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AN OVERVIEW OF SOUTH AFRICA'S DIAMOND INDUSTRY, 2000-2012

DIRECTORATE: MINERAL ECONOMICS

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ABSTRACT

South Africa's (SA) diamond industry has made significant contribution to local economic and social environment over the years, as a forex earner and job provider. However, the country's rough diamond production declined in the 21st century and cost the country part of its global market share, which is attributed to lower grade mines, lack of new discoveries and the changing demand profile for diamonds. The country's diamond industry has traditionally been export orientated, with a relatively small portion of local rough output reserved for local buyers. The relatively small local supply of rough diamonds over the years reflects the discrepancy that exists between the country's diamond resources and the beneficiation of such resources. Even after more than a century of modern diamond mining and despite legislative interventions, SA's diamond beneficiation industry remains disproportionately small and underdeveloped.

SA passed the Diamonds Second Amendment Act in 2005, aimed at ensuring equitable and regular supply of rough diamonds to local beneficiators, thus making provision for the establishment of the State Diamond Trader (SDT), the objective of which is to promote equitable access to SA's rough diamonds and local value addition. By its own admission, the SDT has in the past few years purchased relatively low percentage of rough diamonds, but attributes this to circumstances beyond its control. Since trading activity at the SDT is determined by the amount of rough diamonds produced in the country, the decreasing production does not do any justice to the country's need to further grow diamond cutting and polishing industry. Not much is expected to change along the SA diamond value-chain in the next few years, with the country still expected to be more of a producer than a major downstream participant.

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1. INTRODUCTION

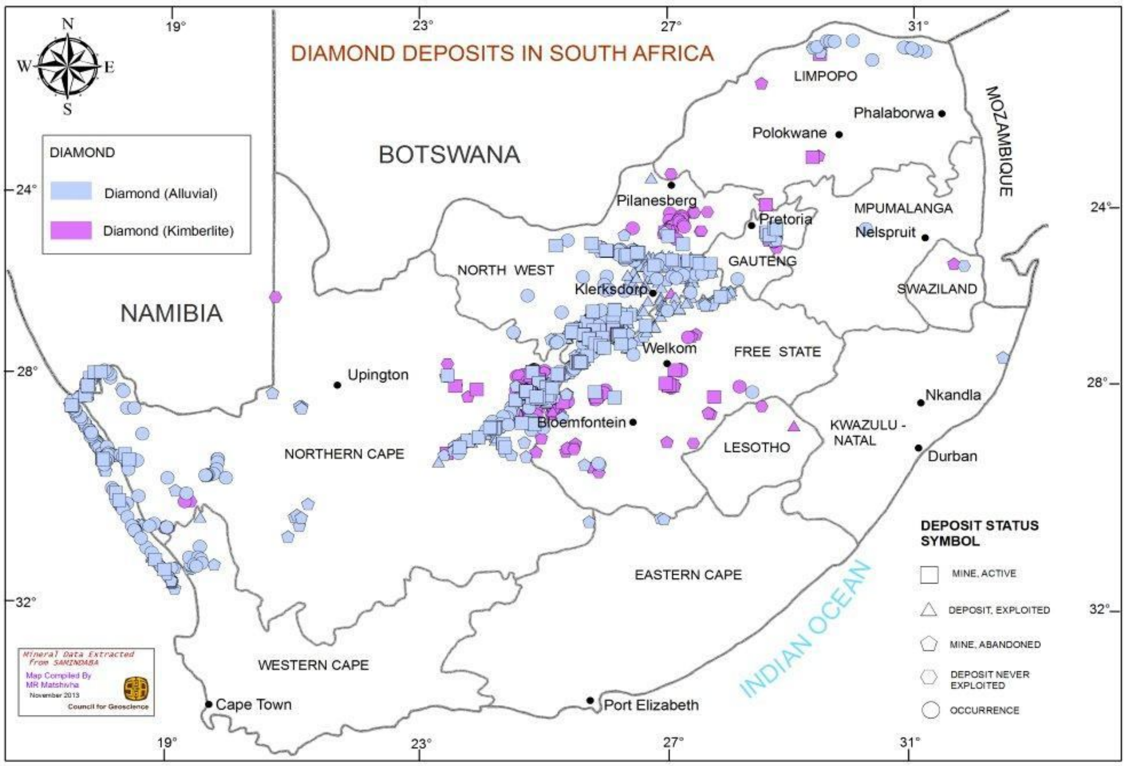
South Africa's (SA) diamond mining legacy started in the 19^{th} century and still continues today. The discovery of diamonds in SA began in 1867 when the alluvial diamond, Eureka, was found on the south bank of the Orange River. More diamonds were discovered and, by 1869, others were found far from any stream or river, first in yellow earth and below it in hard rock called blue ground, later renamed kimberlite after the town of Kimberley. This led to the birth of the modern diamond mining industry. Later in the 20^{th} century more diamond deposits were discovered on the seabed along the west coast of SA. Today the country has the most diverse range of diamond resources in the world including kimberlites, alluvial and offshore marine deposits, as well as dyke and fissure deposits. After more than a century of diamond mining, SA is one of the few countries in the world involved in the entire spectrum of the diamond value chain, including exploration, mining, rough and polished trading, cutting and polishing, as well as jewellery manufacturing.

