

**PRELIMINARY REPORT ON GEOARCHAEOLOGICAL EXPLORATION IN UPPER  
AND MIDDLE REACHES OF MULA RIVER BASIN – A CASE STUDY FROM AHMEDNAGAR  
DISTRICT, MAHARASHTRA**

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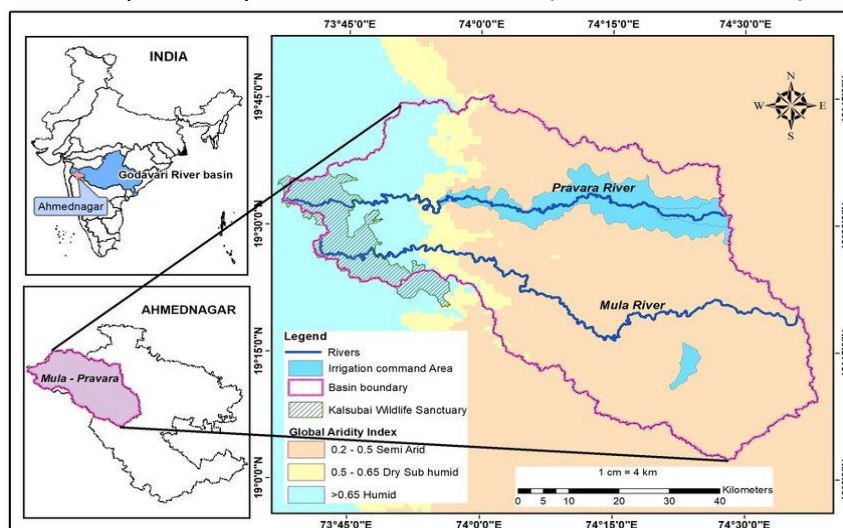


**INTRODUCTION :**

The Geoarchaeological exploration on both the banks of Mula was conducted to observe the culture and settlements hidden in the valley of Mula. The mighty river Mula is a major right side tributary of Godavari, which is a large river popularly known as “Ganges of south” which lies in Ahmednagar district. A general reconnaissance of the river bank from source to destination was done in three seasons i.e. May 2015, December 2015 and June 2016. This was a village to

village survey in particular. Field walking was done in each individual village to understand the character of land and the cultural past that it may possess. The pottery sherds, tools, bangles etc. were taken in zip lock bags as surface collections; the monuments were recorded for detailed study. There were Geoarchaeological sites located in villages like Ghargaon, Lahit khurd, Lingdev, Kotul and Waghevasti. Ethnoarchaeological study was conducted in Ghargaon.

There is a historical record that rivers have been the cradle of civilizations. It brooded and nurtured several ancient civilizations and stayed to be the life line of mankind. Godavari valley has shown rich archaeological site which shows continuity in cultural records right from palaeolithic period to medieval period which was proven by excavation at Nevasa (Sankalia et al 1960).



**Study area location map (Gazetteer Ahmednagar)**

## GEOLOGY AND GEOMORPHOLOGY

Ahmednagar district has its own unique feature. To give a clear cut demarcation to the topography of Ahmednagar it can be divided into three sub headings; Western hills region, Central plateau region, Northern and Southern Plain region. The entire district is occupied by basaltic lava flows erupted in the Cretaceous-Eocene age which are popularly known as Deccan traps sometimes associated with inter trappean bed such as lime stones, sandstone, clay, shales, red bole bed, porous ash or scoriaceous bed. Thin mantle of black cotton soil is present almost everywhere on the basalt, river alluvium, sand, gravel, clay and silts represent the recent deposit in the district. Calcareous concretion and nodule, known as Kankar, is commonly associated with the soil, is more concentrated in the vicinity of the stream – courses. The chief soil of the entire basin is Kali or black with a variety of gradations depending upon the local terrain conditions and slope. The soil by and large river from weathering of basalt under tropical semi- arid climate conditions are regur (black cotton soil) type of clay loam that is moisture retentive. However, in the plains of Sangamner taluka on either side of Pravara and Mula occur rich munjal soils, a reddish sandy loam and chopan soils that are admirably suited for gardening cropping.

