Strengthening Stakeholders Collaborative Action for Sustainable Gemstone Mining in Kenya
Policy Brief – March 2022

Key Insights
The University of Nottingham (UK) in collaboration with Taita Taveta University (Kenya) and the New Vic Theatre (UK) has undertaken a research project on sustainable mining in Taita Taveta funded by the Global Challenges Research Fund. The project aim is to support the development of a responsible and sustainable gemstone artisanal and small-scale mining (ASM) that will contribute to the socio-economic development of the region and its peoples. A key research output co-produced by the mining stakeholder is the Taita Taveta Sustainable Mining Action Plan 2021-2025.

This Policy Brief aims to build public awareness on the policies and measures that are planned to be put in place to develop a sustainable artisanal and small-scale mining sector in Taita Taveta as outlined in the five-year Sustainable Mining Action Plan.

Sixty percent of gemstones in the county are produced by artisanal and small-scale miners (ASM)

Majority of the mining activities is still informal with the true potential of the sector not yet utilized. Most of the mining conducted by artisanal miners offers the only source of income for the miners, in as much as artisanal mining has had a negative perception. There are more artisanal miners than small scale miners with the later having approximately 162 mines covering a total area of 73 square kilometres. More so, the Covid-19 pandemic had devastating impacts on the mineral supply chains and the livelihoods declined as many mines were closed as part of the Government’s containment measures.

To develop a sustainable ASM sector and improve the incomes and standard of living of the miners, their families and mining communities, various policy measures and actions need to be implemented. These include:

- Assisting artisanal and small-scale miners to obtain mining permits and licenses
- Facilitating their access to finance
- Assisting small-scale miners to access modern mining equipment and technology
- Mobilizing individual miners to form enterprises or co-operatives
- Promoting gender equity in the ASM sector to increase the participation of women and ensure they earn equal pay and through implementation of other affirmative action measures
- Training and assisting artisanal and small-scale miners on improving safety and work conditions and compliance with Occupational Health Standards (OHS) requirements and legislation
- Training, building capacity and assisting the artisanal and small-scale miners to promote value addition and marketing of their product
Taita Taveta County is the main producer of Kenya’s high value gemstones such as Tsavorite, Ruby, Tanzanite and Tourmaline. Mining of gemstones has been going in the county for the last 50 years. The County is the leading producer and exporter of gemstones in Kenya which is mined at artisanal, small scale and large scale. The ASM in Taita Taveta is widespread and comprising of low-skilled and low-income mining.

The gemstone mining sector is critical to the socio-economic development of Taita Taveta County. Despite its resource abundance, the miners and mining communities in Taita Taveta have failed to reap the full benefits from its resources.

The local artisanal and small-scale miners who account for up to 60 percent of annual gemstone production in the county continue to live in extreme poverty. The County residents suffer from extreme poverty and are exposed to environmental, occupational health and safety (OHS) risks arising from the mining activities in the region. This in turn affects negatively their social and economic well-being.

Moreover, although innovative mining technologies and equipment are championed globally to advance the social, economic, and environmental conditions of mining, ASM mining in Kenya faces barriers to sustainable innovations which are rooted in technological, social, regulatory and governance systems. A lack of mining equipment and technical support continues to be a major challenge for ASM in Taita Taveta who mostly use traditional mining methods employing the use of basic tools (such as mallets, chisels, shovels, picks, and buckets) and manual labour.

To address the environmental, occupational health and safety, social and well-being challenges facing ASM sector, a holistic approach is required that will help transform ASM into an engine for sustainable development in Taita Taveta County.

There is strong evidence linking poverty, poor employment and working conditions, lack of education, and other social determinants to non-communicable diseases, creating a vicious cycle. Health and safety issues reduce productivity and increase healthcare costs, thereby weakening local and national economic development.

