



ARTISANAL SMALL-SCALE GOLD MINING IN KAKAMEGA AND MIGORI COUNTIES

**AN ASSESSMENT OF THE PARTICIPATION OF WOMEN ARTISANAL AND SMALL-
SCALE MINERS IN THE GOLD MINING VALUE CHAIN**

ASSOCIATION OF WOMEN IN ENERGY & EXTRACTIVES IN KENYA

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EXECUTIVE SUMMARY

This research paper forms part of the activities under the project that the World Bank through its EGPS program funded Association of Women in Energy and Extractives in Kenya (AWEIK). The purpose of the research was to assess the risks and barriers that women experience related to responsible sourcing in the gold upstream tier and identify demand driven, sustainable economic opportunities for women artisanal gold miners in Migori and Kakamega that will benefit them now and in the future.

The objective of the research is to analyse the upstream gold value chain in Kakamega and Migori Counties in Kenya and assess the participation of women. Specifically, the study describes the actors involved along the upstream ASGM value chain, assesses the risks and barriers women miners face relating to responsible sourcing in the upstream tier and establishes potential supply chain partners for commercially viable and responsible supply chain.

The methodology used was primarily desk-based review of various literature including analysis of the ASGM gold supply chain in Kenya, actors and institutions interacting with ASGM and trends and practices in the ASGM value chain processes. This was followed by field work research through key informant interviews with government officials and civil society representatives and mining group focused group discussions.

In order to build women miners to the level that they can build partnerships with certified gold buyers, the findings and the recommendations of the study are summarised below:

1. The ASGM sector constitutes of different actors each playing very distinct roles along the gold value chain. Women in artisanal mining work through registered self-help groups, cooperatives and or cooperatives, and are aware of the leveraged benefits of group approach in artisanal mining.
2. The study finds that the risks and barriers of women in ASGM involve occupational, financial and market access which limits their contribution to the sector. Presence of gender disparity that extends to the distribution of benefits and negative impacts from the sector. For instance, in Osiri, Migori County, women comprise 38% of the ASM workforce, yet they yield only 11% of the revenue share.
3. Trader-artisanal miner and trader-trader relationships are often direct and personal. The informality of the ASGM necessitates that each participant in the supply chain personally know their immediate supplier, but not the supplier of the original raw material. Tracing ASM gold prices across the upstream supply and value chain is challenged by fear of taxation among ASGM.
4. Local licensed and certified savings cooperatives, marketing cooperatives and dealers are key potential partners and target markets for artisanal gold. They however face challenges in renewing licences securing permits due to the high cost of compliance.

Key recommendations are:

1. In order to address occupational risks, the County mining committees and regional mining officers to collaborate with AWEIK enhance gender sensitive mine site regulatory policies, ensure safe working environments for workers, and provide locally appropriate work support services for women in ASGM.
2. In order to address the challenge of access to market, AWEIK should support the women mining groups and particularly those that own their own mine shafts to explore certification of their gold. For this to happen, these groups will need substantial support to understand the requirements and benefits of certification, how to structure themselves to be able to

meet the standards of certification and continuous audits to ensure they adhere to the standards and where they fall short, they have room to correct.

3. In order to address the challenge of financial access, AWEIK should support and encourage livelihood diversification to help spread risks. There already exists some form of diversified income earning portfolios among the women mining groups which includes trading and agriculture. The women miners have access to microfinance lending in the agricultural sector lending to a wide variety of farming. The women can use profits from mining to acquire farm inputs as well as use the profits generated from farming to buy mining equipment. This is a way to circumvent the lack of ASGM financing since it is considered a high-risk sector by banks as it lacks traditional collateral.

1 INTRODUCTION

Africa is a major supplier of gold in international markets with artisanal small-scale gold mining (ASGM) being a vital source of the commodity, job creation and livelihoods for rural communities. Gold demand is fuelled by jewellers, traders and investors predominantly in Asian, American and European markets. In most countries ASGM is characterised as illegal, informal, and micro or small in nature, with the use traditional or fairly rudimentary techniques and equipment for their mining activities.¹

Kenya's gold reserves remain unexploited, with the economic contribution of ASM to Kenya's economy unknown and ASM data largely scant. ² Available data indicates 60 per cent of Kenya's gemstones and most of its gold is produced by ASM, with 800,000 people depending on ASM as source of livelihood.³ As at 2017, approximately 250,000 artisanal small-scale gold miners (ASGM) were directly involved in gold mining activities, 40 per cent being women.⁴

