

# Meteoritic lake in Buldhana Maharashtra, India conserve and preservative measure

PROF RATHOD.M.P

HOD ,DEPT OF ZOOOGY  
M.J.COLLEGE,JALGAON  
Email=drmprathod05@gmail.com

## ABSTRACT

Impact crater site, at the Lonar lake dist Buldhana, India where a huge meteoritic hit about 50.000 years ago into our planet earth making saucer shaped deep underside, to attract the attention of scientists, tourists and pilgrimage, working on different aspect. Roughly 150 known meteoritic impact sites on the earth, Lonar crater is the only one that hit and developed during impact. Thus it is one of the heritage site and well preserved and a unique site which attracts the attention of scientists, to realize the lake on moon. the lake which was created by an meteor hitting the earth during the Pleistocene epoch, is a salt water lake in Buldhana district of Maharashtra, India. All scientists, such as astronomers, geologist's biologists, archeologists, have reported several studies on various aspect of Lake Ecosystem. Today at this site scientifically and archeological facing many problems due to manmade activities like pollution along the lake which emphasized in this presentation. This study suggested that dilution from drainage of city, and manmade activities should be monitored at this lake

**Keywords:-**meteoritic lake, conservation, pollution

## Scope

**Lake biodiversity conservation**

**Help to save Our Environment**

**Restoration and Management of lake and reservoirs**

**International importance due to meteoritic lake in t**

**Conservation Objectives of Lonar Meteoritic Lake Maharashtra state dist-  
Buldhana, India.**

**Sustain the distribution, biodiversity and abundance and population of species in Lonar  
lake conservation Regions**

**Maintain and Recovery of endangered Threatened Species**

**Monitor trends and Biodiversity**

**Research Reasons for Declines Biodiversity of lonar lake success of their action**

**he world**

## MATERIALS AND METHODS:

The present paper deals with the conservation of meteoritic lake and restoration of biodiversity. The lake is polluted day by day and has been getting eutrophication stage

## DISCUSSION AND RESULTS

### CONSERVATION OF LONAR LAKE

The lonar crater is unique ecosystem of its own kind. The speciality being the saline nature of lake water. The unique soil and rock profiles, the flora and the invertebrate and vertebrate fauna of the region. Since ancient times it has been a site of reverence as is reflected in several temples dotting its water rim. Further historical reference does mention of Moughals and other rulers utilizing it as a source of raw material for manufacturing soap.

The lonar crater is unique ecosystem of its own kind. The speciality being the saline nature of lake water. The unique soil and rock profiles, the flora and the invertebrate and vertebrate fauna of the region. Since ancient times it has been a site of reverence as is reflected in several temples dotting its water rim. Further historical reference does mention of Moughals and other rulers utilizing it as a source of raw material for manufacturing soap.

The crater slopes are covered with dense vegetation essentially consisting of the shrubs, small trees and large trees. The essential flora includes custard apple *Acacia nilotica* –trees thorny bushes and different types of grasses-The large trees include teak tamarine, sandal wood, neem,-The shrubs are dominated by teak.Different vegetables,crops like banana and fruit trees like lemon, papaya etc are grown there. - The The vegetation is in general exploited by the localites as a source of fuel wood and timber. Among the other products leaves, flower and fruits of certain medicinal plants and honey is gathered. Further the developmental activities like making roads,erecting temporary sheds and passage related with religious gatherings and fares. At the temples situated in the crater, contribute to unwanted destruction of the vegetation. Further, the increasing trend of the ecotourism has resulted in large number of people visiting theinto destruction of the flora along the passages and approach roads. The tourist casually pluck the foliage and thus damage the flora.

The agricultural activity in certain regions of the lake, where the water is retreated is preceded by tree felling that clears the land for agricultural activities.

The grazing of cattles is also responsible for deforestation as the cattles loosen the soil along the slope of the crater.and also uninhibited grazing has led to severe damage to the flora.

