in demonstrating to traders their commitment to due diligence requirements. ARM was contracted to prepare these reports as monitoring and reporting require considerable technical and human resources investments and ASMOs face limited operational capacity. This inhibits their ability to continue demonstrating compliance once the planetGOLD Colombia project, and therefore ARM's support, ends.

Access to formal markets in the planetGOLD Colombia project

ASGM supply chain dynamics in Colombia:

Figure 4 depicts an example of the ASGM supply chain in Timbiqui[32]. In general, the gold value chain in Colombia begins with ASGM hard rock (open pit and underground) or alluvial gold miners (mostly informal). Both formal and informal artisanal and small-scale gold miners that do not have access to a bank account sell their gold informally, as payments made between miners and formal traders can only be made through bank transfers. There are several reasons behind the exclusive use of transfers: a) Colombia's tax policy is increasingly limiting the use of cash for cost and expenses deductions, b) to promote financial traceability, and c) to reduce risks of trading and carrying large sums of physical money.

ASGM operators with a bank account can either sell unprocessed gold to a) local processing plants or b) international traders of polymetallic concentrates. ASGM process gold themselves (without mercury, or still with mercury clandestinely) and sell either to a) local traders (formal and informal) or b) international traders operating in Colombia. Most of the planetGOLD-supported ASMOs had their own processing plants at site. Local traders typically purchase from artisanal miners, whereas international traders tend to purchase from small-scale miners or local traders that do not have the capacity to export.

[31] See reports: planetGOLD Colombia (2021). Entregable 1. ARM. Unpublished (Chapter 1), planetGOLD Colombia (2021). Entregable 2. ARM. Unpublished (Chapter 1 and 3), planetGOLD Colombia (2022). Entregable 3. ARM. Unpublished (Chapter 4), and planetGOLD Colombia (2022). Entregable 5. ARM. Unpublished (Chapter 1 and 5).

[32] Other representations of supply chains in other ASGM sites can be found in the report: planetGOLD Colombia (2021). Entregable 1. ARM. Unpublished.

To be recognized as a formal local buyer, an authorization / permit from the National Agency of Mining needs to be issued and a registration with the Chamber of Commerce is required to be able to export gold internationally. Currently, formal traders typically offer a 5-10% higher price than informal traders, although miners argue that the gap between formal and informal market is narrowing.

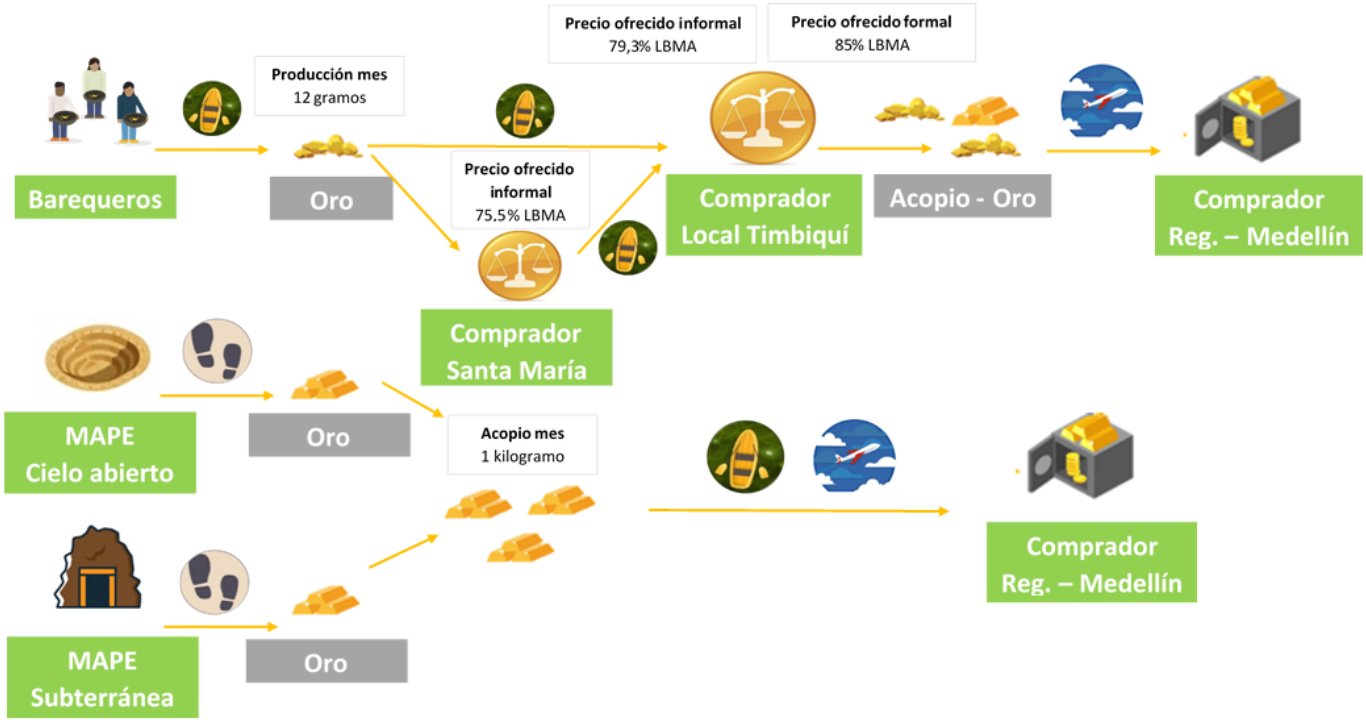


Figure 3: Example of the supply chain in Timbiqui. Source: planetGOLD Colombia (2021). Entregable 1. ARM. Unpublished.

Formal trade is required to occur in specific sites called “formal trade points”, which is not always convenient for miners. Especially for remote ASGM, miners face difficulties accessing formal trade points (e.g., increased transportation costs, robbery risks, and risks of extortion by non-state armed groups). Moreover, many artisanal miners produce volumes below what is viable to compensate for transportation costs to the formal trade points. Formal traders operating in areas with mostly informal ASGM operations tend to then purchase the gold informally. Artisanal miners typically prefer to sell their ore to the informal market to avoid paying income taxes, especially if their production exceeds the non-declaration ceiling.

Formal gold sales are monitored by the National Mining Agency’s platform *(Registro Único de Comercializadores de Minerales* - RUCOM), which records weekly sales. Traders have the responsibility to use the RUCOM to verify that artisanal miners do not exceed 420 grams of gold/year sold (the maximum allowable production capacity of artisanal miners) before purchasing the gold from artisanal miners. However, many artisanal miners operate informally and do not monitor production rigorously.

The maximum allowable processing capacity for small scale gold mining operators is 15,000 tons of gold ore per year. Small-scale operators must submit production data to RUCOM on an annual basis and present royalty payments per quarter.

Informality of ASGM in Colombia can be traced to two main causes. On the one hand, there is a shared perception amongst miners and traders that they do not see the clear benefits of formalization, for example they do not perceive their taxes as being used to improve public services. On the other hand, both miners and traders cite challenges addressing the increased requirements and administrative processes to be able to trade formally. In the last 20 years, the country has observed traceability improvements with requirements that miners and traders need to comply with. Other barriers to entering the formal market include the lack of knowledge on the ASM gold commercialization process under formal frameworks, requirements to access the formal market, mistrust of new traders, and limited access to formal finance.

Activities supporting access to formal markets:

Some of the key activities from planetGOLD Colombia to support miners access to formal markets include:

- **Training and capacity-building of ASMOs focused on the pathway to compliance with Colombian formal trade regulations:** A capacity-building strategy was implemented through different avenues, such as workshops, advisory services, training, and meetings. Following the training, tailored practical tools to manage production projection, sales, deliveries, and engagement with buyers were developed. And finally, further support was offered to identify production and logistic routes to market, sales, deliveries, and documentation of requirements at each stage. Capacity-building and training offered to ASMOs was considered effective (measured in an increase in mercury-free gold sales and increased number of ASMOs operating in adherence to the planetGOLD Criteria) due to its tailored nature to the unique needs and situation of each ASMO.
- **Training other supply chain actors on Fairmined Connect (mercury-free gold traceability):** Beyond ASGM, other supply chain actors (local traders and international buyers) were capacitated via presentations and meetings on Fairmined Connect. The Fairmined Connect application was adapted to enable local and international traders and buyers interested in working with / sourcing from the planetGOLD-supported ASMOs to use the platform – originally, the app could only be used to trace the sales of Fairmined gold. Now, with the adaptation (funded by planetGOLD Colombia), the sales of non-Fairmined gold could also be traced, namely gold sold from the planetGOLD-supported ASGM sites that was produced in compliance with the Criteria. The workshops were provided to explain how they could use this platform. :
    - Although the exchanges with formal market actors were positive, the

implementation of Fairmined Connect on all planetGOLD-sites proved to be challenging. Traders that purchased mercury-free gold from planetGOLD ASMOs were asked to 1) take training on the use of the platform and 2) record various data on their purchases and share invoices. This required additional time and effort for these actors, who did not necessarily see the benefits of dedicating their resources to this. It was thus difficult to incentivize users. This therefore raised bigger questions concerning the viability of integrating due diligence and traceability practices in the day-to-day operations of these supply chains actors without concrete incentives.

- **Mercury-free gold supply chain mechanisms:** Pilots were established for testing responsible supply chains (hereafter "commercialization pilots")[33]. Figure 5 depicts the amount of mercury-free gold produced and sold during the implementation of planetGOLD Colombia. Four ASMOs participated in the pilots[34].

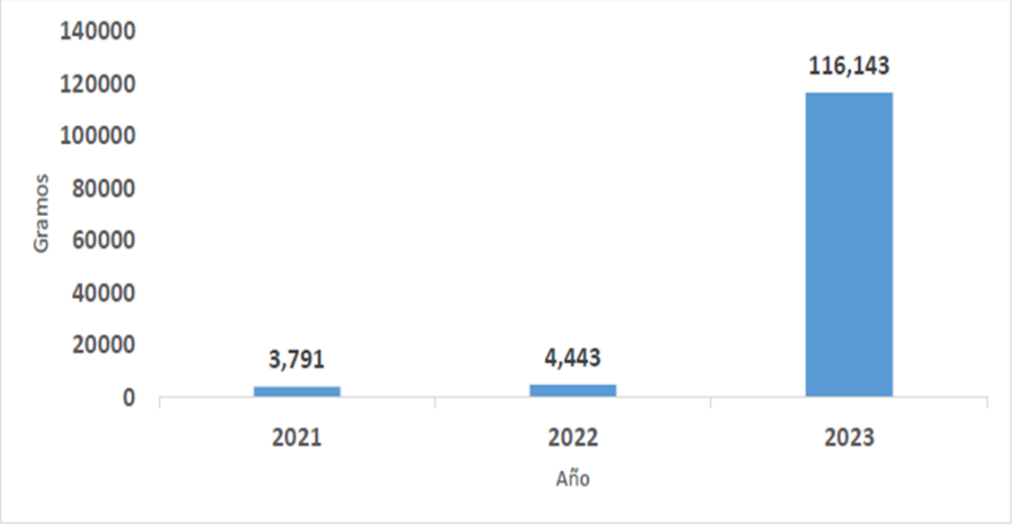


Figure 4: Amount of mercury-free gold produced during the planetGOLD Colombia project. Source: planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.

The following progress was made through these pilots:

- Firstly, the establishment of commercialization pilots required the identification of reliable traders. The pilots aimed to minimize involvement of intermediary local buyers and favored the creation of direct connections between miners and international refiners. However, it soon proved unviable to export small quantities of gold as it increased export costs. Miners also faced challenges in receiving prompt payments from these buyers and required cash. Therefore, local buyers represented

[33] The planetGOLD Colombia project team's experience with supporting access to formal markets and the establishment of mercury-free formal value chains is outlined in the report: planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.
[34] planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.

key actors in the commercialization pilot, as they had the responsibility to ensure the legitimacy of the gold origins and to establish commercial relationships with both miners and international actors.

- Then, ARM leveraged its network of Fairmined Authorized Buyers and international buyers to find potential actors to engage in the commercialization pilots. Selected buyers were introduced to the project and underwent a background check (similar to the viability check done for the planetGOLD project sites). ARM assessed the risks and informed the United Nations Development Programme (UNDP) about the selected buyers' potential participation. In total, nine buyers were considered viable and were engaged as part of the project, seven of which are international buyers, and the others operate in "free trade zones", meaning that they buy and import on national territory, paying Colombian pesos instead of American dollars.
- Once the value chain actors were identified and interactions between them were forged, trade movements were monitored through Fairmined Connect (see explanation above). Not all of the involved ASMOs had achieved Fairmined certification – only La Gabriela.

The following four ASMOs (all small-scale operations) were able to sell their mercury-free gold into a transparent supply chain to (international) formal buyers:

- **La Gabriela (Gold sold[35]: 10.16 kg. Direct buyer: Grupo Altea):**
  Upon commencement of planetGOLD support to La Gabriela, the ASMO was facing difficulties selling gold to formal markets due to low production rates depending on technical (geological data) issues, no access to a bank account, and security issues to transport gold to formal buying centers due to presence of non-state armed groups. A Mining Sustainability Plan was developed by ARM for La Gabriela and activities were subsequently implemented that aimed to improve social, organizational, commercial, technical, occupational health and safety, gender, risk management, and employment conditions. Equipment was also provided by planetGOLD to increase production. Full compliance with the planetGOLD Criteria was achieved in August 2021.
  In Q1-Q2 of 2021, meetings with Grupo Altea (trader, previously called "Anexpo") and Italpreziosi (gold refiner) were coordinated by planetGOLD Colombia to articulate the supply chain. Italpreziosi had approached the planetGOLD Colombia team to explore which ASMOs they could potentially source from.
  From August 2021, mercury-free gold started flowing through the supply chain from La Gabriela to Grupo Altea, then to Italpreziosi and then on to a luxury goods company. Grupo Altea was already a Fairmined Authorized Trader (meaning it is

[35] As of November 2023.

able to trade Fairmined certified gold and recognizes the CRAFT Code as a comprehensive responsible sourcing standard). Fairmined Connect was used to register the commercial transactions of Fairmined gold between the La Gabriela and Grupo Altea.

La Gabriela became Fairmined certified in September 2021, with support from the planetGOLD programme[36].

The planetGOLD Colombia project attributes the success of this supply chain to various factors, including: the implementation of economic incentives (Fairmined Premium), ARM's support and specialized advice to La Gabriela, the visibility and deserved recognition achieved at regional and international levels including through planetGOLD, and the direct engagement of international market actors[37].

- **Compañía Mina Walter (Gold sold[38]: 5.77 kg. Direct buyer: C.I Latrans Grupo Logístico):**

  Compañía Mina Walter received support from the planetGOLD programme from 2022, with the implementation of a Mining Sustainability Plan. The ASMO already had existing marketing processes and transactions for the sale of gold with local and regional traders, with long-standing commercial relationships of trust; they had robust risk management systems, but with opportunities for improvement in their application, as well as in the strengthening of protocols and policies in the identification and mitigation of risk in accordance with the recommendations of the OECD DDG[39].

  As of 1 July 2023, the ASMO fully complied with the planetGOLD Criteria. This meant that Compañía Mina Walter's gold sales could be recognized as in compliance with the planetGOLD Criteria. Latrans Grupo Logístico, a trade company, became the main client of Compañía Mina Walter in this pilot – ARM had been working with this company since 2020. Latrans Grupo Logístico carried out all the procedures required by the planetGOLD programme to be part of the pilot (i.e., followed the necessary training on Fairmined Connect). All sales from Compañía Mina Walter to Latrans Grupo Logístico were registered in Fairmined Connect – the trade company registers the traded volumes and the ASMO validates the information[40]. No further information on other supply chain actors is currently available.

- **Mina Sarco (Gold sold[41]: 106.87 kg. Direct buyer: C.I Latrans Grupo Logístico**

[36] planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished and planetGOLD Colombia (2023). Estudio de caso sobre el piloto decomercialización de Mina La Gabriela a través deplanetGOLD Colombia. Unpublished.
[37] planetGOLD Colombia (2023). Estudio de caso sobre el piloto decomercialización de Mina La Gabriela a través deplanetGOLD Colombia. Unpublished.
[38] As of November 2023.
[39] planetGOLD Colombia (2023). Estudio de caso sobre el piloto de comercialización en Sur de Bolívar a través de planetGOLD Colombia. Unpublished.
[40] planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.
[41] As of November 2023.

