

planet**GOLD**
Uganda

STORIES
FROM THE FIELD
2025

Towards a Mercury-Free Future in Artisanal Gold Mining

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The planetGOLD Uganda project plans to support 4,500 men and women at 11 mine sites in the country, reducing mercury use by 15 tonnes over five years. The project aims to reduce the use of mercury by supporting formalization of the artisanal gold mining sector and increasing access to finance. This will lead to adoption of mercury-free technologies and allow access to more responsible and traceable gold supply chains.



IMPACT



3rd Floor Nakawa House
Plot 3-7 Port Bell Road,
Kampala Uganda



+256-785-162-520.
+256-700-576-874.



@planetGOLD_UG



<https://www.planetgold.org/uganda>

Author

Peninah Asimwe

Editor

Zuzia Danielski

Contributors

Rose Nakawuma
Patience Christine Apio
Swizen Erima
Olive Athieno

Photos

Malik Muhangi and Media Factory

Design & Layout

Christopher Lwanyaga



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Foreword by Project Steering Committee Chairperson



Uganda stands at a pivotal moment in its pursuit of a cleaner, healthier, and more sustainable future. As a country blessed with abundant natural resources, including gold, it is our collective responsibility to ensure that the exploitation of these resources does not compromise the well-being of our people or the integrity of our environment. This storybook, produced under the planetGOLD Uganda project, comes at a critical time, when our country is accelerating its transition toward a mercury-free artisanal and small-scale gold mining (ASGM) sector.

For decades, mercury has been used by artisanal miners as a seemingly cheap and accessible means of extracting gold. Yet the true cost of mercury has always been far too high. This heavy metal is a potent neurotoxin that endangers human health, contaminates soil and waterways, and silently accumulates in the food chain. We have seen, from global tragedies such as Minamata, the devastating consequences of unchecked mercury pollution including rising cases of neurological disorders, mental health challenges, cancers, and lasting environmental damage. Uganda must not tread that same path. As I have often said, no one should have to give away their life in the process of earning a living.

In 2022, the Government of Uganda took a historic step by enacting the Mining and Minerals Act, which categorically bans the use of mercury in mining. This

legislative milestone aligned with Uganda's commitments under the Minamata Convention and reaffirmed our national resolve to protect citizens and ecosystems alike. But legislation alone is not enough. What is needed, and what NEMA is firmly committed to, is a comprehensive, multisectoral strategy that places awareness, alternatives, and partnerships at the centre of change.

Through coordinated efforts with ministries, the Uganda Revenue Authority, security agencies, academia, local governments, civil society, and development partners, NEMA has strengthened public education on the dangers of mercury, while championing safer alternatives that are increasingly available, effective, and affordable. The work of institutions such as Busitema University, which is doing research into mercury-free technologies, demonstrates the growing national capacity to innovate for sustainability.

Our collaboration with planetGOLD Uganda has been especially instrumental. Together, we are amplifying awareness campaigns, piloting mercury-free technologies, engaging communities, and supporting miners to embrace safer practices. These partnerships highlight a fundamental truth: eliminating mercury from our environment is not the responsibility of government alone, but a shared national duty. Article 39 of Uganda's Constitution guarantees every citizen the right to a clean and healthy environment, while Article 17 places upon each of

us the obligation to protect and preserve it. Meaningful change requires collective action from miners and cooperatives to private sector actors, financial institutions, researchers, and international partners.

I envision a future where artisanal and small-scale miners are organised, empowered, and able to access modern, efficient, and mercury-free technologies. A future in which miners benefit from higher returns, reduced health risks, and stronger bargaining power through cooperative structures. This future is within reach. We are already seeing miners unite, form associations, and undergo environmental and social impact assessments, an important step toward formalisation and sustainability.

The stories here capture that transformative journey. They document the challenges, innovations, and human stories that shape Uganda's transition toward a mercury-free gold sector. I commend the planetGOLD Uganda project for its dedication and partnership, and I encourage all readers, policymakers, miners, researchers, and citizens, to join us in realising a future where economic prosperity does not come at the cost of our health or environment.

Together, we shall usher in a mercury-free Uganda.

**Dr. Akankwasah Barirega,
Executive Director,
National Environment
Management Authority (NEMA)**



About planetGOLD Uganda

The planetGOLD Uganda project is part of the global planetGOLD programme, an initiative supported by the Global Environment Facility (GEF) and led by the UN Environment Programme (UNEP). The project seeks to reduce mercury use in artisanal and small-scale gold mining (ASGM) by supporting miners to transition to safer, cleaner, and more responsible practices that protect both people and the planet. In Uganda, the project is executed by IMPACT, in partnership with the National Environment Management Authority Uganda Authority (NEMA) and the Ministry of Energy and Mineral Development under the Department of Mines.

