



# Artisanal Mining: A closer look at its relevance towards sustainable development of rural communities

CASE STUDY: ENGAGE PROJECT  
BY AGC IN SIERRA LEONE

Both of these pictures are artisanal and small-scale gold mining



# Def. contd (Mines and Minerals Act 2009)

- Two Sections of this Act relate to Artisanal and Small-scale mining with the following definitions:
  - ❖ **Artisanal mining – Part X of MMA 2009**
  - ✓ Limited to Sierra Leonean citizens (individuals and cooperatives).
  - ✓ Parameters – 1/2 hectares (0.05 sq km): 10 meters deep, 1 yr licence, renewal 3 times consecutively.
  - ✓ Addressing key problems through law and regulations including:
    - Explicit measures to protect the environment – they are obligated to rehabilitate, NMA has increased capacity to advise and monitor.
    - Greater measures to manage supporter-miner relationship

# Def. contd (Mines and Minerals Act 2009)

## ❖ Small-scale mining – Part XI of MMA 2009

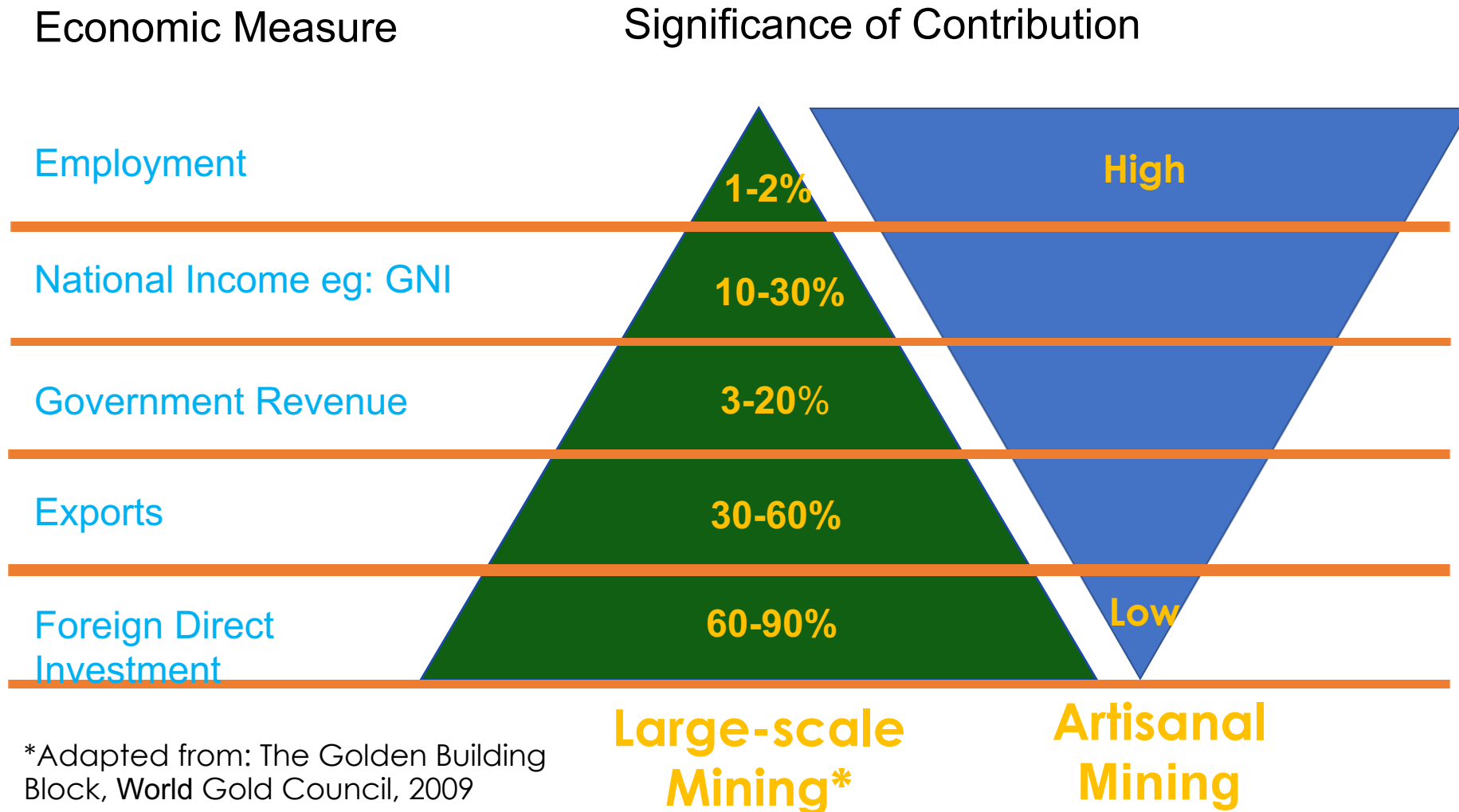
- Applications certified by MAB, approved by the Minister of Mines.
- Requires an EIA approved by EPASL and required to provide financial assurances (e.g. bond) against potential liability.
- Mine Closure Plan (costed) required as part of application process

