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Report

Documentation of planetGOLD Programme: Formalization Interventions in Ecuador

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Primary authors:

- Professor (Dr.) Giorgio de Tomi, University of São Paulo
- Dr. Abby Efua Hilson, University of Kent

Editorial Support: Susan Keane; Jennifer Wilmore Scroggins – Natural Resources Defense Council

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Abbreviations/Acronyms

Abbreviation/ Acronym	Definition
ABG	Agency for Regulation and Control of Biosafety and Quarantine for Galapagos
AGROCALIDAD	Agency for Phytosanitary and Zoosanitary Regulation and Control
AML	Anti-Money Laundering
ASORF	Association of Artisanal Gold Producers the El Oro Province (Portovelo)
GEF	Global Environment Facility
GAD	Decentralized Autonomous Government
IESS	Ecuadorian Institute of Social Security
INAMHI	National Institute of Meteorology and Hydrology
INNOVAGRO	Ecuadorian Chamber of Agricultural Innovation and Technology Industry
MAATE	Ministry of the Environment, Water and Ecological Transition
MAG	Ministry of Agriculture and Livestock
MAPE	Artisanal and Small-scale Mining
NPCM	National Programme for Chemical Management
SDG	Sustainable Development Goals
UNDP	United Nations Development Programme
S&M	Monitoring and Evaluation System
ToC	Theory of Change
UPOP	Unintentional Persistent Organic Pollutant

Executive Summary

The planetGOLD partner project in Ecuador implemented targeted initiatives to advance formalization within Ecuador's artisanal and small-scale gold mining (ASGM) sector. The project's efforts towards formalization concentrated on four primary interventions, detailed as follows.

1. Facilitating Access to Formal Buyers: By facilitating access to mercury-free processing plants and the Central Bank of Ecuador (BCE), this intervention helped miners transition to safer practices while also integrating them into the formal economy. Such efforts can contribute to reducing environmental impact and enhancing miners' livelihoods. The key impacts were:

- Gold sales increased to formal plants (EMICOR and Nueva Unión).
- BCE gold-buying office in Machala reduced logistical challenges for miners.
- Enhanced transparency and fairer pricing led to more trust between miners and formal systems.

2. Regulatory Compliance Support for Miners: By helping miners satisfy licensing, tax, and anti-money laundering obligations, the project has laid a foundation for helping miners build trust-based relationships with stakeholders and improve their access to formal financial services. This could also lead to better working conditions, fairer compensation, and increased transparency in the mining sector. The key impacts were:

- The awareness campaigns educated miners on the benefits of formalization.
- Pathways for Fairmined certification, aligned with international standards, were established.
- Simplified compliance processes encouraged greater participation in formal markets.

3. Addressing Informal Practices and Barriers: This intervention encouraged miners to transition from informal traders to formalized practices which could lead to better income stability, enhanced safety standards, and environmental protection. The key impacts were:

- Miners sold more ore to formal, mercury-free processing plants.
- Trust-building initiatives increased transparency in gold pricing and content assessment.

4. Empowering Vulnerable Groups for Formalization: One of the program's key interventions was to empower women in ASGM, specifically material sorters (jancheras), by advocating for their inclusion and offering training. The key impacts were:

- The efforts raised awareness of women's contributions and ensured fairer pricing for their work.
- Training programs enabled women to engage in formal, sustainable gold supply chains.

1 Introduction

The planetGOLD partner project in Ecuador, implemented as a component of the National Programme for Chemical Management (NPCM), has been addressing the challenges of mercury use and informality in the artisanal and small-scale gold mining (ASGM) sector since 2018. As part of a broader government initiative to manage chemical waste — including mining waste and mercury — the NPCM aligns with planetGOLD's mission to eliminate mercury use in gold mining while promoting sustainable practices. The project sought to achieve these goals through the adoption of mercury-free technologies, improved access to finance, formalized markets for responsibly mined gold, and raise awareness among ASGM stakeholders.

The planetGOLD partner project in Ecuador operated in key mining regions, including Camilo Ponce Enríquez, Chinapintza, and Zaruma-Portovelo. While these sites primarily sell gold to the Central Bank of Ecuador (BCE) or other buyers, challenges persist as some miners continue to use mercury clandestinely despite its ban in Ecuador since 2015. The project focused on engaging a wide range of ASGM producers and processing plants, implementing strategies to increase miners' access to formal markets, and fostering trust in mercury-free processing methods. Notable activities include strengthening processing plants and assaying laboratories, implementing a Mineral Selling Strategy, and supporting miners in obtaining Fairmined certification.

