

## NOTES

### OLDEST NEOLITHIC SETTLEMENTS DISCOVERED IN GULF OF CAMBAY

The Department of Ocean Development unveiled key marine archaeological findings from the Gulf of Cambay dating back to 7500 BC (Fig.1). C<sup>14</sup> dating of these artefacts (by the Birbal Sahni Institute of Palaeobotany and the National Geophysical Research Institute) indicates that these settlements are the oldest Neolithic sites discovered in India. This is for the first time in India that such important discoveries dating back to 7500 BC have been reported from the offshore region.

The latest discoveries are a result of a series of surveys conducted by the National Institute of Ocean Technology (NIOT) during 2000-2001. Having found indications of possible settlements earlier in 2000, NIOT scientists undertook confirmatory surveys in November 2001 in the

Gulf of Cambay area using advanced Marine Underwater Survey Techniques with Side Scan Sonar and Sub-bottom Profiler.

These surveys were carried out under the overall co-ordination of Dr. S. Kathirolu, Project Director, NIOT, Chennai, using the Coastal Research Vessel (CRV) "*Sagar Paschimi*". S/Shri S. Badrinarayanan, D. Venkata Rao, K.M. Sivakholundu, E. Srinivasan and Dr. B.K. Jena were the other scientists who participated in this recent survey.

#### A Significant Marine Archaeological Discovery

The materials collected at the site include artefacts, possible construction elements with holes and studs, pot shreds, beads, fossil bones which are significant signs of

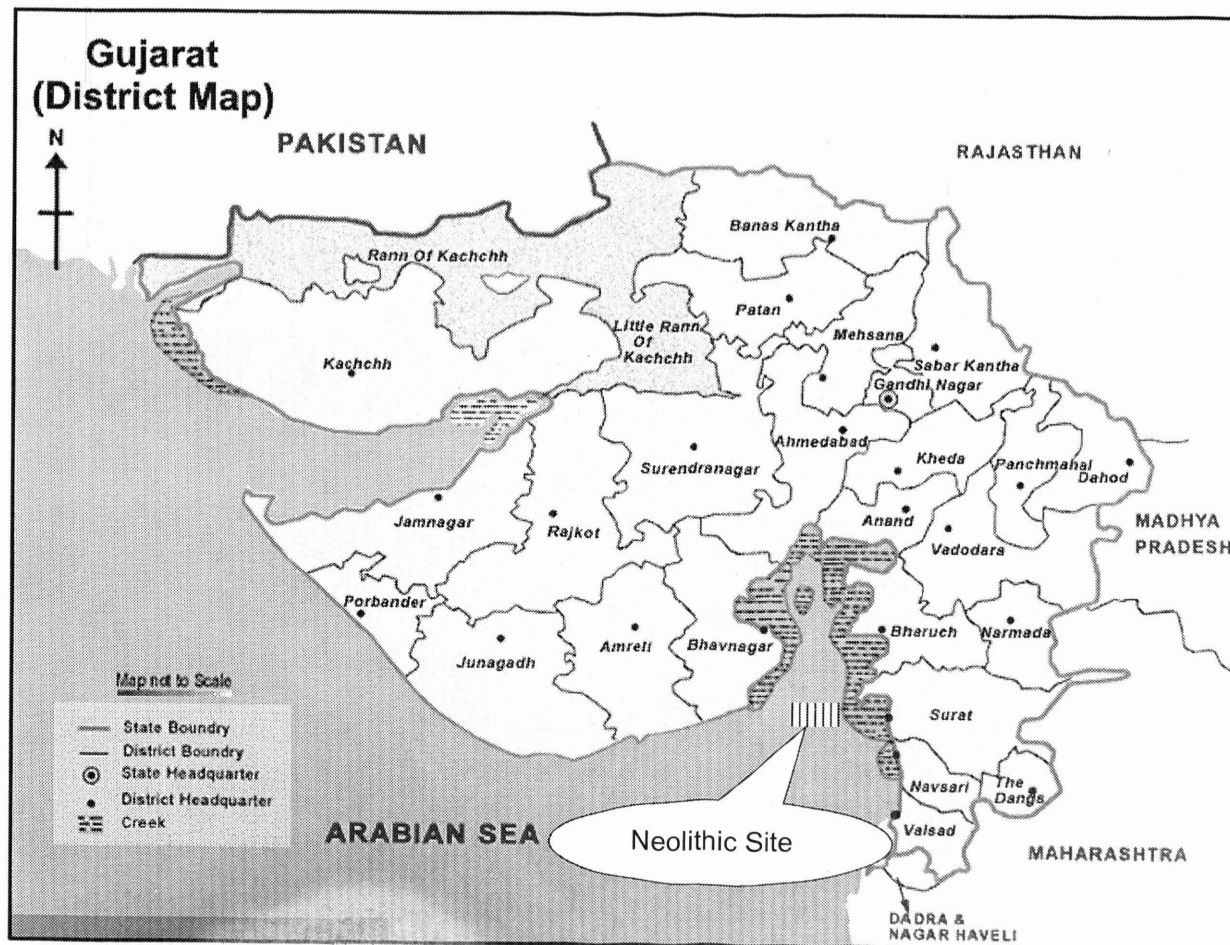


Fig.1. Location map of the Neolithic settlements.



**Fig.2.** Beads recovered from the site.



**Fig.3.** Conglomerate (fluvial) at 30-40 m depth at the site.

human activity in the area (Fig.2). A detailed examination of the area has revealed riverine conglomerate at a water depth of 30-40 m between 20 and 40 km west of Hazira near Surat in Gujarat (Fig.3).

Prof. S.N. Rajguru, former Joint Director and Head of the Department of Archaeology, Deccan college Post Graduate and Research Institute, Pune, feels that these collections represent an exciting breakthrough in offshore archaeology and indicate that the entire landscape between Bhavnagar and Hazira were probably connected around 7000 BC. Further, the acoustic images present channel like features indicating the presence of a river in the region. Geometrical structures and the antiquities have been

discovered in an area only within 200 m adjoining the channel indicating human activity on the banks of the river that was present at that time.

According to Dr. B. Sasisekharan, Research Associate in National Science Academy, the  $C^{14}$  date of 7500 BC obtained for the wooden piece recovered from the site pushes back the hitherto held view of first human urban settlements from around 3500 BC (c. 3500 BC - Valley of Sumer; c.3000 BC - Egypt and c.2500 BC - Harappa) to 7500 BC, thus making the present find the oldest known to man.

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