✓ Minimum 25% Sierra Leonean ownership

✓ 3 yr licences, renewable on 3 yr basis

✓ Limited to 1sq km and depth of 20m – no underground operations allowed

# Artisanal mining is an economic driver



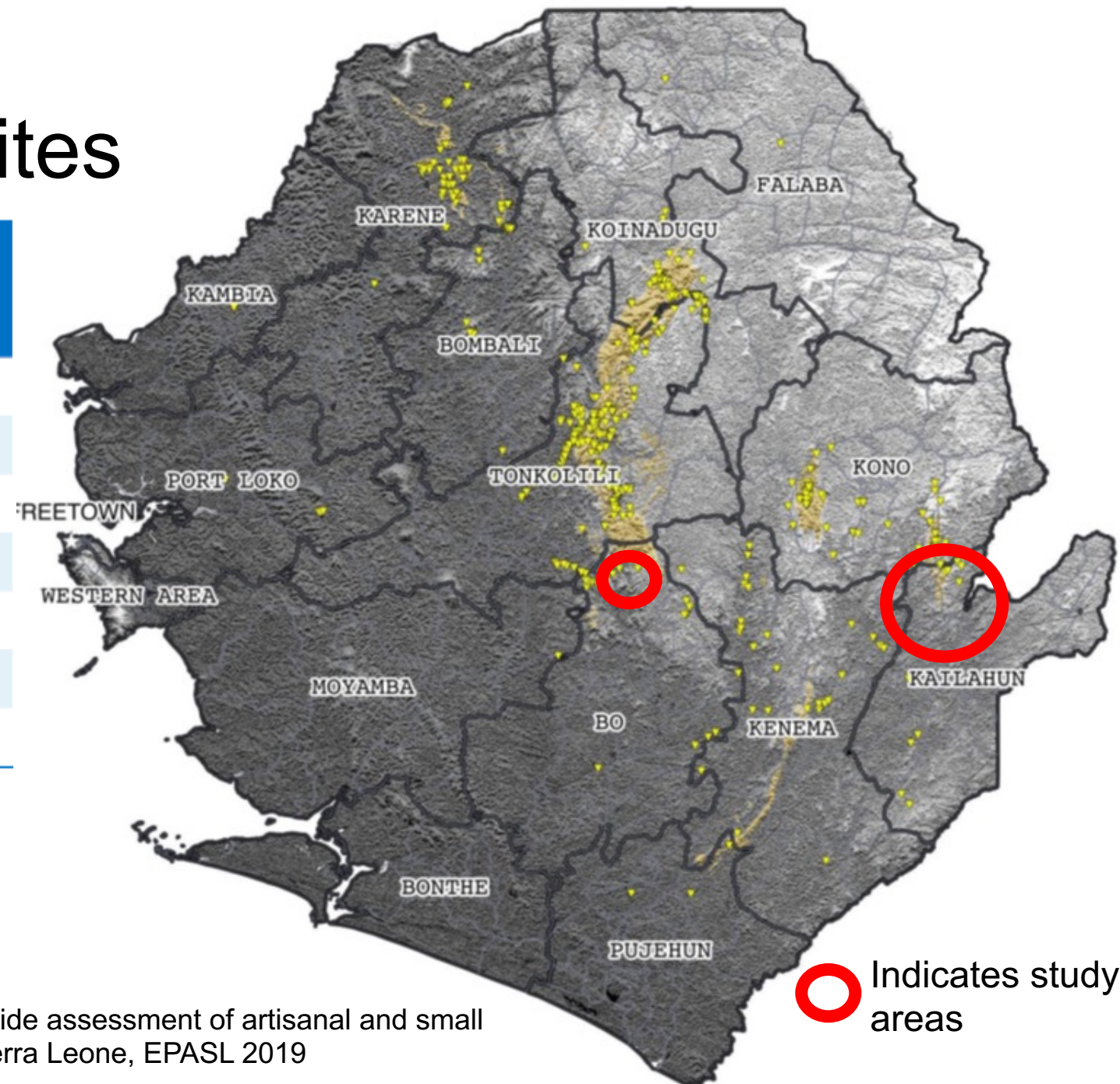
# Artisanal and small-scale gold mining

- There are estimated to be over 80,000 artisanal gold miners in Sierra Leone
- Nearly all of the gold produced in Sierra Leone is produced by these miners
- Gold mining is primarily alluvial (river deposits) but increasingly hard rock is being mined
- The sector is predominantly informal
- The sector acts as an engine for rural development and a safety net for the rural poor
- Some towns (eg: Baomahun) have quite literally been built on artisanal mining revenues



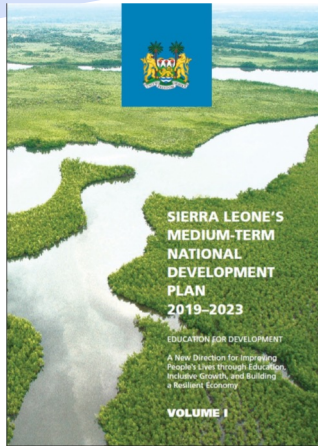
# Distribution of AM sites

Region	District	Major Mining Communities	Geological Group/ Greenstone Belt
