## Michael C Brook (2013) (ed. Esther Kainamba-Senai), Botswana's Diamonds Prospecting to Jewellery

Gaborone, Author, 287 pages, ISBN 978-99912-941-8-6.

*Botswana's Diamonds* by Mike Brook, Group Manager-Hydrogeology at Debswana, is a welcome addition to the literature. It covers the discovery and development of diamonds and the recent moves to process and add value to diamonds within the country, thus adding jobs, creating incomes and building additional benefits for the nation—this is called 'beneficiation'. Mike Brook's first volume is still available at Excusive Books, *Crocodile Pools Botswana: History and Biodiversity (Mmegi 7* October 2011).

*Botswana's Diamonds* is a large-format coffee table book designed to intrigue the browser, but at the same time provides information and photographs that reveal a great deal about the people and the happenings that transformed the country soon after independence through to 2012. There is a fascination six-page illustrated timeline presented in the introduction that begins in 1938 and focusses on key events and personalities related to diamonds in Botswana. This is divided into seven diamond periods between 1954 and the present, with the height being the decade of mine openings between 1971 and 1982. Local diamond valuation, trading and consolidation began in 2006 and beneficiation began to take off in 2008. Prospects began to be revisited in 1980, and smaller mines opened in 2003— both these steps continue today. The age of discovery is dated as beginning in 1967, but a friend of mine was with Sir Seretse Khama in 1962 when a small group of San presented him with three diamonds they had found outside Serowe in a dry riverbed. The first official first find was by CAST in 1955, eleven years before independence.

Mike Brook steps back and looks at Botswana before independence, doing an intriguing CGI merger of photographic images from the past (as far back as 1893) with the present (there are five of these fine banners). For example, referring to the period from 1967 to 1974:

I term this 'the wonderful discovery era' ... over 50 Kimberlites, mostly diamondiferous, were discovered by De Beers Prospecting, during this five year period, including Orapa A/K1, the second largest mined Kimberlite in the world (after the Madui pipe at the Williamson Mine in Tanzania) and also 2125 D/K! and D/K2, later to become the Debswana Letlhakane Mine and 2424D/K2 at Jwaneng, later to become Jwaneng Mine, the richest diamond mine in the world (p.22).

He approves Botswana's efficient handling of diamond revenue to benefit all. He quotes President Festus Mogae, 'For our people, every diamond purchase represents food on the table; better living conditions, better healthcare; potable and safe drinking water; more roads to connect our communities, and much, much more '(p.32)

He pays particular tribute to Dr Gaositwe KT Chiepe, first female member of cabinet, who when Minister of Mines and Natural Resources, helped steer through the landmark agreement between Botswana and Debswana.

Brook then quickly moves into his field, geology. His maps, photographs and explanations in Chapters 3 and 4, are very succinct and valuable. They cover the unusual geological setting under our Kalahari sands and how diamonds are formed. Kimberlites are explained. And this is followed by the world of a prospector and how they evaluate their findings. Over the years approaches have changed and methods improved. Today prospecting can even be done from the air. Debswana's Zepplin travelled 50 metres above the ground and did actually find a number of pipes. Today twelve major Kimberlite fields are recognised in Botswana. Each of these is described briefly.

Brook, in the next chapter, explains the process of mining and gives data on the main mines, with excellent graphs and photographs. Besides prospecting this is obviously the part of the business that he is excited by—it is also the longest chapter in his book. It leads to 'Processing and Recovery', with clear explanations on the role diamonds play in their identification. Again there are excellent photographs that show the amazing infrastructure that has been built to cope with getting these precious stones out of the ground and separating them from the overburden.

Once on their own the job is far from over. First, the precious stones must be sorted and valued (Chapter 7). Way back in 1971, when the industry started to take off, a Botswana Diamond Valuing Company (BDVC) was established in Gaborone. This is where the Diamond Trading Company Botswana (DTCB) comes in a 50:50 joint venture with De Beers and the Republic of Botswana. It quickly became second in the world to the Diamond Trading Company in London (DTCL). Only in 2006 was the BDVC replaced by the DTCB. Orapa House where all this happened was opened in 1982. By the end of 2013 the sales and aggregation currently being carried out in London relocated to Gaborone and diamonds from Canada, Namibia and South Africa are also sorted here.

Diamonds come in many sizes and colours. Botswana's diamonds are of a quality that makes them among the most desired in the world. People have been particularly intrigued by a find called Miss Universe Las Vegas Diamond. Before and after pictures of it are shown (on pages 196 and 197). In the diamond business sales and marketing are followed by cutting and polishing (Chapter 9). This introduces the new Diamond Technology Park. The original four companies that dominated this sector have in the past decade been joined by at least a dozen more. The intricacies of this process are explained in both text and pictures.

For those who believe 'Diamonds are Forever' and 'Diamonds are a girls' best friend', they will want to open the book to Chapter 10 and go to page 231 on 'Jewellery Manufacturing'. In many ways this (before marketing) is what is now putting Botswana on the world map. 'Round brilliant diamonds' are the key ones found in all types of jewellery, with up to 58 different facets they dominate 75% of the market. In many ways the other types of diamonds and cuts are much more challenging. Brook has an excellent picture here of Katja Nilsson's prize winning creation 'Baobab Magic' for the Shining Lights Awards. Six other winners over the years are also shown.

The final chapter, 'Beneficiation', will not be the end of the story—it is an ongoing saga. Brook notes that seven hubs were set up beginning in 2008 to help Botswana develop. One is a Diamond Hub. It is meant to help facilitate beneficiation and the author gives its six key objectives and five examples of how it may help create an enabling environment, but he does not evaluate how successful it has been so far. He does note that by 2016, 6000 new jobs should have been created. Brook concludes, 'The scene is at last now set for Botswana to potentially become one of the most important diamond centres in the world'.

This book makes no claims to treat the social, economic and political aspects of diamonds in Botswana. Its merit stands on what it has accomplished. Others have already tackled the other dimensions of diamonds and their impact on society, and will continue to do so. Botswana's Diamonds is a book many will want to have.

> *Reviewed by Sheridan Griswold* (First appeared in Mmegi, 10 April 2013)