Extractive industries and sustainable job creation

By

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Outline

- Sustainable job creation;
- Agreements influencing Sustainable Job Creation;
- UNCTAD, OILGASMINE and Sustainable Job Creation;
- Channels for job creation in the extractive industries - Direct, indirect, induced;
- Job multiplier effect;
- Constraints to job creation;
- Recommendations to drive job creation.
Sustainable job creation

- "sustainable job creation" defined as the job creation process that promotes economic growth, social inclusion and environmental protection.
Sustainable Development Goals

- **SDG 8** - Promote inclusive and sustainable economic growth, employment and decent work for all;

Linked to other goals

- **SDG 5** - Achieve gender equality and empower all women and girls;

- **SDG 9** - Build resilient infrastructure, promote sustainable industrialization and foster innovation;

- **SDG 10** - Reduce inequality within and among countries;

- **SDG 12** - Ensure sustainable consumption and production patterns;

- **SDG 14** - Conserve and sustainably use the oceans, seas and marine resources;

- **SDG 15** - Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.
Other global development agreements/ sustainable job creation

- Paris agreement - combat climate change and adapt to its effects,
- Addis Ababa Action Agenda - financing the implementation of the SDGs
- Nairobi Maafikiano - UNCTAD
UNCTAD and OILGASMINE

- OILGASMINE - UNCTAD conference on extractive industries since 1996
- Organized in 16 different African countries
- Sudan OILGASMINE conference - 2015; Outcomes:
  - Strengthen local, national and international institutions in policy making to promote SJC
  - Promote training, capacity building, technology transfer to build local content
  - Mainstream gender in policy making and close the gender gap in EI
Follow up on Sudan OILGASMINE – ongoing work on sustainable job creation
Two studies completed on contribution job creation in Mining sector, Ghana and Sudan –
Deeper understanding on quantitative contribution and gender component of artisanal scale mining to total jobs
Channels for job creation – Direct

- Direct Jobs related to the activities in the extractive industries.

- Licensing
- Exploration
- Development
- Production
- Decommissioning
- Surveying
- Site preparation
- Design and planning
- Construction
- Installation
- Extraction – Surface/underground/onshore/offshore
- Processing
- Abandoning
- Geophysical analysis
- Exploratory drilling
- Feasibility studies
- Reclamation studies
- Field expansion
Direct employment in extractive industry
(World Bank 2013)

<table>
<thead>
<tr>
<th>Country</th>
<th>Project (sector or resource)</th>
<th>Investment % of 2010 GDP</th>
<th>Direct employment number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papua New Guinea</td>
<td>LNG Project (natural Gas)</td>
<td>237.0</td>
<td>9300 during construction; 1000 afterward*</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Oyu Tolgoi (copper, gold)</td>
<td>74.2</td>
<td>14800 during construction; 3000-4000 afterward</td>
</tr>
<tr>
<td>Botswana</td>
<td>Jwareng Out 8 Project (diamonds)</td>
<td>20.2</td>
<td>1000</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>Ramu Mine (nickel)</td>
<td>19.0</td>
<td>5000 during construction; 2000 afterward</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Benga Mining (coal)</td>
<td>13.6</td>
<td>Currently 150; 4500 afterward</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Mchuchuma (coal)</td>
<td>12.2</td>
<td>5000</td>
</tr>
<tr>
<td>Namibia</td>
<td>Husab Mine (uranium)</td>
<td>11.9</td>
<td>5200 during construction; 1200 afterward</td>
</tr>
<tr>
<td>Zambia</td>
<td>Lumwana Mine (copper)</td>
<td>9.3</td>
<td>4700 during construction</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Reko Diq Mining (copper, gold)</td>
<td>4.0</td>
<td>2500 during construction; 200 afterward</td>
</tr>
<tr>
<td>Peru</td>
<td>Conga Mine (gold)</td>
<td>2.6</td>
<td>6000 during construction; 1700 afterward</td>
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</table>
Channels for job creation - Indirect

- Indirect jobs created by indirectly stimulating demand for goods and services.

**Suppliers of Goods**
- Eg. Equipment
- Construction materials
- Consumables – explosives, chemicals, lubricants

**Suppliers of services**
- Eg. Drilling, crushing
- Haulage
- Repair and maintenance
- Transport
- Security
- Catering
- Camp support
- Financial

**Extractive Industry**
Induced jobs are created by the consumer spending of income earned either directly or indirectly from extractive industries.
Channels for job creation - Linkages

- Upstream linkages – supplies of goods and services to the mine/oilfield;
- Downstream linkages – processors of mine/oilfield output;
- Horizontal linkages – development of new industries using capabilities acquired from the extractive industries;
- Technology linkages – transfer of knowledge and technical know-how within the extractive industries’ value chain;
- Spatial linkages – Infrastructure investments – power, water, internet and telecommunications.
Constraints to job creation

- Shortage of skills
- Access to finance - expansion of operations; establish new businesses and expansion of existing ones (SMEs);
- Access to infrastructure – reliable power supply, roads, rail, water, ports, telecommunications;
- Weak investment climate – weak governance; business entry/registration challenges, tax rate; legal system; policy uncertainty
Driving job creation - Recommendations

- Capacity building to address skills gap (eg. Chile Mining Skills Council; Brazil Petrobras)
- Local content policies;
- Support programs to improve access to finance, including affordable credit;
- Infrastructure investment (eg. power supply, rail, road);
- Support supplier development programs - integrate SMEs into local procurement channels (eg. Angola CAE);
- Reduce onerous regulation; attract investment.