Northwest	Karena	Laminaya, Campala, Fintonia	Loko Group
North	Koinadugu	Dalakuru, Lake Sonfo area, Makoni, Kamanro	Sula Mountains
North	Tonkolili	Kasafoni, Makong, Mansumbirie, Yele	Sula Mountains
East	Kono	Kumahun, Gbani, numer 9, Bumpeh, Gandon	Nimi Hills
East	Kenema	Kambui Hill, Njebeh	Kambui Hills
East	Kailahun	Jama, Sengema, Grima, Salima, Saluwa	Gori Hills
South	Bo	Baomahun, Lablama, Gbetema, Kortihun	Kangari Hills

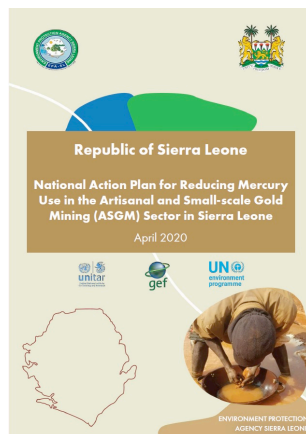
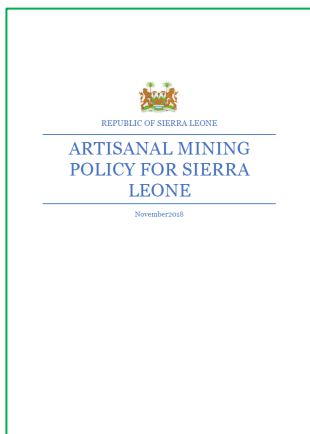


\*Adapted from: countrywide assessment of artisanal and small  
–scale gold mining in Sierra Leone, EPASL 2019

# The national context



**EnGAGE**





# **Enabling and Growing Responsible Artisanal Gold Enterprises:**

## **Project Context**

*Project Goal: To develop a model for responsible artisanal and small-scale gold production and sale in Sierra Leone*



