Abstract

For almost a decade, there was a commodity super-cycle (2002- 2011) that supplied many mineral-rich economies with rents for growth and development. However, on Africa's account, the impact of such rents on growth has been mixed, with the market economic system taking a fair share of the blame. Due to market inefficiencies and the decoupling of growth from the environment, the concept of sustainable development (SD) emerged as the cure for the ills of the market system. In this light, the fundamental question of enquiry in the thesis was to dissect the linkages between the SD concept and mining in Africa, i.e., to what extent is mining and SD linked in resource-rich African (RRA) countries, when mineral resources are non-renewable, physically unsustainable, and the concept of extraction opposes the idea of sustainability?

In dissecting the concept of SD, its definitions and applications to mining were interrogated, firstly teasing from literature the challenges of SD, and using a sustainability assessment framework methodology to devise indicators to measure SD at the national level, vis-à-vis the current interpretation. Four gold producing countries (Ghana, Democratic Republic of Congo, Tanzania and South Africa) were measured against the indicators to determine progress, and whether the 'Mining, Minerals and Sustainable Development' interpretation of SD for mining remains appropriate. The findings in the four countries showed that the balancing component's definition is challenging for true sustainability to be realised. In this bid, the conclusions to the national level assessment pointed to situating *optimal mining* within the broader view of SD and its inter-linkages. Thus, here, sustainable economic development (SED) was forged as a pivotal goal for optimising SD and mining in RRA economies.

Further assessment of what SED means resulted in the development of the 'Investment Framework for Resource-rich Africa's Development' (IFRAD) Strategy as a pathway for Africa's growth. The IFRAD Strategy consists of a five-step process of: aligning development frameworks; understanding the resource potential of a country; types of mining investments; building critical mining sector linkages; and managing investment options for the future. These are fundamental for net equitable distribution of benefits and realising the goal of SED and growth of RRA economies.

The four countries (Ghana, Democratic Republic of Congo, Tanzania and South Africa) were further evaluated on the IFRAD process with specific lessons and recommendations to determine an implementation plan in realising the Strategy in each country. For mineral economies, a key lesson was re-calibrating mining policies with development and industrial policies, while ensuring that all key sectors are well-coordinated within an industrial policy framework. All in all, the contribution to knowledge is IFRAD's holistic approach, which ensures that the enabling environment for policy and requirements for mineral development are enhanced for sustainable economic development. The IFRAD process further provides a tool for the measurement of SED, and pathways for net equitable distribution of benefits from mineral wealth. This would be impactful for the management of rents by governments taking into consideration especially the compliance of the broader minerals industry in mining policy implementation.