Developing Effective Mineral Resource Policy for Sustainable Livelihoods through Geoscience

Zambia is the focus of this study, recognising the historic importance of copper mining in Zambia, the current resurgence of interest in the copper belt and issues associated with foreign investment. There are deep misgivings in the community that the nation’s mineral wealth is not benefiting Zambia and an overall sense that the country does not get a fair deal with mining and tax policies “over-generous” to companies and tilted towards investors. The industry has also expressed concerns regarding privatisation, changing corporate tax regimes with recent increases in royalties from 3-6%, transparency, labour laws/costs and securing affordable and reliable power with electricity currently comprising 15% of operational costs for mining companies. The balance between resource development, foreign investment, regulatory regimes as they apply to all investors and community expectations clearly remains a major issue in Zambia.

This report targeted a more comprehensive understanding of the gaps in knowledge and skills in the area of regional resource analysis, industry activity and trends in Zambia. A key question was how to more fully realise the resource sectors role in Zambia’s future, both by invigorating brownfields regions as well as frontier regions and recognising government’s geoscience role in regional planning and infrastructure development, development of regional exploration frameworks and marketing prospectivity. This approach reflects the experiences of resource-rich countries like Australia and Canada that actively support the provision of public geoscience data and information.

With this as context, this study concentrated on the obstacles to operational effectiveness of the Geological Survey of Zambia in its role of providing reliable information to support:

1. Marketing the mineral resource potential of the country
2. The provision of geoscience understanding for wider socio-economic planning

Key knowledge and skill gaps identified were:

- Data governance frameworks (documented policies, procedures and processes) and data standards (e.g. database models and data definitions; reporting requirements) are required to enable the effective capture of data in forms that can be integrated and confidently interrogated with minimum effort by industry and government users
- Data stewardship and custodianship roles are essential to realise greater integrity and confidence in the administration and delivery of information. Custodians ensure information datasets and products are of a consistently high standard and ‘fit for purpose’ as well as oversight quality control and quality assurance procedures before dissemination of information
- Data integrity and security, recognising that large investment decisions are made using public geoscience so data integrity is critical and that data security is essential, recognising that information submitted on exploration activity forms a vital part of government geoscience databases
- Storage and access technologies

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