Diamond occurrences in ancient India

S. R. N. MURTHY

Abstract

The observations made on the occurrence of diamonds by Kautilya and Varahamihira, the celebrated authors of the well-known Sanskrit texts *Arthasāstra* and *Brhatsamhita* respectively, are presented. Validity of some of the statements has been examined in the light of modern knowledge. Attention is drawn to possible areas where exploration efforts could be directed based on mention made in the two ancient texts.

Introduction

Kautilya's Arthasāstra (Shamasastry, 1960, 1967) and Varahamihira's 'Brhatsamhita' (Jha, 1959 and Shastri, 1969) are two important texts in Sanskrit language which deal with geological, mineralogical and commercial aspects of diamonds. It is surmised that Kautilya wrote his famous work—the Arthasāstra—somewhere between 321 and 300 B.C. As regards Brhatsamhita, Shamasastry (ibid., p. 16)says - 'The general consensus of opinion among scholars is thus in favour of assigning Varahamihira to the last quarter of the fifth and first quarter of the sixth century A.D.' The information contained in these two ancient texts on diamonds helps to give us an idea of the knowledge prevailing about diamonds in ancient India.

Most of the presently known occurrences of diamond in India find a mention in. these texts. Diamonds from different regions have been given specific names and it is not always possible to equate these names in exact terms to the occurrences now known to us. An attempt is made in this note to evaluate the information available in these texts and speculate on certain possible occurrences which have escaped attention of the modern prospector. Such areas should merit closer attention in future.

In this attempt certain difficulties are encountered. The identity of ancient and medieval geographic names and relating them to areas known to us is not free from doubt. The geographical boundaries and limits of ancient provinces like Magadha, Vidarbha, Kosala, Kāśmaka, Madhyamarāstraka, and others are not precisely known. In the absence of such clear-cut demarcations of these provinces and their geographical identification, it is difficult to arrive at specific conclusions. Secondly, the studies on mineralogy and lapidary aspects of diamonds were not advanced and the clear meaning of certain terms like Masūrakam, Kūrmakam, etc. cannot be appreciated and equated in modern terms.

Diamonds were known in India since Vedic times. It is surmised that the development of knowledge of diamonds was slow but steady during the interval between the Vedic and the Sutra periods (the text of *Arthasāstra* being in Sutra style). By the time the *Brhatsamhita* was written, information on the distribution, lapidary and commercial aspects of diamonds had been gained. During the post-*Brhatsamhita* time, no texts of such profundity on diamonds have appeared in Sanskrit literature, though mining for diamond in places like the Krishna river valley during the Vijayanagar time (13th century A.D.) was known. Travels by foreigners including Marco Polo (13th century) and Tavernier (17th century) give us glimpses of the diamond industry in the country in those days.

Distribution of Diamonds According to Arthasastra

According to Kautilya, the following are the mining areas and sources of diamonds: (Shamasastry, ibid, p. 86): Sabhārāstrakam madhyamarāstrakam Kāśmakarāstrakam, Śrīkatanakam, maņi Mantakam, Indravāņakam ca vajram khanih Srótahā prakīrņakam ca yónayah:

Sabhārāstrakam is designated as the diamond from the Vidarbha country; Madhyamarāstrakam is the diamond from Madhyamarashtraka (present Madhya Pradesh); Kāśmakam is the diamond found in the country of Kāśma commented as the area around Benares; Śrīkatanakam is the diamond from Sreekatanaka commented as a place in the vicinity of Vedótkata; Maņimantakam is diamond from the mountain Maņiman or Maņimanta; and Indravāņakam is the diamond found from Indravāņaka commented as the Kalinga country.

From the above it is clear that the diamonds of specific localities or areas were named after their place of origin. Nomenclature of diamonds was place oriented.

