



Figure 1. Black-and-red ware pottery and an iron axe collected from Poredam.

ssed as 100 F/P₂O₅. Bones from similar environment are compared. Chemical analysis of several bone samples from different geographical settings and belonging to Holocene as well as Pleistocene period from India has provided that the regional sequences of these ratios can be built up to get a clue about the relative age of bone sample³.

Results of chemical analysis of bone sample from Poredam shows the following: fluorine (F), 0.03%; phosphorus (P), 7.5%; P₂O₅, 17.17; 100 F/P₂O₅, 0.175.

The Neolithic bone sample from Paiyampalli (Tamil Nadu) and that

from Hunsgi (Karnataka) of the same period have 100 F/P₂O₅ ratios 0.262 and 0.22 respectively. These samples belong to almost similar environment and having a little higher ratio than that of Poredam. Therefore it can be concluded on the basis of this analysis that the burial seems to belong to the period which might be later than the Neolithic period. Secondly, the bones belonging to the Chalcolithic period from other regions like Inamgaon (Maharashtra), Pamapuram (Andhra Pradesh) and Jodhpura (Rajasthan) have the ratios 0.125, 0.21 and 0.166 respectively and are very near to the ratio in the

bones from Poredam which probably denotes it as a Chalcolithic culture.

With this for the first time the prehistoric cultural continuity in Quilon district beginning from the Mesolithic to Neolithic, Chalcolithic and Megalithic has been established. The Tenmala Mesolithic rock-shelter habitational site in Quilon district has the absolute date by ¹⁴C to 5210 ± 110 BP⁴. In India the Chalcolithic phase is approximately dated between 1000 and 2000 BC, while in South India, particularly in Karnataka and Kerala, the Megalithic culture has been dated around 1000 BC.

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Occurrence of giant *Stegodon* tusks from Narmada Valley, India

The present note records the occurrence of longest pair of *Stegodon namadicus* tusks from Dhansighat (22°50'27": 77°52'00"). Hoshangabad district, Madhya Pradesh, India (Figures 1 and 2).

The Quaternary deposits of Narmada¹, Ganga² and Godavari³ valleys, Sayamalai area of Madras⁴ in Peninsular India as well as Pinjor Formation⁵ of Siwaliks, NW India have occasionally yielded the 'Stegodon' fossils in the past.

A new species of *Stegodon* named

Stegodon namadicus was reported from alluvial quaternary deposits of Narmada valley in Dhansighat, Hoshangabad district, Madhya Pradesh⁶. Two fragmentary tusks detached from the skull; one tusk having a preserved length of 390 mm was reported⁶.

On 21 December 1991, from the said locality, an almost complete left tusk of *Stegodon namadicus* measuring 3225 mm in length weighing 137 kg and a broken right tusk measuring 1350 mm in length

attached with part of skull with portion of molar teeth were found by the author, which were later excavated on 2 January 1992 under the guidance of S. Biswas of the Geological Survey of India. The tusks being highly friable were first wrapped in papers, cotton and then coated with plaster of paris to form capsules. These were then shifted to the District Archaeological Museum at Hoshangabad where plaster of paris, cotton and paper wraps were removed.



Figure 1. Complete left tusk and a broken right tusk of *Stegodon namadicus* exposed after excavation at Dhansighat, Hoshangabad dt., MP.

The fossils were carefully washed, dried and later sprinkled with water diluted 'Fevicol' solution. The tusks and skull are presently stored in the repository of the District Archaeological Museum, Hoshangabad.

The giant tusks were found embedded in the middle Pleistocene conglomeratic gravel bed exposed on the southern bank of Narmada, the fossiliferous bed



Figure 2. *Stegodon namadicus* tusks attached with part of skull, Dhansighat, Hoshangabad dt., MP.

being overlain by 3-m thick yellow sandy horizon. Both the tusks were found lying side by side; left tusk being preserved up to the tip while right tusk is broken near the top.

The *Stegodon namadicus* inhabited Narmada valley about 0.76 m.y. to 0.13 m.y. ago. Earlier fossils of Early (Narmada) man, *Bos namadicus*, *Equus namadicus*, *Hippopotamus* and the stone

implements were excavated from the same horizon. The rock paintings of Adamgarh rock shelters, Hoshangabad bears the man-made paintings of *Stegodon* with giant tusks. These finds unquestionably point to association of *Stegodon* and early man during Pleistocene.

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