



ZIMBABWE



Zimbabwe Economic Policy Analysis and Research Unit

# POLICY BRIEF

OCTOBER 2016

## In-depth Training Needs Assessment Survey in the ZIMBABWE MINING SECTOR

### BACKGROUND

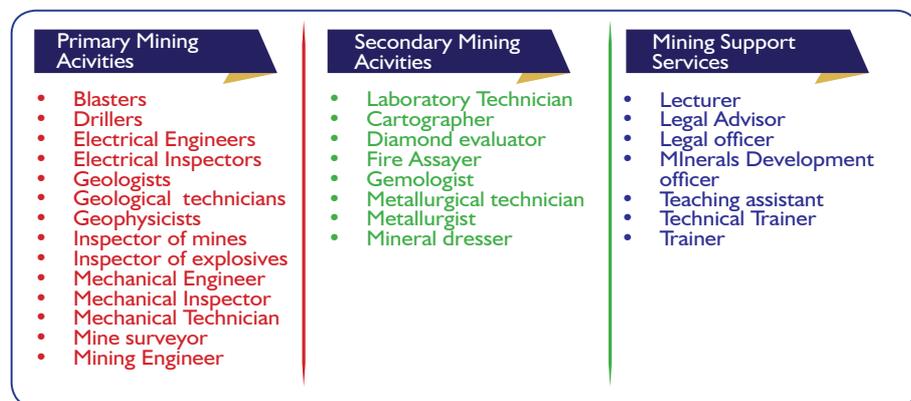
This Policy Brief summarises the key findings from a detailed study undertaken by ZEPARU in 2015 entitled, 'In-Depth Training Needs Assessment Survey in the Zimbabwe Mining Sector'. The Policy Brief puts forward strategies that can help the minerals industry technical capacity to improve to anchor economic growth and development for Zimbabwe. The Brief notes the need for the minerals sector to move from a knowledge tier to a wisdom tier. In addition, there is need for policies that prop up the industry to realise its full potential, thereby meaningfully contributing to the economic growth of the country.



The Zimbabwe minerals sector is a major foreign currency earner and has potential to become the pillar for economic growth and development through value addition and beneficiation. Due to its diverse and well-developed nature, it is one of Zimbabwe's engines for economic growth and transformation alongside the agriculture sector. Despite its potential, the industry's current contribution to the economic growth is still well below expected targets, downplaying its role in export earning, employment creation and poverty reduction. Among the challenges faced by the minerals industry are lack of human capital and tools of trade as well as policy and support infrastructure which are either inadequate or poor or both.

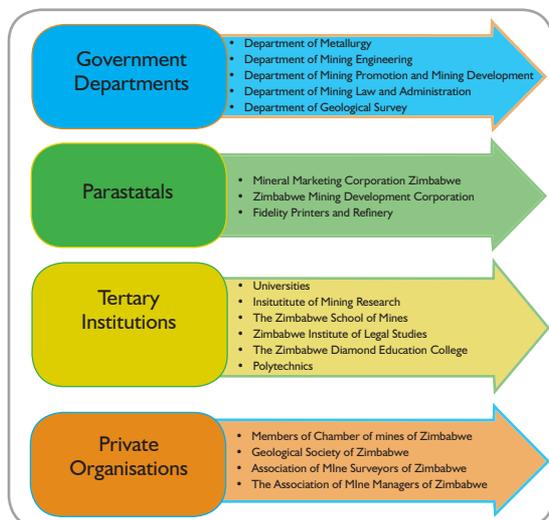
The use of mineral resources to underpin growth and development is premised on adequate institutional capacities, skills and knowledge of all stakeholders across the whole mining sector value chain. Based on a survey carried out as part of the detailed study, it is evident that critical support institutions and stakeholders do not have adequate tools of trade to provide the needed services. In addition, mining related policies are inadequate and the support infrastructure is poor or absent. Nonetheless the minerals industry of Zimbabwe employees have vast mineral related skills at certificates, diploma and degree levels (Figure 1).

Figure 1: Different levels of skills in the mining industry of Zimbabwe



These skills are resident in different institutions, which can be categorised into four groups namely: government departments; parastatals; tertiary institutions; and private mining companies and professionals. These can be identified as in Figure 2.

Figure 2: Key institutions in the Zimbabwe mining industry



The Zimbabwean skills list compares well with those of some of the world's known mining countries like Canada, Australia and South Africa. Thus, the industry possesses sufficient knowledge which is the basis of competence. However, further analysis of the Zimbabwean skills and knowledge in relation to those of other countries revealed that most of the Zimbabwean skills and knowledge belong to the knowledge tier.