(51%), other trading company (49%)):

The third case study is very similar to Compañía Mina Walter. Mina Sarco received support from the planetGOLD programme from 2022, with the implementation of a Mining Sustainability Plan[42].

As of 1 July 2023, the ASMO fully complied with the planetGOLD Criteria. This meant that Mina Sarco's gold sales could be recognized as in compliance with the planetGOLD Criteria. Latrans Grupo Logístico was engaged and reportedly bought 51% of the gold. In addition, documentary review showed that the ASMO also sold part of its gold production to another formal gold trader, but of which ARM has no information or previous relationship. Therefore, although attempts were made to obtain communication with the metals' trader, through Mina Sarco, it was not possible to do so[43].

In the case of sales made since July 2023 from Mina Sarco to C.I Latrans Grupo Logístico, the register was kept through the Fairmined Connect platform, which established that 54 kg of gold was traded in compliance with the planetGOLD Criteria. The sales that Mina Sarco made to the other trader, around 52 kg of gold, could be supported through an official document signed by the Legal Representative of the ASMO, detailing the volumes traded.

- **ASOCALUNGO (Gold sold[44]: 3.5 kg. Direct buyer: C.I Path Gold):**

  Similar to the above two case studies, ASOCALUNGO received support from the planetGOLD programme from 2022, with the implementation of a Mining Sustainability Plan[45].

  As of 1 July 2023, the ASMO fully complied with the planetGOLD Criteria. One of the shareholders of ASOCALUNGO is the main contact of the international trade company Path Gold, which acts as a client of the ASMO. Path Gold showed its interest in taking part in the commercialization pilot of the programme. However, since July 2023, there was only one record of a sale made between ASOCALUNGO and C.I. Path Gold. The trading company had initially shown its interest in participating in the pilot by submitting all the information and documentation required in the pre-feasibility stage, but did not continue to register the purchases made from ASOCALUNGO, nor did it respond to any calls from the ARM team between July and September 2023[46].

[42] planetGOLD Colombia (2023). Estudio de caso sobre el piloto de comercialización en Sur de Bolívar a través de planetGOLD Colombia. Unpublished.
[43] planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.
[44] As of November 2023.
[45] planetGOLD Colombia (2023). Estudio de caso sobre el piloto de comercialización en Sur de Bolívar a través de planetGOLD Colombia. Unpublished.
[46] planetGOLD Colombia (2023). Entregable 9. ARM. Unpublished.

Interlinked activities from other components:

- **Facilitate access to formal financing:** The planetGOLD Colombia project team has supported ASMOs in the opening of 30 bank accounts and get access to credit and financial education through the Financial Cooperative of Antioquia, which was the key partner for the Financial Inclusion component of the planetGOLD programme. Nevertheless, the issue of requiring a bank account remains, whereby banks are reticent to provide services to miners as they are perceived as potentially related to money laundering and/or terrorist financing.

  The government of Colombia has attempted through applying several mechanisms to strengthen the relationship between the ASGM sector and banks, with mixed results. In 2021, the Mining Bancarization Policy was created, which gives greater guarantees to ASGM when requesting financial products. Nevertheless, ASGM continues to face serious challenges in accessing credits due to bank enrolment policies that are not tailored to their type of mining as well as due to the limited presence of private banks.

Cross cutting themes

Gender and child labor

Reportedly, women in the Colombian ASGM sector are often facing greater challenges to access markets or receive a fair price and trading conditions in comparison to men. Moreover, child labor is culturally accepted in some areas, where they accompany their artisanal mining mothers to a) not stay home alone, and b) learn mining skills to generate revenues when older. As part of the project, planetGOLD Colombia conducted a sensibilization programme on gender and child labor eradication in Guapi[47]. Moreover, 447 women were sensitized on the impacts of processing with mercury and ways to eliminate or avoid its use.

Key lessons learned

- There is a need to identify incentives for miners to adhere to the planetGOLD Criteria and to guarantee long-term compliance of the Criteria without depending on third-party support. At present, implementation of the Criteria has not translated into incentives (economic and/or reputational) and without these, ASGM miners are unlikely to continue with the necessary actions to comply with the Criteria, particularly those that are not related to mandatory regulatory compliance.
- Although Fairmined Connect served as the traceability platform to record transactions between planetGOLD Criteria compliant actors, the platform had challenges in being implemented. There is a need to identify incentives for users across supply chains to use Fairmined Connect to increase its practical implementation.
- Opening bank accounts was possible only with a limited number of banks, therefore

[47] More information can be found in the report: planetGOLD Colombia (2022). Entregable 3. ARM. Unpublished (Chapter 4).

seeking strategic alliances with other financial entities is crucial to expand miners' access to finance and facilitating trading within the formal market.

- Collaboration with existing gold aggregating actors is needed in order for a larger number of miners to integrate in formal and international supply chains. ASMOs rarely produce enough gold to make regular export economically viable and international market actors, such as gold refiners, typically prefer to work with aggregators. However, large aggregators are often located far away from (remote) ASGM operations and transportation is typically costly and comes with security risks – especially in areas where non-state armed groups operate. Ideally, such collaborations would prioritize local, informal aggregators as these already have established relationships with the ASMOs and link them to the formal economy. This would especially be needed in order to scale the commercialization pilots to other ASMOs, especially those that operate more remotely and that would not be able to take on the additional transportation costs and security risks. The planetGOLD Colombia team had not implemented any concrete activities aimed at addressing security risks.
- The viability of facilitating a commercialization pilot depends partially on the extent to which an ASMO has already been trained in due diligence tools and methods and has internalized this in their operating systems. A large difference was seen in the progress an ASMO such as La Gabriela – which had received support from ARM in the past – was able to make in the lifetime of the project compared to other ASMOs that had not yet received training and technical support on responsible sourcing standards and practices. Aside from the technical competencies, miners at La Gabriela were already sensitized on the benefits of due diligence and had experienced an increase in profits due to the adoption of responsible mining technologies. This made it easier for them to adopt the planetGOLD Criteria and to fulfill the requirements of formal market actors such as Grupo Altea and Italpreziosi.
- ASGM faces limited operational capacities (technical and human resources) to be able to monitor and report compliance to planetGOLD Criteria. It would be important to develop and implement a scheme to monitor compliance in an agile and effective way.
- The provision of practical tools tailored to ASGM around access to formal markets would give miners some guidance to operate autonomously once planetGOLD Colombia finalizes the programme.
- The promotion of compliance with additional schemes beyond planetGOLD Criteria, such as Fairmined, could ensure long term sustainability of ASGM actions.

ANNEX 3 Ecuador

Introduction

Ecuador's planetGOLD activities carried out under Ecuador's National Programme for Chemical Management (*Programmea Nacional para la Gestión Ambientalmente Adecuada de Sustancias Químicas en su Ciclo de Vida* – NPCM), implemented between March 2018 - July 2024. NPCM is a governmental programme that tackles chemical waste management in general, including pesticides, mining waste, and mercury. On ASGM and mercury use in particular, NPCM aims to eliminate the use of mercury by:

Establish mercury-free technologies.

Assist miners access to finance.

Market responsibly mined mercury-free gold.

Raising awareness and educating.

Because these pillars aligned with planetGOLD, Ecuador participated in the planetGOLD programme through this project.

Profiling ASGM organizations

The planetGOLD Ecuador project mainly works in the mining regions of Camilo Ponce Enriquez (province of Azuay), Chinapintza (province of Zamora), and Zaruma-Portovelo (province of El Oro). All the selected NPCM sites are formalized and sell the gold to the Central Bank of Ecuador (*Banco Central del Ecuador* – BCE) and/or local and international businesses. The project sites extract 60 tons of ore/day (Huertas), 10 ton/day (Pinta Brava), and 500-1000 m3/day (RSH). The project ASGM sites are not supposed to process the gold ore themselves, they are meant to sell it to mercury-free processing plants; however, mercury is still used clandestinely.

Map 4: The planetGOLD project sites in Ecuador.

Beyond the above-mentioned sites, planetGOLD Ecuador has worked with a much broader set of ASGM producers (many of whom use mercury) and processing plants on specific project activities (see below in "access to formal markets" section).

Implementation of the planetGOLD Criteria

The planetGOLD Criteria have not been implemented in Ecuador yet. The NPCM project team learned that many ASGM sites struggle to adopt mercury-free practices. NPCM noted miners' reticence to talk about mercury use and gold production volumes, partly because the use of mercury is illegal in Ecuador since 2015, and production volumes determine the royalties and taxes. In many cases, miners deny the use of mercury and do not disclose their production and processing information. NPCM attempted to estimate mercury use in 9 towns in southern Ecuador, and developed the Mineral Selling Strategy, aimed at incentivizing ASGM to sell untreated ore to processing plants, who can process gold without mercury (see more information below). Moreover, NPCM conducted or financed a few trainings on technology use, gender equality, and capacity-building for local artisanal jewelry production.

With regards to processing plants and assaying laboratories, NPCM assessed their social and environmental risks by applying a UNDP risk tool, which was used to analyze the companies before signing a Memorandum of Understanding (MoU) with them[48].

Finally, NPCM assessed and reported compliance of three processing plants and three ASGM sites (listed in the above section) against the Fairmined standard[49].In general, the six assessed entities are considered legitimate, selling to formal markets, and having a commercial relation with the BCE. All of them comply with organizational and labor criteria to a greater extent, but often fall short in gender, environment, and human rights criteria. NPCM has sought to change these cultural patterns that particularly negatively affect women by identifying women's needs and promoting sustainable, women-led ventures.

Access to formal markets in the planetGOLD Ecuador project

ASGM supply chain dynamics in Ecuador:

The gold value chain in Ecuador is formed by artisanal and small-scale hard rock or alluvial gold miners (mostly informal), who either a) sell untreated ore to processing plants, who process it mainly with MFPS to produce doré bars or concentrate, or b) process gold themselves (with or without mercury) and then sell to local traders (mostly informal). Most formal and informal miners sell their gold individually, even if they are organized in cooperatives. Processing plants can sell gold to the BCE, or export internationally. The BCE only buys gold doré bars. The concentrates, obtained by the processing plants through a flotation process, are mainly sold by the plants to China, Peru, and the US. Informal traders often prefinance miners and use their loan as a lever to ensure miners sell the gold to them, trapping miners in a circle of instability and informality. To be recognized as a formal local buyer, a marketing license must be obtained from the Ministry of

[48] For example: UNDP (2021). JVMetals-UNDP Risk Assessment Tool 2021 FINAL.docx. Unpublished.
[49] NPCM (2022). Producto 3. Evaluación del cumplimiento de los actores mineros del proyecto frente al estándar Fairmined. Unpublished.

Mines. Royalty payments, tax declarations, and commercial obligations vary depending on miners' production capacity[50].

Activities supporting access to formal markets:

NPCM supported miners in gaining access to formal markets by implementing these activities:

- **Mineral Selling Strategy:** The Mineral Selling Strategy aims to establish a formal market for ASGM in Ecuador. The project was implemented for two years and conducted:
  - Capacity training and technology transfer to processing plants and laboratories: two assaying laboratories (Goldenlab and JVMetals) were trained and technologically strengthened with the acquisition of new equipment to increase the quality of gold content determination. Three processing plants (Eymen Corporation, Nueva Union, and El Pache) were also technologically strengthened as part of the project to improve the processing of gold. In total, four processing plants were engaged in the programme (though more than 150 plants operate in Ecuador). These activities aimed to increase trust in the gold content determination, which determines fair pricing, and in efficient gold processing, to make the plants more attractive to miners.
  - ASGM communication campaign: ASGM miners in Ecuador typically do not trust processing plants' assessment of their untreated ore. The ASGM awareness campaign aimed to build confidence and trust to the miners, by inviting and convincing miners to participate in the Minerals Selling Strategy by assaying their ore in the laboratories and then selling it to processing plants. The campaign directly informed 272 people, of which 152 were women. As part of the communication campaign, NPCM established a deal with the processing plants, which agreed to pay at least 50% of the quantity of gold found in the untreated ore. Miners who process gold manually usually manage to only recover 40%. Awareness of the increased recovery rates from processing plants could therefore incentivize miners to sell their gold to these plants. Additionally, the processing plants that collaborate with the NPCM provide technical processing assistance for miners to be able to process gold themselves without the use of mercury.
  - Implementation of the trading model: the implementation of the model where ASGM operators sell to processing plants proved to be challenging due to many ASMOs not operating formally. However, during the project implementation period, EMICOR purchased 73,153.87 tons of ore, obtaining 93.66 kilograms of mercury-free gold, and Nueva Union processed 264 tons of ore, obtaining 2.36 kilograms of mercury-free gold.

[50] World Gold Council (2021). Central Bank Domestic ASGM Purchase Programmes. Retrieved from: https://www.gold.org/goldhub/research/central-bank-asgm.

- **Ecuador's Central Bank gold buying programme:** NPCM supported the BCE in improving its procedures to purchase gold directly from ASGM. As a result of the recommendations by NPCM, the BCE opened another gold buying office in Machala, close to ASGM gold production sites in the south. Initially, there was only one BCE gold buying office in Quito, located far from ASGM activities. This complicated miners' ability to sell their gold to the BCE. The BCE is also exploring opportunities to open a new gold buying office in the northern region of Ecuador. In order to sell gold to the BCE, miners must:
  - Sell gold ore to local processing plants, and the bank purchases the resulting gold bars, which are then sent to LBMA-accredited refiners to be cast as Good Delivery bars.
  - Get registered and have bank accounts with registered financial institutions.
  - Undergo compliance checks with anti-money laundering regulations, tax obligations, and fraudulent activities.

  Currently, only about 500 miners out of 12,000 artisanal miners in Ecuador (less than 5%) are economic certified agents or, in other words, have the necessary paperwork to be able to sell to the BCE. Although the new gold buying offices improved miners accessibility, miners continued facing logistical challenges (security risks and difficulty accessing roads), technical challenges (complex registration process, and time lags in making payments, which is inconvenient for subsistence miners) and perception challenges (as some perceive they will be greatly scrutinized and will need to pay extra taxes)[51].
- **Supporting ASGM receiving Fairmined certification**: NPCM aimed at initiating activities to support a selected company in obtaining Fairmined certification during the second half of 2023. Progress is not known as of this writing.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Ecuador include:

- **ASGM financing:** In collaboration with the BCE, BanEcuador, the Ministry of Energy and Mines, and the Ministry of Environment, NPCM created an individual mechanism to allow ASGM producers to access credit to improve gold processing methods, which would in turn allow for sale to formal markets. As of 2023, half of the miners who applied met the requirements of the bank, but no loans have been granted yet[52].

[51] planetGOLD Ecuador (2023). 2023 Project Implementation Report. Unpublished.
[52] planetGOLD Ecuador (2023). 2023 Project Implementation Report. Unpublished.

Cross cutting themes

Gender

Women living in poverty in Ecuador have found a way to receive income by manually sorting gold mining waste. However, this work was not legalized as it is carried out in material considered unprofitable, and therefore the job women do was underestimated and invisible. More than 80% of women sorters are not affiliated to social security and do not have a health coverage. Mining is seen as a male-dominated sector, which means that vulnerable groups such as *jancheras* (women material sorters) have more barriers to overcome in order to access fair pricing for their collected ore. The NPCM has sought to work towards the recognition of *jancheras* through legal instruments that provides them increased visibility in the supply chain and access to a better price for their collected mineral.

Key lessons learned

- There is a need to strengthen formalization as it opens the door to formal markets. There is a need for training ASGM in how to effectively formalize.
- To ensure that gold is produced mercury free, through connecting miners to mercury-free processing plants and ensure they sell their untreated ore to these plants, there is a need for training on how to address the barriers to selling to processing plants.
- NPCM sees value in developing a digital application to support miners in engaging with national and international buyers, including refiners and other actors aside from the BCE. The app could be used to report on gold production from artisanal miners and vice versa, buyers could use the app to communicate how much gold they would be interested in purchasing. Miners would need to feel incentivized to use this app. The project team particularly sees a benefit for miners to use the information shared in the app in reaching agreements with potential buyers.
- It is important to diversify end buyers. NPCM's strategy focused on the BCE, which is risky in periods of instability. The developed Mineral Selling Strategy would have to reconsider the role and importance of formal private buyers as well. Private buyers are also important because the BCE can currently only buy 20% of ASGM gold, as not all miners are able to undergo the due diligence process required by the BCE to be accredited as a certified economic agent. The difficulties for ASGM to formalize also limits the ability of the BCE's to purchase ASM gold. NPCM had some engagements with international supply chain actors (jewelers, refiners) who contacted them through UNDP, but those engagements were premature, as NPCM strategy focused on the BCE.