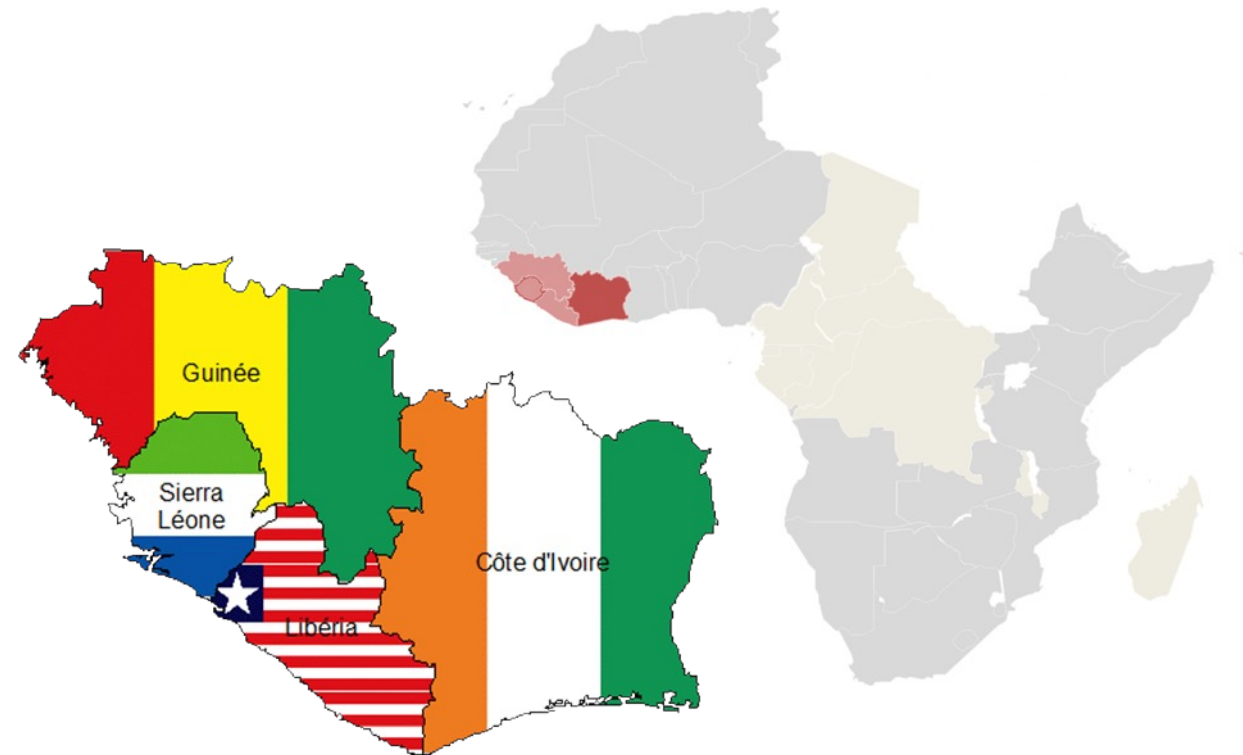


# Regional Resource Governance in West Africa (REGO)

## Approach

The mining sector of the Mano River Union (MRU) is geared towards the principles of **sustainability**

- Economic sustainability
- Social sustainability
- Environmental sustainability






# Assessment methodology

- The scorecard used was developed through careful study of the PlanetGold program in Philippines. Site assessment criteria were adapted to the EnGAGE project in Sierra Leone by considering the following Categories and results shown below

Criteria	Weight	Komahun	Baomahun
1. Governance	15%	9.94	10.19
2. Technical requirements	25%	0.00	0.00
3. Potential ASGM beneficiaries	15%	3.40	4.00
4. Mercury	15%	6.38	9.38
5. Gold, Trade & Supply Chain	20%	7.15	9.45
6. Financial Needs and Opportunities	10%	5.20	5.6
Overall Score	100%	32.06	38.61
7. Security and safety	-30%	-8.00	-8.00
Adjusted Score		<b>24.06</b>	<b>30.61</b>

A photograph of two men sitting on the ground in a mining area. The man on the left is wearing a blue and black striped shirt, an orange safety vest, a colorful patterned face mask, and brown pants. He is writing on a small notepad with a blue pen. A white hard hat and a black backpack are on the ground next to him. The man on the right is wearing a green t-shirt and dark shorts, sitting barefoot. The background shows a reddish-brown soil bank with some sparse vegetation.

