



WOMEN IN THE MINING VALUE CHAIN: A
LANDSCAPE REVIEW OF BARRIERS TO
WOMEN'S ECONOMIC EMPOWERMENT

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November 2019

Written by Davis Osoro and Irene Kinyua

Recommended citation: Women in The Mining Value Chain: A Landscape Review of Barriers to Women's Economic Empowerment. (2019). AWEIK.

Cover photo courtesy: Pact International

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Acronyms

AfDB	-	African Development Bank
ASM	-	Artisanal and Small-Scale Mining
AWEIK	-	Association of Women in Energy and Extractives in Kenya
AZWIM	-	Association of Zambian Women in Mining
CBO	-	Community Based Organisation
CSO	-	Civil Society Organisation
EI	-	Extractive Industries
GDP	-	Gross Domestic Product
GOK	-	Government of Kenya
IIA	-	Invest in Africa
IFC	-	International Monetary Fund
KCM	-	Kenya Chamber of Mines
KOGA	-	Kenya Oil and Gas Association
LPO	-	Local Purchase Order
LSM	-	Large Scale Mining
OGM	-	Oil, Gas and Mining Companies
SACCO	-	Savings and Credit Co-operative
SE	-	Small Enterprises
SME	-	Small and Medium Enterprises
SMEP	-	Small and Micro Enterprise Program
SSM	-	Small Scale Mining
TVET	-	Technical and Vocational Education and Training

Introduction

Africa holds an estimated one third of the world's mineral reserves. Millions across the continent rely on Artisanal and Small-scale Mining (ASM)—a practice using basic techniques and equipment—for their livelihoods.

The extractive industry (EI) has the potential to bring many positive development impacts to communities and the country at large. Besides the direct benefits through employment, mining itself and supply tenders the indirect benefits are even greater in some instances. However, the sector equally has the potential to create and or exacerbate vulnerabilities within these communities in relation to not only land and environmental impacts but also around benefit sharing. The benefits associated with the extractives industry are often evaluated with little examination of the differentiated positioning of men and women. There already exists a body of research that demonstrates that a gender bias exists in the distribution of opportunities in EI projects. Benefits often accrue to men in the form of supply tenders, employment and compensation, while the costs, such as family and social disruption, and environmental degradation, fall most heavily on women.

The scenario above is not much different when it comes to ASM. In fact, because of lack of enabling standards, the women in ASM contexts face bigger impacts and systematic marginalization in the value chain. With limited access to skills, tools and finance the women end up gaining marginally relative to the men. Women are an essential part of artisanal mining, taking on roles from panning and processing, to trading goods and services. They rely on the income from this informal mining economy to support their households and dependents. Yet, at the most basic level—women's diverse and active participation in the artisanal sector, and the gendered experience of artisanal mining, is often ignored.¹ Mirroring this state of affairs against the existing regulatory framework it is evident that more needs to be done to ensure the laws, policies and guidelines are sensitive to the due rights of the women.

AWEIK has been at the forefront championing for women (especially those affected by extractive industries operations) to participate in the sector and to advocate for protection of their rights. These efforts have been undertaken while acknowledging the nascency of the sector in the country in terms of its quantum growth as well as the reform of the regulatory framework. It is thus imperative for the AWEIK team to continue improving its understanding of the operating environment for women involved in the EI value chain – both mining entrepreneurs and suppliers. This is critical in advocating for the expansion of space for women so they can be able to access better regulatory, technical and financial support as they take up opportunities in the extractive sector. As women from mining locales strive to improve their livelihoods it is critical for there to be a comprehensive analysis of the enabling environment for value chain participation.

¹ Women in Artisanal and Small-Scale Mining in Central and East Africa, A SNAPSHOT OF CHALLENGES AND OPPORTUNITIES FOR EMPOWERMENT. Impact Transform briefing note.

Lack of information and correct data makes it difficult to regulate the sector to make things better for women. It also makes it difficult to quantify the barriers to entry for the women in the different parts of the country where EI operations are taking place. Unfortunately, the extractive sector remains a male-dominated industry compared to the other industries. Small-scale women miners lack the requisite capacity to be able to negotiate for better contractual deals with men in aspects such as value addition and sharing of proceeds from commodities sale. Women in the ASM such as in Taita Taveta have had to organise themselves in groups to boost their participation in the industry.

The focus areas: Turkana and Taita Taveta counties have some of the most vulnerable and marginalized communities in terms of economic empowerment. This study explored dynamics in and around mine sites to reveal how gender intersectionality limits women's contributions and potential as economic and social actors within the artisanal mining sector. The study presents an overview of the challenges that women face in the EI based on interviews with communities, government and other non-governmental entities. Based on the key findings, the research team makes recommendations for the relevant actors to improve women's opportunities in the sector.



Photo credit: Tommy Trenchard

The various challenges women face within this sector have been sporadically highlighted in the literature, and a systematic and in-depth approach to understanding those challenges has been inadequate. With some research limitations, this paper takes a focused approach to understanding the key bottlenecks to women's full participation in the EI value chain with the aim of informing highly sought interventions to address those challenges.

Objectives of the survey

- i. Map out the current situation in terms of available local skills, tools and equipment, marketing channels and access to financial capacity, and appropriate technologies within the Project target area.
- ii. Assess the local, regional and national demand for those goods and services that could be efficiently produced at a micro-to small-scale of operation by the women. ie Small Enterprises (S.E's) and Small and Medium Enterprises (SME's) - (this includes CBO'S and Self Help Groups)
- iii. Identify value-addition activities with a view on service/product and process innovation and identification of potential demand.
- iv. Identify potential marketing outlets and the gaps, including relevant trade flows, procedure sand regulations, mainly in the project area and the rest of the country or for export in other African countries or overseas.

Study methodology

This study was an empirical (both quantitative and qualitative) one involving key informant interviews, focus group discussions and desk-top literature. Data was collected in the two counties through key informant interviews of relevant women groups, civil society organisations working on grassroots women empowerment, oil, gas and mining companies' representatives, National and County government officials and influential community individuals. The analysis of the data was guided by the research questions identified in the ToR of the project.

Fieldwork was undertaken in two counties (Taita Taveta and Turkana) by a consultant team of 2 survey specialists. Fieldwork included:

- 1) Meetings with national and decentralized government institutions that are involved in the general management of EI.
- 2) Interviews with key individuals (especially women leaders) that are well versed with the extractive sector at both the national and county levels.
- 3) Interviews with local NGOs and CBOs in Turkana and Taita Taveta that work on issues related to the survey topic.
- 4) Discussions with identified groups of artisanal miners, local suppliers, value addition enterprises and other community members.

Historical back ground

The discovery of oil, gas and other minerals has propelled Kenya as a new player in the global market for hydrocarbons and valued minerals. The country has already begun the production and export of oil, albeit on a pilot basis. The government is currently making preparations for full field oil production that could begin any time from 2020. Through this oil sector the government hopes that the sector will propel the goals of Vision 2030. Preliminary analysis undertaken in 2014 indicated that oil could generate annual revenues of between USD 67-360 billion and mining of about USD 255 billion per year. In addition to oil, Kenya is also rich in gas, rare earth metals, coal, iron ore, gold, limestone, gypsum, soda ash, gemstones, manganese ore, fluorspar, diatomite, titanium, zircon, chromite, niobium and silica sand. In 2013, a minerals explorer company called Cortec announced the discovery of rare earth deposits worth \$62.4 billion (Sh6.24 trillion) in Kwale County. It was said that the deposits could make Kenya the second-largest producer of the mineral. Below are statistics on the various minerals found in the country and the locations where the extraction takes place

Table 1: Top 20 Mineral Deposits in Kenya Quantified

Mineral	Location	Aproximated total deposit size
Gold	Various- Kakamega, Migori	4-5 Moz
Copper		Unquantified amount
Coal	Kitui	400 Metric Tonnes
Iron Ore	Taita Taveta	Approx. 15 (Mt)
Mineral Sands	Kwale, Kilifi Mambrui	91 metric tonnes
Rare Earths	Mrima Hills	110 Metric tonnes
Niobium	Mrima Hills	94 Metric tonnes
Soda Ash	Lake Magadi	Renewable
Gemstones	Multiple- Taita Taveta	N/A
Fluorspar	Elgeyo Marakwet	Millions of tonnes
Manganese	Kilifi	0.6 metric tonnes
Diatomite	Gilgil/ Naivasha	N/A
Salt	Lake Magadi	Billions of tonnes
Carbon dioxide	Rift Valley	Millions of tonnes
Chromite	Moyale	Significant
Limestone	Kitui	Billions of tonnes
Gypsum	Tana River, Isinya	Billions of tonnes
Clay	Various Locations	Billions of tonnes
Glass Sands	Coast, Eastern	Billions of tonnes
Phosphates	Various Carbonites	Significant

Source GOK (2015)

According to government estimates, extractives currently contribute just 1% to Kenya's GDP and in terms of total export revenues it is less than 2%. This contribution is set to grow significantly (current estimates suggest the sector may grow to 10% of GDP) and the opportunity to use the sector to catalyze transformational national development and economic growth requires careful planning at

this critical and early stage (Adam Smith International 2013). This measurable economic contribution derives mainly from medium and large- scale mining.

ASM on the other hand remains unquantified and has existed for many decades with tens of thousands of Kenyans directly involved, and other tens of thousands dependent on the sector

for their livelihood. Though not often well acknowledged, the role of women in the ASM in various areas such as Migori, Kakamega, Kisii, Kitui, Turkana and Taita Taveta is significant, as they make up around 30 per cent of the total workforce, and up to 50 per cent in some regions. Although cultural and historical aspects have relegated women's participation to the periphery, women have always been part of the mining workforce. Women have primarily been involved in crashing, sluicing, washing, panning, sieving, sorting, mercury-gold amalgamation, amalgam decomposition and, in rare occasions, actual mining. Women are also active in the provision of goods (e.g., food and drink vending, sales of artisanal equipment such as sieves, and credit for mobile phones) and services (e.g., transporting dirt, ores, ore particles and water; cleaning; laundry; sex; nightclub entertainment; and trading). However, the cultural and institutional constraints women face has ensured their involvement in the most value-bearing places such as pits and fair markets is practically non-existent

Mining, oil drilling and gas extraction all have environmental, social and economic impacts that change women's lives, often in ways that are dramatically different from their effects on men. Ensuring that men and women have equitable access to the benefits of resource development, and that neither are disproportionately placed at risk, requires commitment to understanding and acting on the gender dimensions of the sector. This means including women in the extractives conversation.

Mineral governance framework

The mineral governance framework for the extractive sector in Kenya is mainly based on these two laws below:

- The Petroleum Act, 2019 came into effect in March 2019, repealing the Petroleum (Exploration and Production) Act, Chapter 308 Laws of Kenya which entered into force in 1984. The Act imposes local content requirements on petroleum operations (at Section 50). This provision is aimed at ensuring petroleum operations carried out in Kenya add value to the economy by creating jobs and requiring the procurement of locally available goods and services.
- The Mining Act, 2016, accompanied by a raft of regulations was enacted to replace an old pre-independence law. The new law provides for designation of ASM zones and formalization of the sector.

In addition to the key government institutions that regulate the extractives sector there are a number of civil society organizations that represent the interests and participation of players. The mining sector is represented by the Kenya Chamber of Mines (KCM) while the Oil and Gas sector is represented by the Kenya Oil and Gas Association (KOGA). Both lobby groups have active membership but the extent to which these groups initiate programs that help women to gain the skills necessary to participate in the sector value chain remains unmeasured. According to KCM most of the mining companies have internal policies that aim to give women – employees and community – greater chances in participating in the value chain. However, many community women interviewed are not aware of any affirmative initiatives by these companies.