The knowledge tier level of skills in itself fosters an operative level but lacks provision of an integration that would infer further knowledge, thus not sufficient to propel the country to the required levels.

The industry needs to move from knowledge tier to wisdom tier through the understanding tier. The understanding tier entails putting knowledge together to solve problems. In this tier, new knowledge and new information is synthesized from what is currently known and understood. This implies synthesizing the current knowledge to suit the Zimbabwean industry and address issues on the ground. This is not currently happening due to over reliance on external expertise which inhibits

research interest among the local industry. The understanding tier can be achieved through comprehensive taught courses at Masters (MSc), Masters by research (MPhil) and Master of Technology (MTech) levels. Development of human capital to wisdom tier should however be the ultimate goal. The wisdom tier adds value to our commodities through product formulation and component manufacture.

## 2. POLICY CHALLENGES

The challenge of human capital requires enhancing the skills level for trainers, increasing numbers of skilled and qualified labour force and reducing the high turnover & skills loss. Currently, some executive and managerial positions in the industry are occupied by first degree holders and personnel with technical skills but limited experience. The tools of trade challenge would need to be addressed through provision of basic equipment, replacement of outdated equipment and infrastructure, availability of spares, competitive prices of tools of trade, servicing and access to information on developments.

On the policy challenge there is need to iron out inconsistencies, marry mining policies to policies in other sectors, include segmental policies to correct sectoral imbalances, design policies that promote capital formation, remove policies that are not conducive to economic growth and clearly communicate and disseminate the policies. Other challenges that need to be addressed to help the minerals sector include: servicing of equipment, reduction of power cuts and tariffs, increasing fiscal funding for the sector, lowering bank rates, increasing cash flow and reducing bureaucracy in government institutions.

### Policy Recommendations

A brief outline of the different initiatives that can be instituted to promote the skills capacity of the minerals industry in Zimbabwe is given here:

#### Establishment of a centre of excellence for minerals industry

The minerals sector tends to be knowledge-intensive and accordingly needs 'priming' through investment in human resource development and research & development. Zimbabwe is currently churning out high quality of graduates but the level remains at the knowledge tier. The center can avail a platform that extends education beyond basic degree and produce adaptable, multi-skilled creative labour, at the same time carrying research relevant to the needs of the country and disseminate research findings. The center would provide best practices, research, support and training for the industry through a team working on various aspects of minerals, sharing facilities and providing an environment that influences innovation. This has the advantage of quickly creating the inventors that Zimbabwe needs so as to add value to the minerals. Mining equipment is very expensive





but a center of excellence can easily address the tools of trade problem by avoiding duplicate buying and redundancy of equipment at the same time servicing a large audience.

## Provide adequate resources to the training institutions

In order to facilitate institutions to produce graduates that meet the needs of the industry, existing institutions need to be upgraded, expanded and adequately staffed. The Ministry of High and Tertiary Education should invest in materials and application research to facilitate production of skills to levels that can develop solutions that create value. The Ministry should ensure that students are exposed to all the equipment and tools used in the mining industry during training.



## Review of mining sector curricular

The mining sector skills require regular upgrading in line with changing sector requirements and expectations. The Ministry of Higher and tertiary Education, in collaboration with the Ministry of Mines and Mining Development (MMMD) need to facilitate the modification of current mining sector curricular through Zimbabwe Council for Higher Education (ZIMCHE) to include more practicals and give prominence to soft skills. Provision of attachments during the course of training should be intensified. MMMD should introduce refresher and upgrading courses as well as enforce psychometric recommendations to existing personnel.

## Retention of Experience in the sector

The wisdom tier (innovation, product formulation, manufacture, value addition) which the sector should aim for is achieved through PhD cum experience. Though knowledge and understanding can often be taught, wisdom is usually acquired through experience so at any cost the sector should endeavour to retain experienced personnel.

## Continuous Review of mining related legislation

The adoption of practical policies and enactment of user friendly legislations will further promote the growth of the mining sector as well as tying together of the different pieces of legislation which have a bearing on the development of the sector. The well-intended policy proposals may fail to be implemented if there is no buy-in from the concerned stakeholders.

## Public Private Partnerships (PPPs).

Government should consider putting concerted efforts on PPPs between government departments and private players/investors as envisaged in ZimAsset. This will involve industry in funding research and training.

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