# Contextual study & baseline report

## Key findings

- Low awareness of the risks of mercury use amongst miners
- Complex local business arrangements that rely on equipment rentals and no records of revenue, sales, etc
- Conflict with large scale operators at all sites under consideration for pilot activities
- Wide discrepancies in gender-based access to mineral ores

# Contextual study & baseline report

## Key findings (contd)

- Rapid expansion of the use of powered equipment and mercury at the site level
- Re-processing of tailings 2-4 times over
- No HSE measures observed



# Formalizing mining activities

- 164 Miners self-organized into two artisanal gold mining cooperatives with training and assistance from WoME and AGC
- These cooperatives are now registered with the Bo District Council and the Ministry of Social Welfare
- Bank accounts opened for each Cooperative



# Formalizing mining activities (contd)

- 3 Artisanal licenses acquired
- surface rent paid to Chiefdom authorities

GOVERNMENT OF SIERRA LEONE  
NATIONAL MINERALS AGENCY  
REGIONAL OFFICE  
2 Lyon Road, Off Stock Road, Korduluma Section, Bo  
Tel: +232 75 250772 Fax: +232 75 250773

**Receipt**  
Date: 13-06-2022  
Received from: Mohamed Conteh  
Amount: 770,000.00  
For: Application Rehabilitation, Demarcation, Mines Monitoring, Record Card  
Bank/Check No: 770,000.00  
Signature: [Signature]

10<sup>th</sup> June, 2022

**ORDER TO PAY:**

Dear Sir / Madam,

**PAYMENT TYPE: ARTISANAL MINING LICENCE FEES (APL-Bo-614)**

In accordance with the Mines & Minerals Act 2009 and associated regulations, you are hereby instructed to forward payment for the fee, as shown below.

**BANK NAME: SIERRA LEONE COMMERCIAL BANK**  
**ACCOUNT NAME: MINES MONITORING FUND**  
**ACCOUNT NUMBER: 003-005512042100-145**

The Bank pay-in-slip should be taken to the Account section, National Minerals Agency office, Bo in accordance with the fees shown below:

Artisanal Mining Fees - SIERRA LEONE	Amount (Leones)
Application Fee	100,000.00
Monitoring Fee	250,000.00
Rehabilitation Fee	150,000.00
Demarcation Fee	250,000.00
Sales/Record Card	20,000.00
<b>Total to pay (LEONES)</b>	<b>770,000.00</b>

To complete the application process, the issued payment receipt(s) should be forwarded to the Mining Cadastre Office (MCO) for recording of payment details.

Yours Faithfully  
ALIEU KAMARA  
Regional Manager

Regional Office Bo: 2 Lyon Road, Off Stock Road, Korduluma Section

MINISTRY OF MINES AND MINERAL RESOURCES  
NATIONAL MINERALS AGENCY  
(NMA)  
ARTISANAL MINING LICENCE  
Created Under  
THE MINES AND MINERALS ACT 2009

Certificate No: 90-AML/141/2022

Authorisation is hereby granted to conduct Artisanal Mining under and subject to the provisions of Mines and Minerals Act 2009, any amendments thereto, and the Rules and Regulations, made there under from time to time or which may come into force during the continuance of this licence including the 'Terms and Conditions' herewith attached and signed by the licence holder. The licence is granted

**Personal Details**

Name: Mr. Abu Kallon  
Registration/Identity No: [Blank]  
Address: Lablams  
Province: Southern  
City: Bo

Chiefdom: Valima  
Village: Lablams

**Concession and License Details**

Division	Chiefdom	Village	Section
Bo	Valima	Lablams	Dahan

**Mineral Type**  
Gold

Bearing Point	X Coordinate	Y Coordinate	UTM Zone
A	214361	935691	29N
B	214295	935584	29N
C	214311	935584	29N
D	214386	935690	29N

Size of Production Area (Sgkm): 0.005 Sq. Kms

Place of Issue: Bo  
Date of Issue: 13-06-2022  
Date of Renewal: 12-06-2023  
Date of Expiry: 13-06-2025

Unless this certificate is suspended or cancelled, it shall be valid for 12 MONTHS from the date of issuance.  
This certificate is non-transferable.