The Mining Policy which was published in 2016 promised to develop and implement frameworks, structures and mechanisms that ensure equitable participation, ownership and decision-making value chains by women, youth and disadvantaged groups. It also spelt out the creation of a Directorate of Mineral Promotion and Value Addition. This department is in charge of marketing opportunities in investments in minerals and promotion of value addition of minerals as well as providing technical assistance and extension services on mineral processing and value addition to small scale and artisanal miners. However, the policy and the subsequent Mining Act 2016 and regulations have so far not adequately instituted the kind of frameworks needed for women to meaningfully participate in the mining value chain. Key women leaders in Taita Taveta decry the slow translation of benefits of the new law especially on supporting women groups to advance their participation in the mining value chain.

The Mining Act does not explicitly address local content but addresses the elements that makes up local content. It includes submission of skills transfer and capacity building programmes for citizens, preference in employment for local citizens, preference for local products, services offered by Kenyans and/or companies or businesses run by Kenyans. Petroleum Act 2018 has prescribed measures to ensure the use of Kenyan local expertise, goods and services, people, businesses and financing before sourcing externally. This latter law does not however elaborate on how women can be adequately provided with the space to participate equally in the oil and gas sector.

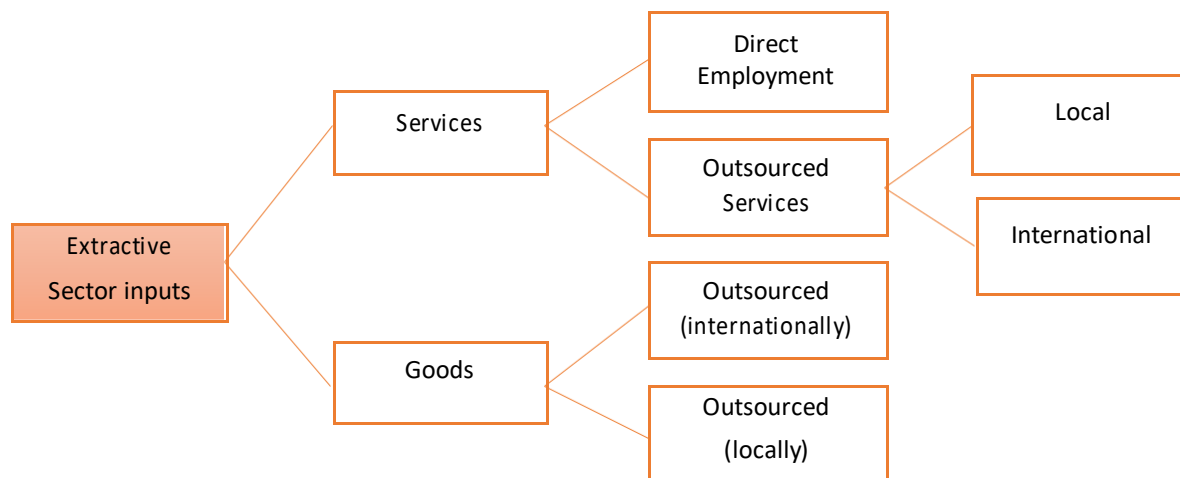
Why is it important for women to participate?

Another facet of the economic opportunities created by mining relate to the industries and economy generated to sustain mines. This includes providing food and drink for the workers, cleaning facilities or providing goods to the company. Even if some of these jobs (cooking, cleaning) belong to women's 'traditional' sphere, women still face barriers that prevent them from fully taking advantage of these business opportunities. These include generally having lower education levels, getting access to finance and getting the information about a company's procurement needs and how to apply

The benefits accruing from the exploitation of minerals in Kenya are unlikely to benefit women if they are not actively participating in the value chain effectively. The social pillar of Kenya's Vision 2030 blueprint, which focuses on gender, youth and vulnerable groups, envisions '*equity in access, control and participation in resource distribution for improved livelihood of women, youth and vulnerable groups.*' Consequent to this are the various provisions within a number of sector laws that prescribe gender considerations across the value chain of resource exploitation. Whether these provisions have been implemented effectively is a different issue altogether.

"Women usually reinvest a much higher part of their earnings in their families and communities than men, spreading wealth and creating a positive impact on future development" — Otaviano Canuto, Vice President of the World Bank's Poverty Reduction and Economic Management Network

Are OGM companies able to understand and take action on gender gaps in their supply chain, and put in place staff, structures, and plans to address these gender issues? This is an important question that has been posed to the companies so as to understand the level of initiative by companies to even out women participation in the value chain.



The EI value chain presents immense opportunities if well harnessed. The figure below illustrates an example of entry points for local enterprises such as women self-help groups and other CBOs. For large EI operations local enterprises have limited entry points due to their low level of skills and lack of access to financing. In some of the cases where some local enterprises have taken part in the value chain, you will often find the real owners of the businesses to be wealthy members of that community. The amount of capital required for meaningful participation in the EI value chain is beyond the reach of most members of the community, and more so for the women who have a lesser control over resources. Thus, the questions that arise from these circumstances are:

- What skills, tools and financing do these women have access to?
- How promising is the market for goods and services being produced by these women and are there trade frameworks set in place to help the local women entrepreneurs in EI sell their goods and services at the local, national and regional levels?
- What are the existing and potential value addition opportunities for women in the EI ecosystem in both Turkana and Taita Taveta?
- What sort of enabling regulations and relevant trade/marketing arrangements (at both local, national and regional level) exist for these women-led enterprises?

The value chain

The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) in their 2018 paper titled ‘Women in Artisanal and Small-Scale Mining: Challenges and opportunities for greater participation’ quotes:

“It is rare to see women involved in the actual digging of ores. They are essentially barred from any activity that involves first contact (mineral discovery) and last contact (sale of minerals).”

In order to fully account for women’s roles and understand the opportunities for their greater participation, the phrase “women in mining” should encompass the whole cycle of mining and related activities from exploration to consumption. Indeed, women’s potential for successful entrepreneurship in mining – and especially ASM - lies within the whole spectrum of activities including mining, processing, delivery, goods and service provision and selling. Since this study has a bias towards the ASM below are the different points of the value chain as relates to women participation and in particular looking at Taita Taveta:

Exploration and raw ore sale: Most quarries will have women of all ages either individually, with partners and/or children carrying out minor digging, shoveling and collecting mineral-bearing ores and quarry materials. While they are involved in significant numbers and for extended periods, the likelihood of succeeding in discovery and thus benefiting from sales is minimal. Even if they succeed in mineral discovery, the prices at which they sell their unprocessed ores is far lower than the actual value. This was evident in many small-unit gemstones mines in Mwatate area of Taita Taveta. The women said that lack of information and awareness about mineral values and market prices forced them to deal with onsite dealers. These dealers mostly quote uncompetitive low benefit buying prices.

Exploration, ore processing and mineral sale: In other cases, women are involved in exploration, traditional processing of ores (usually ore mining, and mineral separation from ore using easily accessible techniques such as stone crashing and curving using rudimentary tools), and sale of semi-purified minerals. The women groups in Taita Taveta are increasingly taking this direction however, they still have to employ the men to dig the ore out and to help in some aspects of the

stone crushing. This approach presents the women with better benefits through the creation of value, although the selling prices are still much less than market value. Based on this survey this is the most popular level of participation by the women who are either involved as individual miners or as women mining groups.

Heavy mining: Very few women would be directly involved in digging, handling of mineral and quarry equipment and machinery (and most other duties around pits) due to various reasons such as socio-cultural barriers. A women group leader in Mwatate said that many women find the pit digging of ore very physically demanding and therefore they are forced to seek the services of men. Nevertheless, some women have grown an entrepreneurial ability by enduring patriarchal discrimination, overcoming countless barriers to not only own the mine pits but also secure the right to operate them. For this small group of women there is some significant benefit with a potential to grow the businesses.

Ore processing: A significant number of women are involved in the processing of ore (mineral separation) and quarry materials (stone crashing and curving) as employees. Women active in these jobs are particularly visible in small scale mines run by individuals, family, group of or cooperative investors. In most cases, they have limited or no information about the value, sales and use of the minerals and quarry products that they help process; as such, they benefit only minimally, often relying on the payment they are offered. In many parts of Taita Taveta where gemstones mining takes place many women involved in the sector in an individual capacity have been sensitized over time. The information has mainly been on the need to join women groups or what is locally called a '*chama*²' so as to consolidate ideas and finances with other women in the area. One of the women in the Mwatate area said that by coming together they have been able to have greater negotiation power as well as greater access to new buyers to their products.

Ore purchase and sale: Some women are also active in the buying and selling of ore and quarry materials on site so as to make some little profit. However, they gain insignificant benefit given that the sacks full of gem bearing ores are often of insignificant value. This approach is not very common in the gemstone mining regions in the country but it has been documented in the gold producing areas. The Ministry of Mining officials in Taita Taveta confirmed that the local women miners are increasingly widening their footprint across the gemstones value chain and therefore do not merely buy unprocessed ore for sale.

Mineral processing: Not all women are involved in the pit mining stages. Some of them are employed in the processing of raw stones to their finished—and in some cases commercial—forms. Their involvement is low due to such reasons as lack of technical skills and cultural barriers. Though still small, the benefit that these women gain may be slightly better than those employed in the processing of ore and quarry materials, which do not require as much technique. It was noted that organised women groups in Taita Taveta sometimes engage the services of skilled women who are non-members to help in the processing of raw materials.

² A popular Kenyan type of an informal cooperative society that is normally used to pool and invest savings

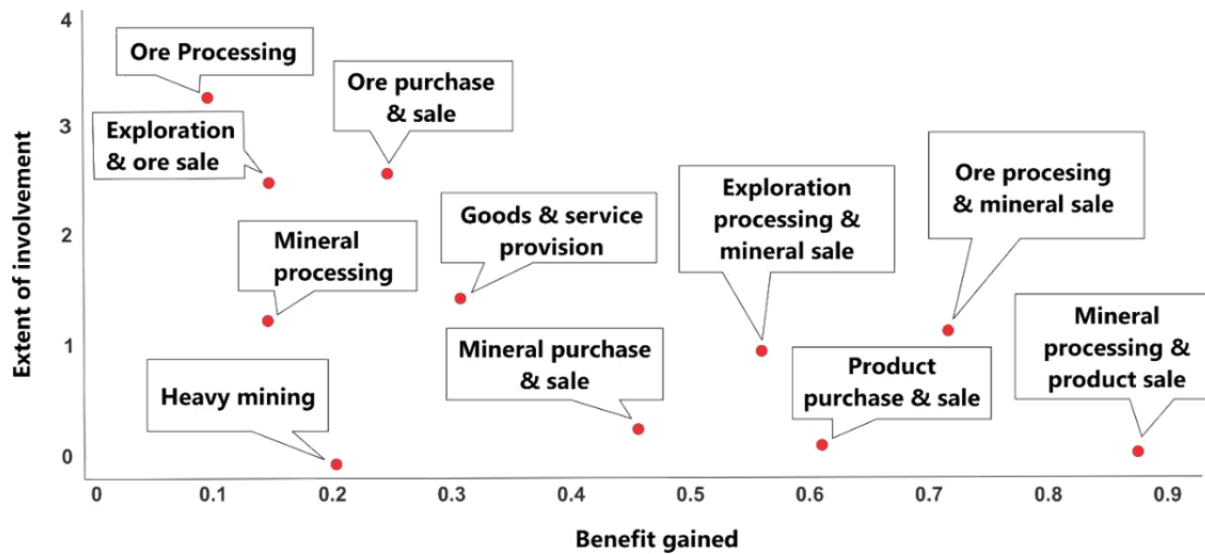
Mineral purchase and sale: A very small number of women are involved in the buying and selling of semi-polished (in some cases polished) minerals and building materials to gain some profit. These ones normally acting as ‘middle women’ or intermediaries, have some market exposure in the major towns such as Voi, Mombasa and Nairobi. In some cases, some of them could be connected to the international market but these ones are usually very secretive of their end market. Unfortunately, almost all of the women in this category are not natives of Taita Taveta County but rather visitors from other Counties in the country who come to seek opportunities and to exploit the gap left by the local women. These are the women who derive huge benefits from the value chain.