In terms of formalization, the project worked to connect ASGM operators to formal gold markets, including the BCE, by helping miners comply with the necessary regulatory requirements such as registration, tax obligations, and anti-money laundering checks. To facilitate formalization, NPCM implemented training and awareness campaigns to educate miners on the benefits of operating within the formal economy, including access to credit and fair pricing. However, significant barriers remain, including the complexity of the registration process, logistical challenges in accessing gold-buying offices, and miners' perceptions of increased scrutiny and tax burdens. By promoting capacity-building initiatives and introducing tools like a proposed digital application to streamline interactions between miners and buyers, the project aimed to address these barriers and increase participation in formal gold supply chains.

While progress was made—such as increased capacity in processing plants, the establishment of a BCE gold-buying office closer to mining areas, and targeted efforts to support women miners (jancheras)—the project faced challenges, including miners' hesitance to formalize, logistical difficulties, and limited access to credit. This report highlights the interventions, outcomes, and lessons learned from the planetGOLD partner project's formalization-related activities in Ecuador, offering valuable insights for ongoing and future efforts to promote responsible and mercury-free gold mining practices.

2 Formalization Interventions

Background

In Ecuador, artisanal and small-scale gold mining (ASGM) has been carried out since the 1500s. Today, it employs in the range of 20,000 people,¹ although this number could be as high as 100,000.² The evolution of the country's ASGM sector can be described into three phases: 1) the emergence, in the late-1970s, of informal activities, in Portovelo-Zaruma; 2) the re-discovery, in the 1980s, of deposits in Nambija and Ponze Enriquez, Southern Ecuador; and 3) the consolidation of these three ASGM sites through the establishment of processing centers as a new organizational business structures during the 1990s.³ Portovelo-Zaruma is the location of Ecuador's oldest and largest ASGM sectors, and is today, home to a diverse collection of operations.⁴

While the *Mining Law* of 1985 was silent on “small-scale mining”, its successor, the *Mining Law* of 1991 included regulations for small-scale mining activities by providing a legal framework for their operation. Yet, the 1991 law fell short of recognizing the sector as an economic activity, viewing small-scale mining as a subsistence undertaking, carried out by individuals or families.⁵ The 2009 *Mining Law* portrayed mining on all scales very differently: as commercial activities. It ushered in a “new economic development model focused on a responsible and organized mining industry for the management of this strategic sector”.⁶ It establishes parameters for “Artisanal Mining” (production capacity of up to 10 tons/day for underground mining and 120 m³/day for alluvial mining, Article 134); “Small-scale mining” (up to 300 tons/day for underground mining, up to 1000 tons/day for open pit mining, and up to 1500 tons/day for alluvial mining, Article 138); and “Processing Plants” (For small-scale mining, ore processing plants are authorized, Article 45). The country also passed, in 2013, *Regulation of the Special Regime for Small-Scale Mining*, which prohibits the use of mercury in mining operations in the country. But despite these moves, the use of mercury in the ASGM sector remains a serious

¹ "Ecuador", www.planetgold.org/ecuador (Accessed 3 January 2025).

² "TSA STUDY ON THE ARTISANAL AND SMALL-SCALE GOLD MINING SECTOR IN ECUADOR", <https://www.planetgold.org/sites/default/files/FAST%20FACTSfinalING%20%2811%29.pdf> (Accessed 4 January 2025).

³ Vangsnes, G.F. 2018. The meanings of mining: A perspective on the regulation of artisanal and small-scale gold mining in southern Ecuador. *The Extractive Industries and Society* 5(2): 317-326.

⁴ "Artisanal and small-scale gold mining in Portovelo-Zaruma, Ecuador", <https://ejatlas.org/print/artisanal-and-small-scale-gold-mining>

⁵ Barreto, M.L. 2012. Analysis of formalization approaches in the artisanal and small-scale gold mining sector based on experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda. United Nations Environment Programme, Paris.

⁶ Global Environment Facility. 2020. National Action Plan on the use of Mercury in Artisanal and Small Scale Gold Mining in Ecuador, in accordance with the Minamata Convention on Mercury. Global Environmental Facility, Washington DC, p. 34.

problem in Ecuador, and amalgamation continues to be carried out widely clandestinely.⁷

The planetGOLD partner project in Ecuador, implemented as a component of the National Programme for Chemical Management (NPCM), undertook several interventions aimed at promoting the formalization of the artisanal and small-scale gold mining (ASGM) sector. These interventions addressed regulatory, financial, and operational barriers miners face when transitioning to formal market systems. This report describes three formalization-related interventions:

- Regulatory compliance support to support ASGM miners;
- Addressing informal practices and barriers to formalization; and
- Empowering vulnerable groups for formalization.

