

LESOTHO

By a special contributor

Political stability has returned to Lesotho following the restoration of multi-party democracy and the government formed by the Lesotho Congress for Democracy (LCD), which does not face re-election until 2007. The government is pursuing a modernisation and economic reform programme, supported by an IMF poverty reduction and growth facility (PDGF) loan. The government has also shown its willingness to tackle corruption by taking legal action during 2003 against overseas contractors alleged to have paid bribes or engaged in other irregularities in connection with construction of the massive Lesotho Highland Water Scheme.

A revival of interest in Lesotho's diamond resources during the past few years could result in a substantial boost to economic output and exports, given the prospects for the production of significant quantities of larger-sized gem-quality diamonds from the several projects currently being developed or under evaluation. GDP growth is forecast at 4.0-4.5% in 2004, up from an estimated 3% in 2002, in anticipation of a further increase in textile exports to the US and the completion of the re-commissioning of the Letseng-la-Terai mine in Mokhotlong district, which was operated by De Beers between 1973 and 1982.

Lesotho remains one of Sub-Saharan Africa's poorest countries, and its main export products, apart from water supplies to South Africa, are wool, mohair and textiles; in recent years there has been strong growth in textiles and clothing exports to the US market under the African Growth and Opportunity Act (AGOA). However, Lesotho's current exemption from AGOA's rules of origin, which allow it to import textile inputs from third countries, will expire in 2004 if not renewed; AGOA, itself, will terminate in 2008 unless agreement is reached on African requests for it to be extended until at least 2015.

Diamond developments

The government is keen to unlock Lesotho's diamond potential as a new source of exports, revenue and jobs. In the absence of substantial recorded diamond output since the closure of the Letseng mine, mining's contribution to the economy has been very low, falling to less than an estimated 1% of GDP in the late 1990s.

However, despite Letseng's closure, a limited amount of diamond mining by local firms and Basotho artisanal miners has continued. IMF data show that between 2000 and 2002 exports of rough diamonds doubled in value to US\$400,000.

In view of the existing small-scale exports and the current prospects for substantial commercial-scale production of diamonds, Lesotho has applied for membership of the Kimberley Process certification scheme for the

international trade in rough diamonds and was deemed compliant with its minimum conditions in 2003. This means that the country can legitimately export diamonds through the established global trading system. Responsibility for regulation of the mining sector currently falls under the Natural Resources Ministry.

Lesotho's exposed rocks belong almost entirely to the Karoo Supergroup; the Karoo sediments were largely deposited in continental environments, large parts of the country are made up of basalt flows of the Drakensberg group. The kimberlite pipes and dykes occurring in northern Lesotho are of lower Cretaceous age. The country has long been known as a source of diamonds and the Lesotho Geological Survey has identified 33 kimberlite pipes and 140 dykes, of which 24 kimberlites are known to be diamondiferous.

The renewed interest in Lesotho's diamond resources has been sparked by the strong global prices for high-quality rough diamonds, and increasing evidence that the country contains, in addition to the Letseng kimberlite, a number of other exploitable kimberlite pipes which also contain a high proportion of larger gemstones. De Beers recovered a total of 280,000 ct from Letseng, including several weighing between 100 and 300 ct but closed the mine during the diamond market recession of the early 1980s. However, the infrastructure was largely left in place and mining of low-grade material by Basotho artisanal miners has continued.

Commercial production from Letseng at around 70,000 ct/y, of which 10% are expected to comprise stones weighing more than 20 ct, is scheduled to resume during 2004 with the installation of a new processing plant and completion of infrastructure refurbishment by local company Letseng Diamonds, in which the government holds a 24% interest. Letseng has been granted a mining lease by the government, with a small-scale mining company, Alluvial Ventures, contracted to sample and mine areas of ground adjacent to the pipes. The re-opened mine is expected to have an 18-year life, and some 1,000 ct/y are forecast to consist of high-quality diamonds larger than 100 ct in size. Sampling and mining of areas adjacent to the mine was carried out during 2003 and in November 2003, three large diamonds were recovered, the biggest weighing 214 ct. (The largest diamond discovered in Lesotho, the 'Lesotho Brown', weighed 601 ct.) Lesotho's prime minister, Pakalitha Mosisili, has described the recent finds as symbolising the resurgence of the diamond industry.

Two other diamond developments under way involve European Diamonds (ED), a company listed on London's Alternative Investment Market (AIM) which has been conducting exploration for diamonds in Finland in recent years, and Ireland-based African Diamonds plc (AfD), which is also conducting extensive diamond exploration in Botswana. ED acquired the entire issued share capital of MineGem Inc, a Canadian company that owned interests in two proven diamond bearing kimberlite pipes in Lesotho, with effect from December 2003. In consequence, ED took over a 65% economic interest in a high grade kimberlite pipe designated the 'Satellite Pipe' project at Lihobong and a 90% economic interest in a 9.5 ha kimberlite pipe

designated the 'Main Pipe' project. MineGem held a majority stake in a local subsidiary Lihobong Mining Development Co (LMDC) with the government owning a 25% stake and was allocated a mining licence in 2001. Prior to the takeover by ED had stated its intention of developing an open-pit mine producing an average of 300,000 ct/y over five years.