Finished product purchase and sale: These are usually dealers who are involved in buying and selling finished products such as jewellery. Their main objective is to utilize their market knowledge and key national and international networks, while exploiting knowledge, information and market gaps to make a good profit. These are often educated women and they would mostly engage as individuals or formal registered companies. They are able to make good profits. One such woman indicated that the level of market awareness amongst local communities is still very low and that a lot of value is being lost due to these circumstances.

Mineral processing and finished product sale: There are also those women who buy minerals in order to process them into finished products, which they then sell at national (and in some cases international) markets. This is the class of women that perhaps gain the most benefit due to the added value in self-processing and taking full advantage of market gaps and gaps between unfinished and finished product prices.

Goods and services provision: It is not all women in the ASM that are involved in mining and processing activities. Some are also active in provisions of goods (e.g., food and drink vending, and sales of artisanal equipment such as gloves) and services (e.g., transporting dirt, ores, ore particles and water; cleaning; laundry; sex; nightclub entertainment; and trading). Although women involved in these activities generally receive limited benefits, provision of sex services and food vending may generate a large amount of money.

Figure 4: Women's role in various activities of ASM value chain



Source: Author's own illustration

Overview of the oil and gas sector (Focus on Turkana County)

Although oil exploration started in Kenya in the 1950s, it was not until 2012 when oil was discovered in Turkana by Tullow Oil. Even though the proven oil reserve is small, amounting roughly to 600 million barrels, there are good prospects for more discoveries. This is because Turkana is within the proximity of the Ugandan region where much larger reserves have been discovered. Tullow Oil in Turkana works closely with a range of subcontractors—from small local firms, to larger national or international partners. The company has over time increased the number of local contractors that it contracts for supplies and services although these are usually basic items. The large majority of sophisticated and costly supplies are still provided by international contractors. Tullow contends that by working with local suppliers, the company demonstrates its commitment to local enterprise development and forges peaceful co-existence with the local communities.

While developing a local supply chain can often be limited by existing local capacity and can require a significant capacity-building investment on the part of firms, a diverse supply chain that includes women-owned businesses can help companies strengthen their supply chain, reduce procurement

costs, and lower overall costs.³ Tullow has experienced major challenges regarding local procurement as well as jobs for the locals, with communities continuously agitating for more opportunities from the company. The illiteracy levels in Turkana are very high and most of the women especially in the villages have little or no education at all. Under these circumstances the local women are usually not well informed in terms of the available opportunities and have limited skills to be able to undertake some of the supply needs of the company. They also lack the finances to be able to participate in Tullow's supply chain. Below are some of the sentiments from some women in the community regarding local procurement for the Turkana people: -

"We hear that women are benefiting with this oil. If that is true then I am yet to be reached. Our men despise us and think we cannot do what they can do in getting opportunities (read tenders) in the sector. Someone should come to our rescue." women from Lochwaa, Turkana South.

"Initially when they (Tullow Oil) came, they said that our sons will get jobs and our community will gain. Now, we cannot see that. All the tenders are going to the politicians and their families. No one has come to this village to tell us if there is anything left to us" – Local woman, Lokichar, Turkana South.

Overview of the Artisanal and Small-Scale Mining in Kenya (Focus on Taita Taveta County)

The Mining Act that was enacted in 2016 recognized the ASM sector and provided for a number of regulations that would formalize the sector in all relevant aspects. In this context the aim was to integrate ASM into the formal economy. The process of formalization includes the development or adaptation of mining (and other) laws or policies to address the challenges of ASM. This formalization was aimed to generate the enabling conditions for accountability within the sector so that it can ultimately be integrated into the formal economy. The success of this remains to be seen since formalization can only be successfully achieved if programmes and public policy deal with the different dimensions of ASM activities simultaneously and in an integrated way. Legalization is just one dimension of the process of formalization.⁴ There are other variables within the sector such as land tenure that are critical for a stable ASM sector and as is widely seen it is the women that continue being disadvantaged in this regard.

As most ASM in the world tends to operate in the informal economy, its contributions to local and national development are typically invisible to most decision makers, government, and the

³ Ibid

⁴ UNEP 2012

general public. Nevertheless, its impact can be significant in mining villages, regions, and countries. At the household and community level, ASM provides rural employment options and results in reduced rural-urban migration. Also, miners' incomes are often reinvested in agriculture or used to stimulate other small businesses, while revenues from ASM and spinoff ventures often play an important role in helping local families meet their health and development needs. Promoting ASM as an engine for economic growth and community development depends on its being good for the economic and social development of the whole community. A growing body of evidence suggests that ASM policies, programs, and projects that are perceived to be gender neutral can, upon implementation, actually widen gender gaps and worsen rather than improve the development outcomes that governments, mining companies, CSOs, miners' groups, and communities are seeking to achieve (Hinton 2011a).

According to the Mining Act 2016 there are four types of permits for the ASM sector. Table 1 identifies the criteria that determine the scale of the operation for each permit.

Table 5: Classification of ASM based on the law

Type of operations	Estimated annual extraction of minerals or material bearing minerals	Investment/expenditure	Technology
Artisanal mining (AM) operation	Not defined	No	Traditional and customary mining operations using traditional or customary ways and means
Small-scale reconnaissance operation	Not applicable	Not defined	Not defined
Small-scale prospecting operation	Not applicable	To be defined in the regulation	Does not employ specialised prospecting
Small-scale mining (SM) operation	Not exceeding 25,000m ³ per year	To be defined in regulations	Does not use mechanised mining technologies, or chemicals including mercury

Source: compiled using provisions of the Mining Act 2016.

The new law prohibits any improvements in the techniques and methods used through mechanization. This prohibition is meant to stop those artisanal or small-scale operators who may have gained the financial conditions to introduce some mechanization (in which case they are not supposed to be classified as ASM and enjoying privileges such as low taxes), which could have an impact on profitability, working conditions, and/or environmental conditions. Basically, the Act's

objective is to prevent large scale mining (LSM) from being camouflaged under a small-scale mining (SSM) permit.

Artisanal mining occurs in almost all parts of the country, if development minerals (composed mainly of construction materials) are factored in. Most of the gold mining in the country is undertaken by ASM in Kakamega and Migori Counties with some medium scale operations taking place in Narok County. The mining of gemstones is predominantly found in Kitui and Taita Taveta Counties with the latter having thousands of locals involved in the trade. The sector's importance for poverty alleviation, employment, livelihoods, and wealth creation in some regions in Kenya cannot be overstated. Here, operations are typified by their informality and rudimentary nature and praised for their importance as largely poverty alleviation activities.

Taita Taveta County gemstones mining

Taita Taveta County is an expansive County that also hosts two national parks (Tsavo East and Tsavo West). Only 12% of the land is arable and therefore residents have adopted other alternative commercial activities such as ASM of gemstones. Indeed, in the most gemstone-reliant sub-counties, Mwatate and Voi, ASM provides the main source of employment for 57% of women and men of economically active age, well above agriculture (39%), trading (35%), and other activities. mining activities have expanded over the years.⁵



Source: Photo 1 (gemselect.com), photo 2 (The Star newspaper)

Gemstone mining is a key economic contributor in Taita Taveta County. Mining is conducted individually, through cooperatives or companies. There is a good number of miners who are

⁵ Pact, ARM. 2018. The Economic Contributions of Artisanal and Small-Scale Mining in Kenya: Gold and Gemstones.

zururas,⁶ This group is comprised of mainly men coming from different ethnic groups. The sector is characterised by informality, conflicts over land endowed with minerals, unavailable information, secrecy along the supply chain and smuggling of the majority of the production. According to the Ministry of Mining and based on official export permits, the most traded gemstones in the County in are tsavorite (most valuable), tourmaline, zoisite, other garnets (excluding tsavorite), opal, sapphire and ruby.

Below is a quick snapshot of the economic status of the gemstones mining based on a study conducted by Pact and ARM

Box 1: Facts on ASM mining in Taita Taveta

- More than 50% of the gemstones export permits are for tsavorite and rubies
- 93% of the exports come from 5 gem types (tsavorite, tourmaline, rubies, garnets, and opal)
- Less than 1% of the tsavorite are exported rough
- About 98% of tourmaline are exported rough
- More than 87% of the export permits are mainly sought from Taita Taveta County
- 63% of the export permits have been granted to U.S. traders, 14% for India, and 13% for Hong Kong
- Gem-cutting is very low in Kenya. The proportion of cut gems official exports does not reflect the reality on the ground. PACT estimates that the official declared gem exports represent only 5% to 10% of the real quantum of gems produced. The rest are smuggled out.
- The number of miners in Taita Taveta approximates 10,000 (according to Ministry of Mining statistics). Half of the miners are employed by companies and paid on a production share basis that varies from 20 to 30% of the extracted gemstones. The other half of the workers extract independently.
- Based on the production sharing arrangements a miner makes about KES15,000 (USD150) per month.

According to the Ministry of Mining women are thought to represent about 30 percent of the ASM workforce although there is no empirical data to back up these statistics. In Africa generally, women may make up anywhere from 40 to 100 percent of the ASM workforce.⁷ Their role in the sector is usually not very well recognized. Factors such as domestic and childcare responsibilities; a lack of formalised access to land and resources; and lower education levels, all conspire to prevent women from fulfilling their potential in the ASM sector. In addition, superstitious beliefs around women's presence at mines persist and limit their opportunities to engage in mining activities. These factors

⁶ A local term to describe miners or traders holding no legal rights and who travel from site to site illegally working on privately owned land, ranches or within Tsavo National Park.

keep women's involvement at the fringes of ASM, with research demonstrating that women tend to have the least-paid and most dangerous jobs in the

⁷ (IGF). (2018). Women in Artisanal and Small-Scale Mining: Challenges and opportunities for greater participation. Winnipeg: IISD

sector. Despite this, most of the women regard this sector as more lucrative than any other alternative economic activity at their disposal. One surveyed woman in Mwatate said: -

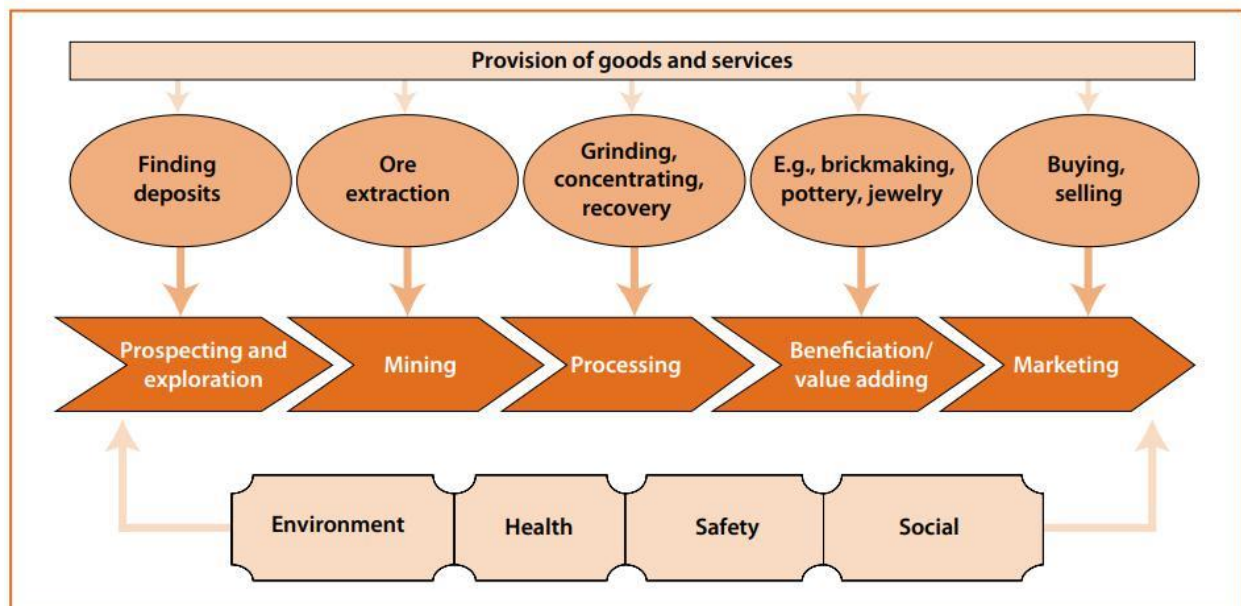
“These gems are my everything; they feed me as a parent feeds her children. They pay school fees for my children as a parent pays school fees for her children; so, the stones are value, they are a parent to me.”