The Uganda Context

The artisanal and small-scale mining (ASM) sector is a vital source of livelihoods. An estimated 400,000–600,000 women and men work in the wider ASM sector, approximately 31,600 of whom mine gold. The sector indirectly supports an additional 2 million people, contributing significantly to rural economies. Uganda hosts both alluvial and primary gold deposits, and while some small and medium-sized operations have begun to mechanize, most artisanal miners still rely on manual methods of gold extraction. ASGM accounts for over 90% of Uganda's gold production, with miners often processing very small quantities—typically less than one gram—and using mercury in the extraction process. Key gold-producing districts include Buhweju, Amudat, Moroto, Busia, Namayingo, Kassanda, and Kisoro.

planetGOLD Uganda promotes mercury-free technologies, strengthens miners' cooperatives, raises awareness on policy and environmental protection, and builds the capacity of miners and institutions to advance formalization and sustainability in the ASGM sector. This work is being done in 11 mine sites across seven districts.

The project's work is guided by four core knowledge areas that shape its approach and interventions:



Formalization:

Integrating miners into the formal economy and regulatory system for the benefit of all.



Technical Solutions:

Reducing mercury use and improving efficiency with better practices and technologies.



Access to finance:

Unlocking capital flows to transform ASGM.



Awareness raising:

Improving understanding of the challenges and opportunities of ASGM, in local communities and beyond.

Project Mission:

To make small-scale gold mining safer, cleaner, and more profitable.

Project Vision:

A clean global supply of gold from small-scale miners.



Foreword by **Project Manager**

Dear partners and colleagues,
In April 2025, the planetGOLD Uganda project reached the halfway point of its five-year journey. The path has been milestones along the way. The project started implementation against the backdrop of the COVID-19 pandemic, presenting challenges for many of us and how we work. This, however, did not stop the enthusiasm to kick off engaging and working with our communities and partners. This year, we reflect on the immense support and progress made with great appreciation and pride.

I present this storybook, a reflection on the progress we have made together on Uganda's journey toward a mercury-free artisanal and small-scale gold mining (ASGM) sector. These stories capture the strength, resilience, and determination of miners who are not only transforming their livelihoods but also protecting the environment for future generations. Across the country—from Kassanda, Moroto, Amudat, Kisoro, Buhweju, to Namayingo and Busia—we've met ambitious and hardworking artisanal miners—both women and men. Their stories exemplify that when mining communities are empowered, change happens.

Together, with government institutions, miners and their communities, the planetGOLD project has advanced the formalization of miners through cooperatives, supported awareness of the Mining and Minerals Law, strengthened enforcement capacity, and championed gender inclusion. Importantly, we've also raised the awareness of thousands of miners on the harms of mercury use, putting them on the path towards possible alternatives. Each of these milestones demonstrates that change is possible when partnerships are strong and purpose is shared.

I extend heartfelt thanks to the planetGOLD Uganda Project Steering Committee for their strategic guidance and to our supporters, the Global Environment Facility, UN Environment Programme, IMPACT, as well as our partners, the National Environment Management Authority, and the Ministry of Energy and Mineral Development's Department of Mines, for their continued collaboration and trust.

I invite you to celebrate the progress made and join us in building even stronger partnerships that empower miners, safeguard our ecosystems, and sustain the momentum toward a truly mercury-free future. Together, let us prove that responsible mining is not just a goal, it is a shared reality in the making.

Lynn Gitu
Project Manager, planetGOLD Uganda

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Across the country—from Kassanda, Moroto, Amudat, Kisoro, Buhweju, to Namayingo and Busia—we've met ambitious and hardworking artisanal miners—both women and men.

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The Year in Review: November 2024-October 2025



December 2024 - February: Over 1,000 miners were reached through awareness raising activities and 5 radio talk shows on the dangers of mercury and health and safety, and environmental management, in 11 project sites across the districts of Kassanda, Busia, Namayingo, Kisoro, Buhweju, Amudat, and Moroto.



March: 22 Police Mineral Protection Unit officers trained in Entebbe on mercury reduction and safe mining enforcement. Officers were equipped to strengthen compliance with Uganda's Minamata Convention commitments.



April: Personal Protective Equipment distributed to 22 miners and key government officers, strengthening occupational safety and improving health protection at mine sites.



April: Safety & chemical handling guidelines installed at 6 mine sites to promote safe work practices and miner responsibility in handling hazardous materials.



May: 361 kg of mercury eliminated at Kayonza (Nfuka), Kassanda through micro-leaching technology. This shortened gold recovery time from 30 to between 3 to 7 days, proving faster and cleaner extraction at ASM level. This assessment started in December 2024.



June: The project supported SkyG Gold company to formalize, develop technical & 3D drawings of the technology as well as provided legal support to apply for the patent for the micro-leaching system developed by the Federation of Artisanal and Small-Scale Miners in Uganda Registration Services Bureau. Micro-leaching is a downscale of industrial leaching to suit ASGM operations, achieving faster, mercury-free gold recovery.



July: Gender Impact Assessment conducted across Kassanda, Busia, Namayingo, Buhweju & Amudat districts. Over 1,000 people engaged, including 10 women-only focus group discussions and 71 individual women miners, shaping a more inclusive and safer ASM sector.



July: Direct smelting furnace designed and fabricated locally with MUSA Body Fabrication Centre. Introduced a mercury-free smelting option using harmless fluxes, enabling miners to recover 80% and above gold safely on-site.



