#### Small-scale mining in Namibia: An Overview

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7th conference of the African Association of Women in Geosciences

Theme: "Earth Sciences and Climate Change: Challenges to Development in Africa"

**Sub theme: Earth sciences and the community** 

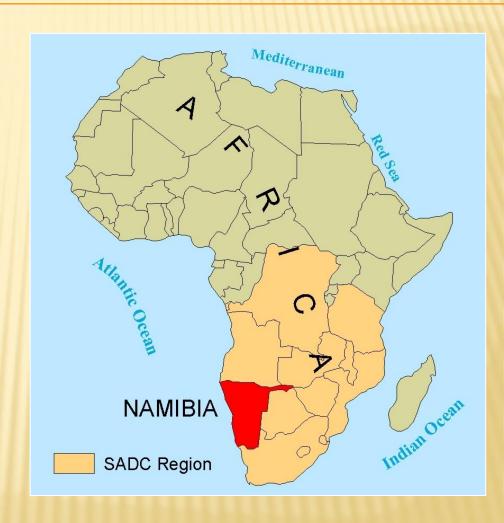
**04 November 2014** 

## OUTLINE

- 1.Country profile
- 2. Namibia's Mining industry
- 3. Small Scale Mining in Namibia
- 4. Support activities of MME
- 5. Socio-economic significance
- 6.Conclusion

### 1. COUNTRY PROFILE

- Government type: Republic, President system
- Capital: Windhoek
- Area coverage: 824.269 Km2
- Population: 2.234 million( 2011 population census)
- Official language: English(10 ethnic languages)
- Independence: March 1990
- Currency: Namibian Dollar (1US\$ = 11.05N\$)
- Inflation rate: 6.10%(May 2013)
- Unemployment: 51.2% (2008)



## 2. NAMIBIA MINING INDUSTRY

- Mining: backbone of the Namibian economy
- ★ 9.3% contribution to GDP\*
- ★ Other sectors: Fisheries, Agriculture and Tourism.

### 2.1 MINERALS MINED IN NAMIBIA

- **X** Diamonds
- \* Uranium
- ★ Base metals (Copper, Lead, Zinc)
- × Gold
- **X** Dimension Stones
- Industrial Minerals
- × Semi precious stones

#### 3. SMALL SCALE MINING

- A common definition for this sector has not been adopted as its legal status, defining criteria, and definitions vary from country to country.
- Locally, Small-scale mining refers to mining using low technology or with minimal machinery, low financial inputs
- Typically exploiting small orebodies that are uneconomical for large scale mining.



## SMALL SCALE MINING.....

- Country-wide 5000 to 10,000 SSMs.
- About 35 types of minerals & gemstones are mined.
- **Extraction** of gemstones & mineral specimen constitute 80% of the SSM activities.
- ★ Dimension stones, industrial minerals & other mineral groups constitute the rest.
- The extraction of high value metals is limited to the production of tantalite and tin concentrates.
- Erongo, Kunene and Karas Regions

#### MINERAL LICENCES APPLICABLE TO SMALL SCALE MINERS

Minerals (Prospecting & Mining) Act No. 33 of 1992

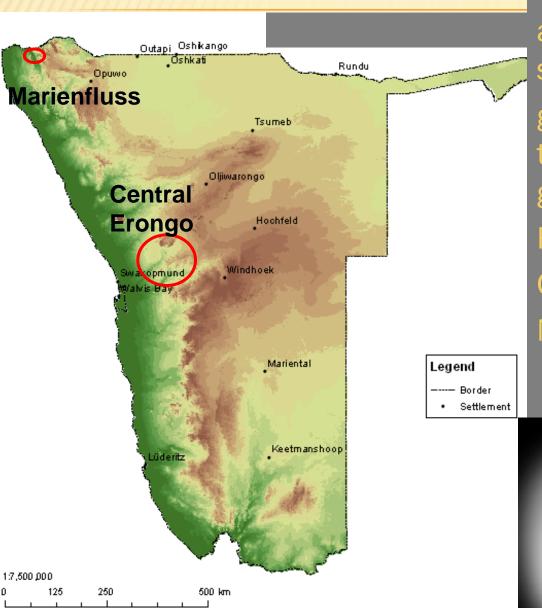
#### Non-exclusive prospecting licence (NEPL).