The industry has made significant contribution to local economic and social environment over the years, as a forex earner and job provider. In 2012, the industry contributed approximately 2.7 percent to the country's total mineral sales value of approximately R364 billion. However, it has evolved a great deal ever since mining began, and there has been as much challenges as opportunities along the way. As a result, policy amendments were used to address challenges, particularly the issue of local beneficiation, to maximize opportunities in the industry. The structure of the industry has changed a great deal, particularly in the 21^{st} century, and this has had a significant effect on employment and production trends. Furthermore, fluctuating demand for stones and associated price changes have resulted in contrasting fortunes over the years. This report, thus provides an overview of the country's diamond industry, focusing mainly on the 21^{st} century and prospects for the future.

2. STRUCTURE OF THE INDUSTRY

Most of SA's production is sourced from kimberlitic clusters, located mainly in the central northern parts of the country, whereas alluvial diamonds are mainly sourced from the North West and Northern Cape provinces (Figure 1). In addition, marine diamonds are still recovered from SA's west coast, just south of the mouth of Orange River. A few large and medium sized companies such as De Beers Consolidated Mines (De Beers), Petra Diamonds (Petra), Transhex, DiamondCorp and Alexkor, continue to exploit the whole range of diamond resources, while other smaller companies and diggers are mainly involved in alluvial diamond mining. De Beers has traditionally produced most of the country's production, from kimberlites.

FIGURE 1: DIAMOND DEPOSITS IN SOUTH AFRICA.



Source: Council for Geoscience.

