TANZANIA’S EXPERIENCE IN HARNESSING MINERAL RESOURCES FOR DEVELOPMENT

By

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
Tanzania’s Experience in Harnessing Mineral Resources for Development

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SCOPE OF PRESENTATION

• Introduction
• Mineral Endowment
• Mining Contribution to National Economy
• Mining and Economic Growth
• Challenges and Opportunities
• Way forward
• Statistics
• Corporate Social Responsibility (CSR)
INTRODUCTION

• Mining is extraction of geological materials from the earth for economic benefits.
• Broad definition includes two sectors, hard-rock (minerals); oil and natural gas.
• Mining of metals, salt and stones has existed since historic memorial times.
• Tanzania experienced hard rock mining boom after 1997 due to changes in economic policies.
MINERAL ENDOWMENT

Tanzania has over 800,000 Km2 of various geological terrains with potential mineral resources:-

- Kimberlitic pipes in central and southern portion of the Archaean craton and Gold in Archaean greenstone belts – south and east of Lake Victoria;
- Gold and base metals in Proterozoic rocks in south western, southern and eastern parts of the country;
- Kimberlite in Proterozoic south and east of the Craton;
- Varieties of gemstones such as tanzanite (unique mineral), ruby, sapphire, spinel, tourmaline, topaz, scapolite, aquamarine, emeralds, amethyst, garnets (tsavorite, rhodolite, hessonite, almandite, pyrope, etc.) in Proterozoic rocks east, west and south of the Archaean Craton.
MINERAL ENDOWMENT … continued

- Nickel, copper and cobalt associated with ultramafic rocks Western part of the country;
- Tin and tungsten in Proterozoic rocks North western part of the country;
- Iron ore in Proterozoic rocks southern part of the country;
- Coal in Karoo System southern part of the country;
- Evaporates such as gypsum, salts in the rift valley and along the coastal belt;
- Industrial minerals such as limestone, gypsum, kaolin, diatomite, phosphates, graphite in different parts of the country.
MINERAL ENDOWMENT... cont’d...

Mineral Occurrence in Tanzania

- Gold
- Tanzanite
- Diamonds
- Coal
- Uranium
- Iron
- Gemstones
- Copper
- Natural Gas
- Nickel

Africa

- North Mara
- Geita
- Bulyanhulu
- Tulawaka
- Buzwagi
- Golden Pride
- Williamson
- TanzaniteOne
- Kabanga
- Shanta Chunya
- Mchuchuma
- Liganga
- Mkuju
- Ngaka
Major Groups of Minerals as per the Mining Act 2010

• Building materials
• Industrial minerals
• Gemstones
• Energy minerals
• Base metals
• Precious metals
Industry Segments

- Prospecting & Exploration
- Extraction & Processing
- Lapidary & Jewelry
- Refinery & Smelting
- Applied Industries

MINERAL ENDOWMENT ...

cont’d ...
MINING CONTRIBUTION TO NATIONAL ECONOMY

Employment & skills
- Direct & Indirect Employments
- Skills Development
- Exploration, Mining, Metallurgy, Equipment and Management

Economic Multiplication & Linkages
- Local Procurement of Goods & Services
- Supply of materials and energy to Local Industries

Export Earnings
- Mining Contributes about 40%-50% of Tanzania’s Export Earnings

CSR Contributions
- Schools, scholarships, hospitals, water, electricity and markets for neighboring villages
MINING CONTRIBUTION TO NATIONAL ECONOMY

- **Mining Towns**
  - Population, housing and amenities example Kahama, Geita, Mwadui, Mererani and Arusha,

- **Infrastructure**
  - Water, power, roads, rail and airstrips

- **Financial Markets**
  - Demand for local banking services including deposits and loans

- **Knowledge & Education**
  - Practical Training to College students, Geology Researches, Stock knowledge for future generation

Cont…
Corporate Tax: Heavy payments of profit tax after recoupment of investment

Royalty & Mining Rents: Largest non-tax revenues from domestic sources

Levy to Local Authorities: Largest revenues to remote local government authorities eg Kahama, Nzega, Geita, Tarime, Kishapu

