Federal Democratic Republic of Ethiopia
Ministry of Mines, Petroleum & Natural Gas

Overview of Mining sector in Ethiopia
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Addis Ababa
Outline

Ethiopia Overview

Geological & Mineral Potential
  Geology
  Mineral Potential
  Basic data coverage

Regulatory & institutional Framework
  Legal
  Institutional

Recent Development
  Changes on legislations & procedures
  on Status of the licenses

Challenges

Conclusion
Addis Ababa the Capital City of Ethiopia is the seat of the African Union (AU), and Head Quarter of the United Nations Economic Commission for Africa and other Regional and International Organizations.

Is located in East Africa with surface area of 1.14 million Km²

Bordered with The Sudan, South Sudan, Kenya, Somalia, Eritrea and Djibouti,

Population: above 90 million

Government: Federal Democratic Republic consisting of 9 National Regional States and 2 city Administrations

Agricultural: country mainly exporting coffee, oil seed, flower, leather etc.

Highly prospective, under explored & currently exporting gold, tantalum, dimension stones and gemstones. The mining sector contributes less than 5%.

Gives much emphasis on expanding Infrastructure (power, telecom, road and railway) to support the growing economic development,

Registered double digit Economic growth Since 2004,

Ethiopian Air Lines has wide international & domestic network

Official language is Amharic & more than 70 languages & English widely spoken) and

Christianity & Islam are major religions

Installed power to date 4200MW & will grow to about 10,000MW when the Renaissance Dam is to be completed in 2017. Another 7000MW is Planned in GTP 2
Geology & Mineral potential of Ethiopia

- The Ethiopian Geology consists of:
  a) Precambrian basement rocks covers 25% of the land mass. It contains exposed belts in three parts of the country. i.e Northern Green Stone Belt (GSB), Western GSB, & Southern GSB

- Palaeozoic – few places
- Mesozoic sed. Rocks - 25%
- Cenozoic volc. & sed. 50%
  - Highland Tertiary volcanics (basalts)
  - Tertiary as well as Quaternary volcanics & sediments of the rift valley
Simplified Geological Map of Ethiopia

Northern Greenstone Belt

Western Greenstone Belt

Southern Greenstone Belt
Mineral Potential

Western & SWBelt:
- Tulu Kape, Dul, Metekel, Chamo, Oda- Godere Primary gold deposits
- Yubdo Platnium deposit
- Bikilal, Sirba & Kore iron deposits & mineralization
- Keta & Abetselo Base metals Mineralization.
- Placer Gold deposits

Southern Belt: Adola & Moyale
- Lege – Dembi, Sakaro, Moyale, Dawa, Okote Primary Gold deposits & occurrence.
- Adola Nickel
- Kenticha Tanatalum
- Placer gold deposits
- Chromite mineralization

Northern Belt: Terkemti, Adi Zersenay, zager
- Primary gold mineralization
- Base Metals mineralization
- Placer gold occurrences & deposits
Industrial Minerals

Cement Raw Minerals:
- Limestone, Gypsum, Clay, Pumice - Million tones

Fertilizer Raw Minerals:
- Potash billion tones & phosphate - 181Mt

Ceramics Raw Minerals:
- Kaolin - 20Mt, Feldspar - 500000t, Quartz - 400000t

Glass Raw Minerals
- Silica Sand - more than 3.4Mt,

Dimension Stones:
- Marble, Granite, Limestone, Sand Stone – in Million tone.

Diatomite - 120Mt, Bentonite - 172Mt, Salt - 4.3Bt, Soda ash - 460Mt,

Gemstones:
- Opal, Emerald, Sapphire, Peridot, Tourmaline, garnet
Ethiopia becomes a major world potash producer for up to 100 years

- Potash companies working in partnership with a strong, stable and cooperative Government.
- Ethiopia regarded as a low-risk, investment-friendly environment
- Become a world class deposit with low operation cost
- Major source of foreign income to Ethiopia
- Employment and development in Ethiopia
- Partnership with the Community
- Open blocks (10,000 km²) is vacant to apply
Potash project location
Production Targets per Annum

- 2 million tonnes MOP
- 0.75 million tonnes SOP
- 0.60 million tonnes SOP
- 2 million tonnes MOP & SOP

Total annual production of 5.35 million tonnes potash is currently planned with significant scope for expansion.
Coal occurrences & deposits (~500 million tons) in the Tertiary sediments

Oromia RS = Dilbi – Moye – Yayu – Gojeb – Arjo – Nejo
Amara RS = Chilga – Mush Valley – Wuchale

Debre Libanos & Mugher
Nejo
Geba, Arjo
Delbi, Moye, Yayu

Oil Shale – 1 billion tones
Location Map of Iron occurrences & deposits of Ethiopia

Figure 6 Location Map of Iron Occurrences and Deposits of Ethiopia
Geothermal Potential

• In the Ethiopian Rift Valley
• More than 10,000MW for power generation
• More than 22 geothermal Fields identified
• Three of the Fields (Aluto Langano, Tendaho & Corbeti) are at detailed stage
2.3. Basic Data Coverage

- Basic geological mapping coverage at a scale 1:250,000 is 82%.
- Ground gravity coverage at 1:500,000 is 100%.
- Airborne geophysical (Electro-magnetic, Magnetics & Radiometrics) coverage is 30% of the Landmass of the country.
Regulatory Framework

- Legislations:
  - Mining proc.no.678/2010 (as amended)
  - Mining Income Tax No.53/1993 (as amended)
  - Mining Regulation no.182/1994

- Income tax for revenues generated from Mining Operations is fixed to 25% and is calculated from net income.
- The law provides companies to have free of duties, import, and export taxes.