— Female miner in Mwatate

El-focused local enterprises development

Women are key community actors. Evidence shows that when women control the community's money, the more likely it is that the funds will be reinvested in families and to the benefit of the community. Some research shows that for every additional 1 percent of women's share in household wages, family savings can grow by approximately 25 percent. The conclusion here is that women-led businesses and businesses that benefit women through employment represent an important community development driver.⁸ So how do these companies get to set up and grow? This is a question that many stakeholders in the sector have to grapple with. The sector already has existing barriers to entry – for both men and women – especially when compared to other economic activities.

Figure 2: ASM Value Chain



Source: Adapted from Mutemeri and Samba 2010.

⁸ Carmen Niethammer, "Women, Entrepreneurship, and the Opportunity to Promote Development and Business," Washington, DC: Brookings, 2013, 31.

Across the country in the mining locales there has been a degree of effort by some mining companies to encourage the creation of women-owned businesses that can tap into the lucrative supply tenders that the companies float. One Tullow Oil representative said that despite the deliberate targeting of women owned businesses, there have been challenges in determining the real beneficial owners of these outfits. This is true especially for those women owned businesses that seem to have sufficient capital to take up medium sized tenders. The company therefore works with local people to be able to identify the real native women businesses.

In the ASM sector the creation of women owned/ran businesses is more challenging. The number of factors that women need to enter the ASM are many such as access to land and equipment. In the ASM there are no ready affirmative action initiatives that would ensure the women compete with the men favourably. It is for this reason that many women in Taita Taveta for instance resorted to coming together to form groups that would then engage in the sector. In this way they have been able to synergise on capital and skills. Despite this approach the women still wish for better support and facilitation by the government for effective participation in the gemstones value chain. As one woman put it below there are various factors that discourage women from creating EI focused enterprises; -

“Since my land does not have gemstone veins, I have to walk far to other people’s lands to try my luck there. I have to convince the land owner to give me the land for mining and I have to be able to raise the money the land owner asks. I also need to buy some few equipment and pay the young men who do the actual digging. In the end I may not find anything and I incur big losses. This sector is not for the fainthearted.” — Female miner from Kasigau

Local procurement for women-owned enterprises⁹

Oil, gas, and mining companies typically work closely with a range of subcontractors—from small local firms, to larger national or international partners. Many OGM companies already prioritize local contracting in their procurement plans and policies because they recognize the significant benefits that can come from working with local suppliers.¹⁰ Not only does it support local economic development; it also fosters local innovation, entrepreneurship, and competition.

⁹ Women-led or women-owned enterprises in this paper refers to those businesses that are majority owned and fully managed by women. They may have men employed for certain tasks but the benefits and financial accruals end up with the women within the business/group.

¹⁰ Jackie VanderBrug, “The Global Rise of Female Entrepreneurs,” Harvard Business Review, September 4, 2013, <https://hbr.org/2013/09/global-rise-of-female-entrepreneurs>.

While developing a local supply chain can often be limited by existing local capacity and can require a significant capacity-building investment on the part of firms, a diverse supply chain that includes women-owned businesses can help companies strengthen their supply chain, reduce procurement costs, and lower overall costs.

Representation of women-owned businesses in the OGM supply chain remains limited owing to several contributing factors. Most medium and large OGM companies in Kenya have indicated having trouble identifying women-owned businesses that are locally owned and that meet their procurement needs. This is common in the initial periods of the company operations before they can fully understand the local enterprise ecosystem. In addition, companies might not know how to go about incorporating women into supply chains in a meaningful and cost-effective way. On the supply side, one reason given by the Kenya Civil Society Platform on Oil and Gas for the lack of engagement with women-owned businesses in the OGM supply chain could be that local women-owned businesses are typically small and often concentrated in just a few non-oil related sectors.



Photo credit: SEGOM, World Bank

In many contexts, particularly where women have more limited access to finance, women-owned businesses struggle to meet procurement requirements for major companies. For example, smaller companies might struggle to provide all the services requested when the larger firm that is issuing bids bundles contracts together. Smaller companies also might not want to

accept a job when the contract terms involve delays between completion of work and time of payment. On top of this, local women-owned businesses often lack access to the same business and community networks that male-owned businesses do, meaning that they might not know about upcoming tender opportunities and they might have a harder time competing against more networked competitors.

Another problem faced by women entrepreneurs in the extractive Sector is meeting the demand required by the large OGM companies. In most cases these tend to be very small businesses that are unable to meet the demands from these companies. Procurement requirements by companies such as Base Titanium or Tullow Oil require that certain standards and goods specification be met in order for an enterprise (such as women-owned) to be able to supply goods and/ services. Both companies have however made some efforts in supporting the preparedness of the women-owned enterprises using affirmative action approaches although many women businesses spoken to believe a lot more needs to be done to bring the women enterprises to the level of men-owned enterprises. In the case of Tullow Oil, there was a time the company required transportation services from the local community, however, the Turkana community was unable to meet this demand, Tullow in collaboration with Toyota Kenya developed a vehicle ownership scheme where local contractors would be provided with Toyota double-cabin off-road pick-ups that would be used by Tullow Oil for transportation, the local contractors would then be paid by Tullow for the transportation services while at the same time Tullow Oil would deduct an agreed amount of money from their income towards the vehicle loan recovery. After three years, the vehicle becomes fully owned by the local contractor. A few women formed a group and benefited from this scheme. This is one of the innovative ways that companies can adopt such as to promote the capacity of the already poor and marginalized women in these mining locales.

According to Adam Smith International companies that want to build stronger connections with women-owned businesses and increase the number of women-owned contractors in their supply chain need do more than the current efforts. The Friends of Lake Turkana believes that OGM companies have the ability to easily support the development of local women-led businesses so they are procurement-ready for integration into the extractive sector supply chain. Tullow Oil claim that they have promoted the use of women-owned suppliers in their supply-chain, especially for women who are true residents and daughters of Turkana County.

BOX 2: Tullow Oil efforts on engendering its supply chain

Tullow Oil has faced many challenges regarding its operations ever since they set up several years ago. The company's procurement policy acknowledges that SMEs (especially the women-owned ones) face unique challenges in accessing supply chain opportunities, for instance, in situations where procurement requirements or procedures are highly complex, or where requirements and standards may exclude smaller providers. In this regard the company devised a policy that would help local Turkana people to access these opportunities.

Their local procurement policy aimed to minimize the barriers to participation by simplifying the procurement processes and also by clearly and transparently communicating the requirements and standards. Through this process, a good number of women-owned businesses have benefited on the company's supply chain. To achieve this the company had to initiate community and gender-biased preferential sourcing methods so as to accommodate the women enterprises in Turkana South and Turkana East. However, the level of participation of the women in terms of the nature of supplies is still very low as the women enterprises supply non-sophisticated and less lucrative supplies and services.

Such efforts by companies can also be complemented by other actors. A good example is the work that a national NGO called Invest in Africa (IIA) has done with local communities in Turkana, trying to promote the development of capacities of local SMEs so they can be procurement-ready for the oil sector. A women-only enterprise called Akiberan Aberu Suppliers and Contractors that is based in Lokichar is an illustration of how women can be supported to participate in the supply chain. In this case Invest in Africa committed to provide up to 70% of the supply cost (Local Purchase Order) for this women enterprise to supply Tullow Oil with vegetables, fruits and other farm produce. Therefore, the women group do not have to suffer the challenges of sourcing for capital to supply the oil company. This kind of innovative financing scheme can help a lot of women-owned enterprises as well as encourage the development of new ones.

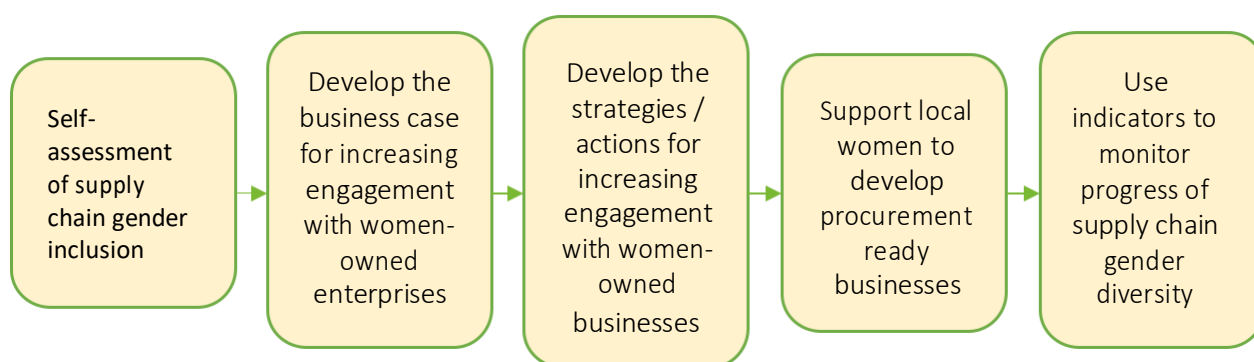
Studies have shown that companies that prioritize supplier diversity (such as including women-owned enterprises) have a 133 percent greater return on procurement investments, spend 20 percent less on buying operations, and have considerably smaller procurement teams than those with lower supplier diversity.¹¹ This may be a cue that some companies have taken on to some degree. According to Tullow Oil women-led businesses produce broad benefits: community stability, growth, and economic development. Importantly for the company, this yields positive

¹¹ IFC, "Women Entrepreneurs are Essential for Private Sector Development in Emerging Markets," Washington, DC: IFC, 2015, 1.

dividends for company-community relationships. Some companies however, do not see a business case for making the extra effort to reach out to women-owned businesses.

There has been broad acknowledgement by stakeholders in the extractives sector in Kenya that more needs to be done to bring more women to the mainstream supply chain of OGM companies. There are immense opportunities that women can tap into if they are able to be procurement-ready. According to Tullow Oil representatives the company has made efforts from the very beginning to try and incorporate the business interests of women that are deemed truly local. Below is an illustration of the steps the company state to have taken in promoting women-owned businesses in Turkana County, especially in the oil field areas.

Figure 3: Steps Tullow Oil have taken to mainstream gender in its value chain



Source: Author's own compilation

Challenges in Identifying and Supporting Women-Owned Businesses

Many companies have in place robust local procurement plans. They may go to great lengths to work with local women-owned businesses. Still, many companies face challenges finding and engaging with women-owned business. Some of these issues are detailed below. Identifying Women-Owned Businesses Many companies report difficulties in identifying compliance-ready local women-owned businesses. Even in situations where larger, less-local women-owned enterprises exist, it can still be challenging to find competent, locally owned women-led firms.

