
**EFFECT OF FLOOD DISASTER ACTIVITY ON THE TEMPLE ARCHITECT: A CASE STUDY OF
MAHADEV TEMPLE AT MALLEWADI VILLAGE**

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INTRODUCTION:

The landscape and environment of the past can be recreated through studies of geomorphology and environmental Archaeology. In such environment, landscape changes can be extreme because of floods, drought, sediment deposition, erosion, tectonics or changes in sea level. Landscape is subject to dynamic changes, so today is not identical to landscape of the past. A geomorphic and environmental study offers the tools to determine appearance of ancient landscape (Sabale et al. 2011).

This paper deals with the effect of river flash flood disastrous activity and their effects on archaeological sites which rest at the right bank are studied in man river basin in Mangalweda area of Solapur District.

STUDY AREA.

Study area is a part of Mangalwedha Tehsil of Solapur District which lies between Latitude 17° 33' 54" E to Longitude 75° 24' 30" N and is seen on Survey of India Toposheet No. 470/3 of 1:50,000 scale (SOI, 1975-76) (Fig. 1.). Mallewadi temple site is located at 10 meters away from Man river channel at its right bank, while old Mallewadi village is 100 m. south of temple. This temple is buried up to 7 to 8 feet from all around the side by river alluvium deposit of flash flood action now it is connected with Pandharpur – Mangalwedha highway Maharashtra.

The systematic survey of the area revealed that the region of Bhima, Man, Sina basin is rich in archaeological record. Several new archaeological sites of historic and medieval period viz. Mudhavi, Uchethan, Dharamgaon, Sarkoli, Siddhapur are present in the vicinity of the study area(Shinde, et al. 2003, Kshirsagar, 2010, Sabale and Kshirsagar, 2010a and b,).

GEOMORPHOLOGY AND GEOLOGY OF THE AREA:

Geomorphologically the area is shows undulating to plain topography. The surface shows gently to moderately slope towards Man river side. The temple is buried its height in to the river alluvium deposit, which spread all over the area due to flash flood activity of Man River. Due to this flood the top of the temple is hardly 2.5 ft from the ground surface. The temple is present at the sharp bend of meander at right bank of Man River. Might be this reason during flash flood activity the alluvium material is spread all over the area which shown in figure 2.

Geologically the study is southern part of Deccan Volcanic Province consist of thick and thin flows of compact, vesicular and amygdaloidal basalt with red bole and ash bands(Sabale, 2008). River alluvium material in consist of pebble cobble intercalated with sand, silt, intercalated with black cotton soil.

Case study: Mahadev Temple:

Temple is constructed with the help of rectangular blocks of black compact basalt stone. Blocks from upper three layers are highly rectangular and have arranged in horizontal manner during construction, while lower layers consist of cubic, dressed blocks of Compact basalt. The temple is having thick fortified wall from all side.

Temple Art and architect:

Door:

The size of the door is 3 feet in high and 2.5 feet in width. This door is attached to the three feet thick wall. The frame of the door is designed in simple manner which shows rectangular shape. The outer face of the door frame is decorated and it shows Geometrical shape. There are five steps provided from door to *Sabhamandapa*.

Pillars:

This temple is standing on 12 square shaped Pillars. That pillar is having 6 feet in high and 1 square feet in the thickness.

Garbhagraha:

It is rest on four pillars. The upper roof of the temple is made of horizontal and vertical flat sheets of compact basalt. The position of the *Shivlinga* is present at the center of the *Garbhagraha*. Basement of the temple is made of Pentagonal shaped stone.

Sabhamandapa:

Sabhamandapa is simple and not decorated with the carved designing.

Fortification wall:

A thick fortified wall is constructed around the temple. This wall is constructed with the help of well dressed blocks of compact basalt while boulder blocks of same rock are used for the construction of foundation of the this wall.

Dipamala / Flag pillar:

This structure is present north east corner the temple. Some fragments of broken pillars and *Dipamala* / Flag pillar are observed in this area which is shows in Plate No. 2. Height of the pillar is 3 m. and radius is 30 cm. with round shape.

Some remains of temple:

In front of the temple, their some remains or remnants are observed. These include a stone wheel of *Ratha*, Hero stone, *Nagdevata*, flag pillar and *Dipamala*, and some other remains of collapsed fortified wall are observed.