In its interim report for the six months ended December 31, 2003, ED stated that in regard to the Satellite Pipe, preliminary evaluation was nearing completion. An important issue related to a commercial mining operation concerns the effective and safe disposal of mined waste from the proposed 420,000 t/y open pit operation, and it was planned let a contract to a well known South African group, which specialises in tailings disposal, to design and ultimately operate an efficient waste disposal system. In addition, ED said it had advanced the development of the final flow sheet of the diamond recovery system to be used for the project, which was being developed by the company's in-house team, together with experts from both South Africa and Australia. This would involve a combination of state of the art diamond recovery systems and existing plant and equipment already available on site. Snowdens, mining industry consultants of Johannesburg, had been engaged to prepare the final pit design and mining schedule, which was expected to be completed in early 2004, and ED expected its target for first diamond production by the end of 2004 would be met and be within budget.

At the Main Pipe, ED had completed the re-logging of 2,500 m of core. A number of different phases of intrusive kimberlite were identified within the orebody, with differing mantle contents between the various phases strongly suggesting that diamond content would vary from phase to phase as is normal for pipes of this size. The evaluation work indicated that pipe contained higher grade zones than previously estimated, with grades of up to 0.4 ct/t identified from previous work, with a new core drilling programme planned to obtain an accurate geological model, and a pre-feasibility study tentatively scheduled for early 2005.

In August 2004, ED announced plans to raise US\$12 million to fund completion of its Satellite Pipe project, confirming that mine construction was underway, with production scheduled to start in December 2004 at a planned rate of 290,000 ct/y. This followed its confirmation a month earlier of the discovery of a 3.5 ct 'fancy yellow' diamond from a 3 kg sample of kimberlite recovered from the surface of its Satellite Pipe, valued at U\$10,000. Similar quality diamonds had been recovered from the deposit in previous years.

AfD has focussed its activities on the Kolo 66 pipe in northwestern Lesotho; this is approximately 1.1 ha in extent and is exposed on a hillside. Included in the project area are five additional small pipes and a series of dykes. At least one kimberlite is known to be diamondiferous but no comprehensive information is available thus far on grades or value per carat.

In the mid-1970s, Kolo was tested by the UN Development Programme (UNDP), which dug a series of pits on a 20 m grid over the pipe, with the top 0.5 m of overburden and in situ kimberlite removed prior to pitting. Without a

crushing facility the volume of material processed from each pit was not constant as the varying proportions of unweathered kimberlite could not be processed. UNDP identified two types of kimberlite: type A, soft and low grade; and type B, hard and of higher grade from the pipe's central area. In the mid-1990s a local firm, Angel Diamonds, conducted limited mining, exploration and sampling work and from January 1995 to August 1999 a total of 44,400 t of kimberlite were processed, yielding 7,500 ct. Stones larger than 10 ct are believed to have comprised some 10% of total production, including ten stones in the 11-52 ct range.

There is no current production from Kolo, although AfD describes the existing infrastructure, including an on-site plant, as good. The plant contains a primary crusher, scrubbing section, rotary pan and grease tables. From examination of plant tailings, the company's management has concluded that the plant was run inefficiently; large garnets are present and the tailings are coarse, evidence that plant efficiency could be improved.

Accordingly, in November 2003, AfD announced the formation of a joint venture with Angel Diamonds to evaluate and exploit the potential of the Kolo kimberlite group, in which it has a 55% stake. AfD is conducting an evaluation programme to confirm indicated grades of 0.16 ct/t and optimise diamond production, based on the existing on-site facilities initially. There are also four additional kimberlites and eight dykes; artisanal mining on one of the other pipes confirmed it is diamond-bearing and these kimberlites will also be evaluated. AfD chairman John Teeling stated when announcing the joint venture that: "Lesotho has the highest concentration of kimberlites worldwide but has remained under-explored. The Lesotho plant can be refurbished within three months. We aim to be producing diamonds from this project in early 2004 in a trial mining venture to improve commerciality. Our investment is to complete and refurbish the onsite plant and complete the evaluation. Total expense is likely to be under £150,000."

More controversial are the operations of Lesotho Diamond Corp (LDC), to which the Australian businessman, Alan Bond, who was convicted of fraud in the 1990s, is reported to be a consultant. LDC has been granted a prospecting permit over the Kao kimberlite, which it describes as the largest in the country not to have been mined to date, containing an estimated US\$3.6 billion worth of diamonds. In early 2004, LDC was planning to raise £30 million through a share issue and listing on London's Alternative Investment Market (AIM), but stockbrokers were reportedly reluctant to endorse the company because of the connection with Mr Bond and in April 2004 it was revealed that the planned float had been delayed by at least six months. Mr Bond's son Craig is a part-time director of LDC and holds an undisclosed stake in the company, which raised £4 million from a private placing in March 2004.

Other minerals

Lesotho contains minor deposits of coal, galena, quartz, agate and uranium but evaluation has been limited, and few deposits are believed to hold significant commercial potential. Clay deposits are exploited for the

manufacture of bricks, high-quality ceramic ware and tiles. Quarrying of aggregates was adversely affected by political unrest during the late 1990s but has continued on a relatively small scale.