ANNEX 4 Guyana

Introduction

The planetGOLD project in Guyana, implemented between May 2018 – June 2023, aimed to test a supply chain approach to achieve mercury-free mining. Key strategies of the project included:

Develop incentives and national policies to produce mercury-free gold.

Establish mercury-free mining processes.

Creation of financial mechanisms for investment in new technologies.

Educate and raise awareness.

Bring mercury-free gold to the market.

Profiling ASGM organizations

A range of activities, with a focus on technology transfer and education and awareness to facilitate the production and sales of mercury-free gold aimed to be executed by planetGOLD Guyana in three mining areas: Barima-Waini, Cuyuni-Mazaruni, and Potaro Potaro-Siparuni[53]. One the distinguishing characteristic of planetGOLD Guyana's country implementation was its goal to establish a national mercury-free gold brand, called El Dorado Gold, which could support the continued expansion of mercury-free production by providing higher prices and access to formal markets[54]. The selected site for the El Dorado pilot project was located in a mining area close to Mahdia Township in Potaro Mining District. The site was owned by a formal medium-scale miner which employed 17 people, of which there was only one woman (working as the cook).

Map 5: The planetGOLD project sites in Guyana.

The planetGOLD Guyana project provided technical and financial support to make Mahdia a demonstration site for mercury-free gold recovery. More

[53] planetGOLD Guyana (2023). Project Implementation Report (July 1, 2022 – June 30, 2023). Unpublished.

[54] planetGOLD Guyana (2023). Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them. Retrieved from: https://www.planetgold.org/sites/default/files/Transitioning%20to%20Hg-free%20Gold%20Processing%20-%20Identifying%20Gaps%20from%20Current%20to%20Hg-free%20Supply%20Chains%20and%20Strategizing%20How%20to%20Bridge%20Them_0.pdf

information on the processes used in Mahdia can be found in planetGOLD Guyana 360.The average monthly gold production at Mahdia was 120.39 grams as of June 2022[55].

Implementation of the planetGOLD Criteria

A baseline risk assessment on compliance with planetGOLD Criteria was done in Mahdia. Priority risks observed related mainly to mercury use, social reporting, gender mainstreaming, and reputational risks related to proximity with Venezuela and Brazil (as some jewelers reported Venezuelan and Brazilian gold associated with money laundering and smuggling entered the Guyanese gold supply chain illicitly). Risk mitigation measures were initiated, including the development of relevant site policies, due diligence measures, and health and safety awareness. Technical support in the form of training, site posters and tools, and risk mitigation plans were implemented to support Mahdia with planetGOLD compliance. At project closure, the Mahdia demonstration site complied up to the first level of planetGOLD Criteria, although it has the potential to comply to the third level[56].

Mercury use is legal in Guyana, and although the use of mercury is understood by miners as a human health and environmental threat, there is a general perception that MFPS are slower and more expensive to purchase and maintain. According to the Guyanese Geology and Mines Commission, the use of mercury remains widespread in Guyana due to the lack of available MFPS, lack of finance to purchase MFPS equipment, and the perception that mercury is unable to recover the high volumes of gold from the ore desired by miners[57].

As explained above, the project provided technical and financial support to make Mahdia a demonstration site of mercury-free gold recovery to tackle miners' misconceptions around the use of MFPS. Although the recovery rates of the designed and implemented mercury free technologies were higher, project implementers recognized that the technology was more expensive. Concrete recommendations on MFPS and equipment are provided in "Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them, 2023".

[55] planetGOLD Guyana (2023). Mercury Avoidance Report. Retrieved from: https://www.planetgold.org/sites/default/files/Mercury%20Avoidance%20Report.pdf.

[56] More information can be found in the reports: planetGOLD Guyana (2023). Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them. Retrieved from: https://www.planetgold.org/sites/default/files/Transitioning%20to%20Hg-free%20Gold%20Processing%20-%20Identifying%20Gaps%20from%20Current%20to%20Hg-free%20Supply%20Chains%20and%20Strategizing%20How%20to%20Bridge%20Them_0.pdf and planetGOLD Guyana (2022). El Dorado Gold Verification and Capacity Building Consultancy Final Report November 2022. Retrieved from: https://www.planetgold.org/sites/default/files/El%20Dorado%20Gold%20Verification%20and%20Capacity%20Building%20Consultancy%20Final%20Report%20.pdf.

[57] More information can be found in the report: planetGOLD Guyana (2022). El Dorado Gold Verification and Capacity Building Consultancy Final Report November 2022. Retrieved from: https://www.planetgold.org/sites/default/files/El%20Dorado%20Gold%20Verification%20and%20Capacity%20Building%20Consultancy%20Final%20Report%20.pdf.

Access to formal markets in the planetGOLD Guyana project

ASGM supply chain dynamics in Guyana:

The gold value chain in Guyana begins with alluvial artisanal and small-scale gold miners, mostly formal, that use mercury (as it is not banned in the country). Miners sell gold to licensed or unlicensed traders, dealers, or the Guyanese Gold Board (GGB). Moreover, miners frequently informally exchange gold for goods and services directly with service providers or unlicensed traders. Licensed traders get licenses from the Guyana Geology and Mines Commission and need to document receipt of gold and report it within 10 days to the GGB. Licensed traders can go to the site and purchase directly from miners or operate from gold purchasing stores. Traders often pre-finance miners on the basis of trust. The lack of formal financing means that traders are normally the ones pre-financing, which ties miners in selling to them. 90% of Guyanese gold trade is done through traders. Licensed traders can in turn sell to the GGB or to licensed dealers.

Dealers are licensed by the GGB and normally act as the GGB's agents, and they are also allowed to export. Dealers often pre-finance traders to enable them to purchase large quantities of gold from miners. Dealers normally engage agents who purchase gold on their behalf, allowing dealers to increase their geographical presence. However, agents are not required to have a trader license and they commonly operate without governmental oversight. Finally, the GGB can purchase directly from miners, traders and/or dealers to export (mostly to a refiner in Dubai) or sell to jewelry companies. Before 2022, the GGB exported gold to the Royal Canadian Mint (RCM) refinery, however, due to increased scrutiny on the Guyanese mining sector, including allegations of the illegal incorporation of Venezuelan gold into the GGB's export stream, and of terrorist financing, the RCM decided in December 2021 to not continue their relationship with the GGB. The GGB, in general, does not trace the origin of the gold it receives, but prior to purchase, it performs a compliance check on its dealers. Local jewelers can only buy gold from the GGB by law, they cannot import from elsewhere. Figure 6 depicts the typical gold value chain in Guyana.

Formal miners pay tax on their gold sales at a rate between 2%-3.5% and a royalty of 5%, which, according to the Guyana Gold and Diamond Miners Association, is perceived as unfair and bringing uncertainty to miners. The Association advocates for a fixed tax to increase certainty, to reduce the tax, and to distribute tax payment among all the actors in the supply chain and not just miners. More detailed information about the Guyanese ASGM supply chains can be found in "Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them, 2023".

Figure 5: The ASGM value chain in Guyana. Source: planetGOLD Guyana (2023). Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them. Retrieved from: https://www.planetgold.org/sites/default/files/Transitioning%20to%20Hg-free%20Gold%20Processing%20-%20Identifying%20Gaps%20from%20Current%20to%20Hg-free%20Supply%20Chains%20and%20Strategizing%20How%20to%20Bridge%20Them_0.pdf.

Activities supporting access to formal markets:

Some of the key activities from planetGOLD Guyana to support miners access to formal markets included:

- **Designing a mercury-free gold supply chain mechanism:** A mercury-free formal gold value chain was designed in Mahdia and branded as El Dorado but ultimately was not implemented. The "El Dorado Gold Verification and Capacity Building Consultancy Final Report, November 2022" presented the proposal outlining how the Verifiable Mercury Free gold supply chain could be facilitated by the El Dorado project. It identified key actors to be part of the value chain and conducted due diligence to each of the actors, as depicted in Figure 7.
    - The project proposed a hybrid system (paper recording and electronic) to track relevant information, see Figure 8.
    - Traders and dealers engaged in the project and the GGB agreed verbally to buy mercury-free gold from Mahdia. However, to simplify the process, miners at Mahdia decided to sell directly to the GGB in Georgetown. Nevertheless, planetGOLD Guyana recognizes that traders and dealers play a crucial role in the Guyanese gold supply chain, which might make cutting them out impossible in other mining areas.

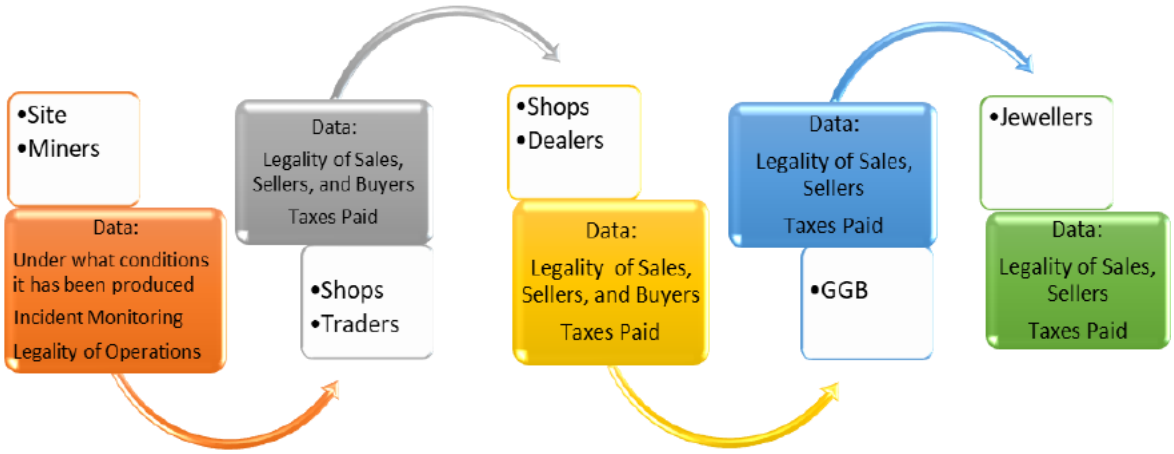


Figure 6: The EL Dorado Due Diligence Process according to the position in the Gold Supply Chain. Source: planetGOLD Guyana (2022). El Dorado Gold Verification and Capacity Building Consultancy Final Report November 2022. Retrieved from: https://www.planetgold.org/sites/default/files/El%20Dorado%20Gold%20Verification%20and%20Capacity%20Building%20Consultancy%20Final%20Report%20.pdf.

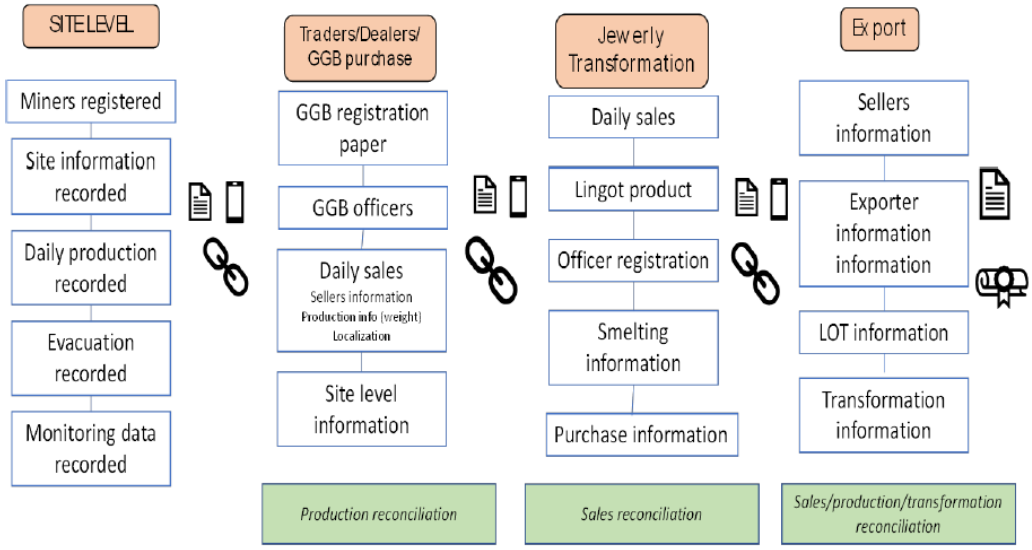


Figure 7: Scheme showing the data collected and at which step traceability is taking place. Source: planetGOLD Guyana (2022). El Dorado Gold Verification and Capacity Building Consultancy Final Report November 2022. Retrieved from: https://www.planetgold.org/sites/default/files/El%20Dorado%20Gold%20Verification%20and%20Capacity%20Building%20Consultancy%20Final%20Report%20.pdf.

- In addition, a consultant hired by planetGOLD Guyana conducted training with miners and Conservation International on topics that covered mercury free production, implementation of responsible mining standards, chain of custody along the supply chain inclusive of OECD DDG, gold traceability systems, and branding and marketing of El Dorado gold[58].
- The project identified an end buyer, Topaz, a Guyanese jewelry brand, who agreed

[58] planetGOLD Guyana (2023). Project Implementation Report (July 1, 2022 – June 30, 2023). Unpublished.

informally to purchase the resulting mercury free gold from Mahdia, via the GGB. However, as there were no formal agreements between Topaz and the GGB, the Board sold it to an unknown buyer. Apparently, Topaz took too long to collect the gold and assumed the GGB would keep the gold on hold for them indefinitely. There was no MoU in place between the GGB and Topaz.

- Besides the identified end-buyer, the project also initiated contact with international refiners to understand their interest and challenges to source gold from Guyana, and also engaged local jewelry companies to understand their interest and challenges to purchase mercury free gold. Key stakeholders engaged and learnings are summarized in the Annex 4 presentation on Branding and Marketing.

- **Conducting a supply chain study and evaluating the viability of a mercury-free gold label:** The planetGOLD Guyana project team contracted Duke University to review the gold supply chain in Guyana to better understand the roles and perceptions of all actors from gold mining to export. Their study also assessed the mercury-free demonstrations in Mahdia and Puruni to evaluate miner-level opinions on mercury-free processing and shed light on recommendations for future policy and implementation efforts for the El Dorado Gold label[59].
  - The report highlights challenges and gaps hindering the transition to mercury-free gold in Guyana's supply chain and concluded that the prospects for a mercury-free gold transition motivated by the implementation of a mercury-free gold label were bleak from a supply chain perspective. Current supply chains inadequately document mercury-free gold production, crucial for supporting a mercury-free gold label.
  - Other barriers to a mercury-free gold supply chain involved miners' profitability concerns, technical transition challenges, low domestic demand for sustainable jewelry, and international distrust due to money laundering issues. While demonstrations of mercury-free technologies in Mahdia and Puruni may address miners' uncertainty, the conditions necessary for miners to adopt mercury-free processes were not met at the time the report came out (February 2023), except through price incentives or substantial technological gains.
- **Support ASGM regulation:** The project team participated in the finalization of the National Action Plan (NAP) which was approved by the Government of Guyana and submitted to the Minamata Secretariat. This policy document outlines the strategies and activities identified and agreed to by all agencies concerned, to complete a comprehensive roadmap for national efforts for Guyana to meet its obligations under the Minamata

[59] planetGOLD Guyana (2023). Transitioning to Hg-free Gold Processing: Identifying gaps from current to Hg-free supply chains and strategizing how to bridge them. Retrieved from: https://www.planetgold.org/sites/default/files/Transitioning%20to%20Hg-free%20Gold%20Processing%20-%20Identifying%20Gaps%20from%20Current%20to%20Hg-free%20Supply%20Chains%20and%20Strategizing%20How%20to%20Bridge%20Them_0.pdf.