The following sections will provide detailed information on each of these interventions.

3 Intervention 1: Regulatory Compliance Support to ASGM Miners

This intervention focused on helping artisanal and small-scale gold miners (ASGM) comply with regulatory requirements to operate formally in Ecuador. The project aimed to guide miners through the processes of registration, tax compliance, anti-money laundering regulations, and licensing. Additionally, it sought to address miners' lack of awareness about formalization benefits and reduce their hesitance to engage with the formal sector. By providing training, awareness campaigns, and support for certification initiatives, the intervention aimed to promote formalization as a pathway to improved access to formal gold markets and sustainable mining practices.

Description of the Intervention

To address challenges that prevent ASGM miners from transitioning to the formal sector, this intervention focused on simplifying and supporting compliance with Ecuador's legal framework for mining, which includes the following components:

Registration and Licensing Requirements: Miners were supported in navigating the legal

⁷ "Ecuador"; Schutzmeier, P., Berger, U., Bose-O'Reilly, S. 2016. Gold Mining in Ecuador: A Cross-Sectional Assessment of Mercury in Urine and Medical Symptoms in Miners from Portovelo/Zaruma. *Int J Environ Res Public Health* 14(1):34.

processes for registering their operations with government agencies and obtaining necessary licenses, including marketing licenses to sell gold legally. These steps were essential for miners to become recognized as formal entities and participate in the Central Bank of Ecuador's (BCE) gold purchasing project or sell to other formal buyers.

Tax Compliance and Anti-Money Laundering (AML): Training and awareness campaigns were implemented to educate miners on the importance of fulfilling tax obligations and complying with AML regulations. The intervention aimed to address miners' fears of scrutiny, additional costs, and administrative burdens that often discourage them from formalizing.

Awareness Campaigns on the Benefits of Formalization: Many miners were unaware of the economic and operational benefits of formalization, such as improved market access, fair pricing, and reduced legal risks. The intervention conducted outreach campaigns to raise awareness, dispel misconceptions, and encourage miners to formalize their operations.

Fairmined Certification Initiatives: The project introduced Fairmined certification as a way to promote compliance with environmental, social, and labor standards while providing miners with access to premium prices in international markets. Although progress was limited, this initiative laid the foundation for future efforts to promote certification among ASGM miners.

Partners and Key Stakeholders

This intervention included collaboration with the following key stakeholders:

- **Ministry of Energy and Mines:** Played a critical role in facilitating registration and licensing processes for ASGM miners and ensuring regulatory compliance.
- **Ministry of Environment:** Provided oversight for environmental compliance, particularly in relation to mercury-free practices and sustainable mining operations.
- **National Tax Authority:** Oversaw miners' tax obligations and provided guidance on compliance with fiscal regulations.
- **Central Bank of Ecuador (BCE):** Ensured that only miners who complied with registration, tax, and AML requirements could sell gold through its purchasing program.
- **Miners were the primary beneficiaries of this intervention.** The project worked to address their concerns about formalization and build their capacity to comply with regulatory requirements.
- **Fair Mined Initiative:** Provided guidance and technical support for certification efforts, promoting responsible mining practices and access to premium markets.
- **Local NGOs and community groups** such as ASORF (Association of Artisanal Gold Producers the El Oro Province), Heifer Foundation and GoldenLab⁸ worked alongside the

⁸ UNDP (2024). Final evaluation of the National program for the Environmental sound management and

project to raise awareness and provide on-the-ground support for miners seeking to formalize.

Main Outcomes, Outputs and Impacts

Increased Awareness and Capacity for Formalization

Awareness campaigns reached various ASGM miners, educating them on the benefits of formalization, including access to formal markets, reduced legal risks, and improved financial stability. Training sessions provided miners with practical guidance on complying with licensing, tax, and anti-money laundering (AML) requirements.

Figure 1: Summary of Outcomes, Outputs and Impacts



Improved Participation in Formal Markets

Although less than 5% of the ASGM sector in Ecuador have achieved formalization and are selling gold through the BCE, the intervention helped establish a pathway for others to follow. Efforts to simplify the registration process and improve awareness are expected to increase formalization rates over time.

Fairmined Certification Pilot Activities

The project supported one ASGM group in pursuing Fairmined certification; certification was achieved in May 2024. This initiative set the stage for future efforts to promote compliance with international standards and expand market opportunities for formalized miners.

