Strategic Environmental Assessment (SEA) in Mining for a Just Transformation

Greg Radford
Director, IGF
Canada
#SEAformining
REPORT LAUNCH

STRATEGIC ENVIRONMENTAL ASSESSMENT FOR THE MINING SECTOR

Lessons from country case studies
Agenda

1. Mentimeter Survey

2. SEA for Mining: Joyce Kortlandt

3. SEA Case Study Presentations: Highlighting successes, challenges, and lessons learned
   ◦ Mongolia: David Annandale
   ◦ Ghana: Yaw Amoyaw-Osei
   ◦ Namibia: Israel Hasheela

4. Q&A: Questions can be posted on Mentimeter

5. Panel Discussion: Wrap Up
Strategic Environmental Assessment for Mining
Lessons from country case studies

Joyce Kortlandt
Technical Secretary, NCEA, the Netherlands
jkortlandt@eia.nl
#SEAformining

LinkedIn @Netherlands Commission for Environmental Assessment (NCEA)
Facebook @Netherlands Commission for Environmental Assessment – NCEA
www.eia.nl
Relevance of SEA for Mining
Relevance of SEA for Mining

- **Governments of mining countries**: balance multiple interests, transparent decision-making, clarity of tasks.
- **Mining companies**: prevent resistance, more sustainable projects, cost-effective ESIAs.
- **Society**: contribution to regional and national development, minimising negative consequences.
Example: SEA for National Sector Planning
Mine Closure Programme, Romania
Example: SEA for regional development planning
Zambezi valley, Mozambique
Recommendations

1. Increase awareness and build capacity about SEA for mining
2. Ensure close collaboration between government institutions during the development of the SEA
3. Involve stakeholders from the beginning of the SEA process
4. Develop SEAs for PPPs about the mining of critical minerals
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.

Joyce Kortlandt
Technical Secretary International / NCEA
Netherlands
jkortlandt@eia.nl

LinkedIn @Netherlands Commission for Environmental Assessment (NCEA)
www.eia.nl
SEA in Mining for a Just Transformation

Strategic Assessment of Mining Policy in Mongolia

David Annandale

DDA International Consulting Ltd
United Kingdom of Great Britain and Northern Ireland

ddannandale@gmail.com

www.ddaconsulting.org
Background

In 2014 the Government and World Bank saw a need to develop a shared vision of how mining growth may affect the development of Mongolia and the lives of Mongolians.

The intent of the SESA was to:

◦ Help meet the needs of long-term country development by integrating environmental and social considerations into mining sector reform.
◦ Contribute to a shared understanding of the mining sector’s role in the sustainable and inclusive development of Mongolia.
◦ Inform the ongoing reform and strengthening of the mining sector regulatory framework.
◦ Support the government’s efforts of enhancing the contribution of the mining sector to the Mongolian society and economy.
## SESA Approach based on GDP Growth Scenarios

<table>
<thead>
<tr>
<th>Growth scenario</th>
<th>What does each scenario mean for production of specific commodity?</th>
<th>Number of mines required to produce commodity tonnage</th>
<th>Environmental and social issues/impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat for low, base, high</td>
<td>X tonnes of commodity (coal, gold, copper etc.)</td>
<td>Y mines (no. of large mines)</td>
<td>Prediction of impacts at reasonably specific locations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Z mines (no. of smaller mines)</td>
<td>Prediction of impacts at reasonably specific locations</td>
</tr>
</tbody>
</table>
From Issues/Impacts to Actions, Gaps and Policy Options

<table>
<thead>
<tr>
<th>Issues</th>
<th>Possible Actions</th>
<th>Main Gaps</th>
<th>Policy Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining/pasture conflict</td>
<td>Relocate herders</td>
<td>No law on involuntary land acquisition</td>
<td>Develop law on involuntary land acquisition</td>
</tr>
<tr>
<td></td>
<td>Pasture management plan</td>
<td>Limited capacity to improve pasture use</td>
<td>Provide budget to organize pasture use improvement activities</td>
</tr>
</tbody>
</table>
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.
Improving Mining Sector Governance Through SEA: Gaps identified for updating the SEA (after 15 years of implementation)

Yaw Amoyaw-Osei
CEO / CEHRT
Ghana
wayoma59@hotmail.com
Background

- Mining in Ghana dates back to the 15th century.
- Ghana accounted for 36% of total world gold output between 1493 and 1600.
- Ghana overtook South Africa as the largest gold producer in Africa & 10th largest worldwide by end of 2022 (Ghana Chamber of Mines, 2023).