“The gemstone mining sector is an important pillar of the socio-economic development of Taita Taveta County as envisioned in the Second-generation County Integrated Development Plan (CIDP II) (2018-2022) that is aligned to Kenya’s Vision 2030 and the United Nations Sustainable Development Goals (SDGs). The County Government of Taita Taveta acknowledges that both the sustainable extraction, and the prudent use of gemstone resources, can spur economic growth and human development for the benefit of all citizens in Taita Taveta County and by extension Kenya.”

H.E Granton Graham Samboja Governor, Taita Taveta County
Project Methodology

The research was undertaken between August 2019 and December 2020. Various research techniques were used including review of past research studies, cultural animation (CA) workshops and a Multi-Stakeholder Dialogue Forum (MSDF). Cultural animation is a novel arts-based bottom-up participatory research methodology, developed by Sust-ASM project co-investigators: Sue Moffat (Theatre Director, New Vic Theatre) and Professor Mihaela Kelemen (University of Nottingham). The CA methodology promotes dialogue and cooperation between and among mining stakeholders with the goal of re-imagining a more responsible and inclusive ASM future in Taita Taveta.

Participants in the CA workshops including miners and other mining stakeholders were encouraged to use their everyday experiences and express their concerns and ideas on development of an inclusive, well managed, and responsible ASM sector in Taita Taveta. To advance the inclusive and responsible ASM agenda beyond the life of the Sust-ASM project, a Multi-Stakeholder Dialogue Forum on Sustainable Artisanal and Small-Scale Mining in Taita Taveta County was launched on October 02, 2020, to foster collaboration and partnerships among gemstone mining stakeholders.

Thus, the Taita Taveta County Sustainable Mining Action Plan document is an outcome of multi-stakeholder dialogue which will enable artisanal miners and mining communities to participate more in mining governance and decision-making processes.

Key Findings

Most artisanal and small-scale miners (ASM) work without the necessary permits and licenses. This is because most miners find the process of obtaining permits and licenses complicated and expensive.

Artisanal and small-scale miners lack access to modern mining equipment and technology as most use manual labour-intensive basic tools such as mallets, chisels, shovels, picks, and buckets for gemstones mining.

Access to finance is a major constraint facing ASM. Most artisanal and small-scale miners lack the necessary collateral to access funds from lending institutions.

Women constitute 3-5% of the total mining workforce in the County. They also earn lower wages compared to men.

Many artisanal and small-scale miners work in unsafe conditions without protective gear and equipment. They are exposed to toxic substances and numerous occupational illnesses.

Most of the artisanal and small scale miners have little knowledge and skills relating to value addition and marketing of their gemstones. As a result, they earn low returns and do not fully benefit from their mining activities.

Mining activities of artisanal and small-scale miners have negatively affected wildlife and the environment. The miners cut indigenous trees which often take many years to grow and mature. Unsustainable ASM practices such as waste disposal, removal of topsoil, abandoned pits, tunnels and trenches, pollution of water bodies and poor sanitation all contribute to environmental degradation.
ASM and Sustainable Development Goals are indivisible

It makes intuitive sense that ASM cuts across the United Nation’s Sustainable Development Goals (SDGs) and is aligned to aspirations of Kenya Vision 2030 and the County Government of Taita Taveta County Integrated Development Plan 2018-2022. Indeed, in the past two decades, scholarship has extensively described the importance of the ASM sector for socio-economic development as envisioned in the Africa Mining Vision, its negative social, environmental and health outcomes, and its multifaceted relationship with peace, security, and human rights. There is considerable interest on the impact of ASM on the SDGs, and the interlinkages between the different SDGs.

Economic Development

Gemstone mining plays a critical role in economic development of Taita Taveta County which directly contributes to attainment of SDG1, 8, 9 and 12. This thematic area strives to ensure sustainable livelihoods for ASMs through trainings and building capacity on technical and knowledge skills to promote inclusive and quality employment. The thematic area delves into financing and resourcing ASM mining and establishing marketing strategies and market systems to promote market interaction through different channels as exhibitions and fairs.