Support for Regulatory Reform and Simplification

Feedback gathered from miners during the intervention highlighted the need for further

life cycle of chemical substances, Country Ecuador. UNDP Identifier No: 5706; GEF Identifier No.: 9203. May, 2024, p 80.

regulatory reform to simplify formalization processes. These insights have informed recommendations for streamlining compliance requirements and making formalization more accessible to ASGM operators.

4 Intervention 2: Addressing Informal Practices and Barriers to Formalization

The planetGOLD partner project in Ecuador embedded formalization efforts within broader initiatives aimed at improving market access, financial inclusion, and technology adoption for artisanal and small-scale gold miners (ASGM). Rather than treating formalization as a standalone goal, the project integrated it into interventions that tackled the root causes of informality—miners' reliance on informal gold traders, distrust of formal systems, financial barriers, and the clandestine use of mercury. By aligning formalization with economic incentives and operational improvements, the project created a comprehensive approach that addressed both structural and behavioral barriers to formalization.

One key strategy was expanding access to formal gold buyers. The project encouraged miners to sell untreated ore to mercury-free processing plants and directly to the Central Bank of Ecuador (BCE), where they could secure fairer prices. Agreements with processing plants ensured miners received at least 50% of the gold content value, improving their earnings compared to traditional manual processing. Additionally, a new BCE gold-buying office in Machala reduced logistical burdens, making formal transactions more accessible.

By embedding formalization into market access, finance, and technology initiatives, the project created an integrated approach that tackled informality at multiple levels. In contrast to more direct compliance-focused interventions—such as regulatory assistance to miners and support for jancheras (women in ASGM engaged in gold extraction)—this strategy demonstrated that formalization could be a natural outcome of improved economic opportunities and technological advancements. Rather than forcing compliance, the project enabled miners to see formalization as a tool for growth, ensuring more sustainable and widespread adoption of formal practices in Ecuador's ASGM sector.

Description of the Intervention

This intervention focused on tackling the root causes of informality in the ASGM sector, which often trap miners in cycles of economic instability, environmental harm, and legal vulnerability. The key components of the intervention included several targeted measures.

First, many ASGM miners continue to operate informally due to distrust of formal systems, fear of increased taxes, or a lack of understanding of the formalization process. To address this, the project implemented targeted education campaigns to build miners' trust in formal systems and

highlight the financial, environmental, and legal benefits of operating formally. These campaigns included workshops designed to support ASGM miners in the formalization process and strengthen their collective organization. Additionally, these workshops raised awareness and visibility of the importance of formalization to the miners while these efforts were valuable, it was recognized that long-term sustainability, there is a need to shift from general collective support to developing individual capacities and strengthening organizational structures. The lesson for future interventions is to focus on enhancing miners' self-sufficiency and organizational resilience to ensure lasting impact.

Second, informal gold traders often exploit miners by pre-financing operations and demanding that miners sell their gold at lower prices. The project aimed to reduce miners' reliance on these traders by encouraging them to sell untreated ore to mercury-free processing plants or directly to the Central Bank of Ecuador (BCE), where they could secure fairer prices. By promoting the sale of ore to mercury-free processing plants, the project advanced its mercury reduction goals while also encouraging ASGM miners to shift away from informal traders. This initiative highlighted the efficiency and profitability of mercury-free gold recovery methods, demonstrating that sustainable practices could align with economic incentives. It has also reinforced the intersection between formalization and the mercury-reduction pillar of the project, showing that reducing mercury use could serve as a practical entry point for miners to engage with formal markets and responsible supply chains.

Finally, addressing logistical and financial barriers has also been crucial. Informal miners often face challenges such as difficulty accessing gold-buying offices or processing plants, as well as financial barriers to upgrading equipment and formalizing operations. The work done by the project to better access processing plants and to access credit under the financing pillar also contributed to the overall formalization of the sector.

Through technical assistance, awareness campaigns, and trust-building initiatives, the project worked to break the cycle of informality. These efforts helped miners see the long-term benefits of participating in formal systems, rather than relying on informal or illegal practices.



SDG 12: Responsible Consumption and Production © PNGQ, UNDP Ecuador

Partners and Key Stakeholders

The intervention relied on collaboration with the following stakeholders:

- **Ministry of Energy and Mines:** Provided regulatory oversight and promoted initiatives to reduce informal mining practices.
- **Ministry of Environment, Water and Ecological Transition:** Supported the enforcement of mercury bans and incentivized miners to adopt environmentally sustainable practices.
- **Central Bank of Ecuador (BCE):** Played a key role in providing miners with a reliable, formal market for their gold, reducing dependence on informal traders.
- **Mercury-free processing plants (e.g., Eymen Corporation, Nueva Unión, El Pache, and EMICOR)** partnered with the project to provide formal services to miners and demonstrate the profitability of formal gold recovery processes.