August: Ore & tailing sampling and laboratory analysis completed in four project districts. Data guided the selection and sizing of mercury-free equipment, ensuring systems match actual ASM ore characteristics.



August: Small shaker table fabricated by Ugandan technicians with project support. This equipment upgrades concentrates from gravity circuits prior to smelting, increasing gold recovery efficiency in small-scale operations.



September: Mercury-free process flow diagrams designed for integrating cleaner tech into existing gravity circuits (ball mills, wet pan mills). Applied in Kassanda, Busia, Moroto & Amudat to support adaptable, scalable mercury-free systems. The process began in March.



October: Three financial institutions (Financial Inclusion Support Unit (FISU), Association of Micro Finance in Uganda (AMFIU), and Uganda Central Cooperatives Financial services (UCCFs)) engaged to unlock finance for registered ASGM actors. Developed a blended financing model combining concessional loans, grants & Village Savings and Loans mechanisms to support mercury-free technology uptake.





Participants signed a commitment board during the 2024 Annual Stakeholders' Meeting as a sign of solidarity towards a mercury-free artisanal and small-scale mining sector.



Mining for a Better Future **in Buhere** Mine Site

In the heart of Namayingo District at the shores of Lake Victoria, lies Buhere Mine Site, a small but determined mining community where most families depend on artisanal and small-scale gold mining for their livelihoods. Among the miners is Esther Nabwire, a miner, wife, and mother of four children whose story is a mirror of the hard work, resilience and transformation taking place in Buhere.

For Esther and her husband, mining is more than work. It is life itself. “All our income comes from mining,” she says. “It’s what pays the school fees for our four children in boarding school, puts food on the table, and keeps our family going.”

Every evening after a day’s work, Esther and her husband sit together to discuss how best to use their earnings. “Through transparency and being faithful to each other, we plan together,” she explains. “That’s how we make sure our hard work counts.”

Beyond her family, Esther speaks about her mining community with a sense of pride emphasizing that Buhere is known for its strong sense of community and collective responsibility. For instance, miners there have taken a firm stand against child labour. No child works in the mines. They have agreed with local leaders to ensure every child is in school. “We all know mining is not for children,” Esther says firmly. “Our work should give them education, not take it away.”

In addition, sanitation and care for the environment have also become part of Buhere’s identity. The miners have built latrines and designated rubbish pits to manage waste, including plastics, ensuring their surroundings are cleaner and safer.

And miners are growing economically too. At the heart of this growth is the Kyoyima Omuto Cooperative Society, a group that evolved from smaller associations, including a women’s group Esther proudly mentions. The cooperative started with just 62 members. Today, it has grown to 280 members—130 of them women. Its leadership is entirely female, with women serving as chairperson, treasurer, and secretary. Together, they manage a mining site, pits, and a processing area, proof of what collective effort can achieve.

Two years ago, planetGOLD Uganda became part of the Buhere story when the project launched at the site with a life-changing message: mercury, long used in gold processing, was putting miners’ health and lives and environment at risk. “Before

then, we used mercury everywhere; even at home, near food,” Esther recalls. “We didn’t know how dangerous it was. But we had noticed some bad patterns in people’s lives. For example, some women were giving birth prematurely, and some babies were born with deformities.”

Learning about mercury’s effects opened the community’s eyes. “Thanks to planetGOLD, we understood that we were keeping a dangerous chemical in our homes,” Esther says.

planetGOLD has been visiting the site frequently with messages on not only mercury use but child labour, gender inclusion, formalization, and financial literacy. Last year, Buhere was part of a sensitization drive that included partners Ministry of Energy and Minerals Development, Ministry of Gender, Labour, and Social Development, and the National Environment Management Authority.

Now, the cooperative is leading efforts to teach miners about mercury-free alternatives. Some of the miners have started using borax, a safer method, and are spreading the word that cleaner techniques can actually recover more gold—up to 80% compared to the estimated 60% when they were processing gold using mercury.

Esther says mining remains unpredictable as all games of chance. “Some weeks are good, others bring losses. On a productive week, a miner may earn between UGX100,000 and UGX200,000, depending on how much ore they process,” she says. Yet for Esther, the focus isn’t just on earnings, it’s on safety, sustainability, and securing a future for her children.

“We are ready to change our minds from mercury to safer alternatives,” she says. “We just hope the alternatives can reach us at prices we can afford, so we can keep mining, but also keep our families safe.”

Esther looks to a future without mercury. With her colleagues, they prove that changing mindsets is possible.

“ We just hope the alternatives can reach us at prices we can afford, so we can keep mining, but also keep our families safe. ”



Formalisation is Taking **Miners** in Buhweju to Greater Heights

If there is to be an example of artisanal miners who are determined to grow big, earn big and have responsible mining methods, it would be miners in Katenga, Buhweju District. United under their cooperative Buhweju District United Miners Cooperative Society (BUDUMICS), these

miners are proving that formalization is a sure way to a more responsible mining future. They are leading a quiet transformation and fast becoming a model for responsible, forward-looking gold mining; where financial discipline, gender inclusivity, and environmental awareness are taking root.

