

How can Namibia's mining sector contribute to sustainable development?

By Lauren Davidson

When the terms 'mining' and 'sustainable development' are used in conjunction, it raises some rather perplexing questions and issues given the strong juxtaposition in their meanings. Mining in its absolute nature is a finite activity with an expected time frame of operation, whereas sustainable development refers to a process which ensures that economic activity focuses on meeting the needs of current and future generations, through mechanisms which will see natural resources and ecosystems to continue meeting such needs.

Over the past decade, sustainable development has taken centre stage in policy debates, and has become even more critical in this arena since the adoption of the Sustainable Development Goals by UN member states in September 2015. Given the depleting nature of the mining and minerals industry, companies in the sector have thus been called upon to actively take steps to ensure that the livelihoods of communities dependent on their operations continue to thrive and operate following mine closure. In reality, however, this is a tough feat given the terminable nature of mining operations just explained.

Adding weight to the recent focus on mining operations and sustainable development is the sad reality that historically, mining companies in Africa generally do not have a convincing track record of responsible and sustainable mining approaches, leaving proceeding generations and governments with unrehabilitated mining sites and revenue gaps to fill. Mineral resources have also been the source of many conflicts in African countries, hindering the maximisation of economic benefit from these endowments and thus contributing very little to poverty eradication. The question then arises: how can extractive industries contribute to sustainable development?

In response to some of these challenges and critical sustainable development issues, the African Union launched the African Minerals Development Centre in December 2013. The Centre aims to increase the economic benefit accruing to countries through the implementation of the African Mining Vision, which focuses on integrating the mining industry with other sectors of the economy, and looks at how mining can contribute to local development.

Contrary to popular belief and perception, mining companies in Namibia do not quite engender to this stereotype, and have in fact acquired a strong social licence to operate. An example of such efforts is the far-reaching education programmes implemented by Rio Tinto's Rössing uranium mine. Since the early 1990s, the Rössing Foundation has worked closely with government to pursue initiatives that have strengthened the capacity of teachers and provided learner support, especially in the areas of Mathematics and Science. This is exemplary of the many ways in which mining companies can contribute to the sustainable development of a country, and in particular to SDG 4 (*Quality education*), through their Corporate Social Responsibility (CSR) programmes.

More recently, a common focus in the of area of CSR intervention has been on environmental protection, conservation and awareness through the recognition of positive implications such programmes can have for later rehabilitation of mining sites, the tourism industry and the preservation of the country's natural wildlife and habitats.

In Namibia, environmental concern in mining is regulated by two pieces of legislation, the Minerals (Prospecting and Mining) Act of 1992 and the Environment Management Act of 2007. Both pieces of legislation require mining companies to provide detailed studies on the potential impact of the operation on the surrounding environment, how these will be mitigated and rehabilitation plans for mine closure, before the company is issued with a mining licence. Robust legislation is thus also imperative in ensuring responsible mining activity and minimising environmental harm on land which could be utilised for other commercial purposes, such as tourism or farming, once mining operations have ceased.

In local policy arenas, there has been a shift in the role of the mining sector in the structural transformation of Namibia's economy and sustainable development, primarily through calls for increased value addition to the country's extracted minerals by mining companies. A few definitions in the mining value addition chain warrant explanation here. Raw materials are regarded as unprocessed ore derived from the mining operation for direct shipment. Beneficiation or value added in the mining sector is referred to as part of the mineral processing value chain after mining. The complete value chain involves the extraction of ore from underground or open-pit operations; mineral processing to produce a concentrate; smelting and finally refining. Namibia's mining sector is already producing minerals with significant value added, such as special high grade zinc, copper cathode and blister copper. Furthermore, the majority of Namibia's minerals are exported in concentrate and not as raw materials as commonly perceived.

While opportunities do exist for further beneficiation of Namibia's minerals within the mining value chain, there are a number of challenges which need to be addressed first. The current and medium term supply of domestic minerals is not sufficient to warrant the construction of capital, water and power intensive facilities. Thus, a lack of economies of scale has been identified as one of the main obstacles for further investment decisions in this sector.

There are also significant opportunities for value addition in manufacturing activities for Namibia's minerals. However, for beneficiation in manufacturing activities, competitive advantage is the key driver of investment decisions, not comparative advantage. Such activities require unique skills and craftsmanship, cost competitive production and access to markets, which are all areas in which Namibia is currently experiencing significant bottlenecks. Consequently, value addition activities to Namibia's minerals in manufacturing should not be proposed as an immediate contributor or strategy to the economy's sustainable development before such issues are adequately resolved.

Despite such challenges, significant economic opportunities do exist in the up-stream and side-stream linkages created by the sector, which could be a key factor in contributing to Namibia's structural economic transformation process and hence to SDG8 (*Promote inclusive and sustainable economic growth, employment and decent work for all*). The mining industry creates a number of linkages through the critical mass it provides. Up-stream linkages arise through its demand for locally supplied inputs and services. Examples of these range from financial services to capital inputs. Dundee Precious Metals Tsumeb recently identified an economic opportunity to produce sulphuric acid, a major primary input for two mining operations in Namibia, which prior to the local production thereof, was being imported from other countries.

The sector is also rich in side-stream linkages. By way of explanation, these include the support services required for the mine to function effectively, ranging from transport services to power, water, skills, research and development, logistics, communications and financial services. In Namibia, such services and side-stream inputs are provided by the public and private sectors. A railway network, for example, linking a mining operation to a port, could later be leveraged to connect the port to other trading hubs once mining activities have ceased. Namibia is currently looking to pursue such strategies through the envisioned Trans-Kalahari railway and its national Logistics Master Plan.

While the notion of mining as a sustainable activity was altogether refuted at the beginning of this article, the longevity and livelihood of the sector is dependent on exploration endeavours being undertaken. It is recognised that although such investment decisions, which involve a high degree of risk, are largely dependent and influenced by external forces, they are also influenced by the regulatory environment and policies governing them.

In the last five years, Namibia has managed to attract investments of approximately US\$3 billion into the mining sector, owing primarily to an attractive environment through a favourable regulatory framework. In the last year, however, the positive investor sentiment has reversed as a result of certain policy proposals that would be detrimental to the growth of the mining and exploration sectors if affected.

It is thus not the responsibility of the mining sector alone to ensure that their activities contribute to the sustainable development of the country. It is rather through effective partnerships and understanding between the public and private sectors that mining activities can thrive and continue to contribute to the country's development in a sustainable manner.



Lauren Davidson is an active member of the EAN and was appointed as non-voting member on the Board of the Association at the beginning of 2016. She has close to four years of experience working in the mining industry, focusing on policy research and input as well as the dissemination of mining related information for the sector and the public at large. The views expressed here are her own.