Convention to phase down the use of mercury in the ASGM sector. However, no mechanism was designed to facilitate a nationwide monitoring of the use of mercury. This required the active involvement of government agencies that were not among the core partners of the planetGOLD Guyana project. Though initial interest was shown among a wide group of agencies to undertake the exercise of tracking and monitoring the use of mercury, the interest was not maintained by key agencies[60].

Interlinked activities from other components:

Key activities relevant for the "access to formal markets" work of the project are described in the section above.

Cross cutting themes

Gender

The ASGM sector in Guyana is male dominated, although some women are involved in ancillary services, artisanal mining, or as owners of operations (without operating themselves). Culturally, women are considered unfit to work on mining and are believed to be protected by not being engaged directly in the extraction of gold, as it is perceived dangerous. The planetGOLD Guyana project raised awareness and encouraged participation of women in providing access to land, finances, and access to MFPS. Further details can be found in the 2021 report "Gender in Guyana's Artisanal, Small-scale Gold Mining (ASGM) sector".

Indigenous communities

To ensure the rights of the Indigenous communities in the Karrau gold mine site were respected, the planetGOLD Guyana project led the development of Guidelines for Following FPIC for Indigenous Peoples as an approach for use under the EL Dorado Gold Responsible Mining Initiative. These guidelines were utilized in the establishment of a site to demonstrate mercury-free gold processing in the Indigenous Village of Karrau. Through a collaborative process led by Conservation International Guyana, along with two government agencies, the Karrau Village developed a ten-year Village Sustainability Plan. The process helped the community to think, plan and manage resources to design and implement projects, including the demonstration site. With consent from the village of Karrau to proceed with the initiative, an Agreement was signed between Conservation International Guyana and the Village of Karrau that paved the way for the import of the relevant MFPS equipment to Karrau and for the demonstration to kick off[61].

Key lessons learned

- The project designed a pilot mine-to-market project that aimed to link miners from the

[60] planetGOLD Guyana (2023). Project Implementation Report (July 1, 2022 – June 30, 2023). Unpublished.
[61] planetGOLD Guyana (2023). Implementing Guidelines for Following FPIC The Case of Establishing a Mercury-free Demonstration site in the Indigenous Village of Karrau. Retrieved from: https://www.planetgold.org/sites/default/files/Implementation%20of%20FPIC%20Guidelines.pdf.

mercury-free demonstration site in Mahia to a (formal) buyer (Guyanese jewelry company). However, the outcome of the pilot project was not successful. The evaluation report concluded that this was caused by a variety of reasons. There was no established market offering a fixed higher price for mercury-free gold, deterring miners and jewelers from costly business changes without guaranteed returns. Miners resist changing gold processing due to distrust in alternative methods extracting comparable or higher gold quantities and a belief that mercury's benefits outweigh health risks. Concerns include financial risks of switching and lacking technical capacity. Verification of mercury-free gold production also faces complications due to inadequate trust in government certification. Government-based verification utilizing the GGMC reportedly lacks international acceptance due to perceived conflicts of interest and potential corruption. Formal buyers' doubts about gold's traceability and responsible sourcing standards pose substantial challenges in establishing a legitimate mercury-free gold label acceptable to formal markets:

  - There was no premium offered for the production of mercury-free gold by the GGB. The only incentives communicated with the miners to produce mercury-free gold were better recovery and improved health outcomes. Some miners indicated that, if a premium would be offered for mercury-free gold, this could be a successful incentive for miners to explore mercury-free technologies.
  - Supply chain due diligence and traceability seems to be new and complex to Guyanese stakeholders. Tracking the supply chain is challenging due to the high mobility of the supply chain actors, complicating their ability to record their purchases, and electronical record-keeping is not deemed suitable for miners as internet and telephone connections are limited in mining areas. There is a need to establish a mechanism to verify the legality of actors before trading and a monitoring mechanism needs to be implemented. Regarding traceability, some systems were suggested and presented during training done in the field, which could be tested further. Finally, training (technical and resourcing) in how to conduct supply chain due diligence and traceability is key.

- There is high potential for many Guyanese ASGM sites to work towards adherence to the planetGOLD Criteria given that most operators are already operating formally. However, mercury use remains a challenge. Financial and technical support to ASGM miners would be needed to address costs associated with compliance with responsible sourcing standards.

ANNEX 5 Indonesia

Introduction

The planetGOLD Indonesia project supported six ASGM communities to reduce mercury use by at least 15 tons over the course of the five-year project (March 2019 – June 2023). Locally, the planetGOLD Indonesia project was known as Global Opportunities for Long-Term Development Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-Scale Gold Mining (GOLD-ISMIA).

Support formalization of the ASGM sector.

Help miners access financing for mercury-free technologies.

Provide technical assistance and training on new technologies.

Raise awareness and disseminate best practices.

Profiling ASGM organizations

The project supported six ASGM communities in Yogyakarta, Nusa Tenggara Barat, Gorontalo, Sulawesi Utara, Maluku Utara, and Riau. It worked with focal points on the ASGM sites and through them, with the ASGM communities and cooperatives of miners. Cooperatives were selected through a process of local consultation. Given that the government of Indonesia was a project partner, the selected cooperatives were required to either have or were in the process of obtaining a community mining permit (Izin Pertambangan Rakyat (IPR)) and a mining permit area (or *Wilayah Pertambangan Rakyat* (WPR)), and generally operate within the legal framework. After the project was launched in March 2019, it started mapping out the mining permits of the existing cooperatives on the supported ASGM sites. This showed that the cooperatives had varying degrees of maturity in terms of complying with legal requirements. Only 2 out of 11 existing cooperatives had an WPR.[62]. At project closure, planetGOLD Indonesia had supported 60 cooperatives in formalizing, representing 1,274 miners, but only nine

Map 6: The planetGOLD (GOLD-ISMIA) project sites in Indonesia.

[62] planetGOLD Indonesia (2021). ASGM Formalization: Lessons Learned from GOLD-ISMIA. Retrieved from: https://www.planetgold.org/sites/default/files/Fact%20Sheet_ASGM%20Formalization.pdf.

mining groups were able to successfully obtain their IPR whereas the remaining 51 were still awaiting approval. This was largely due to challenges related to varying understandings and interpretations of new ASGM legislation, as well as insufficient coordination between national and regency-level agencies[63].

Implementation of the planetGOLD Criteria

The planetGOLD Criteria were developed to guide operations associated with the planetGOLD programme to ensure their compliance with GEF environmental and social safeguards as well as to align with internationally recognized responsible sourcing standards. In the case of planetGOLD Indonesia, the government chose not to adopt the planetGOLD Criteria directly but instead, the project relied on environmental and social safeguards through UNDP (which are largely equivalent to similar GEF safeguards). In the future, the Indonesian government is planning to set up national criteria for responsible gold based on upcoming legislation and regulations and the conditions of the miners.

Access to formal markets in the planetGOLD Indonesia project

ASGM supply chain dynamics in Indonesia:

The gold value chain in Indonesia typically looks as follows: the formal gold traders are those who have received a registration license and permit to trade gold. They are expected to document their gold transactions and only buy gold from miners that operate formally, produce non-mercury gold products, and generally operate in compliance with the government regulatory framework. Buyers trading formally usually assay the gold carat and content concentration at laboratories before they finalize the purchase of gold and pay the miners. In the informal market, buyers operate without a gold trading license and buy gold in cash directly from the miners without asking them to disclose any details on their production and make estimation on gold content on the spot. In some cases, these informal gold buyers are processing plants or (national) refiners without a formal gold trading license. Some informal buyers have also set up stalls nearby processing plants, where miners come to process their ore. The relationship between buyers and miners is often based on mutual trust, whereby the price is determined by estimating the gold concentration using wet gold technique. It is unclear whether formal or informal buyers typically pay the highest price. However, based on the experience of the project team, ASGM producers in Indonesia get much lower prices for their gold compared to the average global market. This is due to: a) low purity levels and b) unreliable methods of determining gold purity especially during informal trading (gold purity determined by the buyer as mentioned above).

[63] planetGOLD Indonesia (2023). Terminal Evaluation (TE) Report of Global Opportunities for Long-term Development - Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA). 30 June 2023. Unpublished.

Activities supporting access to formal markets:

The planetGOLD Indonesia project carried out several activities that supported buyers' engagement. These include:

- **Market actors' engagement:** Engagement was established, including through the organization of events, with a jeweler in Bali, an international refiner, national banks, NGOs, and the media. The purpose of these events and engagements was to promote the ASGM sector. However, results were limited due to the challenges related to the formalization and gold legality issues.
- **Traceability of mercury-free gold:** One of the requirements for ASGM producers to hold a mining permit in Indonesia, is for them to use MFPS. If there is any evidence of miners using mercury, they risk losing their permit. In addition, formal buyers (mostly refiners) refuse gold that has been processed with mercury. The planetGOLD Indonesia project therefore set up a list of formal miners that had installed MFPS to show this to potential buyers in the formal market. Moreover, a digital application was developed ("Jari Emas") to support miners demonstrating their mercury-free gold production methods to potential buyers. The government also uses the application to monitor data of mercury avoided. The planetGOLD Indonesia project supported the cooperatives in understanding and using the application. There is no data available on the buying and selling of gold in the application. In addition, the project supported the establishment of the Indonesia National Standard (SNI) on mercury-free gold processing system, which was approved by the National Certification Agency (BSN).

Out of an estimated 2,840 kg of mercury-free gold produced by the miners in the 6 project locations, it is estimated that 192 kg of gold produced without mercury has been sold to formal buyers[64]. The government released a new regulation in January 2023, assigning PT Pegadaian to buy at least 10 kg of gold from ASM operations per month. However, not all miners are able to deliver this supply without an advance payment to invest in technologies for production increase. One of the planetGOLD-supported ASMOs (Batu Api) was able to deliver this supply through a partnership with PT Pegadaian.

The project identified several challenges for artisanal and small-scale gold miners to access the formal market:

- One of the key challenges, as observed by the planetGOLD Indonesia team, for artisanal miners to access the formal market, is the quality demands of buyers. Downstream companies claim that ASMOs do not have the capacity to produce gold at a quality they would need – this claim especially seems to come from the jewelry sector. The ASGM sector would

[64] planetGOLD Indonesia (2023). Terminal Evaluation (TE) Report of Global Opportunities for Long-term Development - Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA). 30 June 2023. Unpublished.

need access to refining facilities so that ASM gold can be turned into high quality gold. This issue is present for both formal and informal ASGM operations, but for the latter, an additional challenge is that formal buyers like PT Antam or jewelry companies require miners to show their license in order to purchase gold. The project supported miners in improving their gold quality through the roll-out of MFPS, which increased gold concentration.

- Another challenge relates to the laboratory testing of gold. In order for miners to sell gold, formal buyers will first need to see the results of an assaying laboratory. However, for a laboratory to test the composition and purity of gold can take several days. Miners are not able to wait this long for payment, as they need to cover operational costs (e.g., workers' salaries, material transport, fuel etc.) and prefer to sell to the (informal) buyers that can pay them cash right away. This was also considered a challenge in the project, as the ASGM communities supported by the project asserted that this was a non-negotiable issue – they had to receive payment within a day. The project established one laboratory for gold testing to address this challenge. The laboratory is operated by the regional government (District Environmental Agency) and it can be accessed by ASGM miners.
- Finally, given that formal buyers often base their price on the gold spot price, this means that they cannot offer the same price to miners each day. This leads to mistrust and confusion among miners, who are unwilling to accept a lower price than what they have received before.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Indonesia include:

- **Capacity-building of ASMOs**: The project worked with ASGM cooperatives and organizations to build their capacity in developing loan/investment applications for MFPS equipment/investments and subsequently apply for loans or investments[65]. Moreover, capacity-building activities, aimed at supporting cooperatives / miners in record keeping of ore production and gold yields, were also carried out. These are recognized as key element of due diligence in proving the provenance of gold, with a view to supporting miners to sell gold directly to international refineries[66].
- **Training in MFPS:** The project provided technical training to miners to increase their capacity in the use of MFPS. The project trained approximately 800 miners in alternative technologies through a two-day course that explained the health risks of mercury, technology

[65] planetGOLD Indonesia (2021). Potential financial mechanisms for ASGM sector. Fact sheet. 17 January 2021. Retrieved from: https://www.planetgold.org/sites/default/files/Proposed%20Financial%20Mechanisms%20for%20ASGM%20Sector.pdf.

[66] planetGOLD Indonesia (2023). Increasing Capacity for Mercury-Free ASGM Through Provision Of Technical Assistance, Technology Transfer And Support For Formalization. Retrieved from: https://goldismia.org/node/106.

solutions, and practical activities on how to operate MFPS equipment, monitor processing, and check the grade of gold produced[67].

- **ASMO formalization support:** 60 mining groups were supported in formalizing their operations. Formalization is seen as a prerequisite for better / additional income for the miners through access to formal markets for clean gold and tailings, in addition to being able to access formal financing[68].

Cross cutting themes

Gender

Women working in ASGM in Indonesia rarely benefit from the positive impacts of the sector on their communities[69]. To support gender equality and strengthen the role of women in the ASGM market, the planetGOLD Indonesia project organized a training module on financial access and loan / investment applications to two women mining groups and other mining groups that included women miners. Other activities included an assessment of policies and regulations on gender dimensions, formalization training for women miners, and awareness raising on mercury impacts.

The planetGOLD Indonesia project also designated gender-responsive villages. Gender awareness training was conducted in six villages, engaging 193 participants, notably 120 women. These sessions prompted reflections on gender perceptions within the cultural context of mining communities. Through collaboration with mining cooperatives, the project established Koperasi Amanah Duo Tompat (KPDT), aiding in administrative preparation and price negotiations for mercury-free gold sales.

By adapting training materials, the project also enabled economic empowerment for women in ASGM, fostering leadership among women miners. Establishing gender-responsive villages, like in Kuantan Singingi district, empowered women to manage mining areas independently, inspiring others to participate. This focused approach created a ripple effect as women shared their skills within their communities, amplifying the project's impact on gender equality in ASGM areas.

Key lessons learned

- The formal market, including local actors, appears to find it challenging to accept products from the ASGM operations for a variety of reasons, including quality and due diligence issues. Even though the project attempted to engage the jewelry market in Bali, this was not

[67] planetGOLD Indonesia (2023). Project Assurance Report. Reporting Period: Jan-June. Year: 2023. Unpublished.
[68] planetGOLD Indonesia (2023). Terminal Evaluation (TE) Report of Global Opportunities for Long-term Development - Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA). 30 June 2023. Unpublished.
[69] planetGOLD Indonesia (2023). Terminal Evaluation (TE) Report of Global Opportunities for Long-term Development - Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (GOLD-ISMIA). 30 June 2023. Unpublished.

entirely successful due to payment timeline (after few days compared to local traders paying in cash at the point of sale) and quality issues.

- The project team witnessed the power of storytelling particularly in its engagement with the government: as miners shared the work they had been doing with the project and the progress they were making, the government appeared more lenient in approving mining licenses.
- It is unclear whether ASGM miners in Indonesia are actually incentivized to access formal markets given existing incentives to sell to informal traders (as per the dynamics described above). As the project team carried out sensitization activities on MFPS and formalization, miners were encouraged to develop more responsible ASGM practices with a view to increasing their production and access to financial support. However, whether this translated to miners feeling incentivized to work with formal buyers, is inconclusive.
- According to the project team, the needs for miners to access formal markets and improve the trading conditions include: formalization support so that the government is able to become a partner in promoting / engaging the formal market, and education and capacity-building on purity measuring to strengthen miners' bargaining position.

ANNEX 6 Kenya

Introduction

The planetGOLD Kenya project supports six ASGM communities with the aim to reduce mercury use by 1.5 tons over the course of the five-year project (2020 – 2024).

Support formalization of the ASGM sector.