Despite ASGM engaging a significant number of rural mining populations, it remains low in its productivity and its economic contribution to Kenya's economy remains unclear. Records of Kenya's gold production show a gradual increase averaging 497.500 kg from December 1900 to 2017.⁵ During peak mining periods, ASGM activities in Kakamega County produce about 2kg of gold in a week.⁶

Year	2017	2016	2012	1992
Kg	503.0002017	160.0002016	3,600.0002012	20.0001992

Table 1: Kenya's gold production statistics⁷

Artisanal small-scale gold mining activities are predominantly in the western regions of Kenya, with other gold deposits in the Northern parts including Turkana. Significant gold ore deposits are found in Kakamega and Migori counties, where over 8,000 individuals are directly involved in ASGM along rivers and roads and in farms through surface and underground mining. Western Kenya ASGM rely on Kampala as a regional gold hub, where gold sells at 98%-99% of the international market price.⁸ In Migori County, an estimated USD 37 million is injected into the county's economy annually, stimulating the creation of approximately 38,000 additional, non-mining jobs. It is estimated that 50% of traded gold in ASGM remains with individuals working in ore extraction processing, and mineral trading.⁹

¹ Achuora, J. et al. (2020). Implications of Artisanal Mining on Food Security: A Survey of Selected Counties in Kenya.

² Rop, B.K. (2014). Economic and Job Creation Potential of Artisanal and Small-Scale Mining Sustainable Development in Taita Taveta County.

³ Barreto, M. L. et al. (2018a). The Economic Contributions of Artisanal & Small-Scale Mining in Kenya: Gold and Gemstones.

⁴ planetGOLD. Kenya Profile: Supporting the Adoption of Mercury-Free Technologies for A Safer Environment and Better Livelihoods

⁵ Census and Economic Information Center (2021). Kenya Gold Production. United States Geological Survey

⁶ Kakamega County Integrated Development Plan 2018-2022.

⁷ Census and Economic Information Center. (2021)

⁸ Pact Global UK & Alliance for Responsible Mining – ARM (2018). Economic Contributions of Artisanal and Small-Scale Mining in Kenya: Gold and Gemstones

⁹ Ibid.

The trading of gold by ASGM in Kenya is complex, opaque and largely informal. The informality necessitates that each participant in the supply chain personally know their immediate supplier, but not the supplier of the original raw material. Trader-artisanal miner and trader-trader relationships are often direct and personal. This coupled with the fear of taxation makes tracing the supply chain extremely challenging.

Though ASGM mining is considered a male dominated industry, women are a key part of ASGM, taking on different informal, part time or seasonal and low paying roles in the gold value chain such as ore processing, sorting, sluicing, washing, panning, sieving, mercury -gold amalgamation, crashing and amalgamation decomposition, and dealer/agents. For instance, in Migori, men constitute 92 per cent of the extraction workforce, while women constitute 62 per cent of the mineral processing (crushing, milling, sluicing, amalgamation) operations.¹⁰ Similarly, in Osiri, Migori County, women comprise 38% of the ASGM workforce, yet they yield only 11 per cent of the revenue share.¹¹

Women face a number of structural, institutional and cultural challenges in the mining sector. This has meant that their participation in the most value bearing activities is low. Challenges faced in the ASGM sector include lack of ownership, control and access to resourceful land and an inability to access finance to invest in essential equipment in order to upscale activities. They also lack technology and the geological data needed for successful mining operations. Market access is also low or non-existent for many women ASGMs.

This study has therefore been undertaken by AWEIK to analyse the upstream gold value chain in Kakamega and Migori Counties in Kenya and the position of women. Specifically, the study describes the actors involved along the upstream ASGM value chain, assesses the risks and barriers women miners face relating to responsible sourcing in the upstream tier and establishes potential supply chain partners for commercially viable and responsible supply chain.

