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LONAR CRATER LAKE: AN ECOLOGICALNATURAL BEAUTY OF INDIA

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Abstract: Lonar crater is situated in Buldhana District of Maharashtra State India. It is a unique natural beauty of India formed about 52,000 year ago, due to the impact of a huge meteorite. It is nearly a circular depression with 1.83 km. diameter and 130 m depth from crater rim to the water level. Most of its floor is occupied by a shallow saline water of and part of its floor by a number of fresh water springs of unknown origin. The inland saline lake has no outlet. The Lonar Crater Lake is a bi-geographical natural wonder of India with an assemblage of about six different kinds of ecosystems. It is the site of attraction to the Geologists, Ecologists Archaeologists Naturalists and Astronomists (Tandale M.R. and Dabhade 2014). Being the world's third largest and India's only one Meteoritic impact crater in Basalt rock with unusual saline water ecosystem has attracted researchers from various disciplines. The Lonar ecosystem has evolved in a unique way due to the unusual geo-ydrological and climatic conditions. (Ram A. Malu et. al 2005)

Key words: Lonar Crater Lake, Saline ecosystem, Natural beauty.

Introduction

The Lonar Crater Lake is situated in Buldhana District of Maharashtra state India (19^0 58' N and 76^0 31' E). It is a unique natural beauty of India. Lonar Crater Lake is believed to have been formed by an impact of a huge meteorite about 52,000 years ago. It is nearly a circular depression with 1.83 km diameter and 130 m depth from crater rim to the saline water level. Most of its floor is occupied by a shallow saline water and part of its floor by a number of fresh water springs of unknown origin, chief among these are Dhara, Ramgaya and Sitanhani. The inland saline lake has no outlet. The remarkable shape, size and uniqueness of the lake have attracted the attention of Geologists Ecologists, Archaeologists Naturalists and Gastronomists all over the world. (Tandale M.R. and Dahade 2014). However between 1970 to 1985 the lake water dried every year in summer and in rainy season the water accumulated. In 1985 the water level in the lake was so less than a great extent of the lake basin got exposed along with encrustation of salt (Badve R.M. et. al 1993). In recent years there is considerable increase in water level due to percolation which is responsible for changing the quality of water affecting the organisms living within the lake (Deshpande R.P. 2019). The Lonar Crater Lake is India's pearl in the angle of its multidisciplinary significance along with Mythological importance (Deshpande R.P. 2016).

Apart from all aforesaid peculiarities of Lonar Lake as an ecological natural beauty of India, the present scenario is alarming, due to the human hazards like pollution deforestation, uncontrolled exploitation of natural resources. The present article deals with the natural beauty of Lonar Crater Lake and threats.

Ecosystems of Lonar Crater

Lonar crater is an assemblage of about six different kinds of ecosystems including on manmade ecosystem. It includes the main unusual saline water ecosystem, fresh water ecosystem, forest ecosystem, marshy areas around the lake, cropland ecosystem. All the ecosystems are unique with its floral and faunal diversity. Most of the work carried out by Blanford (1868); La Touche and Christie (1912); Zingran and Rao (1959); Beals et.al. (1960); Nandy and Deo (1961); Arogyaswami (1962); Nayak (1972); Fredrikson (1973); Choudhari and Handa (1978), is either from

geographical or astronomical or geochemical point of view. Since last 02 to 03 decades the Lonar Crater Lake is being studied from the bio-diverse angle and its conservation. Prominent among these are Badve et.al. (1993), Ghanekar P.K. (1996); Ram Malu (1998); Dabhade et. al. (1998), Pedge et al. (2013) Althal et. al. (2000). Yet very little work has been carried out concerned with the biodiversity and its conservation.

Topography and Hydrology

Lonar Crater Lake (19^0 58' N and 76^0 31' E) lies in a nearly circular depression with shallow saline lake. It is surrounded on all sides by a steeply rising escarpment to an even height of about 130 meter above the lake. The circumference of the lake basin along its outer rim is mainly 6 km and along its inner rim is 3.5 km. The main saline lake has no outlet. The Lonar Crater Lake is fed by perennial fresh water springs, chief among these are Dhara, Ramgaya and Sitanhani. All fresh water springs remain confined to the periphery of the lake.

Water and Land of Crater Utility

The main saline water from the lake is very unique in its physic-chemical properties like very high P^H, salinity and alkalinity. Because of these properties it cannot be used for drinking as well as agriculture purposes. Besides this the skin disease affected people take bath in saline water as a natural treatment against skin diseases. Water from main fresh water spring 'Dhara' is used by the local residents of Lonar town for their drinking as well as domestic purposes. Water from Dhara, Sitanhani and Ramgaya is used by the local people and pilgrims throughout the year for drinking, bathing and agriculture purposes.

Human Hazards to the Crate

Besides natural beauty and worldwide significance of the Lonar crater, it is in threat condition due to various kinds of human hazards. The major human hazards include yearly visit to the 'Kamaljadevi Temple' by the pilgrims, water pollution, deforestation, hunting of wild fauna, agriculture on about 52 acre land inside the crater, grazing of domestic animals, construction of minor irrigation dam in the vicinity of the crater.

Utility without Threat to the Natural Beauty of Lonar Crater

Lonar Crater Lake can be used without threat to the natural beauty in the following way.

- As a natural source of spiraling.
- As a natural source of fresh water
- As a natural source of fruits and forest edible products like honey.
- As International tourist spot.

Conclusion

Lonar Crater Lake is a bio geographical natural wonder and internationally 3rd ranking meteoritic impact crater with unusual assemblage of different kinds of ecosystems at one place. It is already declared as 'A' grade tourist spot by the Govt. of Maharashtra on 15 Feb. 2001.It should be declared as an International tourist spot with Eco-tourism, to maintain the natural beauty and avoid human hazards, by the Govt. of India.

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