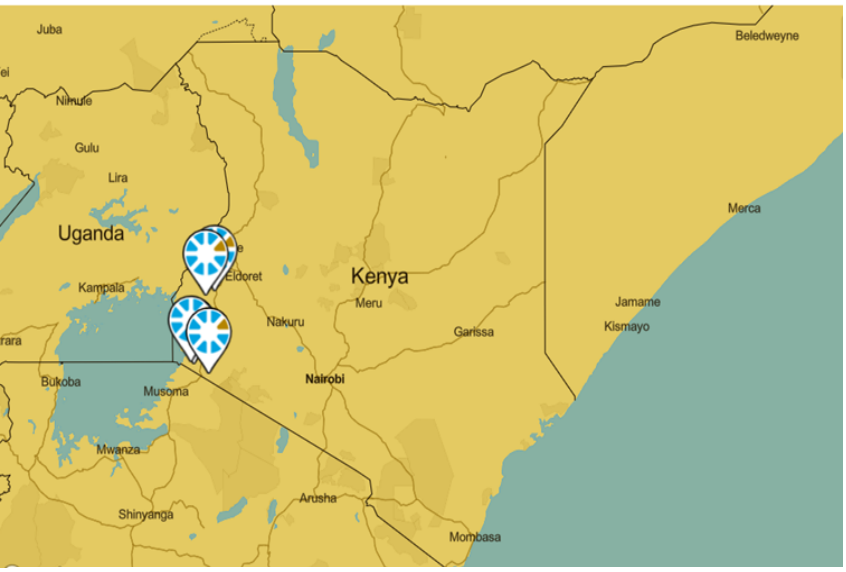
Help miners access financing for mercury-free technologies.

Provide technical assistance and training on alternative technologies.

Raise awareness and disseminate best practices.

Profiling ASGM organizations

When the planetGOLD Kenya project commenced, most miners in the project sites were working informally and individually, meaning they were not organized in any form of entity, such as a cooperative or association. Typically, miners in Kenya operate as employees/subcontractors to the shaft owner that pays them in ore. Miners would then process their ore using mercury. Even though on paper, some "self-help groups[70]" had been created, in reality, miners still worked on an individual basis. There is a general aversion against organizing into cooperatives as miners are afraid of being disadvantaged by aggregating their ore with perceived lower-value ore. One of the project goals was therefore to support formalization and raise awareness on the value of working together. The goal is to support miners on the project sites to form 22 cooperatives; so far, five are fully registered. The plan is to create six mercury-free demonstration processing plants to demonstrate technologies. The equipment for these plants is still being procured. Sensitization activities continue.



Map 7: The planetGOLD project sites in Kenya.

One of the main challenges in formalizing the ASMOs in Kenya, was that the Government of Kenya ordered a moratorium on mining permits between 2019 and 2023, so that the government could carry out a minerals survey. However, ASGM did not stop and took place informally as there was

[70] Self-help groups are typically made up of members of similar economic and social backgrounds who come together to improve their living conditions.

no regulatory instrument that allowed ASMOs to formalize. In October 2023, the moratorium was partially lifted. The Government of Kenya now aims to register 80 ASM cooperatives by July 2024 across the country. To support this goal, the Government has created artisanal mining committees at the local level that are authorized to give basic mining permits.

Implementation of the planetGOLD Criteria

At the time of writing, planetGOLD Kenya has not yet conducted specific training on the planetGOLD Criteria on the project sites. However, some of the miners had already received training on CRAFT Code through The Impact Facility and a European Partnership for Responsible Minerals (EPRM) programme. To tailor their training to those miners less familiar with responsible ASGM topics, planetGOLD Kenya developed a small database outlining who has received which training. The planetGOLD Kenya team has integrated some aspects of the planetGOLD Criteria in its institutional capacity-building training, though, focused particularly on financial management and record keeping. More training was scheduled to take place in late 2023.

The planetGOLD Kenya project team recognizes that currently, the Kenyan ASGM sector would not be able to show records of gold production and demonstrate compliance with the planetGOLD Criteria, including the use of mercury, to potential buyers in the international market.

Access to formal markets in the planetGOLD Kenya project

ASGM supply chain dynamics in Kenya:

In Kenya, the majority of artisanal gold miners work under the supervision of site managers and owners, who could be the processing site owner, landlord, or pit owner. These individuals invest in necessary equipment like crushers, winches, mills, and sluice boxes for gold extraction. Payment methods vary, ranging from cash payments to agreements involving sharing a percentage of excavated ore or the processed product's value. Payment terms are typically agreed upon between the landowners, investors, and the laborers[71]. A large portion of artisanal gold is traded informally, mainly because there does not appear to be access to any formal channels due to a lack of permits – both for miners and traders. Informal miners do not record their gold production to avoid taxation. Money earned through ASGM is often not banked, including those ASGM producers with substantial earnings, to avoid documenting their informal activities. Informal (unlicensed) traders often work on the local level through pre-existing relationships with miners, buying small quantities of gold before aggregating it in the larger cities. These traders also often sell mercury to the miners on the condition that the miners sell their gold to them. This has created a dependency whereby miners rely on informal traders to provide them with mercury to process the gold, and they are unable to sell their gold to other (formal) traders. Moreover, informal traders generally pay low

[71] planetGOLD Kenya (2022). Gender Dimensions of the Existing Policy and Regulatory Frameworks, their Implementation and Monitoring that can Advance Formalization of ASGM in Kenya. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD%20Kenya.%202022.%20Gender%20Dimensions%20of%20the%20Existing%20Policy%20and%20Regulatory.pdf.

prices to miners - they have the power to set the price because there is no system by which miners can determine the quality and purity of their gold. Evidence of smuggling between Kenya and Tanzania or Uganda is widespread.

One of the barriers that prevents miners from accessing formal markets is the lack of decentralized assay laboratories that determine the value of the mined gold. The Government of Kenya is currently drawing up plans to establish decentralized laboratories to support miners in getting a fair price. It is also establishing relationships with the private sector to build gold processing plants in ASGM areas to support MFPS. Progress is slow but improvements are seen in the attitude of the Government towards the ASGM sector.

Activities supporting access to formal markets:

The planetGOLD Kenya project has implemented few activities that directly aimed to support miners' access to formal markets. The planetGOLD Kenya project initially expected to sell 280 kg of mercury-free gold to international buyers. However, due to challenges in access to finance, there was a delay in rolling out the MFPS. The project team hopes that, once the MFPS are up and running, they could move to demonstrating compliance and engaging international market actors through the planetGOLD global programme's network of downstream companies. Another challenge for the planetGOLD Kenya project team to support access to formal markets, is the secrecy of the Kenyan ASGM sector. Informal miners do not wish to declare their gold production to avoid taxes and being linked to activities outside the legal framework. This meant that formalization and awareness-raising are prerequisites for miners to even want to engage with the formal market in the first place, since most miners, as well as traders, are content for the status quo to remain. This awareness-raising should primarily focus on communicating how the formal market could provide a better price for their gold as well as on the advantages of operating formally (e.g., access to loans and investments).

Nevertheless, the project hosted a mining week dedicated to gold, with participants ranging from downstream companies to artisanal miners. This market engagement event can be considered as an activity aimed at supporting miners' access to formal markets.

The planetGOLD Kenya team still sees an opportunity to train miners and other actors along the gold supply chain further in compliance with international standards, e.g., by building capacity and understanding of tariffs and taxes, regulations, formalization etc.

Interlinked activities from other components:

Some of the key activities implemented, that are expected to lay the groundwork for future work on supporting miners' access to formal markets from planetGOLD Kenya, include:

- **Organizing training for miners, buyers / traders, processors, landowners, and other service providers**: Trainings on mercury-free processing, health and safety, legislation and regulation, production improvements, and financial literacy and management were provided[7273].
- **Organizing training for government officials**: Trainings to improve their capacity to assess, plan, and implement sustainable and mercury-free interventions in the ASGM sector were provided.
- **Conduct awareness-raising activities**: For example, the project team visits / organizes radio programmes where miners come on air to discuss best practices and the advantages of MFPS and formalization.
- **Support ASGM regulation**: The project has drafted guidelines in collaboration with the government to create an enabling environment for mercury phase-out in the ASGM sector. Examples include guidelines for designation of areas for ASGM operations, guidelines for health, safety, and environment in ASM, and national guideline on sound management of chemicals and waste in gold mining[74].
- **Advocating for the ASGM sector**: The project is an advocate with the Government of Kenya about regulating the ASGM sector to support the development of a responsible ASGM sector. One of the achievements was that the Minamata Convention on Mercury was ratified by the Government.

Cross cutting themes

Gender

In the Kenyan artisanal gold supply chain, women play an important role in the buying and selling of gold at small offices near processing sites, where mostly women buyers observe the purity of the processes and wait for the final product to sell[75]. However, in many places, women continue to face limitations in accessing equal opportunities within the ASGM sector compared to men. Women's limited land access hinders their entry into markets and access to finance, crucial for ASGM's financial demands. While Kenya's Constitution promotes gender equality in land rights, entrenched patriarchal attitudes in remote ASGM areas hinder progress. Women encounter barriers accessing credit due to lack of collateral, education, and biased attitudes from financiers skeptical of their mining capabilities. This limited access prevents them from procuring land, tools,

[72] planetGOLD Kenya (2022). Comprehensive Training Manual. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD%20Kenya.%202022%20MOE%20ASGM%20TRAINING%20MODULE.pdf.
[73] planetGOLD Kenya (n.d.). Trainer's Handbook: Financial Literacy for Artisanal and Small-Scale Gold Miners in Kenya. Retrieved from: https://www.planetgold.org/sites/default/files/Financial%20Modules%20Final.pdf.
[74] planetGOLD Kenya (2023). 2023 Project Implementation Report (PIR). Unpublished.
[75] planetGOLD Kenya (2022). Gender Dimensions of the Existing Policy and Regulatory Frameworks, their Implementation and Monitoring that can Advance Formalization of ASGM in Kenya. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD%20Kenya.%202022.%20Gender%20Dimensions%20of%20the%20Existing%20Policy%20and%20Regulatory.pdf.

and equipment necessary for independence and increased earnings. Discriminatory perceptions further impede women's employment, remuneration, savings, and capital building in ASM[76].

Key lessons learned

Due to several setbacks and the context in which the project is implemented, whereby the majority of miners on the project sites were initially not operating formally or as formal groups, progress has been limited to strengthening foundational aspects of ASGM formalization. The most progress the project has made so far is mostly on awareness-raising and showcasing the potential of the ASGM sector to relevant stakeholders, such as government officials and financing institutes. Stakeholders across the value chain need to see the incentives and the value of engaging with a project such as this one in order to have a sustainable impact.

[76] planetGOLD Kenya (2022). Gender Dimensions of the Existing Policy and Regulatory Frameworks, their Implementation and Monitoring that can Advance Formalization of ASGM in Kenya. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD%20Kenya.%202022.%20Gender%20Dimensions%20of%20the%20Existing%20Policy%20and%20Regulatory.pdf.

ANNEX 7 Mongolia

Introduction

The planetGOLD Mongolia project, implemented between December 2019 – 2024, is working toward eliminating mercury in the ASGM sector by using a bottom-up approach, involving members of the ASGM sector directly in the creation and implementation of policies and practices to sustainably improve mining operations and livelihoods. It works along the following four key components:

Support formalization of the ASGM sector.

Reduce mercury releases in mining communities.

Educate and raise awareness.

Help miners access financing and international gold markets.

Profiling ASGM organizations

Under its Access to Formal Markets component, the planetGOLD Mongolia project works with two ASGM partnerships[77] representing a total 38 miners (4 women and 34 men): *Shijir Khishig* and *Tunkhel Manlai*. Both partnerships have formal mining permits in Selenge provinces. These two partnerships also operate gold processing plants. The planetGOLD Mongolia project has also focused its efforts on improving the partnerships' processing (mercury-free) technologies and capacity to be compliant with the planetGOLD Criteria. *Shijir Khishig* used to be Fairmined certified since December 2019, but lost certification due to the financial burdens required for auditing which they were unable to carry during COVID-19. Nonetheless, this meant that the partnership had previous experience in implementing requirements of a standard, and this facilitated understanding of the

Map 8: The planetGOLD project sites in Mongolia.

[77] In Mongolia, the Minerals Law and the ASM Regulation provide two types of organizational forms: cooperative and partnership. A cooperative is "a legal entity that is jointly established by several persons for the purpose of meeting their common economic, social and cultural needs, founded on a voluntary basis, with unified, democratic and joint management and oversight, with operations based on shared assets". A partnership, on the other hand, is either registered or unregistered and is defined as an "entity established by 'several persons consolidating their property for the purpose of making a profit and agreeing to organize certain types of production and services in the manner specified in this law (Article 2, Partnership Law)". Source: planetGOLD Mongolia (2022). Legal Framework Analysis of the Artisanal and Small-Scale Gold Mining Sector in Mongolia, 27 January 2022 (p.11). Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD_Mongolia_2021_Legal%20Framework%20Analysis%20Report_FN_EN.pdf.

CRAFT Code. Further training was provided by planetGOLD Mongolia to provide miners with the necessary information and knowledge to operate in accordance with the country's (newly updated) ASM Regulation.

In addition, planetGOLD Mongolia works with another ASM organization that advocates for miners' rights (*Baatar Vangiin Khishig* – BVK NGO). This NGO represents 18 partnerships with a total of about 131 miners (32 women and 99 men) that process their gold at a nearby processing plant. These partnerships also have formal mining permits, though given that more miners are involved, there is a chance that some of them operate outside of their permitted mining area.

The planetGOLD Mongolia team has supported these three ASMOs (BVK, Shijir Khishig, and Tunkhel Manlai) in the implementation of the planetGOLD Criteria and other programme activities. The ASMOs typically consist of 79% of men and 21% of women, though women typically take up managerial positions. Miners in the project area all have access to formal markets.

Implementation of the planetGOLD Criteria

The planetGOLD-supported ASMOs all received planetGOLD Criteria training since September 2022. Reportedly, following the trainings the ASMOs comply with 41 out of 43 criteria, while at baseline, 9 indicators were not met (mainly indicators related to maintaining a formal status and gold traceability records)[78]. A capacity-building plan was prepared in collaboration with the ASMOs. Through continuous consultation, the ASMOs improved and revised their internal rules and mechanisms on environmental management, OHS, gold traceability, accounting, human rights, and complaints and approved them as official mechanisms to follow in their ASGM activities.

While the majority of planetGOLD Criteria prove generally straightforward to implement for these sites in Mongolia, challenges do arise:

- First, cooperation with the government and compliance with government regulations is difficult. Apparently, ASGM contracts are usually valid for 1 year or even as short as 3 months (depending on the governor's discretion). Miners then need to re-apply, which is often delayed or local authorities reject these requests, especially during periods of political instability around ASM. When contracts expire, mining operations can be shut down. Also, if authorities are able to prove that the gold is mined illegally, gold can be confiscated. This makes investing in the ASGM operations a risky business. Although on paper, the process appears straightforward, the reality is that this presents a major challenge for miners to operate formally and creates an environment in which miners can be extorted to speed up the process.
- Second, the project has not yet finished with the progress of MFPS installation at two sites

[78] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.

due to logistical challenges in receiving the MFPS equipment, which had to be imported from Colombia and China[79]. Gold production through the new MFPS had not started yet at the point of writing. The construction of one MFPS building and equipment installation has been completed, a feasibility study was conducted for two MFPS installations, and the project is currently awaiting approval from government authorities. Once the MFPS installations are up and running, the project expects to prevent mercury use by 29.38 kg per year. Furthermore, the project estimates that an additional 293.8 kg mercury will be avoided from the operation of MFPS in the project areas in 10 years after the project ends. This estimation was based on the factors such as, the current existence and operation of the processing plants provided by the previous project and the results of the resource assessment at the mining sites.

- Additionally, the monitoring of ASGM operations is lacking, and this results in weak enforcement of operational safety and safety measures, along with inadequate financial availability to invest in this area.
- Furthermore, because the ASMOs are not accustomed to doing detailed accounting and it is not strongly enforced by law, they need time to learn and include the accounting and recording practices in their operation and management.
- Another challenge relates to the miners' expectations is that given the experiences with the Fairmined Standard in the country, miners expect to be paid a premium for complying with the CRAFT Code. The project explained the difference between the two to prevent confusion and resistance at the start of the implementation process. They conducted awareness-raising and sensitization on the benefits of complying with the planetGOLD Criteria amongst ASMOs (e.g., better health and safety, building positive relationships with government officials in charge of renewing mining licenses, access to (formal) markets that offer better pricing etc.). However, outside of the planetGOLD ASGM sites, the project team has seen little awareness (and interest) on due diligence standards.