Evidences for the flash flood in Man river basin:

Result and Discussion:

Effect of flood disaster activity is also observed at Kudal Sangam located at the confluence of Bhima and Sina in Akkalkot Tehsil of Solapur Districit (Bhide, 2000, Kshirsagar, 2010) as well as same feature is observed at Sarkoli near the confluence Bhima and Man river (Deo et al., 2005). Recently Mishra et al.(2003) has observed that fluvial responses of streams in Upland Western Maharashtra were different in the same climatic conditions. Other evidence from Upland Maharashtra is at *Inamgaon* where gravel with microliths and shells has been dated to 11,700 ± 150 B.P. (Mishra et al. 2003). The according to Deo et al. (2005) evidence of Late Holocene Strong flood that has disturbed medieval occupation sites on the proper Bhima basin. Alternating gravel and silt deposit with calcretized bands of 4-5 m. developed near channel. During this flood plain environment with channel shifting takes place (Deo, et al. 2005). On the basis of alluvial material which the temple buried is consisting of non Calcareous brownish sandy silt of 4-5 m. thick is belongs to Mid to Late Holocene period and this period indicate Semi-arid climate.

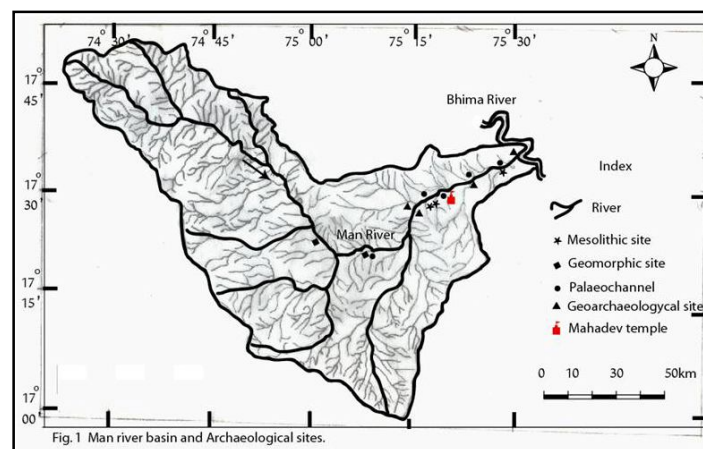
CONCLUSION:

On the basis of above discussion, it is conclude that the Mahadev temple is disturbed and buried under the thick pile of river alluvium deposit due to flood activity of Man river might be during the Late Holocene period, where at the same time Sarkoli archaeological site is also covered with the same flood deposit at the confluence of Bhima and Man River.

During same time this beautiful temple is damaged and resulting their remnants are spread everywhere around the temple today. Therefore, there is need of detail investigation in this area.

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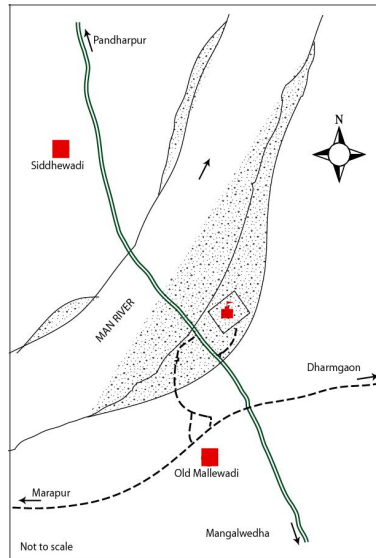


Fig. 2. Location and Geomorphological map of the study area

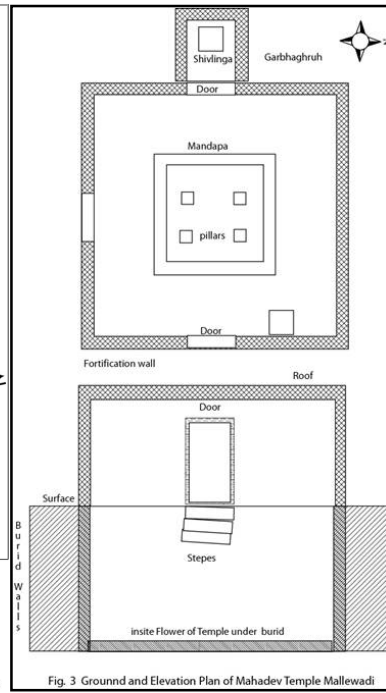


Fig. 3. Ground and Elevation Plan of Mahadev Temple Mallewadi



Plate 1 Picture shows front view of Mahadev Temple.



Plate 2 Remains of Nandi Mandapa pillars and Dipamala.



Plate 3 Fortification wall around the temple



Plate 4 Main entrance of temple facing towards south