Research suggests that women-owned firms tend to be smaller and not as capital intensive. They also typically employ fewer people—all of which can make them harder to identify. The size differential compared to male-led firms is due to a variety of reasons, including different attitudes towards debt and risk, fewer business networks, and limited access to finance. Companies can improve outreach to local women-owned businesses by identifying the sectors in which women

are more likely to own and operate companies. For example, a Canadian mining sector needs assessment aimed at uncovering opportunities for women-owned business in indigenous communities found several product and service areas where small women-owned businesses already existed. The assessment identified potential opportunities to increase companies' engagement with women-owned businesses in the following sectors:

Women-Owned enterprises not numbering up

It is not peculiar that women-owned businesses are much fewer than those owned by men, and this applies to all other sectors apart from the extractive sector. It is true that women-owned businesses face many of the same challenges as those owned by the men. But there are added difficulties – both clear and subtle - where women still face barriers. For instance, due to household obligations women may not easily work beyond normal working hours. In Mwatate, the Taita Taveta Women Mining Group indicated that they have to leave the mines before 5pm so that they could rush home to attend to their children. Men on the other hand do not have to leave early and can often work late into the evening as much as they like. Some of the women claimed that they always have to seek the permission of their husbands before embarking on some of the activities in the mines.

There have been superstitions regarding the gemstones in Taita Taveta with some community members regarding the sector as evil and thus compelling the women not to get involved. However, this belief has been discounted over the year but there are those women in the County who would not touch the sector. It is one of the reasons that most of the women are mainly involved in service provision (including cooks, camp maintenance, hauling water et cetera). There are not many women at other more lucrative levels of the supply chain. For instance, at the Chawia CBO, only about 15 of 230 pit owners are women and only 60 of over 1,500 workers are women. At the trading level there are very few women involved and of these most come from outside the County.

Just like in most Kenyan communities, women in both Turkana and Taita Taveta are likely to have fewer financial resources than men and this is reflected by disparities in ownership of assets as described above. The average woman in Taita may actually invest in mining and even get a mining permit but she would also need to obtain access to the mine sites. A female miner in Mwatate said that in the past, efforts to obtain land access from private owners would sometimes be met with solicitation of sexual favours. This becomes a clear barrier to entry for many women who may not want to participate as a group.

Even where these domestic barriers do not apply, women often have a harder time accessing finance, which can limit entrepreneurship and business growth. Globally, 58 percent of women have

bank accounts, compared to 65 percent of men.⁷ They typically have lower levels of financial literacy. Women can be more debt-averse than men, which inhibits business start-ups.¹³ *(this is discussed in more in-depth in a later section)*. The Turkana Chief Officer Ministry of Trade, Gender and Youth Affairs stated that women are very willing to also participate in the oil sector but they face many subtle barriers. She gave an example of situations requiring social contacts and informal channels to access finance where women are at a disadvantage, because they lack as many networks as the men. In addition, women who live in certain places may be less mobile than men and may not have as much access to enabling tools such as technology. An IFC study found that women are 25 percent less likely than men to have access to the Internet or own a mobile phone, both of which can create barriers to entrepreneurship in an increasingly technology-dependent world.¹⁴

Another factor that is limiting the number of women-owned businesses is lack of business experience due to limited exposure. The Taita Taveta Women Mining Group said that their value addition produces quality gemstone pieces but compared to men, they do not have as much business experience or have the expertise to pursue the right marketing channels in optimal ways. This inexperience can compound their challenges in securing the much-needed investors.

There have also been cases of sexual abuse of women who are employed in the processing of mineral ore. Many women reported incidents where their employers would invade their personal privacy by frisking them in their private parts in search of stolen stones.¹⁵ It is these kinds of experiences that has scarred many women, making them seek alternative income generating activities such as small-scale trade and food vending. The perception of some women about mine sites is not so good therefore it becomes difficult for them to want to venture into building businesses to partake in the value chain benefits.

Defining value addition in the Kenyan mining context

The mining industry is not very different from the oil and gas industry in regards to value addition but there are a number of distinctions between the two that necessitate separate classifications. For instance, it is easy for common citizens to enter the downstream mining sector value addition but quite difficult to do the same in the oil and gas sector. The oil and gas sector are more sophisticated because of the technical and economic nature of the product. For this reason, it is very difficult to find small-scale players in the downstream oil and gas sector. However, this does not discount the potential for prospective enterprises from participating in the oil sector value

¹² World Bank, “The Global Findex Database 2014,” Washington, DC: World Bank, 2015, 15

¹³ Niethammer, Women, Entrepreneurship, and the Opportunity to Promote Development and Business, 31.

¹⁴ IFC, “Women Entrepreneurs are Essential for Private Sector Development in Emerging Markets,” Washington, DC: IFC, 2017, 1.

¹⁵ The Standard newspaper, 28 Aug 2016.

addition. Women enterprises find difficulties in organizing themselves and ready to add meaningful value to extracted products.

The only area where women-owned businesses have made significant developments is in Taita Taveta. Over the last 15 years several women groups have been formed in the County with the aim of synergizing their time, skill and financial efforts. They came together mainly to try and overcome challenges in the sector that prevented women from equally participating in the value chain.

At the moment only a small amount of the gemstones mined are locally cut and then exported. The cutting industry in Kenya is small and cutting skills have been low for a long period of time. Official Ministry of Mining records show that cut gemstones represent 66% of the official exports (for a value of KES 3.1 million in 2015). However, this percentage does not reflect the reality of the exports because the majority of the gemstones are believed to be exported in rough. There is also a lot of smuggling across the border to Tanzania because of the more advanced cutting centers in the neighboring country such as in Arusha. When minerals are smuggled in this nature the upstream producers and processors such as the women miners do not get due value for the effort put in the production.

In a bid to develop value addition practice the government of Kenya set up a state-of-the-art Gemstone Cutting and Value Addition Centre in Voi Town that will increase the value of minerals produced in the country and sold in other markets. It will be a collection center for precious stones mined by small-scale miners in the coastal region, who have in the past got a raw deal from middlemen who buy the uncut stones for a song and sell them for a fortune in the international market. The hope is that lack of formal cutting centers has exposed miners and dealers to unscrupulous brokers, who take advantage of their innocence and desperation, since they do not have access to ready markets for the products. There is a lot of value that is added to a well cut and polished stone and this is the value that the operating women lose since they lack the special skills for adding value to the rough gemstones.

Indeed, virtually all women groups and even individual miners in Taita Taveta try to do some form of value addition. This is mainly through basic cutting and making of jewelry. They contract the services of gemstone cutters to cut and polish the stones before they personally make jewellery and other forms of ornaments. The quality of cutting and polishing in the country is still inferior to those done in established gem markets such as East Asia where cut stones attract lucrative prices in western markets.

Market reach for women-led enterprises

It is one thing for women to be involved in the initial stages of the value chain: exploration, extraction and processing, while it is another thing for them to be able to get the products to the market. As an important end result of mining activity, access to the right market is a crucial

determinant of business survival and success. Women are more disadvantaged in the marketing bit of gemstones, as it is often difficult for them to travel distances due to limited time (they have additional domestic responsibilities), resources and information. Information on markets and prices is one of the critical bottlenecks for ASM women. The ASM sector does not typically have formal marketing and selling infrastructure but it contains a composite of players most of whom operate through informal buying arrangements. The buyers of the Taita Taveta gemstones and ores are usually not easily recognizable as they often operate using pseudonyms and there are varying reasons for this.

Most of the gemstones produced in Taita Taveta are sold to local traders by the miners and mining groups (such as the Taita Taveta Women Mining Group). The gems are usually sold to local traders who later resell to exporters in Nairobi, Mombasa or Arusha. Down the market chain some of the gemstones are directly sold in Asia or Europe. Tsavorite, which is the County's flagship gemstone is usually sold to traders that have links with Sri Lankan buyers whose representatives are located in Voi. Most of the other gemstones are sold to Indian-affiliated buyers in Voi who export them to unknown destinations. In addition to the Voi, Nairobi and International markets there are those traders who buy gemstones directly from miners near the mine sites.

All gemstones traders are statutorily expected to be registered and to obtain a trading licence from the Ministry. A license for Kenyans costs twenty thousand shillings (KES 20,000) per year while those traders that export directly pay three hundred and fifty thousand (KES 350,000) per year. It is therefore difficult for the often low-income Taita women to become direct exporters of the minerals because the licence fee alone is a clear barrier to entry.

Unlike the gold market which has clear international price benchmarks the gemstones market is basically an over-the-counter market where prices are not fixed. Furthermore, as the women who have produced the gemstones proceed with the selling of their gemstones, they lack effective valuation of the rough gemstone. This results in traders having more commercial power, especially in an informal market like Taita Taveta where transactions take place in secret.

Since much of the artisanal mining in the County has been operating informally with no legal recognition, there were no clear obligations for all the parties in the transactions to pay due taxes. Buyers therefore, are averse to being systematically identified as the 'middlemen' or intermediaries which has over time assumed an unflattering reputation. The Chawia CBO woman representative said that one of the reasons they joined the CBO is because they were being swindled on prices by the many buying agents. The CBO was providing them with closer market access as opposed to individualistic approaches. According to the UNDP Kenya country office, formalization of the ASM sector under the new Mining Act 2016 changed the dynamics of the ASM sector because now all players and transactions within the value chain are supposed to be transparent for ease of governmental administration. It still remains to be seen to what extent the new law will demystify the buying and selling of ASM end products.

Domestic responsibilities also affect women by limiting the amount of time and effort they can spend in mining sites, thus missing any financial, networking and mining knowledge gains. Therefore, time and mobility are taken away from women, preventing them from making any meaningful progress in financial gains or entrepreneurial aspirations.⁸ For example, the time and resources required to obtain mining permits from the government offices in Wundanyi, far from home are beyond many entrepreneurial women burdened with domestic work. This unrecognized, unequal and highly burdensome work makes it difficult for women to advance past subsistence activities, as they lack the time and mobility to take part in dialogue, training and to undertake even small administrative tasks that would help recognition of their activities.



Photo credit: SEGOM, World Bank

The Taita Taveta Artisanal Mining Association – a lobby group for all artisanal miners in the county – initiated a partnership with the Africa Social Financing Centre, a marketing and finance agency, to source markets for their minerals. The initiative has not been explicit about the specific support that women will receive but it sets precedents on partnerships that scale the capacity of women-owned enterprises in the EI sector value chain. This is an example of various initiatives that may be needed to respond to the marketing needs of women-owned enterprises.

¹⁶Abena D. Oduro & Irene van Staveren, 2015

Skills, tools and technological gaps

Women often lack knowledge and skills in mining practice, and thus do not benefit fully from the potential of the extractive sector. Enabling better access to mining equipment and technology could play a significant role in promoting efficient production and greater return, while drastically improving health and safety conditions of ASM operators. Like access to finance, promoting a more equitable and gender-sensitive provision of equipment is necessary.

Across all the small sized mining locales in Kenya one can see miners going about their operations with little or no safety equipment such as helmets, gloves and boots. This is especially the case in the gemstones mining sites in Taita Taveta where scores of young men can be seen digging away on the hard rocks with all manner of hand tools, wearing simple shoes and clothes. This also applies to the few women who would be found helping the young men to haul the mineral ore out of the pits on to the ground surface.

In general, there is a very huge gap in terms of skills for most of the women miners operating in ASM sites in places such as Kitui, Taita Taveta, Baringo, West Pokot, Narok, Kakamega, Migori, Kisii and Turkana. Their male counterparts are better skilled and have better access to information due to their ease of movement. There haven't been sufficient efforts by the relevant actors to support these miners however, this could be partly attributed to the fact that in the past ASM was regarded as illegal. Now that the new mining dispensation recognizes the sector it would be important for player such as the civil society to champion the needs of the sector.