At the forefront of this change is Deusdedit Beinomugisha, the determined leader of BUDUMICS. Deus, as he is commonly called, says BUDUMICS is the officially recognized group mandated to mine gold in Buhweju and holds both a small-scale mining license and an exploration license in the Kyamahungu-Katenga area. Deus also serves as the regional chairperson of the Uganda Association of Artisanal Miners (UGASM) in western Uganda, making him a key voice for miners in the region.

“Today, we are proud that we can speak about mining openly,” he says. “In the past, artisanal miners were denied a chance to mine or even be heard. Now, we can engage with government, attract investors, and operate legally as a cooperative.”

Empowering women in mining

BUDUMICS stands out not just for its legitimacy, but for its inclusivity. Sixty percent of its members are women; a reflection of how deeply women are now involved in every stage of the gold value chain. “Even at our annual general meetings, you’ll notice women fill most of the seats,” Deus says proudly. “They are active, hardworking, and they want to earn and build a future.”

Enhancing change through planetGOLD

When the planetGOLD Uganda project arrived in Buhweju around 2022, it found a community rich in potential but operating with limited resources and especially awareness. “planetGOLD saw both our strengths and our vulnerabilities,” Deus recalls. “They came with training, awareness, and exposure. This changed everything.”

Among the most impactful interventions was financial literacy training, which helped miners rethink how they handle their earnings. “That training opened our eyes,” he says. “We learned how to raise funds, manage income from mining, and plan for the future.”

The results have been profound. Deus himself used his savings to construct a hotel, diversifying his income beyond mining. Many others have followed suit. Jane, one of the female miners, built a recreational garden for events, while Joweria established a thriving business in Mbarara City, the big city western Uganda. “Before these trainings, such initiatives were rare,” Deus says. “Now, our members know there must be life after mining.”

The cooperative has also introduced a savings scheme, with some members already saving close to UGX1 million. These efforts are strengthening financial independence and resilience across the community.



Moving away from mercury

Just as importantly, awareness campaigns by planetGOLD have transformed mining practices in Buhweju, with miners at the site telling the project they are using significantly less mercury in processing. “Through planetGOLD, we learned about the dangers of mercury,” says Deus. “Today, mercury use [in Buhweju] has dropped from nearly 100% to about one or two percent.”

Most sites now use borax, cyanide, or traditional gravity methods instead, safer alternatives that protect miners’ health and the environment. Interestingly, Deus explains that mercury was never originally part of Buhweju’s mining culture. “It came with the gold rush in Katenga, brought in by miners from other regions,” he says. “Now we’re returning to our own cleaner, safer ways.”

Recognition and future aspirations

The transformation has not gone unnoticed. The Bank of Uganda recently identified BUDUMICS as a potential gold supplier, recognizing its organizational structure and legal status. “This is a huge opportunity,” Deus explains. “The Bank of Uganda offers competitive prices, and this motivates us to improve even more. We want to show that artisanal miners can be reliable suppliers too.”

With continued support, training, and fair laws, Deus believes BUDUMICS and the wider Buhweju mining community will keep advancing. “We are proud to be part of this journey,” he says with conviction. “With knowledge, unity, and responsible practices, we can make our country proud.”

The transformational story of Buhweju miners is only but one that shows that artisanal gold mining is no longer just about extracting gold but about changing mindsets, building sustainable livelihoods, and proving that responsible artisanal mining is possible.



We Found a New Way to Get Gold, Better than using Mercury

Two years ago, if anybody had told Sebaduka Ramathan that one could get gold without using mercury, he would have found it a very funny statement to say. But today, at the Kitumbi-Nfuka mining site, in Kassanda District, Ramathan is witnessing a transformation he never expected when he first started mining 10 years ago.

“For all those early years,” he recalls, “we used mercury every single day to extract gold. We didn’t know another way.”

For Ramathan and many others, mercury was simply part of mining. They handled it with bare hands, breathed it in when it burned, and washed it away in water, all this unaware of the danger it carried into their bodies, their homes, and the environment around them.

But two years ago, everything started to change. The Federation of Artisanal and Small-Scale Miners visited their site with news that felt almost unbelievable at first. The news? Miners could extract gold without mercury! Shortly after, the planetGOLD Uganda project also arrived, strengthening this message with training and awareness activities.

“planetGOLD taught us that mercury gets into our bodies through water, air, and food,” Ramathan explains. “We learned how it can harm our health. That’s when we started to worry. But the question was, if we stop mercury, what else can we use?”

The answer came quickly; safer alternatives like borax and cyanide, chemicals that may not be as harmful as mercury if handled properly.

New method, better results

Skeptical but hopeful, Ramathan and the miners at his site decided to try. They switched from mercury to other alternatives including borax

as well as cyanide, without poisoning soil or the environment. The results, he says, proved exciting. “With mercury we only got about 30% of our gold. With borax, we now get 70% or more.” Borax is used during gold smelting by lowering the melting point of gold, making it easier to separate it from other impurities, while cyanide is used in a process called micro-leaching.