- **Assaying laboratories (e.g., GoldenLab and JVMetals)** were strengthened to ensure accurate and transparent gold content determinations, which helped build trust among miners.
- **Informal miners and their communities** were the primary focus of this intervention, with targeted campaigns to educate them on the risks of informality and the benefits of formalization.
- **NGOs and community groups** contributed to outreach efforts and trust-building initiatives. They worked together to support the training sessions and to investigate ways to offer miners access to credit, aiding their shift towards formal practices. Examples include the training sessions held in collaboration with the Institute of Geological and Energy Research, in the province of Zamora Chinchipe⁹ and the participation of the Unión y Progreso Association and the Nuevos Horizontes Association of Jancheras in the activities¹⁰

Main Outcomes, Outputs and Impacts

While the primary goal of promoting the sale of untreated ore to mercury-free processing plants was reducing mercury use, this approach also had the secondary benefit of decreasing miners' reliance on exploitative informal gold traders. By encouraging miners to shift away from mercury-based processing, the project advanced its 2-ton mercury reduction target while simultaneously increasing engagement with formal processing plants. As a result, ore purchases under formal agreements grew significantly, with EMICOR acquiring over 73,000 tons of ore, EYMEN acquiring over 2000 tons of ore, and Nueva Unión processing 264 tons during the project period.

⁹ planetGOLD (2024). Making Mercury History in Artisanal & Small-Scale Gold Mining: technology transfer experiences in the planetGOLD programme. planetGOLD partner project in Ecuador. p. 19

¹⁰ UNDP (2024). Final evaluation of the National program for the Environmental sound management and life cycle of chemical substances, Country Ecuador. UNDP Identifier No: 5706; GEF Identifier No.: 9203. May, 2024, p 80.

Figure 2: Summary of Outcomes, Outputs and Impacts



The project also increased awareness of the benefits of formalization through awareness campaigns that reached hundreds of miners, including 272 individuals directly (152 of whom were women). These campaigns educated miners on the economic and environmental advantages of formal mining practices, helping to shift attitudes and foster trust in formal systems. By highlighting the efficiency and profitability of mercury-free processing plants, the project encouraged miners to adopt cleaner technologies. Although this approach focused on promoting mercury-free methods rather than formalization itself, the outcome promoted a shift towards formal transactions, as processing plants demonstrated higher recovery rates (50% or more of the gold value) compared to manual mercury-based methods, which typically recover only about 40%.

However, challenges persist in breaking the cycle of informality. Despite progress, informality remains widespread in Ecuador's ASGM sector, with fewer than 5% of miners currently operating formally. Barriers such as complex registration processes, miners' fears of increased taxes, and logistical challenges continue to limit the intervention's impact. Nonetheless, the intervention laid the groundwork for long-term progress by addressing key structural barriers to formalization and providing miners with the tools and incentives needed to transition to formal practices.

5 Intervention 3: Empowering vulnerable groups for formalization

This intervention focused on addressing the specific challenges faced by vulnerable groups, particularly women in the artisanal and small-scale gold mining (ASGM) sector, to promote their inclusion in formal mining practices. The project sought to empower these groups—such as women material sorters (known as *jancheras*)—by improving their visibility in the gold supply chain, advocating for fair pricing of their work, and fostering sustainable, women-led ventures. It also aimed to reduce the gender-related barriers to formalization by addressing social, cultural, and economic inequalities in the sector.

Description of the Intervention

The intervention was designed to ensure that vulnerable groups, particularly women, benefit from the planetGOLD partner project in Ecuador's efforts to formalize the ASGM sector. Women in the ASGM sector often perform informal and unrecognized labor, such as manually sorting waste material from gold mining, with little to no legal protections, fair pay, or access to social security. To address these issues, the intervention focused on several key areas.

First, it aimed to recognize women material sorters,¹¹ known as *jancheras*, who often work informally by collecting and sorting through discarded mining materials considered unprofitable by others. The project sought to provide legal recognition for these *jancheras*, integrating their contributions into the formal gold supply chain.

Second, the intervention promoted fair pricing for women's work. Advocacy efforts were directed towards ensuring fairer pricing for the ore collected by *jancheras*, thereby reducing the exploitation they often face in informal trade.