As seen in Tanzania and other countries, governments partner with development organizations like the World Bank and the private sector (including largescale mining companies) to provide equipment. The UN Women contends that most women, unfortunately, miss out either because of a lack of information or gender discrimination. Thus, it is important that networks are established around female miners, and practical ways of disseminating information are identified to enhance women's access to those uncommon schemes. This should build on existing networks, such as the female miners' mining groups in Taita Taveta.

The County government of Taita Taveta has initiated capacity building activities targeting both male and female miners in various locales. Many of the miners have benefitted from basic gemology training so as to be able to easily identify the characteristics of the stones that they mine, process and sell. The Ministry of Mining at the County level plans to continue with these training exercises and it also plans to even encourage those who are not miners to receive this training as a way of encouraging more women to join the sector.

Targeted literacy campaigns for women in ASM. Supported by regulations amending legal provisions to promote women's rights for active and equal participation, literacy campaigns targeting women in mining communities can play a significant role in addressing the various gendered challenges mentioned above. Literacy campaigns may take different forms including technical, administrative and management training; basic literacy courses; and various

inductions on government laws, communications and networking, seeking and accessing information, and procedures such as license application.

Education and skills training initiatives for women are recognized as one of the key enablers of women's economic empowerment. An in-depth knowledge broadens women's horizon, building their confidence and capacity to freely make their mining claim, share ideas and perspectives, and stand for their own rights. Most women in ASM are illiterate (or have little literacy) and are hence prone to exploitation and discrimination.⁹

Technology and use of modern communication platforms are also a ready resource that local village women have difficulties accessing because of illiteracy as well as lack of the right infrastructure. The male counterparts are usually more resourced and can for instance own smartphones through which they can access useful platforms like oil company tenders or marketing avenues for gemstones. Some of the women who were interviewed indicated that their husbands owned smartphones while the women only owned simple digital phones. Women who live in certain places may be less mobile than men and may not have as much access to technology. According to IFC research, women are 25 percent less likely than men to have access to the Internet or own a mobile phone, both of which can create barriers to entrepreneurship in a technology-dependent world.

Taita Taveta University has attempted to bridge the existing knowledge gap by offering the mining related courses (Bachelor of Science mining engineering & Bachelor of Science -mineral processing) but these do not seem to target the local women who may require tailored short courses that are affordable. Technical skills such as how to use geological data and gemology are pertinent in the success of the women miners.

Technical skills are insufficient if they are not complemented by business management skills, a skill set that in many cases (not just for women) determines the sustainability of mining businesses. Officials of the Friends of Lake Turkana pointed out the training needs for women in finance and business management, accounting and bookkeeping saying that it's in this aspect where women-led businesses fail. This problem is also encountered by women groups in Taita Taveta where some members have questioned their leaders of accounting and reporting discrepancies. It is therefore pertinent to provide regular business and finance management and this would even help in building creditworthiness for loans.

Access to finance: challenges and opportunities

⁹ Hunt & Samman, 2016

Just like the male-owned mining enterprises the women miners also face access to finance challenges and this is attributed to a number of reasons. The County is one of those that has low literacy levels especially in the rural areas where most mining takes place. The literacy levels for women are even lower than the men. Most of the miners lack the knowledge required to prepare documents such as business plans which are a requirement by investors or financing institutions. Financing institutions would usually require a feasibility study report, mining license, a repayment plan statement and a proof of a market for the product to be produced. The business plan for example has to reflect the quantity and quality of mineral reserve in question and involves other technicalities of costing and analysis in order to achieve breakeven point. To be able to prepare the aforementioned one needs to have the right skills which are generally lacking.

It is easier for the women-owned enterprises in Turkana who aim to supply goods and services to Tullow Oil and its sub-contractors. This is because financing institutions are accommodative of local purchase orders issued by the oil company as there are guarantees that the enterprise is able to repay the credit. This illustrates some of the differences between women participation between the oil sector and the mining sector. The ASM sector is quite unique due to its largely informal characteristics and this does not sit well with most potential financiers. There are savings and credit cooperatives (SACCOs) that are willing to provide finances at the County level for miners however, the main challenge these SACCOs experience with the miners is the inability to provide guarantees for the loans advanced.

The most common reasons that microfinance institutions (that were interviewed) deny credit lines to the miners, are related to the difficulty of carrying out due diligence processes that allow them to perform an accurate risk assessment. Thus, it all comes down to a cost/benefit analysis of the commercial relationship with the mining sector: how attractive the mining sector is versus the risk it represents. It is important to keep in mind that officials of these financial institutions are not experts in mining issues and receive information about the sector from what they see in the media and hearsay. This creates prejudices in bank officials that are later deepened by:

- Difficulties in understanding the information that the miners provide;
- Lack of access to reliable and updated information necessary to verify and expand the information provided by the miner;
- Weaknesses in the financial management of the mining micro-enterprises.

The Adam Smith International explains that the controls and mechanisms used to assess the sector's risks raise the costs and level of effort put into linking and managing a mining client. ASI further states that an attractive client for a financing institution is a client with good income, with healthy administration and good liquidity or possession of capital and investment assets that can guarantee good financial management. Normally, the capital goods of miners, such as machinery,

equipment, mining rights or reserves, do not constitute attractive guarantees for the bank due to the complexity of their management and responsibilities.

Based on the aforementioned, financial institutions have adopted sharp policies that exclude any stakeholders related to the mining and marketing of gold, to severely demanding and exhausting practices for those who approach making a request. One woman in Mkuku are of Taita Taveta pointed out that even when a miner manages to present all of the requested documentation the bank is likely to present other barriers such as approval delays and request for additional information. While this is happening, several months may pass before the miner knows if the requested service will be performed, causing serious inconveniences such as difficulties in payroll payment and delays in their financial commitments.

This study interviewed a few microfinance institutions regarding their engagement with the extractive sector: -

Faulu Microfinance Bank

Faulu is a deposit taking Microfinance Company registered under Micro Finance Act and regulated by the Central Bank of Kenya. From a loan scheme in 1991, it currently has over 90 services outlets and 27 banking branches. Faulu's mission is to empower Kenyans by providing the relevant financial solutions. Among other products, Faulu provides micro finance loans, asset financing, overdraft facilities, insurance premium finance, bids, and bonds guarantees to SMEs. Faulu acknowledges that many financing institutions have overlooked the extractive sector mainly because the industry has not been demystified is still not well understood. The bank branch also stated that not many women SMEs in the mining supply chain have sought financing from the bank. A bank official also added that microfinance institutions such as Faulu prefer working with established businesses therefore it becomes difficult for new entrants, especially women-owned ones to access the much-needed capital to meaningfully participate in the OGM value chain.

Kenya Women Microfinance Bank (KWFT)

KWFT provides financial services to women with the objective of creating wealth in order to improve livelihoods for women. It currently has over 180 branches countrywide, offering business and agricultural loans in order to empower Kenyans' economic status and lower the rural –urban migration. This endeavor largely arose from the fact that women have remained marginalized when accessing financing. This is due to the fact that most women did not have collateral to provide as security. The bank stated that it targets all sectors including the extractive sector and that the reason for the low capital uptake is because many women entrepreneurs in the industry are not fully aware of the financial products the bank offers. This position is however refuted by some women leaders in Taita Taveta who claimed that banks treat women miners with an arm's length because of the perceived risk of non-payment. The

bank indicated that more needed to be done in creating the awareness among mining communities on the opportunities that the bank could offer them. This partly illustrates the enclave nature of the extractive sector and poor communication flow between potential lenders and women mining groups.

Rafiki Microfinance Bank.

Rafiki microfinance trust was established in 2011 and it focuses on youth entrepreneurs by assisting them in starting or expanding their businesses. They provide trade financing such as letters of credit, LPO financing, trade finance guarantees, and invoice discounting. Rafiki does not offer any credit facilities for the SMEs in the extractive sector and it attributes this to lack of engagement by women-owned enterprises in the OGM sector with their bank.

SMEP Microfinance Bank

Small and Micro Enterprise program (SMEP) is a microfinance institution that provides simple financial solutions that transforms the livelihoods of the poor. SMEP provides loans to micro and small enterprises where the collateral is the group. The Microfinance bank also provides loans to SMEs and offers training to lendeers on financial management. The bank confirmed that it has not delved into financing enterprises in the extractive sector, let alone women-owned ones. Despite the bank's presence in the most remote towns of the country there has not been any interface between the bank and the extractive sector in Taita Taveta and Turkana. The officials however, did not rule out the possibility of engaging with the women-groups if they are well organized with proper structures (however simple).

Some of the local enterprises that were interviewed claimed that most of the microfinance institutions require some form of guarantee from clients before giving credit. While this is a common practice by banks when offering credit, the challenge has been to find a way of guaranteeing these enterprises. In Taita Taveta the County government has considered potentially guaranteeing artisanal and small-scale miners in the county so they can take loans to help them advance their entrepreneurship in gemstone mining. This would greatly uplift the women-owned business in the value chain who are struggling to raise resources for business operations and growth.

In other quarters, conversations have begun aimed at the creation of internal microfinance institutions. For instance, different mining groups and saccoes have the potential to come together and create their own bank that would be able to finance its wide membership. The bank would be tailored to the aspirations of the membership. This is a proposal that has been fronted by the women miners and gemstones traders.

Access to land

Land in Taita Taveta is predominantly owned by the men and women are often denied control and access due to the oppressive patriarchal cultural practices. Consequently, the women miss out on opportunities to empower themselves economically empowered as they lack the means of production. Even where households have access to family land the women would need permission from their husbands to utilize the land. According to the Mining Act, one cannot obtain a mining permit unless without presenting a valid land lease on the area under interest. In Taita Taveta, most of the mining occurs in ranches that are owned by cooperatives or wealthy individuals. According to the women who were interviewed the leases are usually expensive and barely affordable for female prospectors. Because of these circumstances most of the women fail to kickstart their entrepreneurial journey in mining. In some instances, this forces some of the women to work as *zururas* in prospecting and mining, adding to the increasing economic challenges women face when attempting to generate wealth from the sector.

Most of the mining sites in Taita Taveta are located in the wilderness within ranches and national parks, which are often inaccessible by good roads except by feeder pathways. Women find it difficult to walk long distances in the wilderness to get to the mines because it exposes them to the dangers of wild animal attacks. In this regard, women are generally at a disadvantage compared to the men because of this power imbalance over land access, ownership and control.

Role of Taita Taveta County govt in promoting women in ASM

The County government of Taita Taveta has the mandate of managing certain aspects of the mining sector within its boundaries. The County audits zones of economic mineral potential, surveys for quality and quantification, issues consent for mining and regulates conduct of mining activities in regard to land use and environmental management. For several years the County has also tried to streamline modes of buy-sell activities and explored creation of zones for value addition like cutting, heating & acid-etching.

One of the biggest challenges has been to support the miners in terms of equipment. At one time the County purchased excavating generators to be leased out to various mining groups, especially for women groups but the scheme did not sustain for long. There have been plans to obtain other equipment such as shovels, excavators, bulldozers and tippers. According to the County Lands, Mining, Environment and Natural Ministry more than 300 miners have been trained in mining and marketing. In the first Taita Taveta County government several gemologists were trained and dispatched to different mining sites to offer technical support. The gemologists have been helping miners in identifying and evaluating gemstones.

Optimizing gender opportunities within minerals supply chains

It has not been easy to advance women's rights across mineral supply chains in the country. There have been proposals that simply targeting women with training at key points in the supply chain can enrich a range of inequalities, as can distributing a proportion of mineral royalties and taxes to respond to women's priorities.