1.1 Methodology

1.1.1 Study Area

In addition to a literature review of the ASGM sector in Kenya, two regions were targeted for more intensive study. The selection process considered the long-term presence of ASGM activities, with representative sites selected based on their size and type of operations as well as research accessibility. From these criteria, Ikolomani Sub-county within Kakamega County and Nyatike Sub-county within Migori County were selected. Both Ikolomani Sub-county and Nyatike Sub-county have the highest number of active gold mining sites within their respective counties and are considered hubs for ASGM activities. Field assessments in Kakamega County focused on three locations within Ikolomani; Isulu, Rosterman and Iguhu, Field assessments in Migori County, focused on three locations in Nyatike; Mikayi, Osiri Matanda and Aego. Field assessments conducted at these two regions are representative of Kenya's ASGM sector.

1.1.2 The Participatory Action Research Approach

A Participatory Action Research (PAR) approach was adopted to ensure participation of the stakeholders throughout the research process as well as ownership of interventions and recommendations to challenges identified. The PAR involved ASGM actors and other stakeholders in a learning process to identify ASGM risks and barriers as well as establish home-grown

¹⁰ Barreto, M. L. et al. (2018a).

¹¹ Ibid.

interventions to these in order to empower and engage ASGM communities in safe, responsible and productive mining activities.

1.1.3 Data Collection, Analysis and Action Strategy

The study made use of both primary and secondary data sources. Primary data collection tools included questionnaires and interview guides for key informant interviews (KII) and focused group discussions (FGD). Secondary data was obtained from published resources on previous ASGM studies. Qualitative and semi-qualitative data collection methods were applied through literature review, site visits, KII and FGD with upstream ASGM supply chain actors and stakeholders.

Courtesy calls to relevant government institutions and Civil Service Organizations (CSOs) identified in the stakeholder engagement plan (SEP) were crucial in identifying stakeholders and ASGM groups for the research. Eighteen mining groups from two counties of Kakamega and Migori were selected based on the assumption that 75% of each group's members were involved in artisanal mining. A focal person was present from each county to lead the process of mobilizing the groups and organizing FGDs with the research team.

Further clarification interviews from the groups were conducted to enrich the data collection and analysis process. Data analysis was conducted in consultation with mining groups, local NGOs, and government agencies at the national and county levels as well as the newly gazette County Mining Committee (CMC) members of the two counties. Data analysis of the findings form the basis of results and recommendations.

The report is divided into three sections:

Part One constitutes the introductory section; a background of ASGM in Kenya, the objective of the report, the methodology used in collecting the data and the limitations qualifying the preparation of this report.

Part Two sets out the findings of the study, which (i) presents the situation analysis of ASGM in Kakamega and Migori (ii) assesses market actors at various levels of the upstream gold value chain (iii) inform on the risks and barriers to women miners participation in the upstream ASGM value chain and (iv) identifies potential partners and target markets for artisanal gold in Kakamega and Migori.

Part Three provides recommendations to government institutions, civil service organization, and international organizations on how to address the risks and barriers identified within the upstream ASGM value chain.

1.2 Limitations of the Study

The stakeholders in the upstream ASGM are based on supply chain models from previous studies and are therefore subject to biases. There also exists an imbalance in research activity and available literature between the two study sites, with more literature available for Migori compared to Kakamega. There has been little research on the component of responsible sourcing and certified gold buyers in both locations.

On the 14th of February 2021, the Ministry of Mining and Petroleum issued a public notice that recalled all Mineral Dealer's Licenses (MDL) for authentication.¹² Additionally new MDL licenses issued between the 1st January 2021 and the 14th February 2021 were also recalled and

¹² Ministry of Petroleum and Mining. (2021). *Public Notice by the Ministry of Petroleum and Mining, Kenya*. [Press Release]. 14/Feb.

any new MDL applications were to be submitted on or before 28th February 2021. This critically affected the research objective aimed at identifying potential supply chain partners for commercially viable and responsible gold sourcing and trade.

Given the high concentration of ASGM in the chosen locations, and the time constraint to carry out the research component, the opinions of stakeholders interviewed are assumed to be representative of ASGM stakeholders in both Kakamega and Migori Counties.

Time constraints and COVID-19 restrictions challenged the data collection activity, given that curfew times had to be observed in spite of the long distances to the mining sites and stakeholders.

2 FINDINGS

2.1 Situation Analysis

2.1.1 Stakeholders in the Kakamega and Migori ASGM Upstream Value Chain

The Kakamega and Migori mining committees are actively involved in managing ASM activities in their respective regions, but are highly dependent on donor funding to undertake any sensitization, trainings, or awareness campaigns within the sector. In Kakamega, aside from the CMC, a Conflict Resolution Committee specifically addresses disputes and complaints among artisanal gold miners, with a similar committee existing in Osiri Matanda, Migori.