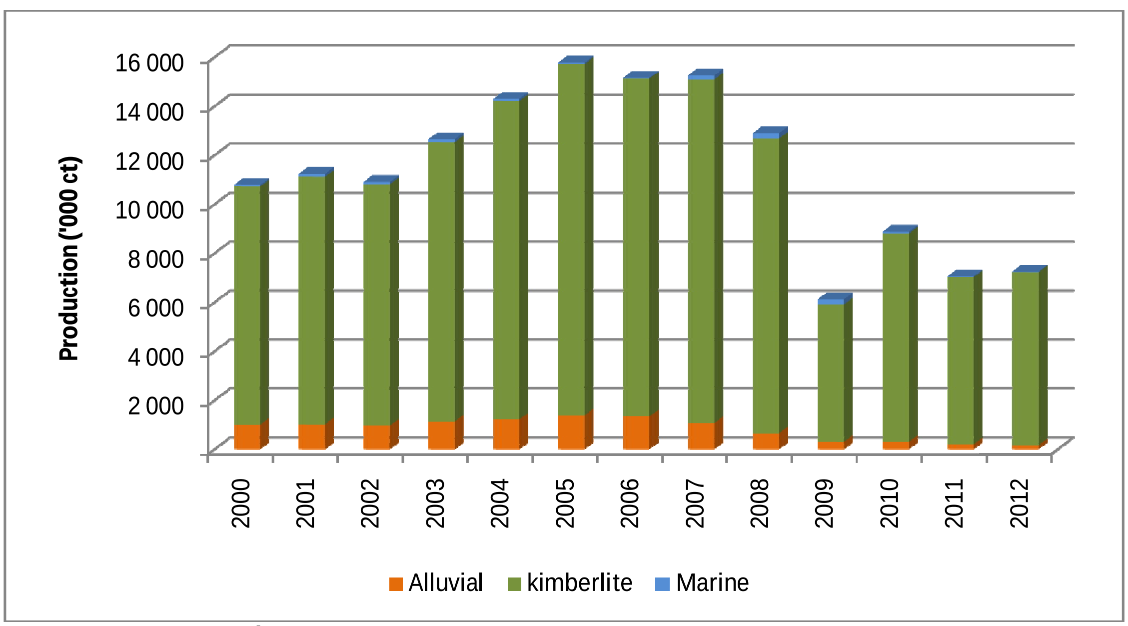
For centuries in SA's diamond industry, De Beers was the leader in diamond mining and recovery technology, producing a significant portion of the country's diamond output. However, in the last few years, the company has generally scaled back in SA by closing its older mines and putting others up for sale. Petra has been the main beneficiary, first acquiring Koffiefontein mine in July 2007 and Cullinan mine a year later. The Kimberley Underground mines and Finsch mine were also acquired by Petra from De Beers in May 2010 and September 2011, respectively. Petra also placed Sedibeng and Star fissure mines on care and maintenance as they were no longer core to the company's portfolio, while Helam fissure mine continues to be operated normally. This has positioned Petra as the second largest rough diamond producer in the country, after De Beers. The latter currently operates a surface diamond recovery in Kimberley and only two mining operations, Venetia and Voorspoed, a far cry from the 8 mines the company operated in 2000. Venetia is the company's flagship operation situated 80 km from Musina in the Limpopo province.

DiamondCorp's primary asset in South Africa is the Lace Diamond Mine, located near Kroonstad in the Free State Province. Lace was first mined between 1901 and 1931, before it was placed on care and maintenance. DiamondCorp was awarded a mining right to the Lace property in February 2009, and resumed underground development at the mine in January 2013 after capital finance was secured. Transhex has established alluvial and marine operations in SA, and its flagship operation, Baken Mine, is situated on the banks of the lower Orange River about 60 km from Alexander Bay. Alexkor is a state-owned company, also involved in alluvial and marine mining in Alexander Bay.

3. PRODUCTION TRENDS

In 2000, SA diamond production amounted to 10.8 million carats (Mct), a year-on-year increase of 7.6 percent (Figure 2). However, the figure did not include production from approximately 1 500 officially registered small scale, alluvial diamond diggers operating in the Northern Cape, North West and Free State provinces, estimated to have been 200 000 – 400 000 carats. By 2005, production had increased significantly to 15.8 Mct, the highest since the turn of the century, mainly as a result of De Beers' efforts to ramp up production. However, production dropped to 6.1 Mct in 2009, largely as a result of the global economic meltdown, before recovering slightly to about 7.0 Mct in both 2011 and 2012. The country's diamond production has therefore decreased by 35.2 percent between 2000 and 2012.