- \* The holder of a non-exclusive prospecting licence (NEPL) is allowed to look for any mineral or group of minerals, on any land throughout Namibia.
- Applicant must be 18 years old and above
- NEPL is valid for 12 months.
- Not transferrable or renewed.
- Costs N\$ 50.00.
- An NEPL is needed if the applicant wants to apply for a Mining Claim

#### **Mining Claim**

- is for Namibian citizens or Namibian owned companies only, valid for 3 years, with a
   2 year renewal period.
- Maximum area size of 18 Ha
- ★ Dimensions: 300m × 600m
- A person can have a maximum number of 10 claims at the same area or spread out in Namibia.
- Costs N\$ 50.00 per claim
- \* The holder of a Mining Claim is allowed to mine/extract minerals from the area.
- Environmental Management Act No. 7 of 2007 (Environmental Clearance Certificate)
- \* Small scale miners typically exploit the following mineral groups:, Semi-precious stones, Dimension stones and Industrial minerals.
- Other groups like Base and rare metals, Precious metals, and Non-nuclear fuels are exploited on a lesser scale.

#### 3.1 Small-scale mining Products:



a) High value semi-precious stones:

green, blue and multi-color tourmaline, green and orange garnet, aquamarine

Resources:

Central Erongo and Northern Kunene







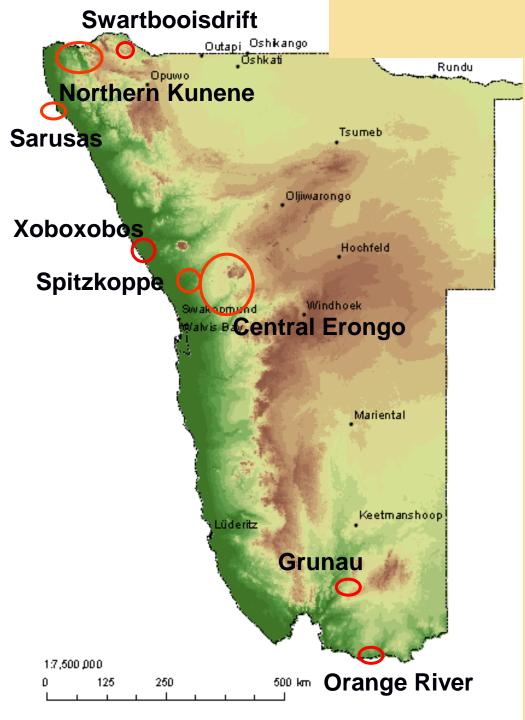
## a) High value semi-precious stones.....

- Mining intensity: Very low (Kunene) to moderate (Neuschwaben, Erongo etc.)
- Value addition: None (Kunene) to low (Erongo)
- Marketing: Middleman system
   established for selling to SE-Asian
   and European markets
- Pricing: Relatively fair









#### b) Low value semiprecious stones:

- = rose quartz, amethyst, agate, sodalite, topaz
- Resources: Southern Karas, Erongo, Northern Kunene
- Resource potential: High





#### c) Collector's stones



- Black tourmaline, topaz,
   aquamarine, quartz
   varieties, dioptase, ore
   minerals etc.
- Resources: Erongo, Central Kunene, Tsumeb
- Resource potential: High
- Erongo, Kunene and Karas Regions
- Mining intensity: Moderate (Kunene) to high (Erongo)





#### d) Ore minerals



## Metal ores: Copper, Tin & tantalum ores

Resources: Copper: Central Kunene, Otavi

Mountainland

- \* Tin: Uis
- Tantalum: Uis, Lofdal, Karas,
- Resource potential: Moderate
- Mining intensity: Very low
- Copper concentrate sold to Namibia Customs Smelter in Tsumeb,
- Tin and tantalum ore sold through dealers if available
- Pricing: Below world market

## e) Building Materials

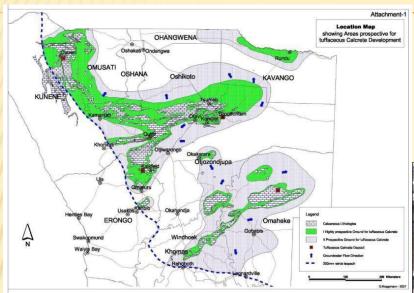








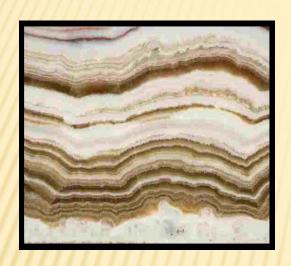
#### Low cost building Materials...