Third, the intervention focused on improving access to social security and legal protections. More than 80% of *jancheras* lack access to social security and health coverage. The project addressed this disparity by advocating for policy changes that would grant them legal protections and social benefits.

Fourth, training and capacity-building initiatives were introduced to empower women in the sector. These initiatives provided women with knowledge on formalization, technical skills, and

¹¹ The NPCM has been working 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, as reported in planetGOLD (2024). Documenting planetGOLD programme experiences with ASGM supply chain mechanisms. planetGOLD, May 2024 (annex 3).

opportunities to explore alternative livelihoods, enhancing their operations and their ability to contribute to the formal gold supply chain.

Lastly, the intervention aimed to reduce cultural and structural barriers in the male-dominated mining sector. It worked to challenge these norms by promoting gender equality in decision-making, policy design, and the implementation of formalization strategies, thereby fostering an inclusive environment for women and other vulnerable groups.

Partners and Key Stakeholders

The intervention relied on collaboration with the following stakeholders:

- **Ministry of Energy and Mines:** Played a key role in identifying vulnerable groups and implementing strategies to recognize their contributions to the formal gold supply chain.
- **Ministry of Environment:** Ensured that sustainable, mercury-free practices aligned with the empowerment of vulnerable groups.
- **Social Security Institutions:** Collaborated to explore ways of extending legal protections and benefits to women and other marginalized groups in the sector.
- **Women material sorters (jancheras) and other vulnerable groups** were at the center of the intervention. Their involvement in advocacy efforts and training initiatives was crucial to the program's success.
- **Local community organizations and women's groups** provided on-the-ground support for outreach and implementation.
- **NGOs and Civil Society Organizations:** Contributed to advocacy, capacity-building, and awareness campaigns that aimed to improve the inclusion of women in the ASGM sector.



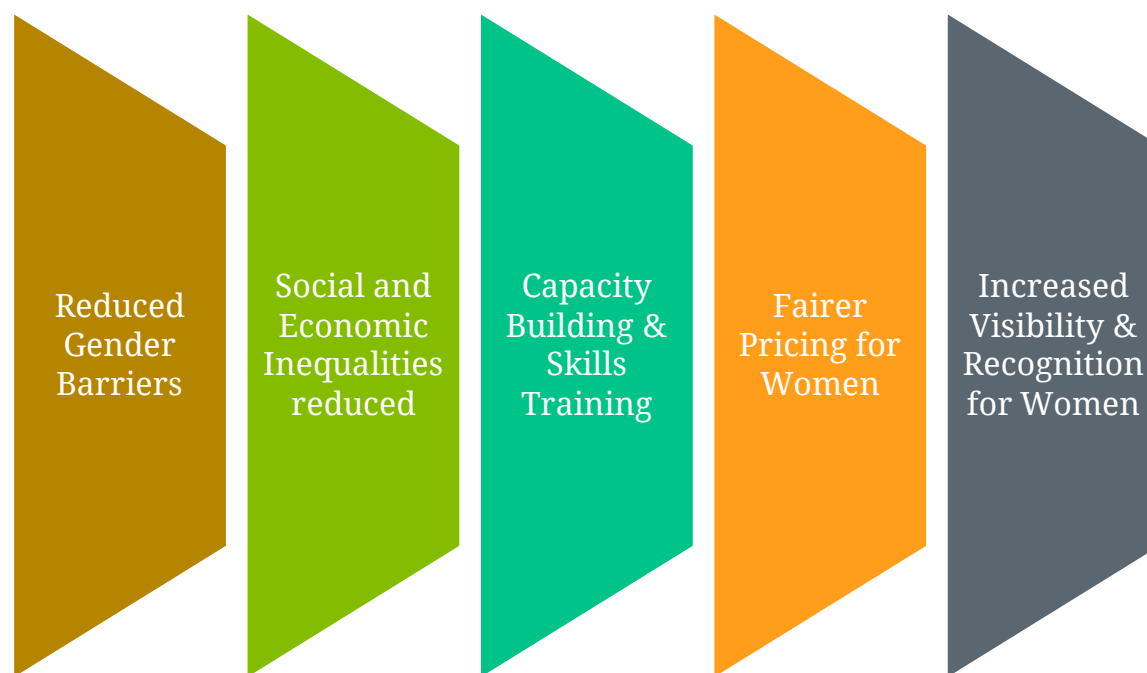
The role of women known as "jancheras" is to classify ore discarded by small-scale mining © PNGQ, UNDP Ecuador

Main Outcomes, Outputs and Impacts

The intervention significantly increased the visibility and recognition of women in the ASGM sector, particularly jancheras, to not only improve their economic opportunities but to reduce exploitation. The project worked towards the recognition of jancheras through legal instruments that provided them increased visibility in the supply chain and access to a better price for their collected mineral. This initiative resulted in a new regulatory instrument in Ecuador that allows the work of the jancheras to be legally recognized as a productive, formalized economic activity, thus enabling them to sell their minerals legally and at a fair price¹². Advocacy campaigns reinforced formalization and equitable pricing for the ore collected by jancheras, addressing the economic inequality faced by women in the sector.