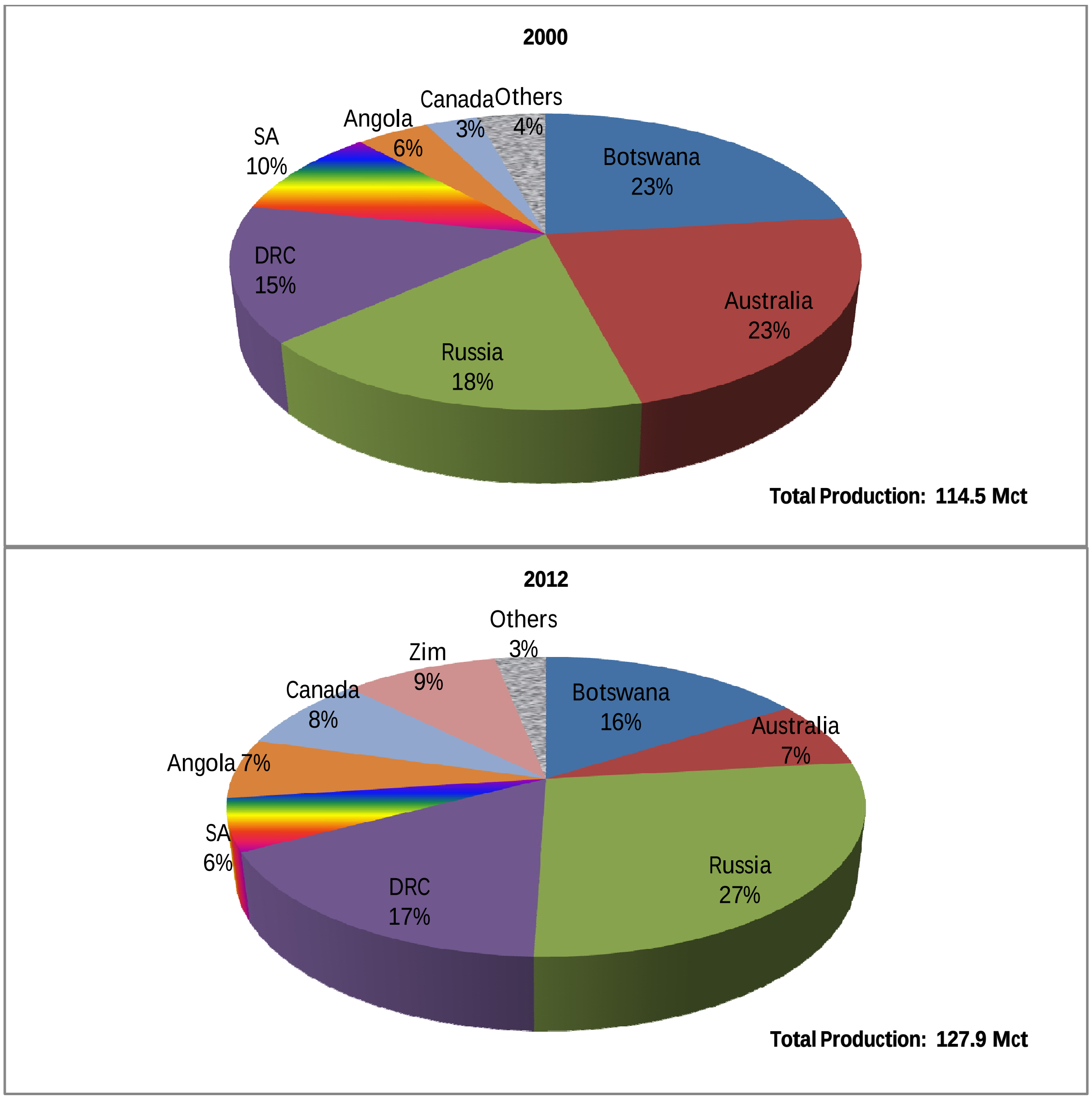
FIGURE 2: SOUTH AFRICA'S DIAMOND PRODUCTION, 2000 – 2012.



Source: Directorate Mineral Economics

The general decrease in SA's rough diamond production cost the country its global market share, from 10 percent in 2000 to approximately 6 percent in 2012 (Figure 3). SA was ranked the 5th largest diamond producer by mass in 2000, after Australia, Botswana, Russia and the Democratic Republic of Congo (DRC). In 2012, the country was ranked 8th, having been surpassed by Zimbabwe, Canada and Angola. Over this period, SA's diamond mining and prospecting licensees increased from 74 in 2000 to 235 in 2012. However, the latter includes diggers or small privately owned natural and juristic alluvial diamond producers, most of which are not active anymore. The general decrease in production is therefore attributed to lower grade mines, lack of new discoveries and the changing demand profile of diamonds.

FIGURE 3: GLOBAL ROUGH DIAMOND PRODUCTION MARKET SHARE, 2000 and 2012.