Artisanal gold miners in both study sites work individually or as members of registered groups, with most groups registered as self-help groups and others as cooperatives or associations. According to our findings, most of the mining groups are aware of the advantages of forming SACCOs. The number of registered groups is however, subjective given the nature of ASGM group association and disassociation as well the lack of a continually validated ASM register at both regional county mining offices.

	Kakamega County	Migori County
ASGM Individuals	8000	Undocumented
Registered ASGM Groups	172	19
ASGM Association	☞ Miners Association Kakamega (hosts 28 groups)	☞ Migori County Mining Association (hosts 19 groups)
ASGM Cooperative	☞ Kakamega Artisanal and Small-Scale Miners Cooperative Limited (hosts 48 groups)	☞ Migori County Artisanal Miners Cooperative Society Limited (hosts 40 members) ☞ Osiri Matanda Miners Savings and Credit Cooperative Society Limited (hosts 1000 members)

Table 2: ASGM groups in Migori and Kakamega

Miners work under different production sharing agreements; individually, as a collective group, through cooperatives, or through financing traders. In some cases, miners collaborate with a financier to pay for expenses such as equipment, tools and food, under an agreement that the financier will also receive a share of mined ore. In other instances, artisanal miners access financial credit from their group table banking projects or miners' cooperatives to purchase ore, and collaborate in rudimentary treatment and sell the product, then gain revenue from its sale.

The Kakamega and Migori CMC are actively involved in managing ASM activities in their respective regions, but are highly dependent on donor funding to undertake any sensitization,

trainings, or awareness campaigns within the sector. In Kakamega, aside from the CMC, a Conflict Resolution Committee specifically addresses disputes and complaints among artisanal gold miners, with a similar committee existing in Osiri Matanda, Migori.

2.1.2 Division of Labour

Men are primarily involved in excavation processes ASGM activities in both Kakamega and Migori. The predominance of men at this level of the supply chain is in part driven by cultural taboos or myths that hinder women's access into the mines. Other factors that limit women's participation at this level are the use of rudimentary techniques and tools, as well as a lack of working knowledge and skills among women interested in this process.

Women in ASGM own mining pits either as individuals or as a women group, through which they engage in surface mining up to 15 to 40 feet, and afterwards hire labour for further excavation processes.

Women are predominantly involved in ore processing in both Kakamega and Migori for themselves, their groups, and or as service providers. While the processing procedures, crushing, sluicing and amalgamation, is similar across both locations, a major difference is that most processing in Migori occurs primarily at mining sites but is also carried out at the household compound in Kakamega. This has an impact on human health and safety, environmental pollution and exposure of children to mercury.

Access to individual or group owned processing ponds is generally open and free, with a precondition that tailings are left at the processing site. Ore processing is a key method of increasing revenue especially within women groups, with tailings are sold to local small-scale miners for further gold extraction, and sale revenue used to boost the group's savings for reinvestment in ASGM activities.

2.2 Market Actors at various levels of the upstream gold value chain

The market analysis looks into the supply chain from mine to dealer, to identify the market actors, their interconnections and roles, and how the supply chain works given the lack of a defined gold market. Access to mercury for ore processing contributes to the complex and personal relationships within ASGM, with gold traders providing miners with mercury and a promise to later buy the ore product at favourable prices. The availability of mercury influences the interconnections and roles of market actors and in part, determines entrants within the supply chain.

2.2.1 Gold Trading

After processing, the Gold, is sold to local buyers at the mine site, and regional traders at local town centres. The study did not identify any certified gold buyers in Kakamega, with, regional traders in the county making use of markets in Kisumu, Eldoret and Migori.

In Migori, gold is similarly sold to local buyers at the mine site, and regional traders at local town centres. However, unlike Kakamega, there are two licensed and certified gold dealers within the county; Migori County Artisanal Miners Cooperative Society Limited (MICA) and the county is Mining Community Development Program (MICODEPRO).

Local and regional traders however, prefer to sell processed ore to a known gold businessman commonly referred to as Bansi or across the border in Tanzania, which has a network of government-controlled trading centres.