## PREVIOUS WORK

Mula a major tributary to Godavari falls in Ahmednagar District of Maharashtra. Right from the beginning it has been known as the “paradise of archaeological settlements” because of the presence of remarkable sites such as Newasa, Chirki Nala, Daimabad, Jorwre, Paithan, Nasik, Puntamba and Kopargaon. In 1954-55, Shri B.P Bopardikar of the south western circle of the department discovered tools of series-2. Mostly scrapers, from Baregaon-Nandur, Tandulwadi, Dhanori Budruk and Khurd and Manori-Renapur, each situated on the Mula or its tributaries. Two new Paleolithic sites at Tisgaon in district Ahmednagar were discovered by the Deccan College. In the same district were also discovered two purely Microlithic sites, one at Ghargaon and the other near Sangamner. In 1960 – 61 exploration work was carried out in Rahuri and Parner talukas where B.P. Bopardikar discovered Microliths, Chalcolithic and early historical sites in 1966-67 Corvinus undertook a project for the search early man under Prof. H.D Sankalia. The work was to be conducted upon the cut off trenches of the spill way of Mula dam at Mulanagar near Rahuri in Ahmednagar District, fossil bones of *Bos namadicus* and tusk of *elephas* were collected from the cutoff of trench of the proposed dam at the Godavari near Paithan. A carbonized wood of *Terminalia Arjun* was collected in association with the unrolled jaw of *Bos namadicus* at Mula dam project in the alluvium buried below the present bed-level of the Mula. Again in 1985-86, S.S Parekh of Aurangabad circle carried out village to village survey and noticed late medieval gateway, ruins of two temples with sculptures of Bramha, Vishnu and Nandi in Chas village near Sangamner (courtesy IAR). S.A. Sali carried out archaeological exploration(1960s-70s) in this region and located over seventy five Chalcolithic and numerous historical sites, but his work was not followed up since then. As various remarkable sites were discovered near about this river stream so this became our area of interest to conduct a further study.

## PRESENT STUDY

The region appeared to be very promising to understand the man land relationship therefore the exploration of Mula river basin have been undertaken. Survey was planned systematically after studying the maps and related literature. The study area is covered by 1:50,000

topographic maps of Geological survey of India with map number 47 E/10, 47 E/11, 47 E/15, 47 I/7, 47 I/11, 47 I/10, 47 I/15. These toposheets were thoroughly examined. The river covers five tehsils which includes Akole, Sangamner, Parner, Rahuri and Nevasa. Below is the list of explored sites in three seasons of field work, as mentioned above.

Sr.No	Villages	Geo-Coordinates	Newly Discovered/Revisited	Period
1	Harishchandragadh	19° 23'11"N 73° 46'40"E	Revisited	Historical Period
2	Paachnai	19° 24'47"N 73° 46'53"E	Newly discovered	Medieval
3	Shirpunji	19° 29'11"N 73° 46'47"E	"	"
4	Bhairavgadh	19° 28'07"N 73° 46'51"E	"	"
5	Pabargadh	19° 30'50"N 73° 46'43"E	"	"
6	Lavhali Otur	19° 25'26"N 73° 49'05"E	"	"
7	Kothale	19° 24'50"N 73° 48'56"E	"	Early Medieval
8	Dhamanvan	19° 28'57"N 73° 49'58"E	"	Medieval
9	Baravwadi	19° 28'19"N 73° 50'47"E	"	Early Medieval
10	Tale	19° 24'41"N 73° 49'53"E	"	"
11	Waghdari	19° 25'55"N 73° 50'30"E	"	Medieval
12	Kohane	19° 24'52"N 73° 53'12"E	"	"
13	Somalwadi	19° 25'16"N 73° 52'58"E	"	Late Medieval
14	Khadki Budrukh	19° 26'49"N 73° 51'11"E	Newly discovered	Medieval
15	Gondushi	19° 28'25"N 73° 52'21"E	"	Late Medieval
16	Fofsandi	19° 23'14"N 73° 53'19"E	"	Medieval
17	Ghoti	19° 26'20"N 73° 52'40"E	"	Iron age(1200-300 B.C)
18	Shilvandi	19° 22'57"N 73° 54'26"E	"	Medieval
19	Paithan	19° 26'21"N	"	Medieval