At this site, the numbers tell a powerful story of improved recovery and safer mining. In a day, Ramathan says that a new piece of mercury-free equipment that they introduced, the wet pan mill, can process 60 tonnes of ore per day. Out of these, at least 30 grams of gold can be extracted at an estimated 0.5 grams of gold per tonne. Each gram of gold is worth approximately UGX350,000. Importantly, all of this is processed without mercury.

Safer, healthier, and more profitable

The results of this shift have been that the mining process has become safer, healthier, inclusive and more profitable. And Ramathan speaks not just as a miner but as a witness to this transformation of his site to a safer innovation. “We get more gold, and our lives are safe too,” he says.

For miners like him, this shift means more than just good earning. It means healthier families, cleaner communities, and culture change. “Now we know there is life beyond mercury,” he says. “And it is good.”

“ Out of these, at least 30 grams of gold can be extracted at an estimated 0.5 grams of gold per tonne. Each gram of gold is worth approximately UGX350,000. ”

Stories **from the field**



Women as Champions of Change for the Mercury-Free Movement

Aisha has been in the mining business for more than six years. But in the past year, she made the decision to fully embrace mercury-free alternatives and inspire others to follow. This has made her a true champion of change. At her mine site in Nfuka, Kayonza, Kassandra District, Aisha Kamuhanda stands proudly to say, it is free of any mercury use. This puts her at the forefront of the mercury-free movement.

“I am proud to say I no longer use mercury,” Aisha says with confidence. “We now use borax and cyanide through micro-leaching, and we are seeing the difference in our lives, our health, and our earnings.”

Aisha’s transformation began when she received training and awareness sessions on mercury-free gold processing, especially through the planetGOLD Uganda project. “planetGOLD taught us clearly about the dangers of mercury how it enters our bodies through air, water, and food,” she recalls. “Then they spoke to us about better methods, and that knowledge changed everything.”

Workshops held both in Kassandra Town and in Kampala City helped Aisha understand mercury’s serious effects, especially on women and children. “We had seen some of our women friends at the mines struggle to conceive before,” she explains. “Some children even developed shaking illnesses because mercury was everywhere in basins, on our clothes, in our homes.” Today, she proudly notes visible improvements in her community: illnesses at the mine site have reduced, and the environment is safer and cleaner. “The health changes are real,” she says. “We are seeing the results.”

The translation into earnings

The shift from mercury has not only protected lives, but it has also transformed incomes and strengthened livelihoods. “One sack of ore after being processed with mercury would give us about UGX350,000,” Aisha explains. “Now with the new

methods, that same sack brings in about a million shillings.” She adds that with mercury they only survived on day-to-day income, but now women can save, plan better, and pay their workers fairly. “Now we are building, saving and growing.”

Aisha knows firsthand that women can lead in mining and that they thrive when given knowledge and opportunity. “When women understand these alternatives, they become protectors of their families and communities,” she says. She now encourages her fellow women to take the leap, just as she did. “Some women fear leaving mercury because they don’t have a lot of capital. I tell them: start small. Even one sack in a small tank can bring gold in four days. Once you begin, your confidence grows.”

As a mother, miner, and advocate for this change, Aisha’s voice carries hope and conviction. “I chose to stop mercury because I understood the harm. I tell women: you can do it too. You will earn more, stay healthy, and protect your children.”

Aisha continues to preach mercury-free mining across Kayonza and she has become a trusted role model for miners exploring better methods. “I urge every miner: begin the mercury-free journey. The future is better without mercury.”

Aisha’s story proves the powerful truth that when women are empowered with knowledge, communities thrive, and change becomes unstoppable.

“One sack of ore after being processed with mercury would give us about UGX350,000,” Aisha explains. “Now with the new methods, that same sack brings in about a million shillings.”



Formalisation & Finance

Unlocking Opportunities for ASGM Sector

Formalization is not just a legal requirement, it's the key that opens doors to finance, technology, and markets.

Artisanal and small-scale gold mining (ASGM) sustains a sizeable number of households across Uganda. Yet for decades, most miners have

operated informally without licenses, registration, or links to formal financial systems. This informality has locked miners out of credit and investment, kept them from adopting mercury-free technologies, and limited their participation in formal markets.

Often miners lack licenses, have weak financial records, do not have collateral, and have limited knowledge on how to engage with financial institutions. In addition, their incomes are often irregular, increasing the credit risk. Given this, financial institutions view miners as high-risk clients with perceived credit, environmental or reputational risks even though many institutions have limited understanding of the ASGM business model.

Recognizing these challenges, the planetGOLD Uganda project is working to formalize ASGM operations and unlock access to finance as a foundation for responsible, sustainable gold production.

Why formalization matters

Formalization transforms miners from informal operators into recognised economic actors. It enables them to obtain mining licenses, build trust with banks and buyers, and access credit to acquire equipment and transition to mercury-free technologies. It also allows them to sell gold in formal, legal markets, while improving their safety and environmental practices.

Without formal status, miners are seen as high risk by financial institutions and remain excluded from mainstream financial systems. This is why formalization is central to planetGOLD's work.

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**Supported
17 cooperative
societies
to formalise
and acquire legal
registration.**

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How planetGOLD Uganda is supporting miners

planetGOLD Uganda has combined formalization support, financial literacy training, and strategic engagement with financial institutions.