The table below shows a list of the efforts different actors are making to advance women's participation in the extractive sector value chain: -

Organisation	Interventions
Kenya Chamber of Mines	Kenya Chamber of Mines (KCM) is a mining industry lobby association that champions for the interests of mining companies in the country. The Chamber also addresses ASM issues with an aim promote its formalization and development. The Chamber has taken steps seeking to build an environmentally sound, socially responsible, and formalised artisanal and small-scale mining sector in different parts of the country. This is possible through provision of technical and strategic support, as well as education and capacity building. One of the areas KCM indicates to put emphasis on is on gender mainstreaming. In this regard the chamber has in the past conducted gender-mapping studies in order to execute gender-responsive interventions. Although there is not much on the ground in the two counties in terms of documented success stories the chamber pointed out that over the years, they have been able to improve the social, economic and environmental conditions of mining communities, and especially the women who were hitherto completely marginalized.
Pact International	Specializing in areas including health and safety in mining, human rights, traceability and transparency, economic empowerment among miners, mercury abatement, child labor reduction, mineral certification and ethical sourcing, Pact helps communities gain lasting benefit from natural resources by using them more sustainably. Pact Kenya provides strategic advice, technical support, training and research to stakeholders in the mining sector (specifically, the ASM) seeking to strengthen natural resource management for the benefit of the citizens. It focuses on several areas to achieve its aims: Improving community livelihoods, improving resource governance and transforming artisanal and small-scale mining. Gender equality is one of its cross-cutting themes and this are emphasized in its outreach programmes where women are encouraged to tap into the immense opportunities that the sector provides.

AWEIK	AWEIK aims to improve the social and economic conditions for women that are engaged in the oil, gas and mining sector. This ranges from decision making at the boardrooms at the national level to the grassroots level where one would find illiterate women being sensitized on saving schemes. The focus thereby is on promoting the place of women in the male-dominated extractive industries. AWEIK also supports miners and their communities in improving their mining practices and extends to championing for more women at that level to participate in running mining related businesses. Moreover, and very important is the work the association does in movements building; encouraging women to form organized groups so as to synergise resources for better participation in the extractives sector.
GROOTS	GROOTS is a national movement of grassroots women-led community-based groups (CBOs) and Self-Help Groups (SHGs) in Kenya. The movement aims to facilitate grassroots women effective engagement in development through movement building, leadership and advocacy, while increasing their ability to engage in economic activities. It has engaged stakeholders to dispel misconceptions that contribute to gender inequality around mining locales. The movement helps to create an enabling environment for women to engage in economic activities, both within the mining sector and beyond, by changing gender norms and attitudes to women's rights and gender equality. The organization also helps rural women to access markets
Friends of Lake Turkana (FoLT)	FoLT works to foster social, economic and environmental justice in the Turkana Basin through promotion of sustainable management of resources and protection of the natural environment with stakeholder participation. The local organization promotes equality and social improvement for Inuit Turkana women, raise awareness of their needs, and encourage their full participation in the oil company's supply chain. It has a working collaboration with various women groups across Turkana County and its coordinator, Ikal Angelei is an influential community mobiliser with over ten years of engagement with the Turkana communities.
Lokwamusing Women Group (Turkana)	This is a network of local women in Lokwamusing, Turkana that promotes women's empowerment and protection of their rights, whilst seeking to challenge patriarchal power arrangements. The organisation has three areas of focus: social and economic empowerment, women rights and community welfare. This group has been able to engage many other women in the larger Lokwamusing area and advocates for more

	opportunities from the oil company for women. The women have also petitioned the county government to provide the local women with the necessary skills that will enable them participate in the oil company operations value chain.
Taita Taveta Women Mining Group	This is a group of women from across Taita Taveta County striving for profitable mining that contributes to development. The lack of enough women in the gemstones mining sector was the impetus behind setting up the group. The network's focus areas include: taking into account women's needs and experiences with regards to how the mining sector is managed; protecting the environment; supporting the creation of revenue generating activities for women in mining communities; and protecting women's rights in mining communities (including right to health, to education, to compensation). The coalition only formed in March 2018 but has so far installed focal points in twelve mining communes and led workshops there to sensitise women about their rights.
ActionAid	ActionAid is explicit about the need to adopt a feminist lens in its work to ensure that women living in poverty and exclusion are given due focus. They are running a 2017 – 2019 project to build the capacity of women leaders in mining-affected communities in Kenya. The women leaders will be supported in how to engage and influence mining companies and government officials on policies and laws that will protect the communities' social and economic rights.
Invest in Africa (IIA)	Invest in Africa works on three main areas: - 1. Connecting multinationals and larger businesses to credible local suppliers (SMEs); 2. Improving these SMEs access to skills, contracts and finance to build long term capacity; and 3. Helping to improve the investment climate and quality of policy discussions in the country. Having been formed as a private sector initiative IIA has partnered initiated a credit guarantee scheme in Turkana, aiming to help SMEs improve their credit, making it easier for them to access finance without having to give collateral. This is then followed by training on business management and linkage with the oil company's procurement opportunities. IIA has particularly worked with a good number of women groups in Turkana and their model of working with SMEs has been recognised nationally because of the depth of support that helps especially women to take part in the oil and gas supply chain.
Base Titanium Mining Company (Kwale)	It is the biggest mining company in Kenya and is located in Kwale County. The company partnered with Invest in Africa (an

	organisation that connects multinationals to Small and Medium Enterprises) such that the miner could increase tender opportunities for suppliers in Kwale County. The partnership is expected to create space for credible Kwale base firms get a substantial share of the company's supply tenders. The partnership also indicated that local women would be encouraged and assisted to participate in the supply chain of the mining company.
Tullow Oil	Tullow Oil is the major upstream oil company in Kenya and the only one to have discovered recoverable oil deposits in the country. The company's procurement budget is quite big and therefore, local firms have great opportunities to participate in the supply chain. Tullow recognises that the success of their business should bring long-term social and economic benefits to the communities where they operate. Therefore, the company has been exercising fit for purpose local content procurement practices which enable local companies (especially those from Turkana) to participate in their supply chain. Additionally, the procurement practice ensures there is a level playing field and development of women to equitably participate in the value chain. The company has also developed partnerships with other institutions such as Invest in Africa and Lundin Foundation to develop the capacities of women-led SMEs in the County.

Potential opportunities to leverage on

SheTrades: Bringing Together Supply and Demand

SheTrades is an initiative of the International Trade Center that brings together female entrepreneurs and suppliers, with the aim of connecting one million women entrepreneurs with markets by 2020. It was created in response to concerns raised by corporations that they were having a hard time identifying suitable suppliers—and that this was getting in the way of increasing gender diversity in their supply chains. Through the use of the SheTrades app, female entrepreneurs can connect with others, expand their networks, and internationalize their businesses, giving them increased visibility. The app itself is the result of a global tech challenge, sponsored by SheTrades in partnership with Google and Brazilian tech firm CI&T. Greenbell

Communications, a woman-owned Kenyan technology firm won the competition and created the SheTrades platform. (more information on www.shetrades.com)

WEConnect: Global Network for Women-Owned Businesses

WEConnect International is a global network that connects women-owned businesses with supplier opportunities. Through the network, businesses that are majority-owned (minimum 51 percent), or managed and controlled by women are identified, trained, registered, and certified. The platform targets women-led businesses outside the U.S. It connects these businesses with corporate buyers, including major multinational corporations. Corporations can register on the WEConnect website to become corporate members and women-owned businesses can sign up to become certified suppliers. For more information: weconnectinternational.org

IFC's Banking on Women program

Through this program, IFC works to increase access to finance for women entrepreneurs. IFC uses its capital investment to help financial institutions support women entrepreneurs, works with non-traditional financial access mechanisms, supports women's engagement in value chains, and provides training and advisory services to support women-owned businesses. Banking on Women has \$2.5 billion committed to women-owned small and medium enterprises (SMEs), through financial intermediaries.

The World Bank

The World Bank has been a keen promoter in supporting women entrepreneurs to acquire skills and knowledge needed to operate and grow small business within the extractive sector.

UN Women

The other output was the development of a toolkit, *Extracting Equality*, which examines how to incorporate gender at each step of the extractive value chain. Since then, UN Women offices have continued to work on gender and extractives issues, with a strong focus on how to economically empower women through mining and increase their participation in the workforce. Organising a "Regional Sharefair" on gender equality in the extractive industries, (in Kenya,

2015), to generate discussion on how to promote women's inclusion in the extractive industries, mitigate the negative effects of extraction on communities and improve women's economic opportunities. Importantly the UN Women has been keen to equip women with the skills and knowledge they need to operate and grow small business targeted at the mining sector.

Hewlett Foundation

The Foundation's global population and development programme focusses on improving women's economic and reproductive choices, increasing citizen participation, and improving policy making through evidence. As part of this programme, Hewlett Foundation has supported projects focused on natural resource governance and on women's rights, improving women's participation in transparency and accountability initiatives. women's economic empowerment in Sub-Saharan Africa, which included a focus on the artisanal mining sector Being one of the funders of the Growth and Economic Opportunities for Women (GrOW) initiative under which projects related to women artisanal miners have been funded.

Box 3: Case Study of a Women Mining Cooperative - ASSOCIATION OF ZAMBIAN WOMEN IN MINING (AZWIM)

Zambia is well known for its long history of mining (small and large-scale) conducted by both the state (mainly copper) and by private entities. Women are mainly involved in the artisanal mining of industrial minerals and gemstones. In the early 1980s Kaingu Namaku, a gemstone miner, founded the Association of Zambian Women in Mining (AZWIM) and recruited many other women miners to join the group. She was the first African woman in Koffi Annan's UN Global Compact Advisory Council in 2001 to advise on small-scale mining. Amongst many other responsibilities she continues to advocate for the rights and space for women in mining and lobbies the Zambian government for funds for women to buy equipment.

In 2011 AZWIM successfully managed to secure an international contract that enables emerald women miners to supply 135 kg of emeralds to a Canadian company and similar deals in Asia.¹⁸ AZWIM has also enabled women to add value to their mining activity through beneficiation, the processing of rough stones and making of jewelry and entrepreneurship. The cooperative even initiated what is called mining-related tourism, where guided tours are offered to an aquamarine mine. Their work even attracted the attention of UN Women who called on AZWIM to assist in the development of an investment and trading platform for women in mining. This platform has been resourceful as it provides a number of opportunities; services such as valuation of minerals, information, marketing opportunities, business-to-business linkages.¹⁹

¹⁸ Mining Review, 2011.

¹⁹ UN Women, 2014

Conclusion

There are plenty of opportunities in the oil, gas and mining companies value/supply chain for communities living near the mining locales. These opportunities span both the large-scale mining operations as well as ASM. Increasingly, the participation of women across the extractives value chain is being appreciated by stakeholders and the women themselves. Despite the prevailing patriarchal norms, the role of women in the extractives sector is being given increased support but a lot more needs to be done so as to level up the benefits that accrue from the sector. Most of the local women that were interviewed in both Turkana and Taita Taveta have their respective set of ways they could participate in the value chain and have manifested as different challenges as much. Women in both counties find the sector lucrative enough for them to want to be strong players in the value chain.

The existing women-owned enterprises in Turkana who have set themselves up to participate in the Tullow Oil operations value chain lack sufficient requisite skills and knowledge to be procurement-ready for the oil company goods and service demands. Artisanal mining has transformed the lives of some of the women despite the many challenges. In some few cases some of the women-owned enterprises have managed to overcome some of these barriers to earn an economic livelihood from it the oil and gas value chain. In fact, various sources indicated that women earn two to three times more from mining activities than from other income generating activities which shows the potential of mining to women's livelihoods. Therefore, despite the politics infused with patriarchy that creates real barriers for the women they are still able to gain some good benefits from the sector.