Women are highly engaged with the supply chain as gold traders. They are however, predominantly at the most local level, the mining site, or employed as local agents of regional traders, who are predominantly men. The cost of gold across buyers increases by a hundred Kenyan shillings per

gram within the local tier, with higher quantity commanding higher price per gram. Local and regional traders further process purchased gold by burning, reaching purity levels as high as 90%. The difference in selling price for highly purified gold can be as high as a thousand Kenyan shillings per gram from the initial buying price.

2.3 Risks and Barriers to Women Miners Participation in the Upstream ASGM Value Chain

Studying the difficulties of women in ASGM is crucial for addressing their persistent ‘stay-behind’ roles that increase their economic marginalisation and socio-cultural invisibility in the sector. Artisanal small-scale women gold miners in Kakamega and Migori face crosscutting barriers. The sociocultural dynamics and gender relations within ASGM are poorly understood and underexplored despite the increasing participation of women in the sector. Very little is known about the operations of gender norms, structures and relations concerning women’s livelihoods in ASGM zones.

2.3.1 Occupational Barriers and Risks

The experiences of rural Kakamega and Migori women participating in ASGM are shaped by a complex tapestry of historical and cultural eventualities that reflect the unique social context through which their informal work takes place. The study highlighted five areas that female miners have the greatest challenge. These challenges include various forms of cultural marginalisation that rest on social norms, beliefs and cultural practices and prevent women from accessing mining sites or working in profitable roles in ASGM, poor working environments, poor onsite work facilities and work support services and inter-ethnic discrimination.

Cultural customs and traditional beliefs at the mines perpetuate a gendered order where women’s work is confined to supporting and subsidiary roles, which fetch low income and are and treated as casual. In both study sites women are culturally prevented from working in under-ground mining pits, leaving them prone to scams, where they are sold low value ore. The lack of access into the mine also leaves women engaged in ASGM prone to sexual exploitation, since it is common for men to request from them sexual favours for a chance to purchase high value ore.

Traditional technical knowledge in ASGM such as construction of the mine shaft, rock identification and the excavation process is passed down within the family to male members. Women’s participation in ASGM is primarily through supporting roles such as carrying loads, hand crushing ore and processing. These roles are highly dependent on the demand at the mine sites, especially in underground ASGM.

Inter-ethnic discrimination of women was frequently reported among women miners in both site locations, where cases of gender-based violence, scamming, or disputes often go unreported to the mine’s overseeing committee, since women who are not native to the region are victimized, with no consequences to perpetrators.

Another important aspect of women’s marginalisation in ASGM concerned how mine site committee membership disfavoured women. Committees are usually formed to evaluate all activities, prevent casualties and to also make crucial decisions on their illegal activities. It was generally reported by women that male miners perceived them as not having adequate knowledge and skills about mining activities to be included in the committees. Consequently, women were not involved in the decision-making and management roles at ASGM sites.

Women miners, therefore, experience multiple inequalities at ASGM sites due to entrenched gendered norms and taboos that structure the kind of activities available to women and their

involvement in ASGM. Consequently, this working environment attaches a low premium to women’s labour in ASGM in addition to widespread discriminatory practices.

2.3.2 Barriers to Market Access

Women mining groups operate within the ASGM chain by owning mine sites and or processing pits, as well as running table banking projects. None of the women mining groups, however, operate as traders. Due to the lack of a defined market, gold trading in ASGM is based on personal trader-miner and trader-buyer relationships. The groups all sell their ore to middle men at mine sites or nearest trading centres, who then sell the same to known licensed traders in towns. The lack of a defined market makes it difficult for women miners to differentiate whether they are selling to middle men, smugglers or money laundering individuals. It is also important to note that the price is always set by the buyer and not the seller, leaving miners vulnerable to exploitation across the supply chain.

Women mining groups indicated an interest to become dealers too. This means that, apart from processing their own ore, they also buy ore from other mine sites and miners and then sell to the licensed traders. With time, they hope to learn and meet the requirements to become certified dealers in their own right. This therefore requires capacity building to understand the process and the attendant requirements to becoming certified dealers.

A table as Annex A provides more information on the ASGM women groups from mine to market

2.3.3 Barriers to Financial Access

The informal nature of ASGM limits women mining groups and women individual miner’s access to credit facilities, such as financing loans. The women groups, rely on table banking projects and alternative livelihood projects to increase their financial capacity for investment and reinvestment into ASGM activities.