Sources: Directorate Mineral Economics
KPCS Statistics

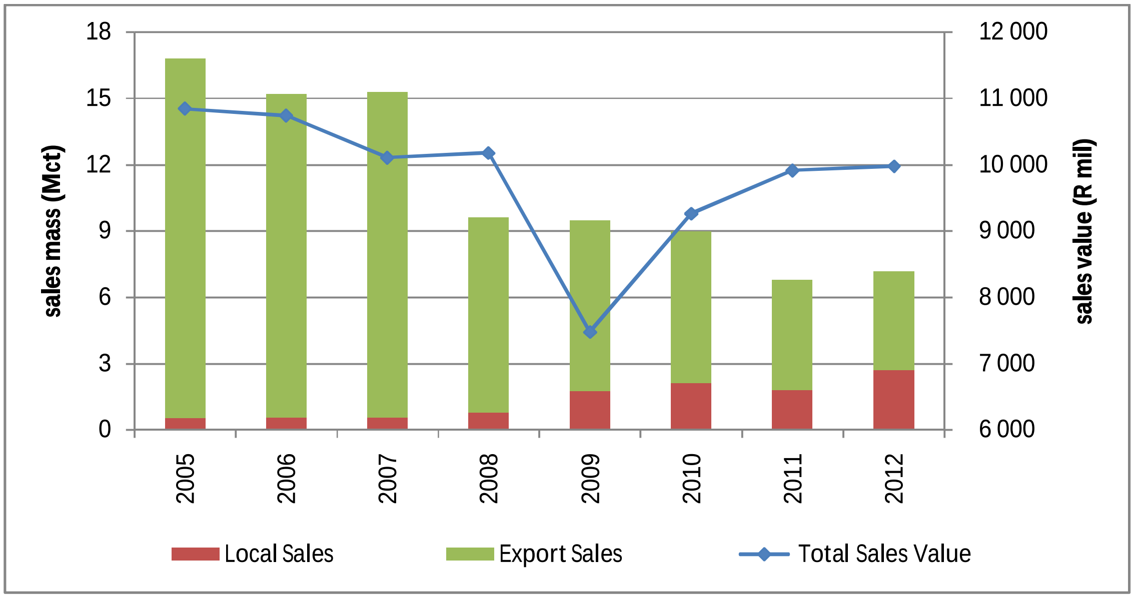
4. SOUTH AFRICAN TRADE

South Africa's diamond industry has traditionally been export orientated, with a relatively small portion of local rough output reserved for local buyers. De Beers accounts for more than 90 percent of the country's rough exports, utilizing its distribution arm, the Diamond Trading Company (DTC). With activities in sorting, valuing, sales and diamond beneficiation, the DTC is the bridge between De Beers' rough diamond production and the clients, known as Sightholders. The DTC holds its sales, commonly known as sights, 10 times a year, which are on average five weeks apart. The majority of the rough diamonds exported from South Africa end up in Belgium and Israel as the primary destinations because the majority of De Beers' sightholders' downstream partners for further distribution are based in those locations.

Until recently, De Beers was also the largest local supplier of rough diamonds. However, the *status quo* began to change as Petra took over the majority of De Beers' assets, positioning the company as one of the major producers in the country. Unlike De Beers, however, Petra's business model is based on local supply by holding open tenders each and every month to sell rough production. Tenders last between four to six working days, during which participants view the assortments and place a confidential electronic bid on the parcel of their choice. Currently Petra accounts for more than 90 percent of local rough diamond supply.

Although local supply remains significantly small, it has grown tremendously over the past few years, most notably in 2009 when it more than doubled to 1.7 Mct from 0.7 Mct in 2008 (Figure 4). This was partly attributed to the global financial meltdown, as less international demand meant that there were more stones available for local purchase. However, supply remained around 2 Mct for the next 2 years, before finally shooting up to just less than 3 Mct in 2012. In line with decreasing production, total sales mass has diminished by 57.3 percent from 16.8 Mct in 2005 to 7.1 Mct in 2012, with the corresponding value decreasing by 9.2 percent.

FIGURE 4: SA's ROUGH DIAMOND SALES, 2005 – 2012.



5. LOCAL BENEFICIATION AND AMENDMENTS TO THE DIAMONDS ACT

Since the turn of the century SA has consumed on average approximately 12 percent of locally produced rough diamonds. The relatively small local supply reflects the discrepancy that exists between the country's diamond resources and the beneficiation of such resources. Despite being one of the largest diamond producers, SA continued to play a relatively small role in the downstream sector of the diamond value chain. This situation is not unique to SA as the vast majority of diamond beneficiation takes place in countries that have very little or no mine production of diamonds. Like many other governments around the world where diamonds were mined, the SA government sought to grow the local cutting and polishing industry by developing legislative amendments to ensure increased local beneficiation of rough stones.