To this end, the project has so far:

- Supported 17 cooperative societies to formalise and acquire legal registration.
- Assisted Kyoyima Omuto Women Cooperative Society to apply for a mining license, currently under review.
- Helped SkyG Gold to register as a company and is now supporting them to patent their micro leaching innovation for mercury-free processing.
- Supported the Kitumbi-Kayonza Women Cooperative Group to start saving in gold, with some members already adopting micro leaching technology.
- Negotiated with the Minister of State for Energy and Minerals Development (Minerals) to allow gold miners in Namayingo District to secure legal access to the Butamba gold rush area in the district.

Introduced ASGM groups to Financial Inclusion Support Unit (FISU) in Ministry of Finance, and Association of Micro Finance in Uganda (AMFIU), as well as Uganda Central Cooperatives Financial services (UCCFs), and is currently working with a local Micro-Deposit Taking Institution (MDI) to design and formalize a financial model tailored to ASGM. These efforts are bearing fruit. Kitumbi-Kayonza women are building collateral through gold savings. SkyG Gold is formalised and innovating mercury-free processing. Namayingo miners now operate legally in Butamba, planning for long-term, responsible production.

Looking ahead

More work remains. planetGOLD Uganda will expand formalisation to more miners, strengthen financial partnerships, and finalise a tailored financial model. By advancing formalisation, the project is laying the foundation for a cleaner, safer, and more prosperous future for Uganda's artisanal gold miners.



By Rose Nakawuma
ASGM Association and
Cooperative officer

Gender & Inclusion



Women, the Invisible Backbone in ASGM

Despite making up a significant portion of the workforce at mine sites, women in the mining business face systemic barriers including limited access to land, finance, equipment, and decision-making spaces. This year, planetGOLD conducted a Gender Impact Assessment and the exercise revealed that whereas, there has been significant change, social norms and gender stereotypes that further marginalize women contributions continue to hold ground. These often push women to less profitable and more hazardous tasks such as crushing and panning, most of whom who have no other options other than mercury, a dangerous substance for women's health. At its core, planetGOLD advances gender inclusion to raise the status of women miners and ensure that they are included in the profitable work of the mining business because a responsible gold supply chain must be inclusive.

Why gender inclusion matters

When women are empowered and their roles recognized, mining communities become more resilient, equitable, and economically vibrant. Gender inclusion is not just a social construct; it's a cornerstone of sustainability and ethical sourcing.

Women in ASGM often navigate a complex balancing act. Beyond their labour-intensive roles in mining, they shoulder most household responsibilities, childcare, cooking, and caregiving. "I wake up at 6am and go to the mine site where I work up to 3pm inspecting my pit, ensuring the smooth running of activities. I then come to open my drug shop where I work up to 10pm, in between juggling childcare and other responsibilities" said Rehema, one of the miners in Buhere Mine Site, Namayingo District.

This dual burden limits the time they dedicate to

mining hence little earnings from mining business, mobility, and opportunities for advancement within the sector. Despite these challenges, women demonstrate remarkable resilience and innovation. They form cooperatives, manage finances, and lead community initiatives, all while working under risky conditions. Recognizing and supporting this balancing act is key to unlocking their full potential.

Why gender inclusion matters – the planetGOLD Uganda approach

planetGOLD Uganda is committed to transforming the ASGM sector by promoting gender equality and inclusion. The project integrates gender considerations across all activities, from policy advocacy to technical training and financial access. The project works to:

- Ensure women's voices are heard in decision-making processes. Considering that the women make up a great percentage of the ASM, planetGOLD Uganda supported the framework to regulate the operations of artisanal miners, with women's voices considered through consultations with women representatives.
- Provide gender-sensitive training and equipment. As part of the transition to mercury-free mining, the project will consider the needs of women miners in any equipment shared with communities
- Support women-led cooperatives and entrepreneurship. The project is supporting women's cooperative societies.
- Challenge harmful norms and promote equitable roles by applying the gender transformative approach.

By embedding gender inclusion into the heart of its strategy, planetGOLD Uganda is helping to build a more just and sustainable ASGM sector in the region and beyond.

“ I wake up at 6am and go to the mine site where I work up to 3pm inspecting my pit, ensuring the smooth running of activities. ”

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Women miners leading change: The story of Rehema

A 33-year-old miner, single mother of one and member of Kyoyima Omuto Artisanal Miners Cooperative in Buhere Mine Site, Rehema came to Buhere in 2018 and was inspired by her friend Afuwa, a fellow miner. She started by moving ore and crushing it to earn money to boost her drug shop which was her side business. Through the earnings, she was able to save money, buy a pit, a handheld electric rock breaker and generator to boost her mining operations. With the expansion of the mining operations, she was able to generate enough income to support her sister's school fees. Through training from planetGOLD on mercury-free gold processing, Rehema appreciates that mercury is bad and is not the only way to get gold. She is shifting to mercury-free operations. Rehema has also started enlightening fellow women and other miners in Buhere and beyond on the dangers of mercury. She says though miners haven't stopped using mercury completely, they have reduced the amount they use through concentrate amalgamation techniques. Rehema appreciates the engagements

they had with the planetGOLD stating that before the project, they were selling their gold for as low as UGX6,000 a point a figure that has now grown to UGX27,000.