¹² planetGOLD (2023). 2021/2022 Annual Progress Report. UN Environment Programme, 2023 (p. 22).

Figure 3: Summary of Outcomes, Outputs and Impacts



Through formalization training and capacity-building programs, women received technical skills, knowledge of formalization and mercury-free practices, and opportunities to participate in sustainable, women-led ventures. This empowerment improved their ability to contribute to the formal gold supply chain and explore alternative livelihoods.

The intervention also targeted social and economic inequalities by promoting policy changes to address the lack of social security and health coverage for women in the ASGM sector, as illustrated by the new regulatory instrument for the *jancheras* to be legally recognized as a productive, formalized economic activity. While more work is needed, this intervention laid the groundwork for improving protections and benefits for vulnerable groups.

Despite these advancements, women in the ASGM sector continue to face cultural and structural barriers to formalization. Mining remains a male-dominated industry, and many women still struggle to access the necessary resources and opportunities to transition to formal systems.

6 Sustainability

To ensure the sustainability of the planetGOLD Ecuador formalization interventions, it's essential to bolster institutional frameworks and operational practices. This includes continued efforts to formalize ASGM operations, allowing miners to meet legal, environmental, and labor

standards. Building trust among miners through awareness campaigns, transparent practices in processing plants, and improved communication is crucial. Additionally, establishing collaborative partnerships between miners, processing facilities, and governmental bodies is necessary to ensure alignment with sustainability goals.

Additionally, the planetGOLD partner project in Ecuador relied on continuous learning and adaptation initiatives. These included training miners on formalization processes and sustainable practices to overcome barriers to compliance. The project also addressed logistical and perception challenges in formal market participation, such as registration complexities and payment delays.

By addressing these interconnected dimensions, the planetGOLD partner project in Ecuador built a foundation for sustainable transformation in the ASGM sector, balancing environmental protection, economic viability, and social inclusion.



7 Gender Issues

The planetGOLD partner project in Ecuador included consideration of gender-related challenges in the ASGM sector, particularly with their work with women material sorters known as *jancheras*, who face legal, social, and economic barriers that undermine their contributions and limit their opportunities for empowerment. *Jancheras* sort mining waste sometimes considered unprofitable, yet their labor was undervalued and excluded from formal economic and legal frameworks. As described above, this lack of visibility within the mining value chain kept them away from fair pricing for their ore and restricts their ability to benefit from formal market participation.

Image 2: Woman engaged in the classification of ore discarded by ASGM. © PNGQ, UNDP Ecuador



Moreover, over 80% of women *jancheras* lack access to social security and health coverage, leaving them vulnerable to economic instability and health risks. The informal nature of their work and the male-dominated culture of mining exacerbate these vulnerabilities, creating significant barriers to their inclusion in decision-making processes and leadership roles within the sector.

Economic inequity is another pressing concern. Women face challenges in accessing formal markets and financial resources, preventing them from investing in sustainable practices or pursuing independent ventures. Traditional gender roles and cultural stereotypes further marginalize women, perpetuating discrimination and limiting their participation in training and initiatives aimed at improving mining practices.

Health and safety risks are also prevalent among women in ASGM. The informal employment status of jancheras and the clandestine use of mercury in mining operations expose them to hazardous working conditions, with little to no institutional support to mitigate these risks.

Some of the actions in the planetGOLD partner project in Ecuador that addressed these challenges are:

- **Legal Advocacy:** Promotion of the formal recognition of women jancheras, ensuring their inclusion in the ASGM supply chain and granting them access to fair pricing for their work. This has been achieved through the new regulatory instrument issued by the Ecuador government for the legal recognition of the work of the jancheras as a productive, formalized economic activity
- **Capacity Building:** Training programs focused on gender equity, leadership, formalization and the development of women-led businesses, empowering women to take on more prominent roles within the sector.
- **Support for Women-Led Ventures:** The project actively encourages formal, sustainable, women-led initiatives, helping women to achieve economic independence and social empowerment.