The women in the ASM mining sites identified several challenges that prevent them from effectively benefiting from the value chain of the tools/equipment as the key aspect they would like to change about their work at the mining sites, to help them become more efficient and to yield more gemstones. Most of the women also have high expectations that the government (both at national and county government) could support them in the provision of some of the basic health and safety equipment yet the governmental bodies are not able to provide sufficient support due to limited funds.

In terms of access to finance a number of circumstances often prevent women from accessing credit that would allow for more operating capital and increased mineral yield. In both the oil and the ASM sectors women cannot readily access credit because of the aversion by microfinance institutions of the extractive industry. The women cannot meet the requirement threshold to qualify for the much-needed financing. The finance sector's worry has its legitimacy, since the sector is truly a complex and high-risk. However, the tendency to deny miners' access to financial services in an almost generalized manner constitutes an unconstitutional practice

undermining the development of the sector. This calls for more innovative approaches to solving this challenge because in any case – relative to men- women have been known to be less-riskier in terms of loan repayments.

The existing marketing avenues are quite limiting for the women to sell their produce as the return on investment is quite low. Women have a lower access to the lucrative across-the border (beyond local area) markets which usually provide better returns for mined material. This is particularly relevant to the women in ASM mine sites of Taita Taveta. The women have expectations that the government can facilitate easy market access that is devoid of the numerous exploitative middle men. Indeed, the government has taken steps to construct a modern gemstone buying and cutting centre in Taita Taveta to begin to increase the value that miners can derive from the trade.

Already, there are existing efforts and developments that will go a long way in facilitating women's participation in the extractives value chain. For instance, the new sectoral laws for petroleum and mining have progressive provisions that if well implemented will provide women enterprises with more space and opportunities in the sector. Targeted instruments such as the local content policy which is still in draft form suggests innovative approaches to help women-led enterprises to participate in the extractive sector on a somewhat equal footing as the men.

Policy and practice recommendations

Government (National and County)

- The Ministry of Mining could form activities (the revolve around the enacted laws and regulations) that will enhance the continuing provision of technical skills training as well as financial inclusion for women in mining.
- Form partnerships with the private sector (through the Kenya Chamber of Mines) so as to encourage these companies to develop community engagement frameworks and enterprises development that would target local women.
- Ensure meaningful participation and representation by women in any consultation on mining sector policy reform.
- Develop or scale up marketing channels for the miners such that the women enterprises get good returns by selling their gemstones at competitive market rates.
- Deliberately promote and develop policies that support women's participation in decision-making within mining governance structures, and support the creation of associations/saccos for women in the sector.

- Support women-owned businesses in the sector to do proper administrative documentation of their businesses and help them articulate the contents and data they consistently generate and interact with. This is possible because the government has employed experts in the extractive sector value chain.
- Ensure there are effective ways for women to communicate their concerns to the government such as gender-specific grievance mechanisms, as well as health and security concerns.
- Government could introduce subsidy or a revolving fund (that is issued equitably) that would provide credit to potential women investors. Additionally, the government can commit to provide credit guarantees to microfinance institutions that lend to the women miners and suppliers. Public–private sector partnerships need to be forged that initiate—and facilitate—awareness raising on ASM business risks and opportunities, and that support women in ASM through such things as collateral guarantees. Through such partnerships, specific financial products can be designed that are accessible to women in the sector while providing risk assurance to lenders.
- The Micro and Small Enterprise Authority of Kenya (MSEA) together with other relevant institutions can create a value addition incubation centre in places such as Taita Taveta so that the women-led enterprises (with others) can increase the value of the raw minerals mined. This could be done jointly with multilateral or bilateral partners that have a focus on Micro-enterprise development.

Civil society

- Lobby the government and development partners to allocate resources towards the development and nurturing of women enterprises in mining value chain
- Promote policies that support women’s participation in decision-making roles within extractive industry governance structures (especially at the local level) and support the creation of associations for women in the sector.
- Reduce the barriers for women posed by illiteracy and lower rate of education, by offering technical support services such as basic accounting and book-keeping, customer relations and documentation.
- Provide technical capacity and support for government agencies to conduct gendered assessments ahead of sectoral policy reforms and before implementation of programs targeting mining communities.
- Promote spaces for the sensitization of the financial sector with respect to the mining sector so that the lending institutions could have a better understanding of the sector.

- Organise workshops with other organisations to train local communities' women on starting businesses and participating in the value chain (supply tenders) as this will help cultivate more women-owned businesses

Women mining groups

- Identify a few rural microfinance institutions and engage them as a group to advocate for credit services tailored for the ASM sector and especially for women. If well engaged, these banking institutions can design useful and affordable financial products that meet the needs of the miners in terms of transactions, payments, savings, credit and insurance.
- Strengthen the institutional capacity of the women cooperative mining groups and reach out to government agencies and civil society organizations that could support capacity building and facilitation to access capital.
- Local women need to develop agency and self-belief that they can be mining engineers, geologists and leaders who can steer their own enterprises to great heights. To achieve this the women will need to be open to receive many forms of capacity building and awareness. Basic education (literacy campaigns) should be developed for women in mining communities, with provision of access to information using innovative platforms

OGM companies

- Companies are able to identify and to support the development of women-led enterprises. These companies could develop workable gender-inclusive procurement policies that will improve identification of and contracting of women-led businesses that derive from the local level.
- OGM companies can ensure the advertisement of tenders is effectively circulated so as to reach all the women within the community. They should avoid communication channels that may disadvantage smaller, inexperienced businesses, or those without access to more established business networks.
- The companies - in the spirit of community development – should review their procurement criteria so as to accommodate small women-led businesses that are not able to meet the set standards. Requirements such as duration of company's existence, income history should be relaxed a bit so as to provide opportunities for small businesses to grow.

Development partners

- Development partners can engage local actors so as to support the creation of mentorship and development programs to help women-owned enterprises scale up to meet OGM corporate procurement requirements. For women in ASM such a program could enhance their capacity of the production, processing and sale of minerals.

Industry Associations (Kenya Chamber of Mines and Kenya Oil and Gas Association)

- Working with all the other actors above, these two industry associations are pivotal in advancing the interests of communities because without the goodwill of the latter the companies may not operate smoothly. These associations could rally their members to adopt gender-sensitive procurement approaches as well as sharing marketing channels for minerals produced by artisanal miners.

All actors

The IFC's Banking on Women Program is a progressive model that can be emulated at a reasonable scale in Kenya's extractive sector to support women in the sector. The IFC's program provides financing and expertise to an extensive network of financial institutions to help them enlist women-owned SMEs and retail customers and to profitably finance them. Many studies, including IFC's client data shows that women-owned SME borrowers are more likely to pay their loans than the overall SME pool of borrowers. Organizations such as AWEIK can stimulate creation of a multi-stakeholder partnership that includes multilateral financing institutions such as the African Development Bank (AfDB) and the IFC. This partnership would see the financing institutions guaranteeing loans issued by local small banks to the women-owned enterprises in the extractive sector value chain. Microfinance institutions are ready to finance the women however, they have limited understanding of the inherent risks that characterize the sector. The multi-stakeholder partnership would also ensure to sensitize the microfinance institutions for a better understanding of the EI value chain.

Potential areas for further research and potential projects for AWEIK

This study was aimed at collecting baseline information on the extent of participation by women-owned enterprises in the OGM sector (with a bias on the ASM sector). The baseline information would help AWEIK and its partners to prepare the right approaches for interventions and projects in the affected areas. In this regard, the following are some of the areas that may require further research:

- A comprehensive skill mapping in the extractive sector and the skills that TVETS and other forms of training are offering community women.

- Estimation of the market value of minerals and gemstones that are produced by the women-owned business in Taita Taveta County (and other gemstone mining Counties) in order to determine the market and revenue generation potential.

AWEIK can also initiate the following projects in the two counties:

- Creating awareness for the women in the mining locales on the potential opportunities from effectively participating in the value chain and how they can obtain the required skills and training.
- Collaborating with the Tullow Centre for Community Enterprise Development for short courses training on business entrepreneurship.
- Create partnerships amongst key institutions such as the Ministry of Trade and Industrialization and financial institutions so as to develop a scheme that provides capital and small loans to women entrepreneurs. These financial resources would help the women to mechanize their operations for greater benefits.
- Collaborate with industry associations (KCM and KOGA) and Invest in Africa to initiate business incubation activities for local women mining groups and mines suppliers.
- Reach out to multilateral financial institutions with the aim of forging an SME financing guarantee program in conjunction with other actors such as microfinance institutions, the County governments and the Ministry of Petroleum and Mining.

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Annexes

Annex table 1: Minerals Occurrence in Kenya.

REGION	COUNTY	MINERALS
RIFT VALLEY	Kajiado	Soda Ash, Feldspar, Limestone Gypsum, Gemstones, Marble & Granite (dimension stone)
	Elgeyo Marakwet	Fluorspar
	Baringo	Gemstones (Baringo Ruby), Diatomite
	Nakuru	Diatomite
	Turkana	Gold, Gemstones, Gypsum
	West Pokot	Gold, Gemstones, Chromite
	Samburu	Gold, Gemstones, Manganese, Chromite, Vermiculite
	Narok (Trans Mara)	Gold
	Nandi (Kibigori)	Gold
WESTERN	Kakamega	Gold, Dimension stone
	Siaya	Gold, Iron Ore
	Migori	Gold, Copper
CENTRAL	Homa Bay	Iron Ore, Gold
	Kiambu	Carbon Dioxide, Diatomite
	Machakos	Gypsum, Pozzolana,
	Kitui	Coal, Iron Ore, Copper, Gemstones, Limestone, Magnetite
	Makueni	Vermiculite, Gemstones
	Tharaka Nithi	Iron Ore, Gemstones
	Isiolo	Gemstones
	Marsabit	Gold, Gemstones, Manganese, Chromite
COAST	Taita Taveta	Iron Ore, Gemstones, Manganese, Graphite
	Kwale	Gemstones, Heavy Mineral sands (titanium minerals), Silica Sand, Rare Earth Elements, Niobium
	Kilifi	Titanium Minerals, Manganese, Barytes, Gypsum, Gemstones
	Tana River	Gypsum
NORTH EASTERN	Garissa	Gypsum
	Mandera	Gypsum
	Wajir	

Source: Author's compilation from Ministry of Mining

Annex table 2: Summarized challenges of the gemstone mining sector in Taita Taveta

Financial	Institutional	Infrastructure/Equipment	Environmental	Health and safety
Inaccessibility to financial credits	Inadequate training, sensitization and awareness on policy and regulations in the mining sector	Inadequate mining equipment and machinery	Lack of land ownership of women in the area	Insecurity and safety of workers on the mining areas
Low income levels/high poverty level	Lack of education and training on basic geological skills and knowledge making women vulnerable to conmen	Inaccessible mining sites, exposing women to harsh mining conditions	Poor or no shelter in mining areas, recipe for diseases	Lack of protective gear which is likely to increase the rate of injuries
Poor/low wages in the artisanal mining sector	Lack of skills and knowledge on value addition and innovation	Lack of occupational health and safety equipment and accessories exposing women to injuries	Lack food and water	Use of explosives that affect hearing senses and collapse of mine tunnels
Expensive to provide transport to mining sites	Most women operate as <i>zururas</i> without any legal entity in mining	Lack of equipment and facilities for value addition and innovation	Long distance to mining sites in the wilderness	Sexual harassment of women in mining sites
Lack of capital for purchase of equipment	Lack of organized market for the minerals		Wildlife menace causing injuries and sometimes deaths	Social evils such as prostitution and spread of HIV/AIDS