Building an inclusive future together

To truly transform the ASGM sector, we need enabling policies that prioritise gender inclusion. Governments, donors, private sector actors, and civil society must work together to remove structural barriers to women's participation, invest in gender-transformative programs in the ASM and support and recognize women's leadership in mining communities.

Everyone has a role to play. Let's make the invisible visible and build a gold supply chain that reflects the strength, skill, and leadership of women.



By Patience Apio
Gender & Inclusion Officer



Communication & Awareness

Rallying Communities Towards a Mercury-Free Future



Over the past year, planetGOLD Uganda strengthened national and community-level awareness on the risks of mercury use in artisanal and small-scale gold mining and promoted the viable, safer alternatives.

To mark World Environment Day, the project convened a media engagement that brought together key national media houses including UBC, NTV, and print media New Vision, and the Daily Monitor. The resulting coverage amplified the urgent call to transition to mercury-free gold processing technologies. Miners interviewed during the engagements voiced both their commitment to change and the need for continued support to access alternative technologies and build confidence in their use. Reinforcing this message, the Busia District Environment Officer joined the event, underscoring government's commitment to a mercury-free future and alignment with national environmental priorities.

In addition, the project delivered five regional radio talk shows across four key ASGM regions where project sites are located. These programs featured technical experts and planetGOLD Uganda representatives who discussed the health and environmental dangers of mercury, as well as opportunities for miner formalization and responsible mining practices. The talk shows provided an open platform for miners and community members to ask questions, share experiences, and access accurate information directly from specialists.

Together, these outreach efforts continue to build momentum toward safer, more responsible, and mercury-free artisanal gold mining communities in Uganda.



Small scale miners tipped on how to access financing



Technology and Innovation

Advancing Mercury-Free Alternatives to Gold Processing



Artisanal and small-scale gold mining (ASGM) happens in over 80 countries and provides livelihoods to more than 15 million miners worldwide. However, the sector is also the largest source of mercury emissions globally. To address this, countries adopted the Minamata Convention on Mercury, which aims to protect human health and the environment by reducing or eliminating mercury use.

Despite global efforts, mercury use in ASGM remains high. An estimated 2,059 tonnes are used annually, releasing about 838 tonnes into the air. Adoption of mercury-free technologies has been slow, especially in developing countries where mining supports entire communities.

In Uganda, mercury use is widespread across Busia, Namayingo, Kassanda, Mubende, Buhweju, Moroto, Amudat, and Nakapiripirit, districts while Kigezi sub-region remains largely mercury-free. Studies show that about 73% of Uganda's gold is processed using mercury, releasing more than 15 tonnes into the environment each year.

Miners continue to use mercury because it is cheap, easy to find, and deeply ingrained in their work culture. As Paddy, a miner from Busia, puts it: "Our lives depend on this gold mining, and mercury is the only thing we have. Until you bring other alternatives, we shall use what we know." His words capture the dilemma many miners face, knowing the risks but having no practical or affordable alternative.

How Mercury is used and its Risks

The process of amalgamation is mixing mercury with crushed ore to extract gold. This is a seemingly simple but extremely dangerous process. It contaminates air, soil, and water, affecting miners, their families, and surrounding communities.

There are two ways of approaching this method. The first is whole ore amalgamation where mercury is mixed directly with all the crushed ore. This captures less than 30% of the gold, and most of the mercury ends up in tailings, making this one of the most polluting and dangerous practices.

The second is the concentrate amalgamation where the gold is first concentrated by gravity before mercury is added. This reduces waste but still exposes miners to harmful vapors when the amalgam is burned. As well, the mercury continues to pollute the local water and soil.

Alice, a miner in Cheptakol Mine Site, Amudat District describes the grim reality at her site. "We are forced to drink this water because we have no



other option. There is no borehole. It's the same water we use to wash gold."

For miners like Alice, exposure doesn't come from a lab or a factory, it comes from a daily survival source.

Health and environmental impacts

Mercury is a powerful neurotoxin that attacks the brain, lungs, and kidneys. Children and unborn babies are the most at risk, as exposure can cause memory loss, developmental delays, and tremors. In mining areas where mercury use is rampant, people often report headaches, dizziness, or fatigue, unaware that mercury vapors are the cause. Concentrations around burning sites can exceed 1,000 nanograms per cubic meter, far above the World Health Organization's safe limit.

Mercury also moves far beyond the mine site. Once it settles into rivers, it changes into methylmercury, a compound that accumulates in fish. This poison gets into the food chain, affecting communities that rely on fish even hundreds of kilometers away as this miner from Mubende shared. "Even when we don't see the smoke, we can feel it. Our eyes burn, and we cough. We just keep working because we have to feed our families." His words reveal how mercury quietly harms entire ecosystems and the people within them.

Mercury-free alternatives

Mercury-free technologies offer a cleaner, safer, and often more profitable way to recover gold. What miners need most is training, access to finance

mercury-free alternatives, and the confidence to adopt new tools.