Compliance with the Criteria is demonstrated through monthly reporting prepared by trained "CRAFT officers". These CRAFT officers (all women) have the equipment (computers), skills (knowledge of the Criteria, literate), and incentive (monthly salary through the partnership) to continue documenting compliance after project closure, although the project team asserts that further training on applying the Criteria in practice is needed.

[79] planetGOLD Mongolia (2023). Logistical challenges of equipment shipping from Colombia. Retrieved from: https://www.planetgold.org/logistical-challenges-equipment-shipping-colombia.

Access to formal markets in the planetGOLD Mongolia project

ASGM supply chain dynamics in Mongolia:

The gold value chain in Mongolia typically looks as follows. The BoM is the final buyer of domestically produced gold. The BoM exports gold to a Swiss LBMA-refinery (Argor-Heraeus). Mongolia was recently removed from the Financial Action Task Force (FATF) list of countries with strategic anti-money laundering (AML) deficiencies. They were originally put on the list in 2019 with one reason being a lack of gold trading regulation – unlicensed traders selling gold to the BoM. As a response, in recent years, the Mongolian government started licensing traders. The country was subsequently removed from the list in 2020. There are currently about 400 licensed gold traders. This means that, on paper, miners that sell gold to formal traders, who in turn sell gold to the BoM, operate in the formal supply chain. However, the planetGOLD Mongolia team has often heard licensed traders complain that the license is working against them, as they need to comply with complex government regulations and requirements and disclose tax information. There are, according to the project team, no clear benefits for traders to operate with a permit compared to operating without one. Licensed traders often lack the capacity to record their gold purchases, or they intentionally misrepresent these details to avoid taxes, launder money, or disguise the provenance (if gold was mined by informal ASGM operations). There is no system in place for the government to track the gold bought and sold by licensed traders.

Artisanal gold miners use local processing plants to process their gold-bearing ore. Following the recovery of gold, miners sell the gold to either local gold traders or the processing plants themselves. To ensure the purity of the gold, traders then often go to One-Stop Services (OSS): an assay laboratory and a commercial bank operating under one roof. After the gold is assayed, it is then sold directly to commercial banks. These banks, acting as intermediaries, will subsequently sell the gold to the BoM[8081]. Since the BoM started licensing traders, commercial banks with branches across the country, including in rural areas, have received permission from the BoM to buy gold from licensed traders. Two OSS centers for gold assay and purchasing were also established in Darkhan-Uul and Bayankhongor aimags to further decentralize and formalize the gold trade[82]. Nevertheless, most miners do not sell their gold to the BoM or commercial banks, due to the lack of assay labs near the ASGM sites. A 2022 planetGOLD report stated that “94% of respondents indicated that they have never sold their gold to the BoM […]. The study also showed that geographical accessibility (42%) is the main barrier for miners to sell their gold to the BoM[83]”. Miners in, e.g., Khovd and Gobi-Altai

[80] World Gold Council (2021). Central Bank Domestic ASGM Purchase Programmes. Retrieved from: https://www.gold.org/goldhub/research/central-bank-asgm.
[81] World Gold Council (2021). Central Bank Domestic ASGM Purchase Programmes. Retrieved from: https://www.gold.org/goldhub/research/central-bank-asgm.
[82] planetGOLD Mongolia (2021). Artisanal and Small-Scale Gold Trade in Mongolia – A Review of Current Policies and Practices. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD_Mongolia_2021_Gold%20Trade%20Report_FN.pdf.
[83] planetGOLD Mongolia (2021). Artisanal and Small-Scale Gold Trade in Mongolia – A Review of Current Policies and Practices. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD_Mongolia_2021_Gold%20Trade%20Report_FN.pdf.

provinces, live too far from the capital city to assay their gold there and prefer to sell to any trader that can pay cash, licensed or unlicensed. In addition, some of the informal traders have an established, pre-financing relationship with the miners. These informal traders often offer low prices to the miners, at times reflecting a mere 50% of the global gold price. Informal traders charge artisanal miners, especially those in remote areas, for transportation and security costs. Once traders bought the gold, this is commonly aggregated by traders in larger cities, from where it gets sent to Ulaanbaatar and sold to BoM. It is commonly known that anyone can take their gold to the gold market in Ulaanbaatar and sell it at a competitive price for cash with no requirements of traceability or due diligence. In some cases, processing plants have a BoM trade license. A more detailed description of the supply chain dynamics and informal market can be found in the 2022 planetGOLD report on gold trade in Mongolia[84].

Activities supporting access to formal markets:

Some of the key activities from planetGOLD Mongolia that aim to support miners' access to formal markets include:

- **ASGM supply chain study trip**: The project organized a study trip for the main ASGM stakeholders in October 2022. The two-day trip consisted of visits through the artisanal gold supply chain, from the miners to the traders, and discussions with the main representatives of this sector. The participants gained knowledge and information on international best practices, gaps in the gold origin documentation and its requirements within the supply chain, and barriers to implementing a proper due diligence mechanism in the ASGM sector[85].
- **Organize market engagement events**: The project co-hosted both the first and the second Precious Metal and Stones Forum and Expo, which attracted over 60 representatives from governmental and non-governmental organizations, private entities, and gold traders and provided information on the current ASM condition and challenges and investment opportunities in the ASGM sector[86]. During the expos, the planetGOLD Mongolia booth attracted a total of 755 visitors and disseminated information regarding the project purpose and its activities.
- **Support ASGM regulation**: The project provided professional support to the development of the government regulations on "Issuing and registering licenses to dealers of precious metals, precious stones and items made of them" and "Monitoring and control over operations of dealers for precious metal, precious stone, or items made of them" in 2020, as well as to the new ASM Regulation (296). This contributed to the creation of a transparent supply chain as these regulations address issues of recording and registering the origin of

[84] planetGOLD Mongolia (2021). Artisanal and Small-Scale Gold Trade in Mongolia – A Review of Current Policies and Practices. Retrieved from: https://www.planetgold.org/sites/default/files/planetGOLD_Mongolia_2021_Gold%20Trade%20Report_FN.pdf.
[85] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.
[86] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.

gold extracted and gold trade formalization. According to the project team, the government integrated the planetGOLD comments into their regulations.

Although a lot of progress has been made in complying with the planetGOLD Criteria, formal mercury-free ASGM supply chains will only be possible once the MFPS implementation has been completed. The project expects 22.6 kg of responsible gold from the ASGM sites per year once the MFPSs are operated and the planetGOLD Criteria are fully implemented. The ASMOs do sell their gold to licensed traders. Overall, it is well known that any efforts to formalize the gold trade depends on whether miners and traders have an incentive to sell their gold to the BoM.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Mongolia include:

- **Facilitate access to formal finance:** A savings and credit cooperative (SCC) is in the process of being set up with 24 miners representing miners from Mandal soum, Selenge province. The SCC will be a financial institution owned and operated by the miners themselves, allowing them to pool their resources and collectively benefit from the savings and credit operation. They recently registered the SCC in the state registration and are working to get its operation permit[87]. It is expected that the SCC will be financed through the successful operation of the MFPS. The newly installed MFPS will be considered as a loan investment given to the two partnerships. The partnerships will then repay a portion of the investment back, but instead of repaying the project, they will repay the loan amount to the SCC. The governance of the SCC is currently being set up.
- **Training in planetGOLD Criteria and MFPS**: The project has contributed to the prevention of mercury use through a series of organized activities during the project implementation. By signing MoUs with two partnerships and one NGO in Selenge province, the project has implemented the planetGOLD Criteria, mandating participating organizations to cease current use of mercury and abstain from its future utilization. Additionally, the project has conducted various training sessions and workshops across Govi-Altai, Khovd, and Selenge provinces. These initiatives aimed to educate miners about responsible mining operations, the hazards from mercury, and methods to prevent its use. These activities may not have directly reduced the use of mercury on site but have acted as a preventive measure to reduce the potential use of mercury.

Cross cutting themes

Gender

Women in the Mongolian ASGM sector are known to be heavily involved in important management tasks, including acquiring legal permits and registration, securing finance, and selling gold. A 2021

[87] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.

planetGOLD Mongolia study showed that 88% of women are involved in decision-making in various activities along the supply chain (e.g., processing plant liaison, selling gold, accounting, equipment purchasing etc.)[88].

The planetGOLD Mongolia team confirms that no major challenge for women that inhibits their access to markets were identified, but the situation varies geographically. In Western Mongolia where traditional values and patriarchal norms are stronger, women miners have limited access to decision-making related to gold sales, managing finances, and big purchases. In the central region, more women have taken up leadership positions and are acting as key personnel at ASMOs. Nevertheless, although not specific to the ASGM sector, Mongolian women are still struggling with persistent gender stereotypes, biases, gender-based violence, toxic valorization of motherhood, unpaid care work, and time poverty. Despite access to economic opportunities, women are often restricted to utilize these and meaningfully participate, which ultimately limits their income-generating activities or pushes them into informal sectors, including ASGM. For this reason, planetGOLD Mongolia not only advocates for the formalization of the sector to protect the rights of thousands of miners, but also to address these gender-specific challenges.

Key lessons learned

- Getting gold supply chain actors to understand the importance of supply chain transparency and due diligence, and conveying the message that this is the direction the sector is moving into, proved more challenging than initially expected. Miners did not immediately see the advantages – they were not incentivized, because complying with these standards was perceived costly and administratively burdensome. The government had not sufficiently raised awareness or conducted training with miners and other supply chain actors. However, miners were generally keen to improve their legal status, having experienced the downsides of informality (e.g., low gold prices, dependencies on unfavorable loan conditions, government-mandated mine shutdowns).
- Gold is an important revenue source for the BoM. Although the BoM is conscious that they need to improve their supply chain to avoid strategic AML deficiencies and ensure international traceability and due diligence expectations are met, government officials are rarely aware of the concrete supply chain issues and barriers for miners and other actors to operate formally. This, in turn, weakens the BoM's ability to influence government institutes, includingthe relevant ministries, to improve regulation and incentivize supply chain actors. The planetGOLD team is seen as experts on supply chain due diligence and although progress is slow, their engagement with the government and the BoM is impacting the way the sector is regulated. Without a stable and robust legal framework governing the

[88] planetGOLD Mongolia (2021). Gender Mapping in the Artisanal Gold Mining Sector in Mongolia. Retrieved from: https://www.planetgold.org/sites/default/files/CS_Report_Gender_08_06_2021.pdf.

ASGM sector, access to financial resources and potential investments is limited or even impossible. Currently, only a few responsible ASMOs maintain records of the origin of their gold. For miners to demonstrate to potential investors or financial organizations that they have a viable business, they must establish that their operations are legal, formal, and that they consistently produce a reliable amount of gold (which is complicated by difficulties for ASGM operators to invest in geographical prospecting). However, the lack of a mandate for gold traceability by the BoM, limited regulation by the central government, and the overall complexity deficit in the policy framework are hindering the development of a smooth and transparent gold supply chain.

- Diverse training approaches are essential, tailored to the specific needs of various market players. For miners, training sessions should cover capacity building in operational safety, increasing awareness of the various laws and regulations governing artisanal mining operations, and the importance and advantages of engaging in responsible mining operations. Additionally, leaders of the mining partnerships and organizations could benefit from soft skill training in management, documentation, and communication. The planetGOLD Mongolia team noticed during their meetings and surveys, that miners are not accustomed to doing simple accounting, including recording their income and expenses. In order to improve access to formal markets, these skills need to improve. Business plan development skills are also important. As for government officials and policymakers, training should emphasize the significance of effective monitoring and the enforcement of laws and regulations. Such training should include international trends and successful experiences in artisanal mining governance and management.

ANNEX 8 Peru

Introduction

The planetGOLD Peru project, implemented between June 2019 – June 2024, aims to reduce or eliminate the use of mercury in the ASGM sector by:

Strengthening the regulation for mercury-free practices.

Assisting miners access financing for mercury-free technology.

Technical assistance on alternative technologies, supporting formalization and access to responsible markets.

Raising awareness while disseminating best practices and lessons learned.

Profiling ASGM organizations

The planetGOLD Peru team works with 32 ASMOs in the regions of Piura (4 ASMOs, 316 people), Puno (15 ASMOs, 263 people), and Arequipa (13 ASMOs, 278 people), with 857 miners and manual gold sorters. The planetGOLD Peru project only works with organizations legally registered and operating formally or those who are informal but are taking actions to formalize. There is a greater percentage of informal ASMOs in Arequipa and Piura, as compared to Puno. The amount of gold produced and sold by these organizations is varied.

Map 9: The planetGOLD project sites in Peru.

Implementation of the planetGOLD Criteria

The planetGOLD Peru project developed a matrix to evaluate ASMOs against the planetGOLD Criteria[89], as well as to assess and monitor risks and continuous improvement. All ASMOs with whom planetGOLD Peru works are considered to be legitimate and respecting human rights. Some ASMOs find it challenging to implement labor management measures, and almost all ASMOs find it difficult to halt the use of mercury. Mercury in Peru is cheap, easy to use, and it allows the miner to have complete control over gold processing, which is valued by miners as processing plants, which use MFPS, are perceived to recover less gold, and therefore, miners feel they lose revenues.

[89] planetGOLD Peru (2021). Criterios planetGOLD - Matriz de resultados y riesgos 08.11.2021. Unpublished.

As further elaborated on below, planetGOLD Peru supports ASGM by having field teams live close to ASGM communities to support them in topic such as mercury-free processing, formalization, environmental protection, accounting, and gold trading.

Access to formal markets in the planetGOLD Peru project

ASGM supply chain dynamics in Peru:

The supply chain of ASGM in Peru is represented below. Across the entire country, 80% of miners exploit hard rock deposits, with the remaining 20% mining alluvial ore. At least 25% of gold mined from hard rock deposits is sold as ore to processing plants. These plants receive untreated ore and process it with appropriate technologies; they produce gold bars that then get legally exported.

However, the vast majority of gold mined from hard rock ores is crushed and milled, amalgamated with mercury, and sold to local traders who either export legally or illegally. Miners do not trust the processing plants because they perceive the plants giving them unfair discounts and payments for the gold extracted. The amalgamation process also generates tailings that are sent to processing plants that can treat these tailings to extract the remaining gold. See Figure 9 for a depiction of the typical ASM gold value chain in Peru.

In the case of alluvial mining, gold extracted from alluvial ore is almost all amalgamated with mercury to extract gold, although 1% of gold from alluvial ores is recovered using gravimetric processes that do not require mercury. All gold recovered from alluvial ore is sold to local traders.

Local traders are diverse. Some are formally registered as traders and declare all gold bought through invoices, which are administered by the Superintendence of Tax Administration (*Super Intendencia de Administración Tributaria* – SUNAT. These traders need to record their sales in banking institutions. However, some traders are formally registered, but declare some (or none) of the gold bought, and others are not registered and operate informally. The informal traders typically do not use invoices and do not use banking systems. The informal market has been reported to pay better than the formal market, but mostly as a result of tax evasion, not because traders pay a better price.