Amendments to the Diamonds Act, 2005, are aimed at creating a framework for further downstream value addition, ensuring equitable and regular supply of rough diamonds to local beneficiators, and promoting investment in the diamond manufacturing sector. The act made provision for the establishment of the SDT, the aim of which is to facilitate rough diamond supply locally and ensure equitable access to rough diamonds for local beneficiators. The act requires all diamond producers to supply the SDT with 10 percent of their run-of-mine (ROM) production. In order to promote equitable access, the focus of the SDT's sales strategy is on small companies with less than 5 employees, with a high level of Historically Disadvantaged South Africans (HDSA) participation (>26% ownership) and that do not have access to regular supplies of rough diamonds from any other source. In order to promote beneficiation of the Republic's diamonds, the SDT has engaged in a policy of only selling to those companies in possession of valid beneficiation licenses issued by the South African Diamond and Precious Metals Regulator (SADPMR).

By its own admission, the SDT has in the past few years purchased relatively low percentage of rough diamonds, but attributes this to circumstances beyond its control. These include the global economic climate and demand for diamonds generally, constraints in terms of purchasing ROM selections, quantity of goods not preferred for beneficiation, as well as pricing methodologies which, according to the SDT, do not reflect the actual market performance globally and locally. However, the SDT is mooting new strategies (details of which have not been made publicly available) to counteract the effects and consequences of these factors, and some of these may be implemented during the course of the coming financial years. Unfortunately though, local cutters and polishers are of the view that the SDT has not been as successful as they had anticipated in fulfilling its mandate of promoting equitable access to, and local beneficiation of South Africa's rough diamonds.

SA's diamond cutting and polishing industry boasted approximately 2 000 jobs in 2003, but has now shrunk to, by conservative estimates, less than 1 000 jobs. Some of the beneficiators have left the country in favour of countries such as Botswana, which are thought to offer better job security, while De Beers has since sold most of its SA assets to Petra Diamonds. Perhaps the latter is a positive development since Petra sells mainly locally, but De Beers remains the largest rough producer and its export orientated model does not do any justice to the local industry. With this in mind, it is hard to dispute the fact that amendments to the Diamonds Act have not yet succeeded in their quest to grow the local industry.

6. OTHER LEGISLATIVE FRAMEWORKS

6.1 The Diamonds Export Levy Act 15 of 2007

The main objective of the Act is to provide for the imposition of a 5 percent export levy on unpolished diamonds (excluding synthetic diamonds) and, allows for offsets with respect to that levy. The 5 per cent rate, which has been determined in consultation with the DMR and the South African Police Service, is viewed as sufficiently high to ensure, in addition to the efforts of the SDT, a reasonable supply of rough diamonds to the local market and low enough not to unduly encourage smuggling. Should the Minister of Mineral Resources decides that a producer needs not offer his or her rough diamonds for sale at the Diamond Exchange and Export Centre (DEEC) before export, such diamonds will be exempted from the 5 percent export levy. The Minister may also exempt a registered producer exporting rough diamonds from the levy if the diamonds are properly offered at the DEEC. This offer, essentially gives local polishers a "right of first refusal". The Minister may provide this exemption to a producer under a specified set of conditions.

6.2 The Beneficiation Strategy

The value proposition of the beneficiation strategy makes provision for a framework within which South Africa can implement orderly development of the country's mineral value chains in order to leverage benefit from inherent comparative and competitive advantages. Essentially, the strategy is intended to support national programmes such as the National Industrial Policy Framework (NIPF), consistent with the provisions for a sector specific strategy and key action plans for downstream mineral beneficiation as well as the development of the nuclear power capacity, for instance, which is intended to diversify the country's energy basket and to ensure security of energy supply. The strategy also advances the objectives of the Mineral and Petroleum Resources Development Act (MPRDA), the Broad-Based Socio-Economic Empowerment Charter and the Precious Metals Act. The strategy was approved by Cabinet in 2011 but the implementation thereof is yet to be approved.