Gravity methods

These use motion and water instead of chemicals to separate gold. Equipment like ball mills, wet pan mills, and gold concentrators can recover up to 30% of gold, producing a clean concentrate smelted with borax to obtain pure gold. A miner in Buhere Mine Site who joined a planetGOLD demonstration remarked, “At first, we didn’t believe it could work without mercury. But when we saw the gold come out clean, we started to understand.”

Chemical leaching (Micro-VAT)

This process uses controlled cyanide tanks to dissolve gold from tailings, achieving recovery rates of up to 90%. Cyanide is also a toxic chemical but breaks down naturally in sunlight and does not persist like mercury. Its use requires strict safety measures.

Carbon-in-Pulp (CIP) systems

These modern systems combine leaching and carbon absorption to recover up to 97% of gold. They recycle water, minimize waste, and reduce emissions. With proper training, these systems can make mining cleaner, safer, and more efficient.

planetGOLD Uganda's interventions

The planetGOLD Uganda project is helping miners transition to safer, mercury-free practices through:

- Training and awareness: Sensitizing miners

about mercury’s dangers and demonstrating alternatives.

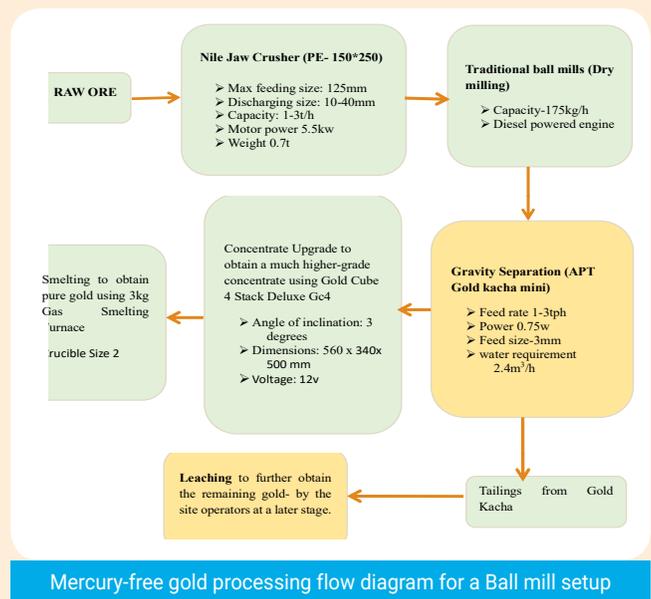
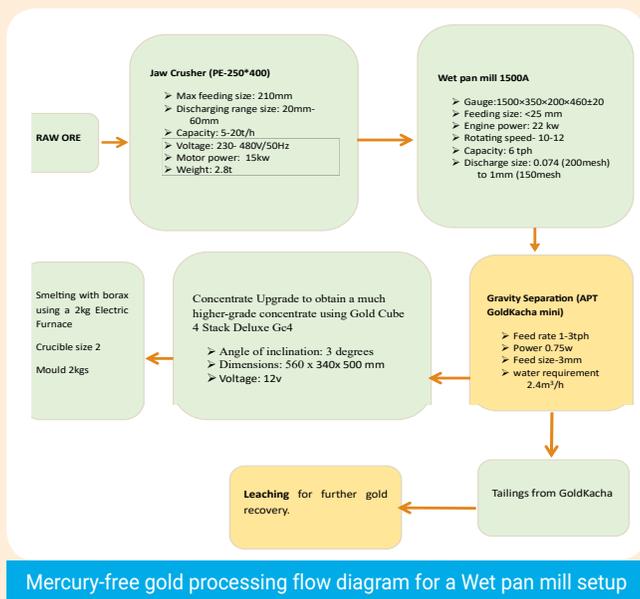
- Technology promotion: Setting up demonstration sites to show that mercury-free methods can yield more gold.
- Formalization: Supporting miners to register cooperatives and access finance which can help them invest in mercury-free alternatives.
- Policy support: Working with government to strengthen regulations and promote safer mining.

In places like Amudat, Busia, and Buhweju districts, these interventions are starting to pay off. Miners are recovering more gold and realizing that cleaner practices protect their health and families. A miner from Amudat confirmed: “We now know mercury is not the only way. If we can get help, we will leave it behind.”

Together, for a mercury-free future

Mercury use in ASGM poses grave risks to health, livelihoods, and ecosystems. Yet, the tools and knowledge for change already exist. What’s needed is collective action, miners adopting alternatives, governments enforcing standards, and partners continuing to raise awareness.

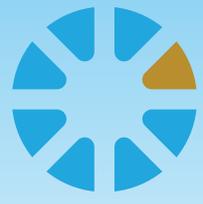
As the miners’ voices remind us, poverty forces difficult choices; but with support, the shift away from mercury is not only possible, it is already happening. Cleaner gold, healthier people, and a safer environment are within reach.



Swizen Erima
Technical Consultant
planetGOLD Uganda project



Olive Athieno
Technical Consultant
planetGOLD Uganda project



planet**GOLD**
Uganda

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