WHTs & Payroll Taxes: Reliable revenues even before and after production

PUBLIC REVENUES

MINING CONTRIBUTION TO NATIONAL ECONOMY

cont’d …
MINING CONTRIBUTION TO NATIONAL ECONOMY

cont’d …
MINING AND ECONOMIC GROWTH

- Mining contributed to GDP 3.5% (2012)
- Mining sector grew by 7.8% in 2012
- Table: Tanzania Economic Picture (2012)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>USD</th>
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<tbody>
<tr>
<td>GDP (PPP)</td>
<td>75.07 bn (2012)</td>
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<tr>
<td>GDP (nominal)</td>
<td>28.2bn</td>
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<tr>
<td>GDP Growth</td>
<td>6.9% (2012)</td>
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<tr>
<td>Per Capita Income (PPP)</td>
<td>$1,700 (2012)</td>
</tr>
<tr>
<td>Per Capita Income (Nominal)</td>
<td>700</td>
</tr>
<tr>
<td>Population below Poverty Line</td>
<td>35% (2012)</td>
</tr>
<tr>
<td>Inflation</td>
<td>12.1% (2012)</td>
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</tbody>
</table>
MINING AND ECONOMIC GROWTH

Contribution to Non-Traditional Exports (2012)
MINING AND ECONOMIC GROWTH

- FDI growth: USD 1.3m (1997) to USD 2.5m (2010)
- Direct growth 1,700 people (1997) to 15,000 (2012)
- Indirect employment >200,000 persons (2012)
- Largest export earnings above 35% (In 2012 mineral exports were USD 2,246.3 mil. out of total exports USD 5,979.5 mil.)
- Gold value more than 90% of mineral
Mining Contribution to GDP (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution %</th>
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<tbody>
<tr>
<td>2001</td>
<td>1.8</td>
</tr>
<tr>
<td>2004</td>
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<td>2005</td>
<td>2.9</td>
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<tr>
<td>2006</td>
<td>3.2</td>
</tr>
<tr>
<td>2007</td>
<td>3.5</td>
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<td>2008</td>
<td>3.4</td>
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<td>2009</td>
<td>3.3</td>
</tr>
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<td>2010</td>
<td>3.3</td>
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<td>2011</td>
<td>3.3</td>
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<tr>
<td>2012</td>
<td>3.5</td>
</tr>
<tr>
<td>2013</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Multiplier through Local Procurements

• Major mines procured locally in 2012 >USD 520m
• Local procurement range btn 30% to 50%
• It is 23.5% of total annual turnover (USD 2.2 billion)
• Key items procured locally include Food, security, janitorial, contract mining and light supplies.
MINING AND ECONOMIC GROWTH

Increase in Public Revenues

• Ever increasing royalty since 2000
• Growth in domestic revenues 2% - 7%
• Raising corporate tax basket from 2009
• Tanzania shillings 478 billion has been collected as Corporate Tax between 2009 and 2013.
• USD 1.25 billion has been collected as total Govt revenue from 1998 to 2012.
MINING AND ECONOMIC GROWTH

Backward Linkages

• Contracts to Local Expert Geologists
• Supply to Exploration Camps
• Services provided by domestic Labs
• Hire of domestic transport facilities
• Environment and financial Consultancies to local firms

cont’d …
Forward Linkages

• Cutting and Polishing of gemstones
• Processing of minerals and metals to jewelry products
• Inputs to manufacturing of cement, fertilizers, building materials and energy sources
• Inputs to food processing
1. Skills shortage and limited experience
2. Inadequate infrastructures (railways, roads, ports, electricity and water);
3. Undeveloped capital markets.
4. Vacuum in the Medium Sector
5. Illegal mining, smuggling and illicit trade
CHALLENGES

• Limited local technology
• Undeveloped financial and consumer markets
• Infancy of private enterprising to grab supply opportunities
• Impact of fiscal stability contracts (15% uplift on Unredeemed Capital)
OPPORTUNITIES

- Upcoming gas to lower production costs
- Prospective Uranium, Coal, Nickel and Iron
- Global demand for energy commodities
WAY FORWARD

• Foster Investment competitiveness
• Integration with domestic economy.
• Fiscal regime to capture resource economic rent- ‘supernormal profit’.
• Strengthen auditing and monitoring especially on high-value projects.
• Enhancing transparency and public education.
WAY FORWARD

• Government to curb illicit mining and smuggling to facilitate growth of formal sector.

• Entrepreneurs should capitalize on opportunities to supply to Mining Projects

• Invest in mining education, skills and research to alleviate reliance on foreign technology
STATISTICS ON MINING AND DEVELOPMENT
Foreign Direct Investments (FDI) in Mining, 1998 – 2012 (USD Million)
Total Gold Production & Exports by 7 Large Scale Mines (2000 – 2012, mil. troy oz.)