## **DIMENSION STONES**













### 3.2 VALUE ADDITION

- Government encourages value addition.
- Value chain analysis for the semi precious stone industry-MTI
- Keetmanshoop and KaribibGemstone Centres
- Currently non Operational Kunene House of Gems





#### 3.3 Challenges that SSM face:

- Equipment: Inefficient nature of mining,
- Access to finance No credit facilities due to risk associated with businesses of this nature.
- Market Most miners sell their stones below market value due to a lack of formal market structures
- Land issues Most of the mining activities take place on commercial farmland privately owned by individuals. A contract is made by the landowner often at the SSM's disadvantage



#### 4. SUPPORT ACTIVITIES OF MME

#### a) Advisory and laboratory services by MME

- 1. Analysis of minerals and element spectrum in rocks
- 2. Technical advise for mining and processing

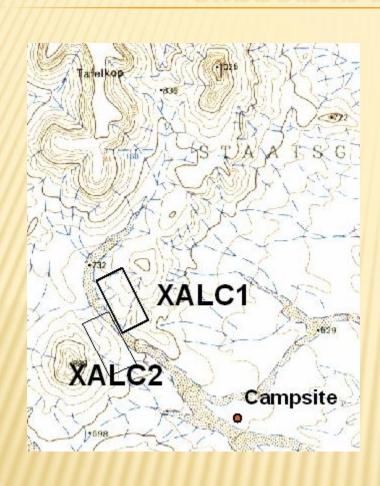






Free laboratory service to legal/registered SSM.

# B) Advise on mineral policy issues and support in pegging of claims







# c) Organisational support: Associations and cooperatives

Support to Small-scale Miners in formation of Association and cooperatives



Noordoewer
Small Scale Miners Association -founders meeting

## d) Support: Implementation of capital projects (Employment creation)

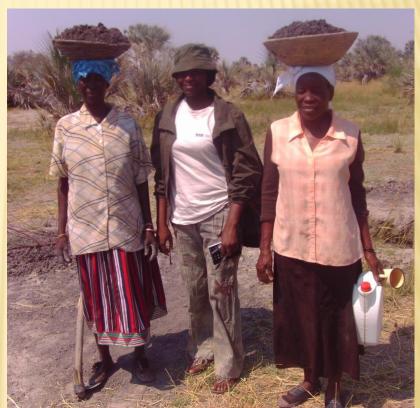
- \* 6 projects in process of implementation
- Projects involve setting up of processing facilities for cutting and polishing of dimension and semi-precious stones (Karibib, Khorixas),
- Processing of flatstones for building materials (Noordoewer)



# Support: Implementation of capital projects....

 Processing of clay into bricks and ceramic ware (liheke ya Nakele, Tondoro & Ioma)





# e) Liasing with stakeholders/external agencies to optimise support to Small Scale Miners

Bundesanstalt fürGeowissenschaften und Rohstoffe(BGR)









## Liasing with stakeholders/ external agencies to optimise support to Small Scale Miners.....

- Meeting Points Mining (MPM);
- Use of GPR in exploration of gemstones
- \* NCCI, Polytechnic, UNAM etc.





### F) Mineral Ancillary Rights Commission

\* A Mineral Ancillary Rights Commission is in place and assists small scale miners with the common disputes especially that of lack of access to private land (farms).

### 5. SOCIO-ECONOMIC SIGNIFICANCE

- Even though the exact contribution of the sector to the country's GDP is not known,
- \* SSM has a positive, direct economic impact (poverty reduction) at the household level in rural and remote areas (According to a study done by NEPRU in 2009 in Erongo Region).

#### Figure 7: Estimated monthly income during peak season

Peak season for these miners is usually at times when many tourists visit coastal parts of Namibia. This is usually between the months of June and August. During peak season, about 35 percent of the small scale miners generate an estimated monthly income of between N\$100 to N\$500 from selling such stones. About 17 percent of miners generate an estimated monthly income that falls between N\$1001 to N\$5000. Following that is 15 percent of miners who generate an estimated monthly income of between N\$501 and N\$1000 and another 13.3 percent of the miners who estimate their monthly incomes during this period to be more than N\$10 000.

## 6. CONCLUSION

- \* If the SSM subsector is properly funded, organized and administered, it can significantly reduce the prevailing high unemployment rate to acceptable levels and improve the quality of life for many in the regions.
- SSM (untapped mineral resource) has a high potential to contribute to economic development through empowerment of disadvantaged groups such as women and improvement of income in rural areas)

### SOCIO-ECONOMIC SIGNIFICANCE

- SSM is the only source of livelihood to many households in the rural areas. Used for pay for education, health and other essential needs.
- \* At a corporate level, A 2 % royalty is payable to government for all exports of gemstone/semi-precious stones.