The aim of legislations:
- Aimed to attract investment & guarantee rights of investors
- Restricted the role of government to regulation of the sector and generation and dissemination of basic geo-science data
- Promotion & development of the mineral & petroleum resource of the country
Recent Development/ Changes on legislations & Procedures by proclamation 816/2013

• Amendment on the Mining Operations Proclamation No. 678/2010;
  – Reduction of Royalty on Gold from 8% to 7%,
  – New license type; Special Small scale Mining and Retention License are added to the already existing types of licenses
  – Amendments to nature of relinquishment
• Amendment of the Mining Income Tax Proclamation
  – Reduction of Income Tax from 35% to 25%,
• Some changes to licensing procedures
  – inclusion of bidding procedures and
  – Evaluation committee established to evaluate proposals
  – Open blocks/areas could be checked at a desk from ICT Directorate
  – Provision of PDF format license information upon request
• Cadastre System on operation
• Ethiopia accepts global EITI principles & requirements. Based on this, Ethiopia obtained EITI Candidacy Status
<table>
<thead>
<tr>
<th>License Type</th>
<th>Duration</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconnaissance</td>
<td>18 Months</td>
<td>Non-renewable &amp; non-exclusive</td>
</tr>
<tr>
<td>Exploration</td>
<td>• Up to 10 years (3 years initial, 2 renewals of 1 year each &amp; 5 extensions of 1 year each)</td>
<td>Exclusive Mineral Right</td>
</tr>
<tr>
<td>Retention</td>
<td>Up to 6 years &amp; exclusive (3 years initial &amp; one time renewal for 3 years)</td>
<td>• Upon discovery of mineral deposits of economic significance&lt;br&gt;• Existence of adverse market conditions, or&lt;br&gt;• Unavailability of Processing technology</td>
</tr>
<tr>
<td>Mining Large Scale</td>
<td>20 years initial &amp; exclusive (renewal of 10 years)</td>
<td>Upon demonstration of continued economic viability of mining the deposit</td>
</tr>
<tr>
<td>Small Scale</td>
<td>10 years initial &amp; exclusive (renewal of 5 years)</td>
<td></td>
</tr>
<tr>
<td>Special Small Scale</td>
<td>• May not exceed 10 years&lt;br&gt;• Renewal for 5 years</td>
<td>To upgrade Artisanal mining operation using machinery &amp; labor&lt;br&gt;Does not require feasibility study</td>
</tr>
<tr>
<td>Artisanal</td>
<td>Maximum of 2 years &amp; Exclusive not renewable</td>
<td>Reserved for nationals &amp; revocable if the deposit required advanced exploration and mining methods</td>
</tr>
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3.4. Institutional Framework

- Minister
  - National Regional States
  - State Minister for Solid Minerals
  - State Minister for Petroleum & Natural Gas
  - Geological Survey of Ethiopia
Duties & responsibilities of Institutions

Regional States are mandated to:

- Issue artisanal mining licenses for nationals
- Issue for domestic investors:
  - reconnaissance, Exploration and retention licensees with respect to construction and industrial minerals,
  - small scale mining licenses for industrial minerals,
  - Small and large scale mining licenses for construction minerals,

The Ministry have the powers and duties to:

- Issue reconnaissance, exploration, retention and mining license other than those to be issued by the states,

Geological Survey of Ethiopia is responsible to carry out basic geological mapping, mineral exploration & other related geological activities and Services (data
We welcome potential investors

- A total of 129 mineral exploration licenses and 71 mining licenses (gold, potash, tantalum, marble, coal, iron etc) are granted in hard mineral sector owned by foreign, joint-venture and local investors.
Recent Development on status of Mineral exploration Licenses

Some of exploration companies are advanced stage of exploration and development stage of Mining.

**Potash: Huge Resource**

- **Allana/ICL Potash** has acquired mining license and is on development work. Two Million tons of annual run of mine (ROM).
- **Yara Dallol** applied for potash large scale mining. 0.6 M (SOP) tons ROM
- **Circum** minerals applied for large scale potash mining. 2.7 million tons ROM

**Advanced & development stage exploration for Gold & Base metals;**

- **Kefi Minerals**, acquired gold and silver mining licenses and is on development stage in Oromia, western Ethiopia.
- **Midroc-Metekel** project is also at final stage to be granted Mining license
• ASCOM precious metals co. at Dish mountain, National Mining at Okote, TRI at Adi Dairo & West shire are at pre-feasibility stage of gold & Base metals exploration. There are other projects at advanced stage of exploration.
Mineral operations activities contribution

- Revenue
  - Royalty 2 – 7%
  - Income tax 25%
  - Government free equity 5%

- Foreign currency earnings
- Import materials replacement
- Job opportunity
- Community development
- Infrastructure development
- Knowledge transfer
CHALLENGES

• Human Resource
  - lack of skilled workers especially in the fields of mine Geology, mining engineering, mineral economics etc.
  - migration/flow to private sector

• Gap between mining industry & educational institutions

• Training and competency.

• Infrastructure
Conclusion

Mining in Ethiopia, particularly traditional gold mining has long history and still is becoming important in foreign currency earning & is playing important role in the economic development of the country & livelihood of the people.

The investment in the sector is growing from time to time and Ethiopia is becoming a good investment destination mainly due to:

- Political stability and good governance,
- Conducive mining investment policy and environment,
- Attractive and competitive legal frameworks
- Geological favourability to host a wide variety of minerals
- Highly prospective but under explored geologically,
- Availability of numerous mineral occurrences;
- Availability of labor and hospitable people,
- Intensive infrastructure development

The government of Ethiopia welcomes potential investors to invest in the mineral industry of Ethiopia for Mutual benefit.
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