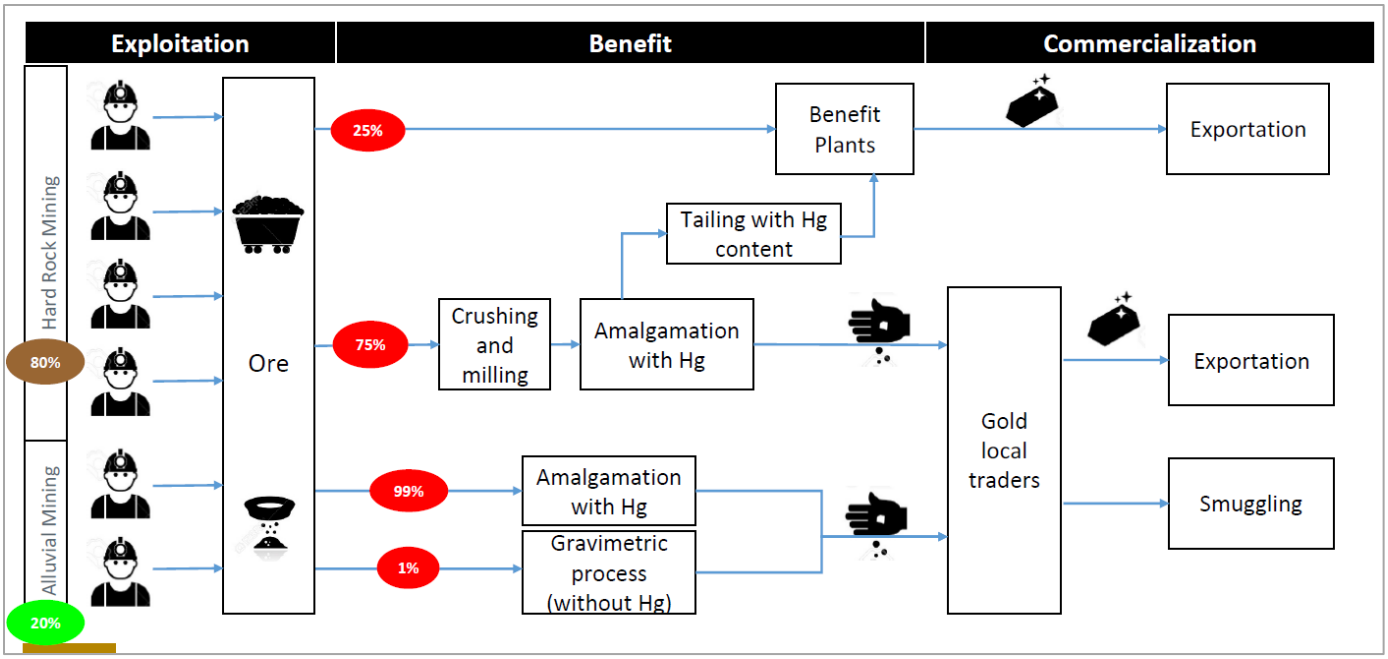


Figure 8: The ASM gold value chain in Peru. Source: planetGOLD Peru (2023). Presentation for Levin Sources, October 2023. Unpublished.

Many miners in Peru do not declare all the gold extracted. Some do not wish to export through formal channels for a number of reasons. For some, it is a cumbersome process, and they do not receive prompt payment. For others, sometimes the volume of gold produced is too low for export: the planetGOLD Peru project has found that it is advisable to export at least two kg of gold each time; less than that is not deemed economically viable.

Activities supporting access to formal markets:

The planetGOLD Peru project supports miners in increasing access to formal markets by implementing the following activities:

- **Establish market linkages with a refiner**: planetGOLD Peru has an alliance with a refinery that manufactures coins and bars in Bulgaria and is currently preparing the documentation with the ASMOs to generate the first gold export. A framework for long term collaboration is envisioned once the first export gets accomplished, with the hopes that this supply chain will become self-sufficient. The manager of this refinery has visited some mines and has access to the matrix that evaluates ASMOs against the planetGOLD Criteria, and that assesses and monitors risks and continuous improvements. This matrix is not shared with local traders because they are not interested in it. As this is a work in progress, more details are currently not available on the links in this supply chain, from the ASGM sites to the refinery, such as involvement of local intermediaries.
- **Gold traceability**: planetGOLD Peru provides technical support to the Ministry of Energy and Mines on the implementation of an ASM gold traceability tool, Qori. Qori is used to

register online the following: the purchase and sale of gold, whether the gold was processed or not, relevant supply chain actors, and what chemicals / equipment they use (mercury, explosives, etc.). Qori is a free digital application for iOS and Android. According to planetGOLD Peru, the application is beneficial for miners because it offers a secure commercialization system, real time information on gold prices, type of exchange rates. The government can use the data on Qori to monitor gold production and trading. The planetGOLD Peru project team foresees that, by using this app, miners can more easily access bank credits, international responsible mining certification, international markets, governmental programmes providing technical assistance, and state certification of Good Practices of the Ministry of Energy and Mines. Qori was developed in conjunction with the government with the vision of making its use mandatory, as the tool aims to improve formalization and public management of gold resources. Although Qori has not been launched yet, as it is still undergoing a testing phase with miners across both planetGOLD-supported and non-planetGOLD-supported ASGM sites, the perception of users has been good so far.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Peru include:

- **Building trust by providing integral assistance in the field**: planetGOLD Peru provides integral assistance to ASGM by having field teams who live close to the ASGM communities and build relationships over time. Field teams are multidisciplinary and support miners in various topics, including formalizing, improving their practices, increasing production output, financial management, commercialization of gold. It is very important to build trust amongst the miners, as they are reluctant to share information with regards to accounting and commercialization. But once trust is built, miners have more confidence in planetGOLD Peru and are willing to commit to engage. This leads miners to become more open to talk and address the challenges they face with accounting and formal market access.
- **Facilitate access to formal finance:** planetGOLD Peru has an alliance with a Peruvian Canadian processing plant, Inca One, which is the third largest plant in Peru, to work towards a responsible ASGM industry. Inca One does not have its own mining operations, but processes ore from third-party operations. Inca One has committed to conduct due diligence on its ASGM sources to ensure they adhere to the planetGOLD Criteria. The planetGOLD Peru team has suggested a more rigorous assessment of its gold supply chain to Inca One and identified mitigation actions in line with planetGOLD Criteria[90][91]. Inca One

[90] planetGOLD Peru (2023). Annex 4, Criterios planetGOLD -Matriz de resultados y riesgos final. Unpublished.
[91] For instance, planetGOLD Peru recommended the adoption of an "environmental and social safeguards compliance statement" as part of its supplier due diligence assessment (see: planetGOLD Peru (n.d.). Annex 9, FORMATO DE DECLARACIÓN JURADA DE CUMPLIMIENTO DE

has also applied the planetGOLD Criteria to their own processing plants (in the facilities of Kori One and Chala One) in support for its commitment towards the project and integration of the Criteria[9293]. Many of Inca One's procedures were already in line with the Criteria when collaboration started, which is why their level of compliance is high.

- Inca One and planetGOLD have proposed a system to allow miners access to finance. This system is set up as follows:
    - The planetGOLD Peru project addresses access to formal finance challenges for miners by connecting financial institutions with Inca One. The plant could share its gold purchases records with the bank to ensure that the purchases can act as a guarantee for miners and the bank is comfortable providing the miner with credit (knowing they have a stable market for their ores). Credit is then disbursed to the miner through a technology provider, who delivers the technology to the miner so that the artisanal miner can increase production. Consequently, profits for the miners increase, a part of which is retained by the processing plant and returned to the financial institution.
    - At the point of writing, the financial mechanism is still being finalized and is not operational yet. The idea is that miners will sell Inca One gold-bearing ore (i.e., the rock with gold content), then Inca One would process this into gold doré for export. Also, Inca One would incorporate a metallurgical process to recover mercury from gold tailings previously treated with mercury before it enters the cyanidation circuit, as is in accordance with the Minamata Convention goals.

SALVAGUARDAS AMBIENTALES Y SOCIALES). Unpublished. This is currently under evaluation by Inca One (see planetGOLD Peru (n.d.). Evaluación y aplicación de criterios planetGOLD a Inca One Gold Corp. Informe Final. Unpublished).

[92] This agreement states that: "planetGOLD Peru signed a letter of collaboration with Inca One Metals Peru with the purpose of articulating institutional efforts to improve mining practices in the ASM sector, in order to support its professionalisation, formalization and promotion as a source of employment and development, as well as the promotion of financial inclusion of the ASM sector and responsible supply chains through the fulfilment of the planetGOLD Criteria". See: planetGOLD Peru (n.d.). Evaluación y aplicación de criterios planetGOLD a Inca One Gold Corp. Informe Final (p.4). Unpublished.

[93] planetGOLD Peru (2023). Annex 3, Lista de Chequeo de los Criterios planetGOLD – Chala One. Unpublished.

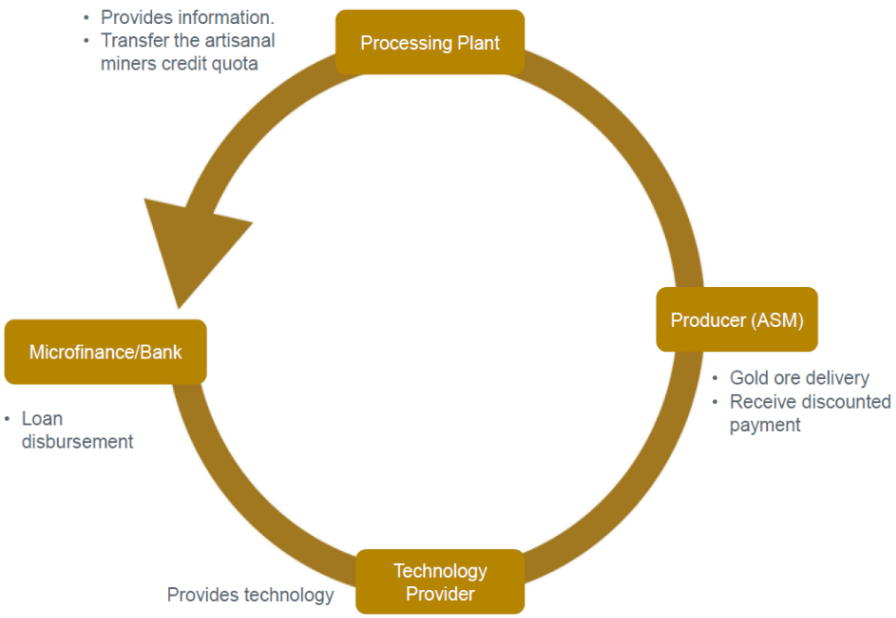


Figure 9: Financial mechanism "4P Financial Model. Source: planetGOLD Peru, presentation for Levin Sources, October 2023. Unpublished.

Cross cutting themes

Gender

Gender inequalities are prevalent in Peru. The planetGOLD Peru project conducted a study in 2022 to assess gender disparities in the ASGM sector in the country. That study shows payment and roles disparities amongst women working in ASM. Although there are some women who managed to take leading roles, oftentimes women take subordination, sorting and services roles, and work informally without a contract. Women also face stereotypes and have a greater responsibility in domestic tasks, which helps perpetuate the disparities amongst men and women.

Key lessons learned

- The importance of working closely with ASMOs and building trust over time was stressed by the planetGOLD Peru team. Trust-building cannot be expected to happen within a few visits, especially considering the sensitivities and known reluctance to do things differently in the gold sector. It requires integral support on the ground, by first understanding mining methods, organization, and needs, to then be able to provide technical advice that will increase their production and reduce risks.
- At the level of gold trading, planetGOLD Peru suggests that increasing the involvement of the Peruvian state in the management of ASGM would be beneficial. For example, Qori, the tool developed by planetGOLD, aims to help the government improve the management of ASGM.
- Creating a platform to showcase good practices by ASMOs to international buyers could increase visibility of the sector and raise awareness in the market about how ASMOs work.

Such a platform could contain information on miners' performance, formalization status, and adherence to national and/or international standards.

- There is a training gap on capacity building and access international markets with a focus on commercialization and exporting requirements, protocols, step-by-step guidance on exporting gold, and highlighting the benefits of exporting.

ANNEX 9 The Philippines

Introduction

The planetGOLD Philippines project, implemented between December 2018 – 2025, is working toward eliminating mercury in the ASGM sector by using a bottom-up approach, involving members of the ASGM sector directly in the creation and implementation of policies and practices to sustainably improve mining operations and livelihoods. It works along the following four key components:

Support formalization of the ASGM sector.

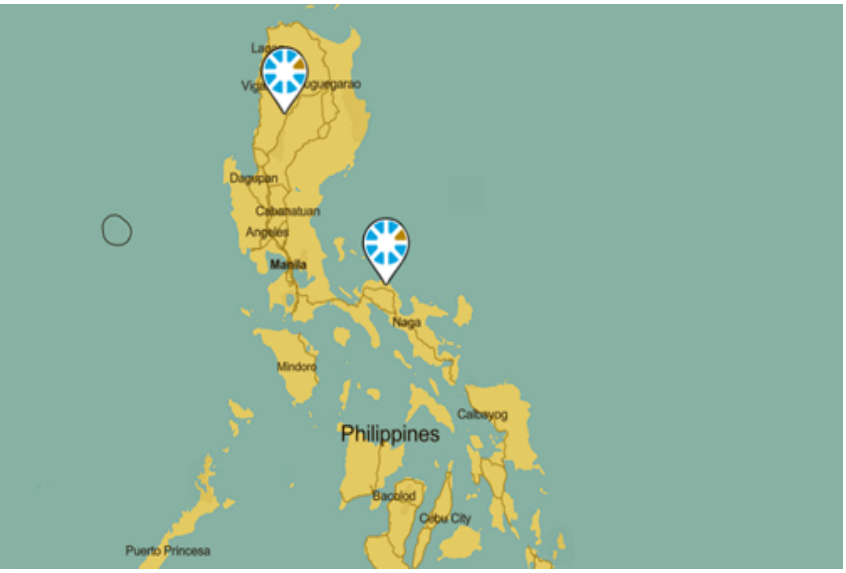
Reduce mercury releases in mining communities.

Educate and raise awareness.

Help miners access financing and international gold markets.

Profiling ASGM organizations

The planetGOLD Philippines team works on two project sites: Paracale, where mercury-use was widespread across ASGM operations, and Sagada, where barely any mercury use was measured as ASGM operators are members of a local Indigenous community for whom environmental protection is an important concern. In order for an ASGM operation to be considered formal in the Philippines, there are two requirements: the area where the ASGM operations occur must have been declared a ”Minahang Bayan” (or “people’s small-scale mining area”) by the Government, and individuals or associations must possess a small-scale mining contract (NB artisanal mining operations are not recognized under Philippines law). If individuals or associations also operate a processing plant, they should establish it within a declared mineral processing zone and acquire an additional permit (a mineral processing license). Upon project commencement, both ASGM sites were declared Minahang Bayan and in both sites, there was an association with a small-scale mining contract: in Paracale, the association is called *Samahan ng mga Minero sa Barangay Casalugan* (SMBC). SMBC is an association of workers and consists of 8 active smaller mining



Map 10: The planetGOLD project sites in The Philippines.

groups with varying production levels. Based on the contextual study conducted in 2021, operations in Paracale happen year-round, most mining groups sell around 50 to 200 grams of gold per month, and miners earn around 5,000-10,000 Philippine peso per month (approx. 90-180 USD) – this is a fairly common income in the Philippines. In Sagada, the association is called Northern Sagada Barangay Small Scale Mining Association Inc. (NSBSSMAI). NSBSSMAI is registered as a non-profit cooperation. When the project officially selected its sites, NSBSSMAI obtained its small-scale mining contract (SSMC). However, certain conditions still had to be met and until then, they were still not allowed to operate legally. Specifically, they needed to acquire a certification required of ASMOs operating within ancestral domains of Indigenous peoples and an environmental compliance certificate. The mine site in Sagada produces around 200-400 grams of gold per season (they usually mine 3-6 months per year). It is estimated that, once the Paracale MFPS is operational and can accommodate the whole Minahang Bayan, it will produce around 55 kg of mercury-free gold annually, while the Sagada MFPS will produce 9 kg only using gravimetric process.[94].

Implementation of the planetGOLD Criteria

The planetGOLD Philippines team conducted several trainings on due diligence reporting, specifically the CRAFT Code, with miners at project sites, as well as with government officials and the BSP. The project team developed agreements (MoUs) with the associations to support them in adapting the planetGOLD Criteria as their own due diligence standard.

Nevertheless, adherence to all the requirements of the planetGOLD Criteria remains complex due to slow formalization processes (e.g., there are examples of Minahang Bayan applications taking over 4 years to receive approval). This makes consideration of the legitimacy of small-scale operators particularly important, in recognition of existing efforts and willingness to formalize. Small-scale miners share a sentiment that the government favors large-scale mining (LSM) companies, therefore making the permitting processes unnecessarily complex and burdensome[95]. In addition, the elimination of mercury use appears to be the main concern of the BSP while miners from SMBC currently still use mercury. This can largely be explained by the limited capacity of the MFPS: in Paracale, gold ore production averages at 20 grams per day, but the processing plant's production is only 4 grams per day. The remaining ores thus still get processed with mercury. The MFPS from planetGOLD were still under development at the point of writing – delays occurred due to difficulties receiving approval to establish a mineral processing zone. It is expected that, when the MFPS are ready to use, it could reduce mercury usage in Paracale by 17.16 kilograms and in Sagada by 11.78 kilograms[96].