Social Development

The ASM in the county has tremendous impacts on the social development of the miners and the mining communities. The mining activities have multiplying effects on SDG3, 4 and 5 with indicators on improved education standards, health and well-being and socio-economic welfare of women respectively. The thematic area focuses on how to provide miners with personal protective equipment, raise awareness on mental health, develop mechanisms to reduce gendered pay gap and institute alternative dispute resolution mechanisms among others.

Clean Energy, Infrastructure, and Sustainable Communities

Artisanal and small-scale mining activities have spurred infrastructural development in the county where access to water, roads, communication, and energy is essential to its socio-economic development. This thematic area focuses on implementing SDG 7, 9 and 11 and ensures increased productivity and income generation of the mining sector. Concrete interventions to drive the required infrastructure development, technology, and mining rights allocations are suggested within stipulated timelines.

Environmental Stewardship

ASM mining activities have negative impact on the environment, biodiversity and terrestrial ecosystems which hamper the attainment of SDG13 and 15. The unsustainable ASM practices witnessed such as tree cutting, removal of topsoil, abandoned pits and damping of mine tailings have had negative impacts to the environment and wildlife. This thematic area focuses on sustainable mining interventions to reduce these harmful effects to the environment as it draws inspiration from the constitutional requisite for a clean and safe environment.

Governance and Partnership

Ensuring sustainable mining of gemstones calls for enhanced collaboration and strong partnership by different stakeholders in Taita Taveta. This pillar strives to address the social, economic, and environmental governance through inclusive participation by the key players such as the national, county governments, ASM miners, local communities, mining entrepreneurs, political leaders, academic institutions, faith-based organizations, and health practitioners. The planned interventions under this thematic area, for example, holding multi-sectoral dialogue forum, inclusive gemstone resource governance, ASM formalization and entrenching accountability and responsibility will in the short, medium, and long term encourage the autonomous co-existence of artisanal and small-scale miners to support ASM yield optimal results.
Key Recommendations

Based on the findings the research recommends that:

Accelerate the formalization and licensing of artisanal miners and the use of the on-line mining cadastre portal.

Provision of modern mining equipment and technical support. It is important to facilitate the miners access to modern mining equipment and technology. This can best be done through mobilizing individual miners to form enterprises or co-operatives to access modern mining equipment for collective use. This ensures maximum utilization of the equipment.

Enhance access to finance. There is need to put in place mechanisms that enhance access of artisanal and small-scale miners to finance including exploring collaboration with national and international financial institutions.

Ensure gender equity in the ASM sector through implementation of measures which create equal opportunities for both women and men. These include affirmative actions by government, NGOs and industry players that focus on education and training to develop women’s technical, leadership, marketing, value addition and financial literacy.

Enhance implementation of occupational health and safety measures through sensitization and training artisanal and small-scale miners on compliance with OHS measures as well as providing them with the means to access protective gear and equipment.

Enhance capacity for compliance with environmental management legislation by sensitizing the ASM sector on the need to carry out sustainable mining and provide the necessary training to comply with environmental management standards and legislation.

Promote Value Addition and Market Development. There is urgent need to assist miners with training on value addition and marketing, including promotion and use of digital marketing and social media platforms. The government through the designated ministry of mining ought to prioritize creating visibility of the ASM to the regional and international markets. Participation of the miners and relevant stakeholders in regional platforms such as Mining Indaba, Gemstone Universe and other global platforms would enhance various market penetration.
We identify the key stakeholders that have a role, responsibility, and, or an interest in the issue, and propose resources needed to achieve that SDG. Planning and implementation is a process, and so, we take this as a living document to be reviewed towards the end of the current five-year term.
Contact the researchers

**Professor Judy N. Muthuri**  
Professor in Sustainable Business and Development  
International Centre for Corporate Social Responsibility, University of Nottingham  
Email: judy.muthuri@nottingham.ac.uk

**Mr Arthur Ndegwa**  
Kenya Project Lead at the Taita Taveta University  
Email: arthur.ndegwa@ttu.ac.ke