Name of Signatory: ALIEU KAMARA  
Designation of Signatory: Regional Manager  
Authorized Signature: [Signature]

# Training of miners: Technical

- A training group of 7 local miners was identified to be the core group running the equipment
- This group was involved in setting up and commissioning the equipment
- Hands-on training continues with the help of the **F.B.C .Mining Engineering Department** in:
  - Comminution
  - Shaking table use
  - Gold purification
  - Gold smelting





## Training of miners: Occupational health and safety

- 30 miners (23M/7W) were trained in injury prevention and safer mining practices using classroom and field-based training sessions

# Training of miners: business skills

- Running a gold processing facility requires ownership, operators and a plan to maintain the facility i.e.: basic business skills
- 37 miners (20M/17W) were given training in business skills
- Topics covered by the training:
  - Types of businesses
  - Expenses and revenues
  - Budgeting
  - Sources of finance
  - Markets
  - Business plans
  - Organizing into business associations





## Training of miners: Gender issues

- 87 miners from Baomahun (24M/63W) participated in training on gender issues led by WoME
- Participatory sessions addressed:
  - Basic gender concepts
  - Identification of barriers to gender equality
  - 10 lines of actions that should be taken to address gender inequalities were identified

# ASGM Training for Health Professionals

- 24 health professionals from 7 districts with the occurrence of AGM were trained on occupation health hazards in ASGM
- Most trainees were WASH officers, Community Health Officers, Public Health Inspectors, and Senior PHS officers
- By the end of the training most participants were able to:
  - Describe health risks, particularly mercury exposure, in ASGM;
  - Apply a risk communication strategy to advise artisanal miners about how to reduce exposure to mercury and how to protect their health;
  - Describe the symptoms of acute and chronic mercury intoxication and understand diagnostic procedures and treatment options;
  - Demonstrate the ability to conduct an exposure history and physical examination of adults and children with possible exposure to mercury; and
  - Understand and describe the role of the health care sector in the implementation of Sierra Leone's National Action Plan on mercury.



# Media training

- The media plays a role in how the public perceives ASGM and thus the policy approach of governments
- Workshop goals:
  - Raise awareness in the media of the importance of the ASGM sector to Sierra Leone
  - Provide information and first-hand experiences to journalists so that they can cover the sector in an informed manner
  - Think about the role the media play in improving ASGM
- Representatives from 25 media outlets across the country participated in the workshop and were taken to the gold processing facility



# Summary: successes and challenges

## Key Achievements

- Sierra Leone's first artisanal gold toll processing facility built and owned by artisanal miners
- Hg-free production is ongoing. Miners report recovering more gold and spending less time doing so
- 2 of Sierra Leone's first artisanal gold mining cooperatives are now established
- Profits from the mining facility will be redirected into 2 community improvement investment funds
- 164 miners trained in:
  - Operating Hg-free mining equipment
  - Business skills
  - Gender awareness
  - Occupational health and Safety
- 24 health professional trained in treating mercury and other ASGM occupational health concerns
- 25 journalists trained in covering ASGM issues

## Remaining Challenges

- Will the beneficiaries be able to maintain the facility as a profitable gold enterprise for the long-term?
- How will the achievements be replicated? Who will finance replication?
- This project was about responsible gold production. What about the responsible ore extraction? Responsible gold supply chains?
- Rapid Assessment of the impact of Covid-19 on the Artisanal gold mining sector in Sierra Leone
  - <https://www.artisanalgold.org/publications/country-studies/>

# Thank You!

Contact Details:

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[kayebunt@yahoo.com](mailto:kayebunt@yahoo.com)