The Vidarbha region could be identified as the region of Panna, where diamonds are being mined today. The Kāśmaka country is equated as the region around modern Benares. The diamonds referred to may have come from the diamondiferous rocks of Pipra, Jungel and adjoining areas. The location of Maņiman mountain is not clear. The Indravāņaka, equated with the Kalinga country probably refers to the region of modern Orissa at 'Hira Khud' or 'Hira Kund'. This region should merit a close study.

Shamasastry (ibid., p. 80) comments that Magadha, Kalinga, Śūrpaka, Jaladāyasa, Poundraka, Barbara. Tripura, and mountains such as Sahya, Vindhya and Vedótkata, the country of Kosala and Vidarbha are the places where diamond mines are situated.

Magadha region is part of modern Bihar. In view of the occurrence of ultramafic rocks in the region of Singhbhum and adjoining places, the area needs closer examination for the possible occurrences of diamond-bearing pipe rocks. $S\bar{u}rpaka$ is equated with the modern Sopara near Bombay and Poundraka probably refers to the Aravalli region. Ultramafic rocks associated with the Precambrian formations in these regions need closer examination. Jaladāyasa cannot be located. The recently reported occurrence of diatremes in the northeastern part of the country (Yusuf and Saraswat, 1977) lend support to the occurrence of diamond in Tripura.

Poundra is also equated by some authors to be the *Gouda desh* or north Bengal; *Barbara* is known to be the *Yavana* areas of Persia; *Vedótkata* is mentioned (Sircar, 1971) as the Vedaparvata near Madras. According to present knowledge diamonds are not reported from these areas.

Distribution of Diamonds According to Brihatsamhita

Varahamihira in his text *Brhatsamhita* treats the occurrences of diamonds in the Chapter on *Ratnaparīkşādhyāya*. The verses 6 and 7 describe the characteristics of the diamonds of different places.

'The diamond found on the Vena river bank (which is equated to the river Wainganga near Nagpur by Shamasastry (ibid. p. 325) is of pure quality; that which is found in Kosala is of the colour of *sirisa* flower (i.e., slightly yellowish); that which is found in Sourāstra is of the colour of copper metal; that which is found in Sopara is dark; slightly reddish is the diamond found in the Himalayas; the diamond found in Mātanga is slightly grey as the colour of the Valla flower; that diamond found in the Kalinga area is yellowish; and the one found in Poundra desh is blue.'

RESEARCH NOTES

At present there are no diamond occurrences known in the Sourashtra region, i.e., modern Gujarat and adjoining country. However, as has already been stated, the region requires to be closely examined for the presence of diamond in association with the ultramafic rocks of the region. The Vena river is referred to as Wainganga and Shamasastry (ibid.) suggests that the area may be Wairagad situated on the bank of river Wainganga. It is believed that some of the inscriptions in the Hathigumpha equate Wairagadh to Vajragrha. The river, as can be seen, drains the east Nagpur region and it is not known whether there are any diamond bearing rocks in its catchment area. Shamasastry asserts that this is the same area referred to by Kautilya as Sabhārāstra.

Diamonds of *Kosala* and *Benares* are to be expected from eastern Uttar Pradesh and Vindhya regions. There are no mines of diamond in the Himalaya. *Mātanga* is probably the region of Vajrakarur and adjoining areas in Andhra Pradesh. This has not been mentioned by Kautilya. This region and the Krishna valley, the latter with its source of diamonds from the Kurnool formations, was the chief producer of diamonds during Vijayanagar times This area appears to be a new find not known to the author of Arthasastra.

Conclusion

Based on the observations made by the authors of the two ancient texts, it is suggested that the following areas be closely explored for the possible location of diamond-bearing rocks:

- 1. Magadha or southern Bihar.
- 2. Gujarat and parts of Rajasthan country of Sourashtra
- 3. Tripura or parts of northeastern region.

The suggested areas are rather large, but initially attention may be confined to the examination of ultramafic rocks and carbonatites in these regions.

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Address of the Author

S R N MURTHY, 541, 38th Cross, 5th Block, Jayanagar, Bangalore 560041.

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