7. CHALLENGES AND OPPORTUNITIES FACING THE INDUSTRY

Local beneficiation undoubtedly remains the key challenge facing the SA diamond industry. The SDT in particular has come under fire as inadequate local rough diamond supply persists, and comparisons have often been drawn between the trader and its private predecessor, Diamdel. By its own admission, the SDT has in the past few years purchased relatively low percentage of rough diamonds, but attributes this to circumstances beyond its control. These include the global economic climate and demand for diamonds generally, constraints in terms of purchasing ROM selections, quantity of goods not preferred for beneficiation, as well as pricing methodologies which, according to the SDT, do not reflect the actual market performance globally and locally. However, new strategies are being mooted to counteract the effects and consequences of these factors, and some of these may be implemented during the course of the coming financial years.

The country clearly has ample potential to further raise the level of beneficiated diamond output, but only if development initiatives are supported by all stakeholders, multiple government departments and relevant agencies. The emphasis should not be on selling locally, but on ensuring that such stones are beneficiated locally, as some locally sold rough stones still find their way beyond the borders of the country. Perhaps more producers need to follow an example of Trans Hex, whose Diamond Cutting Works in Johannesburg enables it to avoid being exposed to the 5 percent export levy. In addition to the 10 percent of output that has to be made available to the SDT, Trans Hex decided to beneficiate its own diamonds rather than to sell them to non-group local beneficiators at below the tender price without properly understanding the process. Further development of the downstream sector of the diamond value chain in South Africa, as advocated by the legislation, has an immense economic potential, as it will stimulate business development in the diamond industry and other related industries. Since trading activity at the SDT is determined by the amount of rough diamonds produced in the country, the decreasing production does not do any justice to the country's need to further grow diamond cutting and polishing industry.

The non-discovery of major deposits in the country remains a challenge, despite the continuous spending of millions of dollars in exploration by mining companies. This is partly because the focus is predominantly on brownfield exploration and acquisition of existing operations, leaving the country inadequately prospected. However, expansion plans announced recently by the two major producing mines will boost diamond production in the country. Petra Diamonds secured a revolving credit facility of $25 million from the International Finance Corporation (IFC), which it would use to expand its production at Finsch mine. On the other hand, De Beers would be investing R20 billion in the expansion of Venetia mine, which would extend the mine's life to 2042. However, such projects should not be seen as substitutes for the discovery of other world-class deposits through modern exploration techniques in prospective areas yet to be exhaustively explored.

8. OUTLOOK

Not much is expected to change along the SA diamond value-chain in the next few years, with the country still expected to be more of a producer than a major downstream participant. The country's rough diamond production is expected to increase in the next few years as major producers continue to ramp up production, in line with anticipated growth in demand from emerging economies such as China and India. However, production is not yet expected to recover to pre-economic crisis levels. While local sales might also increase as a result of improved production, the local beneficiation of such stones is still expected to remain below expectations. The government's fundamental role is in redressing the historical imbalances in the mining sector. Thus, policies such as the National Development Plan (NDP), National Growth Path (NGP) and the beneficiation strategy are expected to help grow the diamond manufacturing industry. Furthermore, the Minister of Mineral Resources hosted the jewellery summit in October 2013, which brought together mining and jewellery manufacturing associations and government, with the view to creating entrepreneurs with the requisite skills to enable South Africa to become a jewellery hub. Jewellery manufacturing is one of the five value chains identified in the beneficiation strategy approved by Cabinet in 2011. Thus, the summit is expected to stimulate jewellery manufacturing, of which diamonds are a significant part, and ultimately contribute positively to socio-economic development.

9. RECOMMENDATIONS

In order to improve the country's diamond industry, particularly at the downstream level, the following recommendations are made:

- The business model of the SDT has to be reviewed in order to reposition the entity in a way that would make it viable. This should involve a review of the entire regulatory framework for the precious metals and diamond industries. Fortunately, the SDT's weaknesses have been identified, which should make the whole process a lot easier.
- The state should also continue to create an enabling environment to attract more participants into the industry. As such, initiatives similar to the recent Jewellery Forum should be encouraged to increase chances of developing empowered and self-employed entrepreneurs.

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