		73°54'55"E		
20	Ambol	19°25'40"N 73°56'02"E	"	Early Medieval
21	Kotul	19°24'40"N 73°57'26"E	"	Mesolithic
22	Bori	19°25'11"N 73°59'27"E	"	Medieval
23	Waghapur	19°22'20"N 74°01'04"E	"	Medieval
24	Lahit Budrukh	19°23'40"N 74°03'51"E	"	Early Historic
25	Lahit Khurd	19°22'17"N 74°03'00"E	"	Mesolithic
26	Pimpalgaon Khand	19°26'14"N 74°01'56"E	"	Medieval
27	Lingdev	19°26'05"N 74°03'34"E	"	Mesolithic
28	Pimpaldari	19°20'22"N 74°04'46"E	"	Medieval
29	Kauthe Budrukh	19°20'16"N 74°08'12"E	"	Medieval
30	Borbanwadi	19°18'40"N 74°09'17"E	"	Medieval
31	Ghargaon	19°19'01"N 74°10'27"E	Revisited	Mesolithic
32	Bota	19°15'35"N 74°08'51"E	Newly discovered	Early Medieval
33	Ambi Khalasa	19°20'56"N 74°11'46"E	"	Mesolithic
34	Kondarwadi	19°19'38"N 74°12'59"E	"	Mesolithic
35	Khandarmal	19°20'18"N 74°12'20"E	"	Early Historic
36	Akalapur	19°17'29"N 74°12'45"E	"	Early Medieval
37	Pimpalgaon Dhepa	19°27'58"N 74°14'22"E	"	Medieval
38	Rankhambwadi	19°26'33"N 74°18'15"E	"	Early Historic
39	Mandve Budrukh	19°21'21"N 74°20'25"E	Newly discovered	Early Medieval
40	Khambe	19°23'53"N 74°24'55"E	"	Early Medieval

41	Chas	19°22'50"N 74°04'31"E	"	Mesolithic
42	Khadki Budruk	19°26'678"N 74°50'196"E	"	Medieval
43	Malwadi	19°13'35" 74°08'34"E	"	Early Medieval
44	Singve	19°16'17"N 74°39'53"E	"	Early medieval
45	Nandgaon	19°16'20"N 74°37'19"E	"	Early Historic
46	Mandve Khurd	19°19'58"N 74°19'16"E	"	Medieval
47	Khadakwadi	19°19'16"N 74°23'00"E	"	Late Medieval
48	Wasunde	19°13'37"N 74°21'52"E	"	Late Medieval
49	Palashi	19°18'05"N 74°24'58"E	"	Early Historic
50	Venkute	19°18'54"N 74°28'34"E	"	Medieval



**Microliths and raw material, Kotul**



**Early historic black and red ware with other Medieval potteries, Kotul**





**Early historic and medieval potteries, Ghargaon**



**Microliths Ghargaon**



**Quaternary section at Kotul**



**Memorial stone Aklapur**

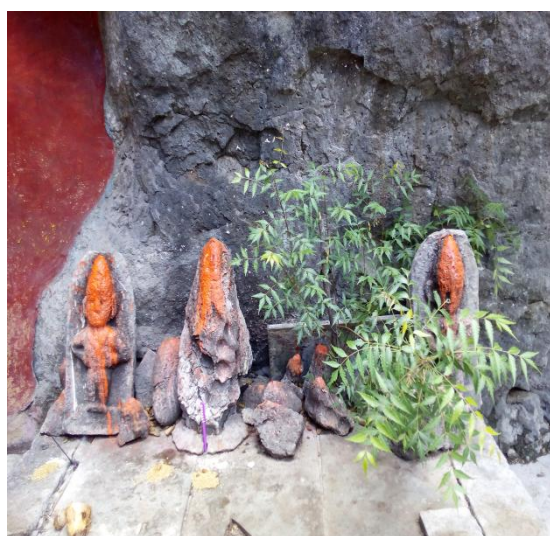


**Herostones at Khandarmal**



**Memorial stone from Tale**





**Kalamjai cave temple  
at Ghargaon**

**Stalactite and stalagmite sequence  
at waterfall point in Ghargaon**

## **RESULT AND DISCUSSION**

Exploration in the upper, middle and lower reaches revealed several Mesolithic, early historic, early medieval and medieval sites which shows that Mula valley has from thousands of years remained the pulsating zone for the homosapiens. The environment and landscape was favourable for the thriving human settlement.

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