2.4 Potential Partners and Target Markets for Artisanal Gold in Kakamega and Migori

There is room for women mining groups to run centralised processing centres with amalgamation facilities that process their ore as well as process ore from other miners at a fee. This means that they can then buy the necessary machinery for processing large quantities of ore at once. At a processing centre, women can receive technical and environmental training as well. The miners can leave tailings behind which can then be further processed by the centre owners to earn profits.

There is also opportunity for women mining groups and individual miners to sell their gold dusts through mining societies. Presently, there are two mining societies in Migori that can be avenues for the women groups and individual miners. The two groups are in the table below. The Kakamega Mining Cooperative and Society could also play a similar role.

Migori County Artisanal Miners Cooperative Society Limited
Based in Migori, MICA was registered in 2011 as a cooperative society and has 40 members (23 men and 17 women) all of whom are miners and dealers. The society has a trading and export permit and is pursuing a mining permit. Anyone can sell their gold through the society including non-members. Members pay a fee of 2%, while non-members pay a 4% commission to the society. The society is also currently undertaking research in collaboration with Jomo Kenyatta University of Agriculture and Technology on developing a mercury free processing equipment as well as crushers with lower and dust emissions to reduce pollution.
Osiri Matanda Miners Savings and Credit Cooperative Society Limited
Based in Migori, Osiri Matanda was registered in 2016 as a savings and cooperative society and has approximately 1000 members ranging from miners, services providers (boda boda,

kiosks, retail shops, foot kiosk, water venders) gold buyers, pit owners and pit diggers. 86% of the members are women. The Sacco's location, its structure and composition make it a strategic partner for overseeing ASGM activities and addressing issues of responsible sourcing

3 RECOMMENDATIONS

Based on literature review, field observations and interviews in Kakamega and Migori, this study discusses the challenges women in ASGM face at various levels in the upstream gold value chain and what limits their ability to participate in the Gold value chain. These recommendations provide actions that are necessary to support women miners and women mining groups to build partnerships with certified gold buyers and improve their economic opportunities in the upstream artisanal gold value chain.

The approach has to be multifaceted with different stakeholders playing different but complimentary roles in order to address the challenges identified.

The following are the recommendations:

3.1 Government institutions (Ministry of Mining, County Mining Committees, Regional Mining officer)

1. In order to address occupational risks, the county mining committees and regional mining officers to collaborate with AWEIK enhance gender sensitive mine site regulatory policies, ensure safe working environments for workers, and provide locally appropriate work support services for women in ASGM.
2. In order to address the financial barriers, it is recommended that the government continue to develop microfinance services and economic empowerment programs such as the Women Enterprise and Youth Funds and tailor them towards the mining communities and keep track of the strategies that work best. Future studies and policy reviews will be useful in ascertaining which types of microfinance programs work best with different groups of miners. Multiple partnership models could be developed to address credit constraints in different ASGM contexts.
3. The county mining committees together with the county cooperative officers can assist women gold miners by informing them how to organise and formalise themselves into Cooperatives, assist in preparing by laws, assist members to register with the Registrar of Cooperatives, organize meetings to elect board members and train the board members to run the SACCOs

3.2 Association of Women in Energy and Extractives in Kenya (AWEIK)

1. AWEIK to promote regional chapters in the two counties to advocate for women in ASGM, giving input to legal reforms, and providing a platform for networking and information and knowledge exchange. This presents opportunities for co-creation and partnerships in creating programs and interventions for ASGM to avoid the duplication of efforts within the sector.
2. **In order to address the challenge of financial access, AWEIK should support and encourage livelihood diversification to help spread risks:** there already exists some form of diversified income earning portfolios among the women mining groups which includes trading and agriculture among the groups. If more information can be gathered about these income earning activities and a better idea of the embeddedness of these rural activities gained, then perhaps finance institutions would be more inclined to make available funds

on different terms. Experience from artisanal fishing and agricultural sector show, there is merit in embodying a gender dimension to these financial services, given the increased attention being paid to women rights and equality in the form of SDGs.

The women in the mining groups have access to microfinance lending in the agricultural sector lending to a wide variety of farming. The women can use profits from mining to acquire farm inputs as well as use the profits generated from farming to buy mining equipment. This is a way to circumvent the lack of ASGM financing since it is considered a high-risk sector by banks as it lacks traditional collateral.

