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SKILLS FOR A COMPETITIVE MINING SECTOR IN ZAMBIA

By

Elite Leonard Mhone

M.Eng, B.Eng P.Eng Ministry of Energy and Mining, Zambia

The views expressed are those of the author and do not necessarily reflect
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OVERVIEW



- ▶ Background of Mining in Zambia
- ▶ Skills Gap Definition
- ▶ Case for Zambia, What are the causes
- ▶ Major Skills gap in the Mining Industry
- ▶ Interventions by Governments
- ▶ Government – Private Sector collaboration to deliver training to meet skills need
- ▶ Conclusion

Background



- ▶ Zambia has been Mining for over a 100 years in partnership with Multinational operators. At its peak, the country produced close to a million Mt of Copper.
 - Private – State (Parastatal) – Private
- ▶ It is the second largest producer of copper in Africa after Congo and second largest producer of emeralds in the world after Colombia
- ▶ Mining in Zambia employs between 70,000 and 80,000

Skills Gap

- ▶ A “skills gap” is defined as an imbalance in the demand for and supply of workers with different skills,
 - at the right time,
 - in the right quantities/proportions and
 - of the right quality/level of competence.
- ▶ Skills development in Zambia lags behind technological innovation in the mining industry
- ▶ 82% of the workforce in the Mining and Quarrying Sector has no formally recognised skills

Institutions that Provide Skills to Mines

➤ CBU

- PhD
- Master
- Degree programmes;
- Diploma programmes; and
- Advanced certificates

➤ UNZA

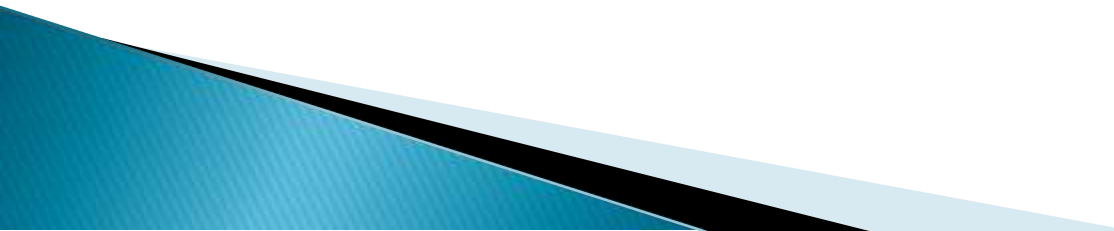
- PhD
- Masters
- Degree programmes.

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➤ TEVETA with 247 accredited institutions

- Diploma programmes;
- Advanced certificate programmes; and
- Craft certificate programmes.

Cause for the Skills Gap

- ▶ Improvements in technology, Recapitalisation and new mines caused change in operator needs
 - ▶ Lack of investment in latest technologies in Trades Training Institutes (TTIs) and the two main public universities i.e. CBU and UNZA (disparities in training & operator needs)
 - Brain drain (Lecturers and Skilled labour)
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Where are the skills gaps (study by Hamukoma)

Position	Establishment	Short fall	%
Graduate mining	268	47	16%
Graduate metallurgy	394	16	4%
Technician geology	4	2	50%
Technician mining	383	120	31%
Technician metallurgy	60	40	60%
Craft certificate Mining	647	209	32%
Craft certificate Heavy Equipment Repair	786	16	2%

5 Jobs with Highest Number of Vacancies

Job Title	Budgeted labour Strength(A)	Number of Vacancies(B)	(B) Expressed as % (A)
Artisan – Plant Fitter/Turner	733	55	8%
Section Boss*	203	46	21%
Mining / Planning Engineer	288	44	16%
Artisan – Electrician	728	36	5%
Shift Boss**	353	36	10%

It takes two years to train Artisans and Section Bosses, two and half year for Shift Bosses and five years for Engineers

*Under Mining regulation a section boss can supervise up to 49 persons in a mining area.

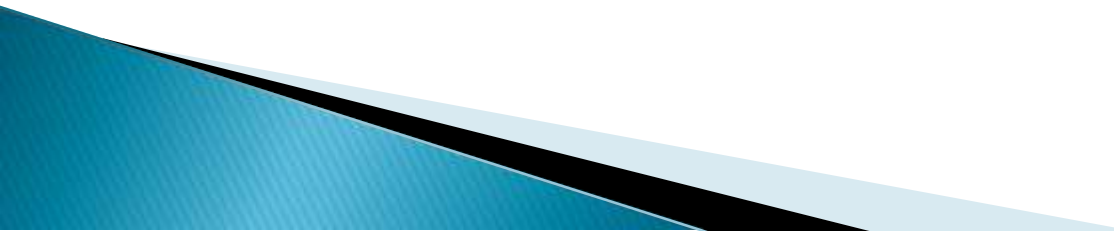
**Under Mining Regulation once an area has fifty persons working it has to have a shift boss and at least two section bosses.

Other gaps to be addressed

- ▶ The skills shortages that have been caused by the absence of adequate training programs include:
 - rigging,
 - coded welders
 - assaying
 - various areas in instrumentation.

Governments response

– policies and programmes

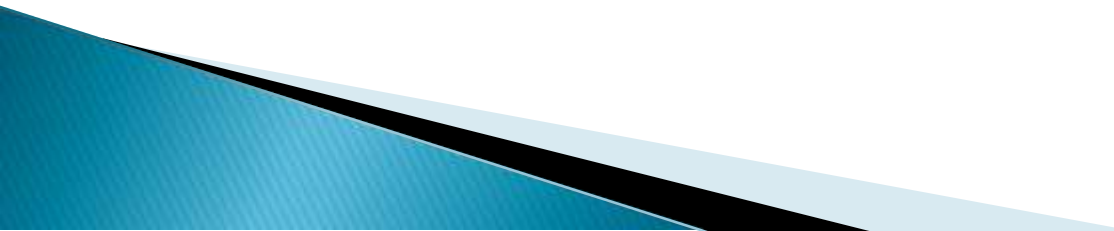
- ▶ Review of the TEVETA policy
 - ▶ Review of curricular in various programs to respond to industry needs
 - ▶ Two Tier education system in Secondary Schools – vocational training
 - ▶ Recent establishment of ZAQA and ZHEA
 - ▶ Introduction of the Skills Development levy (1.25% annual payroll) – Skills Development Levy Act No. 46 of 2016
 - ▶ The Mines and Minerals Development Act No.11 of 2015 compels all mining firms to provide training for employees
 - ▶ Increased funding to trade schools (TEVET funds)
 - ▶ Plans to introduce incentives to organizations that give internship to a students
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Government – Private Sector collaboration to deliver training to meet skills need

- ▶ **Formation of the ZAMSET – ‘developing and managing an integrated framework for mining education and mining skills development from school to post–university levels’**
 - ▶ Private sector driven
 - Collaborate with TEVETA and ZHEA, to monitor and evaluate and review all skills development programs that are offered for and by the mining sector.
 - ▶ Kwambula Project – Government provides infrastructure while FQM provides state of the art equipment and expertise at Solwezi trades Institute

- ▶ Recognition of The Copperbelt University as Africa Centre of Excellence for Sustainable Mining
 - Help re-orient teaching & research to address recent innovations and sustainable mining
 - ▶ The Chamber of Mines has embarked on career exhibition tours to schools
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Conclusion

- ▶ Do we have a skills gap in Zambia's Mining sector?
 - ▶ Zambia realises that skills development is an investment for its long-term competitiveness of the mining sector.
 - Beneficial to the companies and their shareholders, and ultimately for its contribution to the nation's economy and society.
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▶ **END**