Source: Richard Takyi et al. 2020
SEA and Mining Sector Policy

Mining Sector Policy with the aim to promote:
1) Sustainable planning with other sectors in mind.
   ▪ Ensure inter-agency collaboration for sustainability in resource allocation.
2) Accountability of the Sector Agency (MC)
   ▪ To own liabilities arising from sector decisions i.e. licensing decisions informed by IA outcomes.
3) Public confidence in mining sector decisions.
4) Cumulative IA where multiple contiguous concession areas are concerned.
SEA Ownership and Industrial Minerals

Ownership of the SEA
• Ministries of Lands and Environment (responsible for MC & EPA) should have assumed ownership, driven the process & superintended over implementation.

The SEA and Industrial Minerals
• Less emphasis on industrial minerals (particularly sand mining and its devastation)

Source: Ghana Business News
SEA Underscoring Effective Collaboration & Engagement

SEA promoting a bottom-up process in mining decisions

• The search for prospective mining concession areas must actively involve District Assemblies, traditional authorities and local communities with MC’s backing in a collaborative manner.

SEA requiring prospecting E&S screening to delineate sensitive areas in advance

• A level of E&S screening leading to Env. Permit (for prospecting) prior to the grant of the prospecting license.
Counter-productive discharge of institutional mandates

- MC does not recognize the benefits of IA outcomes for Mining Sector licensing decisions.
- IA process reduced to/understood as a mere permit.
- MC sidetracks IA process by issuing mining license first, before asking proponents to obtain the Env. Permit.
- EPA gives cause for MC to view IA process as a bottleneck delaying the mineral licensing process.
- MC & EPA approach their mandates in isolation & arrive at respective licensing & permitting decisions independently.
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.

Thank you!!

Yaw Amoyaw-Osei
CEO/CEHRT
Ghana
wayoma59@hotmail.com

STRATEGIC ENVIRONMENTAL ASSESSMENT FOR THE CENTRAL NAMIB URANIUM RUSH, NAMIBIA

Israel Hasheela
Ministry of Mines and Energy
Namibia
Israel.Hasheela@mme.gov.na
www.Facebook.com/mmeNamibia
www.mme.gov.na
Background

• Renewed interest in uranium resources globally (mid 2000s) resulted in a scramble for U exploration rights in Namibia.

• Third largest U-producing country after Kazakhstan and Canada (8% of the world U resources).

• Moratorium placed on Uranium EPLs (2007) to consider how best to manage this rush.

• SEA conducted to provide a strategic direction to uranium mining.

• Licences at the time; 36 exploration and four mining.
Methodology

The SEA has identified the key cumulative impacts of the “Uranium Rush” and assessed its benefits and potential harmful effects.

### Uranium Rush Mining Scenarios

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two additional mines by 2010-12, and no further before 2020; Trekkopje and Valencia.</td>
<td>One or two more additional by 2013; Rössing, Langer Heinrich, Trekkopje, Valencia, Husab, Etango project.</td>
<td>Two or more additional before 2020; Rössing, Langer Heinrich, Trekkopje, Valencia, Husab, Etango, Omahola, Marenica, and Reptile EPLs.</td>
</tr>
</tbody>
</table>
Assessment of cumulative impacts of mining

- Noise pollution
- Dust emissions
- Radon emissions
- Groundwater pollution
- Visual impact
- Loss of biodiversity
- Light

Central Namib is a Tourism Hotspot

Groundwater quality Assessment

Uranium distribution in groundwater

Areas of High Biodiversity value

Potential Areas for Tourism Expansion

Groundwater assessment

Predicted Visual Influence of Scenario 2

Legend

- Areas of High Biodiversity Value
  - High Biodiversity
  - Moderate Biodiversity
  - Low Biodiversity

Uranium distribution in groundwater

Legend

- 0-15
- 15-90
- 90-150
- 150-200
- >200

Central Namib is a Tourism Hotspot

Predicted Visual Influence of Scenario 2

Areas of High Biodiversity value

Legend

- Areas of High Biodiversity Value
  - High Biodiversity
  - Moderate Biodiversity
  - Low Biodiversity
Did the SEA process improve management of the uranium mining sector?

- Provided a guiding tool or framework (SEMP) within which individual projects had to be planned and implemented.
- Enabled coordination of development, i.e. infrastructure corridors (roads, powerlines and waterlines) to ensure minimal impact to the environment.
- Increased trust between the industry and communities they operate in.
- Availed industry performance information to the public and stakeholders (annual reports).
- Ensured responsive environmental management plans for individual mining and exploration projects.
Let’s continue the conversation!
Post questions and comments in the IAIA24 app.

Thank you!!

Mr. Israel Hasheela
Ministry of Mines and Energy – Geological Survey
Namibia
Israel.Hasheela@mme.gov,na
www.Facebook.com/mmeNamibia
www.mme.gov.na

#iaia24