- 3 **In order to address the challenge of market access, AWEIK should support the women mining groups and particularly those that own their own mine shafts to explore certification of their gold.** This will require a strict adherence to transparency and traceability and if they can meet these transparency and traceability requirements they can sell their products into the formal markets. For this to happen, these groups will need substantial support to understand the requirements and benefits of certification, how to structure themselves to be able to meet the standards of certification and continuous audits to ensure they adhere to the standards and where they fall short, they have room to correct. Additionally, when it comes to transparency and traceability, we argue that unlicensed miners should be included in the process of developing these fair mined certification systems.
- 4 Through the **AWEIK Madini SACCO, the Association needs to build capacities on financial literacy and encourage a savings culture.** The collective solidarity to spread and minimize risks can support women miners' access financing for equipment, Gold sourcing, running their mining businesses and taking care of their welfare.
- 5 **AWEIK should work with small scale and medium scale mining operators to help the artisanal women mining groups' access mining equipment.** Many previous ASGM interventions have undertaken to provide business and financial literacy education for miners, to enable them to improve the management of their operations and to make them more "bankable," that is, more attractive to financial institutions and investors. As miners build literacy, the education efforts can be complemented by practical experience with increasingly more sophisticated financing mechanisms. For ASM operators who are unable or unwilling to take on debt and/or where upfront capital costs of low/mercury-free equipment is a barrier, leasing can be a more feasible way to facilitate access to equipment for ASM operators without paying high upfront costs. These leasing programs, accompanied by training, can be a first step to engaging miners to build capacity and a track record for responsible financial management. This can be followed by small short-term loans or revolving funds, building to larger loans or investment. One possible way of doing this would be to call on leading licensed small-scale/ medium scale operators to take on responsibilities to support this process.

3.3 Recommendations for International Organizations

Finally, international donors have a key role to play in financially and technically supporting the engagement of women mining groups to participate in planning and policy development. Recognizing that the social, economic, legal, and institutional dimensions of ASGM are inextricably connected to technologies and environmental practices, the World Bank, in its effort to address technical issues can support AWEIK and the County Mining Committees at the County government to undertake public engagement and policy dialogues, support research institutions like (Jomo Kenyatta University of Agriculture and Technology) JKUAT to conducting research and innovation, and outreach.

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ANNEXES

Annex A: ASGM mine to market

	Name Of Group	Number Of People In Group	Registration Status	Years In Operation	Processing	Production Levels Per Day	Sales (Price Per Gram) Ksh	Other Income Generating Activities
Migori								
	Mikei Women Mining Group	25 members 21 women 4 men	registered in 2016 as a women self-help group	5 years	Process the ore as a group	20 grams on a good day and 7 grams on a bad day	5000	Table banking
	Aego Women Mining Group	50 members 45 women 5 men	registered in 2016 as a women self-help group	5 years	Own mines, Operate a processing centre Buy gold from other miners	30 grams on a good day and 5 grams on a bad day	4000 - 8000	Brick making, Poultry (grade) keeping
	Mikeyi Osiri Kabogo Women Group (MOKA)	13 members 12 women 1 man	registered in 2017 as a women self-help group	4 years	Do not undertake any mining activities as a group. Each member is however involved in processing and contributes earnings to the group to fund table banking and merry go round.	Individually 0.2g - 0.4g per day	4200 - 5000	Table banking

					Processing charges are KES 200 for 50kg sack			
Kakamega								
	Inuka Women Artisanal Mining Group	30 members 24 women 6 men			Process some ore together as a group			
	Tingatinga Women miners	27 members all women			Process ore individually	Usually around 1-2 grams		
	Mwanga za Shivuna me	26 members 21 women 5 men	registered in 2016 as a women self-help group	5 years	Own mine as a group Distribute mined ore to members Members process individually and contribute KES 100 weekly to the group for table banking	Individually 0.2g - 1g	3800 - 5500	Table banking Retail sale of sugar
	Muungano Iguhu	26 members 20 women 6 men	registered in 2018 as a women self-help group	3 years	Do not undertake any mining activities as a group. Each	0.5g - 4g	4200 - 5000	Table banking

					member is however involved in processing and contributes earnings to the group to fund table banking and merry go round. Processing charges are KES 200-500 for 50kg sack or KES 100 per basin			
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