Further, the natural water spring situated on the western slope of the crater is a common site of bathing and

The afforestation activity implemented by the local administration, without taking into consideration the appropriateness of the species to be planted as a result into the introduction of exotic species that are threatening survival of other species, to be specific kubabul planted along the water coast line have become so populous that the entire lake is surrounded by this species. It has replaced the native flora that once upon a time existed there. I unnecessary gathering of the rock samples, thereby depleting geological wealth of the region which otherwise could be useful for scientific and academic ventures.

Thus, the sum total of above mentioned activities have resulted into severe destruction of the habitat and the local flora and fauna and there by endangering the lives of several native biodiversity.

### **MEASURES TO BE TAKEN FOR CONSERVATION**

Wastes and effluents from the Lonar and other pollute the water of Lonar Lake. Thus it is necessary to have strict regulations for waste discharge into the lake. Suitable methods and means should be devised along with community involvement to use the fly ash, sewage and water hyacinth in beneficial manners which are greatest threats to the wet land and their catchments areas. The ecological benefits like water and nutrient retention, fishery, fodder and recreation in addition to the most important function being a habitat for a large number of avian fauna and other wild life eminently justifies the need to wisely use and maintain the lake. The preliminary socio-economic survey carried out in this region of the lake through the Contingency Valuation.

Method, showed high level of dependency on wetlands for groundwater, food, fodder, fish, fuel, and so forth. The high level of dependency on this lake calls for immediate restoration of degraded lakes and appropriate measures for their conservation and management in order to maintain ecological balance in the region. The project attempts to benefit both biodiversity and people. Strategic approaches like intervening at the catchment's level, using a holistic approach to freshwater management, and involving local communities have been applied in this project to finally achieve logistic scenario for the people as well as the biodiversity. The conservation measures undertaken in Lonar lake region are designed to reduce chemicals run off from farms and deposition in the wetlands. Since the migratory population has suffered from vegetation changes due to nutrient enrichment from runoff, it is hoped that these soil conservation measures, in addition to benefiting the farmers, will also help to reverse the trends of declining numbers of

bird population. The Lonar Lake holds scope for development of eco-tourism but within certain limits. The optimality of the present resource appropriation in light of its sustainability needs to be worked out through further ecological assessments and definite regulatory framework should be in place. These restoration goals require intensive landscape planning, and funding, with active involvement from all levels of organizations (Governmental, NGO's, corporate sectors, citizen groups, research organizations, media, and so forth) through interagency and intergovernmental processes being instrumental in initiating and implementing the restoration program

The principle of measurable targets governments have had to make some effort to final ways of recording of good forest management at the national and international level a new range of criteria and indicator have been developed for meteoritic lake.

The human intervention such as deforestation by local peoples should be stopped. The non government organization NGOS has been assessing performance of forest and agricultural management of lake. At the national level, Ministry of Environment and forests to initiate the new programmes for conservation and recognizing the importance of lake. Recently the national lake conservation plan (NCLP) to assess and restore the lake but they should update the programmes

At the international level, the convention and forest stewardship council encourage for standardization. These organization and convention need to improve management for environment and social including the lake biodiversity. -08

Priority would be to create awareness among local residents and visitors about uniqueness and importance of crater. Dependency of the local population on vegetation of crater, mainly for fire wood, should be reduced. Further, a complete check is necessary on activities of pilgrims who visit the temples on the bank of the crater. It was open for all to be further research and suggestion from all over world.

## REFERENCES

MALU AND RAM (2002-12-18) "Lonar crater saline lake, an ecological wonder in India." International society for salt Lake research retrieved 2008-09-08.

LONAR LAKE, BULDHANA DIST, MAHARASHTRA. Geological survey of India Retrieved 2008-09-08

"LONAR". The Planetary and space science center, University of New Brunswick Retrieved 2008-09-08.

Shaikh M.D Babar, Dept of Geology (2010)-12.