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MINE CLOSURE IN SMALL SCALE DIAMOND MINING IN SOUTH AFRICA: A REVIEW OF POLICIES AND PRACTICES

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ABSTRACT

Mineral commodities are finite resources and their extraction can be understood using the mining life cycle which comprises of the following stages, namely: prospecting and exploration, development, extraction, and closure and reclamation. In the past, focus was largely directed to the first three stages of the mining value chain. This resulted in mine closure not receiving much attention. The increasing impacts of mining on the environment has forced government and mining companies to consider mine closure in policy and legislative frameworks as well as in the planning of mining operations. Over the years, several guidelines have been developed to serve as best practices for the mine closure. Moreover, mine closure has been included in mining policy and legislations for a majority of countries.

While considerable inroads have been made in terms of regulating mine closure; the focus of governments has been inclined towards large-scale mining operations. The majority of the mine closure guidelines and provisions within mining laws have been designed for large-scale operations. As a result, mine closure remains a gap in the small-scale mining (SSM) sector. The SSM sector continues to play a significant role in the socio-economic development in the remote areas. It is reported that the sector currently employs more than 40 million globally. Just like any mining activity, the SSM sector also had negative impacts on the environment. Unfortunately, if not conducted properly, the SSM activities can result in negative effects on the communities and the environment both during the operation and after a mine ceases its activities.

This study aimed to understand mine closure in SSM using South Africa as a case study. The study entailed reviewing the policy and legislative framework regulating this sector, determining the mine closure practice in the sector in order to assess whether there exists a gap between the policy and practices.

A combination of qualitative and quantitative methods was used to conduct the research and data was collected in the Northern Cape in South Africa. The research included a review of the

literature and an assessment of mining application and closure data. In addition, key informants were conducted with the practitioners from government Departments and the private consultancies to gain insights into mine closure practices in the SSM sector.

The research revealed that there is a gap between policies and practices within the SSM sector as it regards mine closure. Insufficient financial provision and the complexity of the legislation were the main hindrances to efficient mine closure. In addition, the lack of knowledge and skills, and the lack of enforcement and compliance were also identified as barriers in the sector.

The study concluded by proposing strategies that government, miners and institutions could follow to improve mine closure policies and practices in the SSM sector. As a starting point, a recommendation has been proposed towards the rehabilitation levy and its calculation. Government should reconsider the legislation and provide training and workshops on policies and technical issues; miners should integrate mitigations strategies in the closure plan. Furthermore, there is a need for supporting organization and institutions to provide support to miners particularly in the areas of technical education and funding assistance.

Keywords*:* SSM, Mine Closure policies, Financial Provision, Closure Certificates.