[94] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.
[95] For example, SSMC applicants are required to submit a Two-Year Work Programme, Potential Environmental Impact Management Plan (CDMP), and Annual Safety and Health Programme (ASHP). Understanding and fulfilling these requirements can be challenging, especially for miners without a formal degree. Consequently, associations often have to hire professionals to assist them, placing an additional financial burden. Unfortunately, government-provided technical and financial assistance is limited or nonexistent.
[96] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.

The planetGOLD Philippines project team supported the two associations in appointing a CRAFT Code, planetGOLD (pG) version, focal point that is responsible for the implementation and monitoring of the CRAFT Code pG, such as: reporting on incidents, leading risk mitigation measures, and generally preparing monthly and semi-annual reports (CRAFT Code pG templates). These focal points are continuously trained by planetGOLD Philippines to use the templates developed to monitor implementation of the CRAFT Code pG requirements. After the project ends, the associations are expected to continue providing compensation to the focal points. In Paracale, this will be done through a social enterprise that is part of the SMBC, which is funded through profits from the gold processing plant. It has been agreed with the members that a portion of the money that goes into this social enterprise will be dedicated to continue paying salary to the CRAFT focal point. The CRAFT Code pG templates are used to share with the BSP, as gold buyer, as well as with local banks that consider extending loans to small-scale mining associations. In addition, planetGOLD Philippines has set up an MoU with the associations and the Provincial Mining Regulatory Board (PMRB). The PMRB will further support the project by creating a multi-partite team that will be monitoring the ASGM operations and processing plants.

Access to formal markets in the planetGOLD Philippines project

ASGM supply chain dynamics in the Philippines:

The only authorized buyer of ASM gold in the Philippines is the BSP[97], guaranteeing a buyer for gold regardless of market conditions (NB LSM gold can be sold to other markets). In the 1970s, the BSP constructed a state refinery, which received accreditation from the LBMA as a Good Delivery refiner, allowing its gold bars to be purchased on the international market (the BSP is the only central bank on the LBMA's Good Delivery List of refiners)[98]. Until 2019, the sole accredited buyers of gold were the gold buying stations of the BSP. The BSP Gold Buying Stations advocates responsible mining by requiring compliance with LBMA standards[99]. There are a total of five gold buying stations across the country. However, as there are around 40 provinces where small-scale gold mining operations occur, these represent too few stations for miners to feasibly sell their gold to the BSP. For example, miners in Sagada had to travel over 7 hours to reach the nearest station. Therefore, the BSP introduced new regulations in 2019 allowing accreditation to individuals and associations to buy gold. The BSP also abolished the 4% excise tax and 1% creditable withholding tax as incentive for miners with SSMC who sell to them directly or to accredited individuals and

[97] "The sale of small-scale gold to BSP is required by law. Under section 17 of the Republic Act No. 7076 (People's Small-Scale Mining Act), all gold produced by small-scale miners is mandated to be sold to the BSP, or its duly authorized representatives". Source: planetGOLD Philippines (2021). Formal Gold Trading with Bangko Sentral ng Pilipinas. Know who BSP is and start trading SSM gold. Retrieved from: https://www.planetgold.org/sites/default/files/A4_ENGLISH_PGOLD%20Brochures_Formal%20Gold%20Trading_2021.pdf.

[98] World Gold Council (2022). Artisanal and Small-scale Gold Mining. Retrieved from: https://www.gold.org/esg/artisanal-and-small-scale-gold-mining.

[99] planetGOLD Philippines (2022). Gold with Dignity: A Review of Laws and Policies on Artisanal and Small-Scale Gold Mining (ASGM) in the Context of Human Rights-Based Approach to Formalization. Retrieved from: https://www.planetgold.org/gold-dignity-review-laws-and-policies-artisanal-and-small-scale-gold-mining-asgm-context-human.

associations. Accredited traders usually pay miners in cash, whereby price is determined using gravity methods.

Financiers of the small-scale gold operations are commonly the tunnel and processing plant owners. These are often deeply involved in the day-to-day operations at the mines. At SMBC, for example, financiers are daily at site. In some cases, informal gold traders also pre-finance gold mining operations, under the condition that the miners sell gold to them. These traders also commonly provide mercury, explosives, or mining equipment to the miners. A more detailed account of the gold supply chain in the Philippines can be found in the report titled "Gold With Dignity: A Review of Laws and Policies on Artisanal and Small-Scale Gold Mining (ASGM) in the Context of Human Rights-Based Approach to Formalization in the Philippines".

Activities supporting access to formal markets:

Some of the key activities from planetGOLD Philippines that support miners' access to formal markets include:

- **Organizing training for miners**: Providing training on gold trading, due diligence, and the planetGOLD Criteria (including on the health effects of mercury and the management of MFPS) to miners.
- **Supporting gold traders:** Supporting the associations to become accredited gold traders for the BSP. The project is currently working on the legal aspects of accreditation. Although the interest is there, several challenges remain:
    - Accredited gold traders require the capital to be able to travel to the BSP gold buying stations, often with only small quantities of gold, and to buy the gold directly from miners. The associations do not have access to such capital.
    - Accredited traders and BSP buying stations require a processing fee (1,600 peso, or approx. 30 USD, per lot regardless of amount of gold) and a retention fee. The retention fee has recently been lowered to 0.5%, but miners thus far remain skeptical that they will get their money back due to widespread misconception. More information on the requirements of becoming an accredited trader and selling to the BSP can be found in the report titled "Gold With Dignity: A Review of Laws and Policies on Artisanal and Small-Scale Gold Mining (ASGM) in the Context of Human Rights-Based Approach to Formalization in the Philippines".
- **Engaging the Central Bank**: Engaging with the BSP to provide miners with incentives and easier access to formal markets. This includes offering training on due diligence to miners, exploring financing opportunities (see also below), and organizing seminars with commercial banks to advise them on loaning agreement with small-scale miners. For instance, an orientation seminar was organized in collaboration with the BSP by planetGOLD Philippines for SMBC about the Credit Surety Fund (CSF) – a credit enhancement scheme for

micro, small and medium enterprises (MSMEs). Moreover, a workshop on financing and gold trading was held with the participation of government officials from the BSP and the Mines and Geosciences Bureau (MGB)[100].

- **Overcoming logistical barriers**: As selling directly to gold buying stations continues to be challenging – given that the gold buying stations are only able to pay in checks that miners would need to cash at the bank (whereas miners rarely have a bank account as they would need an ID card, which many do not have) and generally, miners feel uncomfortable using banking services and prefer to work in cash – planetGOLD Philippines supported miners in overcoming this barrier by collaborating with a financial institution. This institution (Cebuana Lhuiller) is piloting a project in which they act as accredited gold trader for the BSP. Due to the planetGOLD Philippines project team's engagement with them, their pilot area was expanded to include the two planetGOLD Philippines project sites. Miners can more easily access Cebuana Lhuiller compared to gold buying stations, given that they have branches across the country. The bank would also cover the processing and retention fee, thereby lowering the barrier for miners to sell to other formal buyers.

Given the delays in installing the MFPS, the project has not been able to support miners in producing mercury-free gold.[101].The planetGOLD Philippines project team has not engaged any other buyers, given that the BSP is the sole legal gold exporter. Instead, in cases where refiners or jewelers reached out to the project team, they would connect these downstream buyers with the BSP. However, the BSP retains most ASM gold in its internal reserves. If they were to sell, they would prefer to sell to the LBMA or international markets. It is known that informal traders commonly export gold to China.

Interlinked activities from other components:

Some of the key interlinked activities from planetGOLD Philippines include:

- **Facilitate access to formal finance:** The project worked on setting up a supplier agreement between the BSP and the associations. The BSP recognized that access to finance is one of the main reasons miners continue to sell gold to the informal market. However, the BSP is unable to provide commercial loans. This agreement therefore stipulates a commitment from the BSP to continue buying gold from the associations, using the planetGOLD Criteria as due diligence standard. It essentially outlines the mutual commitment of both the BSP and associations, including the practice of due diligence. With this agreement, the planetGOLD Philippines project team is approaching financial institutions, hoping they would accept the supplier agreement as a form of collateral when assessing loan applications from small-scale gold miners. The supplier agreement has gone through several reviewing rounds and is

[100] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.
[101] planetGOLD Mongolia & Philippines. UNEP GEF PIR Fiscal Year 2023 1 July 2022 to 30 June 2023. AGC. Unpublished.

currently awaiting final approval from the BSP's side. The planetGOLD Philippines project team believes the supplier agreement could serve as a model for other ASGM associations.

Cross cutting themes

Gender

In a gender mapping survey, planetGOLD Philippines recorded how 42% of women respondents engage in gold selling and 42% of women buy ore in processing sites in Sagada. In Paracale, 22% of women respondents engage in gold selling and none in buying ore in processing sites (which can be explained by the fact that there are many fewer processing plants in Paracale compared to Sagada). There are several factors that (still) reportedly limit women's participation in small-scale gold mining. The majority of respondents in the gender mapping survey indicated that they think there are certain tasks women are not supposed to perform due to the physical demands of the sector, restrictions based on cultural and gender norms, and lack of safety measures for women. However, women are strongly motivated to participate in the sector as an opportunity to earn for their families. Challenges to their opportunities in small-scale gold mining include: limited access to resources and benefits (including income, ore sharing, formalization, tools and equipment, and finance), poor working conditions, unpaid care work, gender-based violence, and limited institutional capacity in gender mainstreaming[102].

Women reportedly face greater challenges in accessing the BSP compared to men, which can be explained by their restricted role in the mining operations and the small share of gold ore that they receive. They are mainly involved in auxiliary services or sorting waste ore, so they get significantly lower amounts of gold, to the extent that it would not make sense for them to transport it to a BSP gold buying station and pay the processing fees in order to sell - the costs of the fees and transportation would be higher than what they would get for their gold sales. Supporting women in receiving equal access to trading opportunities therefore is embedded in wider structural challenges that women experience in the Philippines mining sector.

Key lessons learned

- The project team acknowledges that the centralized gold buying scheme remains an ineffective model for miners to access formal markets. Instead, many miners continue to prefer selling to informal traders for several reasons: there is no documentation / administrative work involved, they do not need to show their ID or any other documentary requirements, they receive cash payments, and there is no processing or retention fee. This was especially seen in Sagada. However, as the BSP generally offers a higher price for the gold compared to informal traders (even after fees), through a process of awareness-raising,

[102] planetGOLD Philippines (2021). The Artisanal and Small-Scale Gold Mining Sector in the Philippines: A Contextual Study of planetGOLD Philippines Project Sites. November 2021. Retrieved from: https://www.planetgold.org/sites/default/files/CStudy_FINAL_CLEAN_210312.pdf.

miners on the planetGOLD ASGM sites appear increasingly incentivized to sell to the BSP.

- Connecting access to finance and access to markets is key. This is particularly important for miners to be able to purchase and operate MFPS. Capital is also needed in order for miners to formalize their operations, as this requires substantial human and financial resources (e.g., you need dedicated staff to abide by the legal and due diligence requirements of the government).
- The biggest challenge in facilitating access to formal markets is formalizing the small-scale mining operations in the first place. Ideally, the planetGOLD ASGM sites should be fully formalized before commencing other project activities. The lack or delay of formalization in ASGM associations creates a domino effect on all other project activities. For instance, in Sagada, miners had issues with their small-scale mining contract and association registration that significantly delayed their engagement with the BSP. More dialogues and fora to amend the small-scale mining law and its implementing regulations and processes should be conducted.
- There is an opportunity for formal buyers to engage directly with the miners by visiting the ASGM sites and providing seminars and trainings. Misinformation about formal buyers' requirements is common amongst miners (e.g., many do not understand that they will get the retention fee back from the BSP). Sensitization needs to be supported by the BSP.
- Moreover, there is also an opportunity to engage more stakeholders along the supply chain, including accredited gold traders, other mining associations, NGOs, environmental agencies, and (local) government agencies to support due diligence efforts of the small-scale gold miners. The BSP cannot be alone in trying to support miners given that there are ASGM across the entire country. Inter-agency collaboration is crucial.
- Future training needs include understanding the conduct of due diligence generally, and the BSP Gold Buying Programme specifically. Since the law requires the sale to the BSP or its authorized representatives, the training should focus on informing the miners about such law, policies, and programmes / incentives of the BSP. Additionally, providing training on gold assaying can offer miners valuable knowledge and help them understand and appreciate the accuracy and fairness of the BSP's processes in contrast to those in the informal market.

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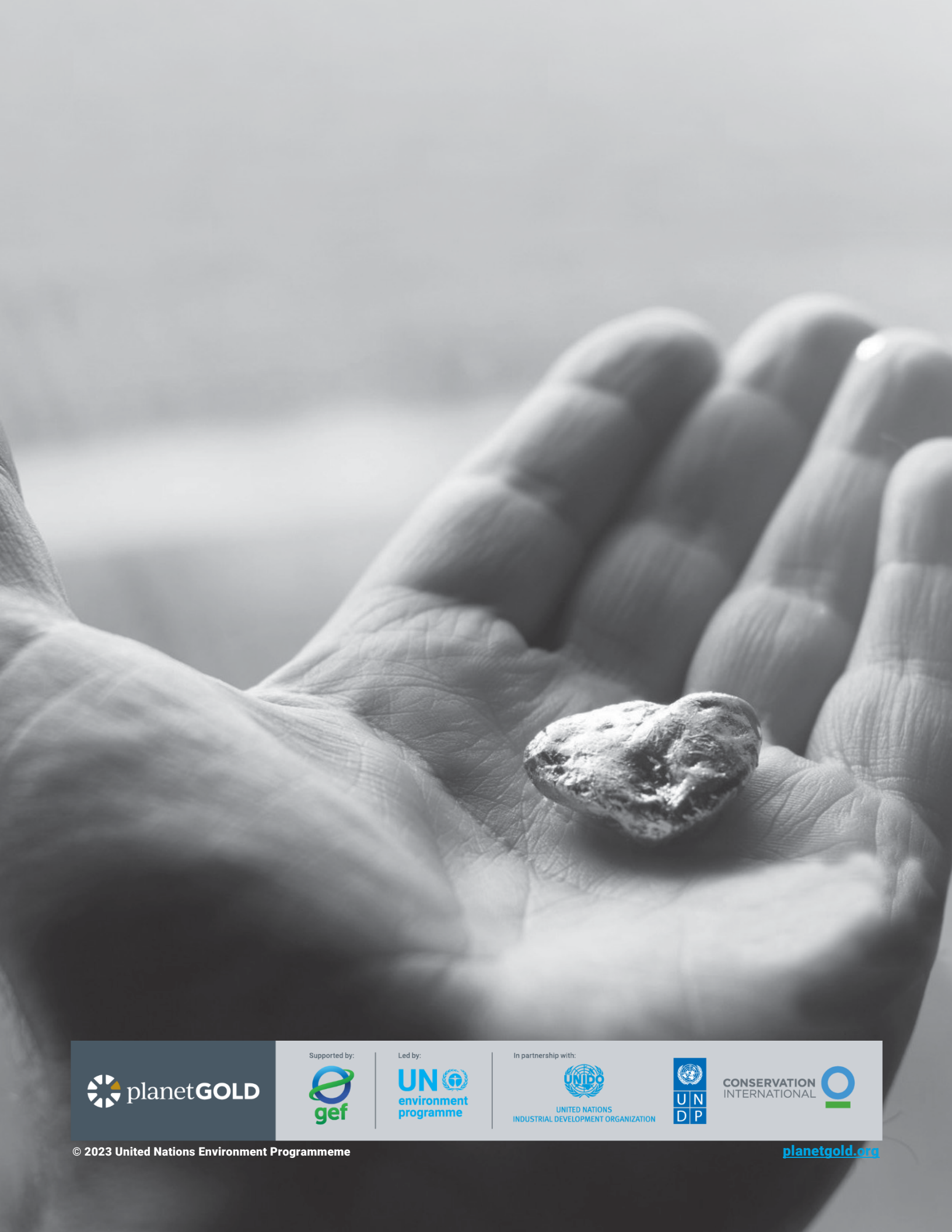

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