- 2000: 0.42
- 2001: 0.94
- 2002: 1.14
- 2003: 1.32
- 2004: 1.42
- 2005: 1.40
- 2006: 1.25
- 2007: 1.16
- 2008: 1.03
- 2009: 1.10
- 2010: 1.24
- 2011: 1.32
- 2012: 1.27
Mineral Export Value by 7 Large Scale Mines (2000 – 2012, USD million)

- 2000: 117.0
- 2001: 260.2
- 2002: 364.3
- 2003: 493.0
- 2004: 597.7
- 2005: 640.8
- 2006: 783.1
- 2007: 825.4
- 2008: 920.8
- 2009: 1,109.4
- 2010: 1,582.6
- 2011: 2,167.9
- 2012: 2,168.4
Royalty Payments by 7 Large Scale Mines (2000 – 2012, USD million)
Royalty and Tax Payments by 9 Large Scale Mines (1999 – 2012, TZS Billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Corp. Tax</th>
<th>PAYE</th>
<th>WHT</th>
<th>SDL</th>
<th>VAT &amp; Other</th>
<th>Tax Total</th>
<th>Royalty Total</th>
<th>GRAND TOTAL</th>
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<tr>
<td>1999</td>
<td>0.00</td>
<td>0.84</td>
<td>0.26</td>
<td>0.29</td>
<td>0.15</td>
<td>1.54</td>
<td>0.55</td>
<td>2.09</td>
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<tr>
<td>2000</td>
<td>0.00</td>
<td>3.88</td>
<td>4.71</td>
<td>0.86</td>
<td>0.39</td>
<td>9.84</td>
<td>2.79</td>
<td>12.63</td>
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<td>2001</td>
<td>0.00</td>
<td>7.23</td>
<td>4.86</td>
<td>1.13</td>
<td>0.35</td>
<td>13.57</td>
<td>6.56</td>
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<td>2002</td>
<td>0.00</td>
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<td>1.69</td>
<td>1.64</td>
<td>19.41</td>
<td>10.22</td>
<td>29.63</td>
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<td>2003</td>
<td>0.00</td>
<td>12.79</td>
<td>5.45</td>
<td>1.66</td>
<td>2.19</td>
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<td>14.97</td>
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<tr>
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<td>0.00</td>
<td>8.33</td>
<td>5.32</td>
<td>2.44</td>
<td>4.86</td>
<td>20.95</td>
<td>18.87</td>
<td>39.82</td>
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<td>2005</td>
<td>2.31</td>
<td>13.05</td>
<td>7.50</td>
<td>8.87</td>
<td>5.44</td>
<td>37.17</td>
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<td>2006</td>
<td>1.75</td>
<td>11.78</td>
<td>3.35</td>
<td>2.49</td>
<td>2.84</td>
<td>22.21</td>
<td>29.30</td>
<td>51.51</td>
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<td>2007</td>
<td>1.44</td>
<td>22.28</td>
<td>3.26</td>
<td>3.76</td>
<td>3.44</td>
<td>34.18</td>
<td>30.00</td>
<td>64.18</td>
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<td>2008</td>
<td>0.88</td>
<td>44.01</td>
<td>5.61</td>
<td>7.55</td>
<td>9.23</td>
<td>67.28</td>
<td>32.69</td>
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<tr>
<td>2009</td>
<td>3.21</td>
<td>52.64</td>
<td>7.87</td>
<td>9.78</td>
<td>8.67</td>
<td>82.17</td>
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<td>2010</td>
<td>21.38</td>
<td>49.92</td>
<td>13.14</td>
<td>11.32</td>
<td>4.87</td>
<td>100.63</td>
<td>70.37</td>
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<tr>
<td>2011</td>
<td>137.16</td>
<td>90.30</td>
<td>12.26</td>
<td>19.50</td>
<td>26.26</td>
<td>285.48</td>
<td>97.03</td>
<td>382.51</td>
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<tr>
<td>2012</td>
<td>299.85</td>
<td>87.45</td>
<td>67.64</td>
<td>19.32</td>
<td>46.81</td>
<td>521.07</td>
<td>114.81</td>
<td>635.88</td>
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<tr>
<td>Total</td>
<td>467.98</td>
<td>415.18</td>
<td>146.63</td>
<td>90.66</td>
<td>117.14</td>
<td>1,237.59</td>
<td>492.84</td>
<td>1,730.43</td>
</tr>
</tbody>
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CORPORATE SOCIAL RESPONSIBILITIES

CSR EXPENDITURE BY 7 MAJOR MINES

Graph showing the CSR expenditure by 7 major mines from 2000 to 2011. The expenditure is measured in USD (\$1,000).