8 Findings, Experiences and Lessons Learned

Highlights of Formalization Interventions

- The *regulatory compliance support intervention* has been an important component of the planetGOLD Ecuador program's efforts to formalize the ASGM sector. The miners' concerns have been discussed and practical guidance on compliance was provided. According to the project's documentation, some challenges still remain to be addressed, such as the scaling up of formalization efforts and reducing barriers to formalization.
- The *intervention to address informal practices and barriers to formalization* was aimed to addressing the challenges associated to the informality in Ecuador's ASGM sector. The intervention contributed towards reducing miners' reliance on informal systems.

Additional efforts are needed to overcome historical and persistent barriers for the formalization of the miners.

- The *intervention to empower vulnerable groups for formalization* was another important component of the planetGOLD partner project in Ecuador formalization. The contributions of jancheras were studied and discussed with the objective of reducing inequality in the sector.

Several common strategies were used for these interventions:

- **Awareness Campaigns and Education:** Targeted campaigns educated miners on the benefits of formalization, such as fair pricing, technical support, and environmental sustainability.
- **Focus on Practical Access to Formal Markets:** The expansion of Central Bank gold-buying offices in mining regions reduced logistical challenges for miners, making it easier for them to access formal sales channels.
- **Trust-Building Measures:** Transparent gold content assessments by processing plants and laboratories ensured fair pricing, which helped build confidence among miners.
- **Capacity Building for Processing Plants and Laboratories:** Technological upgrades and training for processing plants and assaying laboratories ensured efficient mercury-free processing and reliable gold assessments.



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- **Streamlined Compliance Processes:** Efforts to simplify formalization requirements, such as registration and tax compliance, made participation in formal markets more accessible to ASGM operators.
- **Gender Inclusion Efforts:** Recognizing women material sorters (jancheras) within the ASGM supply chain promoted equity and inclusivity as part of the formalization efforts.
- **Collaboration with Financial Institutions:** Partnerships with the Central Bank, BanEcuador, and other entities created financing mechanisms that supported miners' transition to formalized and sustainable practices.
- **Engagement with International Standards:** Aligning ASGM practices with certifications such as Fairmined enhanced credibility and marketability for formally mined gold.

These factors collectively contributed to the project's progress in fostering formalization within the ASGM sector in Ecuador, building a foundation for long-term sustainability and broader adoption of formal practices.

Lessons Learned

The planetGOLD partner project in Ecuador efforts on formalization offer lessons for future activities. One key lesson learned was the importance of formalizing and integrating vulnerable and marginalized groups, such as the jancheras, into production chains. The team observed that efforts to formalize and integrate such impoverished and vulnerable groups require multidisciplinary, comprehensive, and long-term interventions. In the early phases of these initiatives, the focus should be on enhancing individual skills and fortifying organizational structures.

Ensuring that the economic benefits surpass the costs is crucial for the success of initiatives focused on adopting and maintaining good practices. This balance incentivizes participants to sustain and integrate these practices effectively.

Engaging private parties in medium-term cooperation agreements effectively mitigates institutional and political risks, thereby boosting the initiative's prospects for sustainability. The commitment and participation of companies and private organizations in adopting good practices were significantly driven by the project's exemplary implementation. By fostering essential inter-institutional connections, offering continuous support, and showcasing the potential for enhancing brand reputation, the project successfully encouraged these entities to integrate good practices.

Recommendations

Two key recommendations stand out regarding the formalization component:

Establish a Protocol of Understanding: It is recommended to establish a protocol of understanding between the involved parties. This protocol should define short- and medium-term responsibilities, set follow-up goals, provide technical support, and facilitate governance spaces, such as the National Environmental Quality Committee. Additionally, it should outline the alliances and commitments acquired by and with the participation of the private sector.

Form a Multidisciplinary Team for Future Work: For future initiatives, it is advisable to form multidisciplinary teams. These teams should preferably consist of thematic experts supported by specialists in community engagement. This approach ensures comprehensive and effective project implementation, particularly when working with grassroots groups and territorial actors.

By implementing these recommendations, the project can build a stronger foundation for achieving its formalization goals and ensuring long-term sustainability.

9 Annex: Documents Reviewed

1. Country Project Implementation Reports (PIRs) 2023-2024.
2. planetGOLD Annual Progress Reports.
3. Programa Nacional Para La Gestión Ambientalmente Racional Y La Gestión Del Ciclo De Vida De Las Sustancias Químicas.
4. Brochure Tiptico Crédito Fomento Minero.
5. Final Evaluation: National Program for the Environmental Sound Management and Life Cycle of Chemical Substances.



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