

**Summary of  
Maharaja Sayajirao University Baroda  
ARCIPI activities 2014**

ARCIPI funds supported the following activities carried out by the Department of Archaeology, Maharaja Sayajirao University (MSU) of Baroda, Vadodara, Gujarat.

**Excavations Shikarpur, Gujarat 2014**

Shikarpur is a small, walled Harappan Period (ca. 2600-1900 BC) settlement located in Kachchh district, Gujarat. Excavations at the site began the third week of January 2013 and continued till the first week of March. This constituted the seventh season of a research program that aims to understand, among other things, craft production at Shikarpur and the site's place in the wider economic networks that existed during the Urban Phase of Harappan culture in Gujarat, particularly in Kachchh.

**Excavation team, 2014**

Excavations at the site in this year started in the third week of January and continued till the first week of March 2014. In addition to the above research plan one of the purposes of the excavation as usual was to train the Masters students of the M. S University in the methods of archaeological excavation, recording and documentation of excavated remains and methods of their preservation (Fig.3 and 4). The training being a part of the Masters curriculum, the students participated in the excavation for four weeks starting from 12 January 2014 to 12 February 2014. In addition to this, final year under-graduate students attended the excavation for a short period.

**Plan and Objective of the Excavation in 2013-14 field season**

The main objective in the current seasons excavation campaign was to check if there were any difference in the spatial distribution of artefacts within and outside the inner fortification. Trenches for excavation were therefore selected keeping this objective in focus in the central part of the site within the inner fortification and in the east, about 25 to 30 m away from the inner fortification.

**Trenches inside the Fortification**

Four new trenches are taken up for excavation in the central area around the open court in order to trace the westward extension of the open square. This has revealed that the open space originally had extended further west as was revealed in the excavation in the trenches Eh10 and Eh14. The trenches in the north, adjoining the central open space revealed evidence of regular habitation. It was decided to carryout deep sounding reaching down to the natural sediments for understanding the vertical distribution of artefacts and architectural remains that can be compared with similar evidence from deep trenches outside the inner fortification. Deep sounding in the trench Em9 and Em10 revealed that the earliest habitation in the trench came up after levelling the reddish sandy dune top. It appears that fire was used for clearing the unwanted vegetation as regular thick streaks of dark charcoal and whitish ashy bands are found in the bottom part of the earliest cultural deposit exposed sections. Structures in the earliest layers were all built of mud bricks having the standard Indus 1:2:3:4 ratios. Besides, wooden-posts were used along with bricks, as some large post-holes cutting into the wall are recorded as a part of the early stage structures. The mud-brick structure that followed the earlier one had a brick paved floor and a large

storage jar was found partly buried in the floor by cutting the bricks. This is a practice often found repeated in several structures excavated at the site. The excavation had also revealed another brick paved floor in the upper layer separated from the lower one by the usual habitation debris.

This structural phase was followed by another stage of brick structure construction using relatively light coloured mud-bricks. The bricks follow the usual Harappan ratio. Remains of the earlier structural collapse and construction debris of the new structure forms the layer 5 that incorporated several brickbats and disintegrated bricks. This was levelled to form the floor of the newly built structure. The floor in course of time was capped by a single layer of mud-bricks suggesting that the floor was paved with bricks once again at this stage. Similar paved brick floor was unearthed in the 2007-08 season from the trench Eh2, which is located about 30m further west of Em9/10

Apart from the large storage jar, the early deposit incorporated the Harappan dish-on-stand, perforated vessels, black slipped jar sherds, beakers, dishes and large basins. Most of the well painted classical Harappan potsherds is found in this early deposit. Besides it also had a few sherds of the Anarta pottery represented by bowls with incurved rims, basins, and medium size jars and pots. The sherds are profusely painted often in the cream or whitish background which in fact is characteristic feature of the Anarta vessels. The artefact collection included a broken terracotta sealing with inscribed seal impression, several beads of carnelian, amazonite, jasper lapis and bead rough-outs and Earnestite drill-bits; shell bangles, terracotta beads, bangles and toy cart-frames and humped bulls; blade tools of Rohri chert and chalcedony and copper tools.

### ***Trenches Outside the Fortification***

The trenches Ik2 and Ik3 were taken up for excavation for unravelling the architectural features of structures built outside the inner fortification and also to check the stratigraphic details of occupation away from the centre. These two trenches are located about 25m east of the fortification and adjacent to the trenches Ik7 and Ik8 that were excavated in the 2010-11 field-season. These two trenches revealed multi-roomed stone and mud brick structures belonging to the last stage of the Urban Harappan occupation at the site. They also revealed two different clusters of pottery as if they were stored in separate rooms. Besides, a large intact terracotta toy cart - frame and a heart-shaped copper bangle are found in the cluster of pottery. It appears the entire southwestern area lying outside the main fortification was mainly used for activities related to the production of pottery and terracotta objects.

From the chronological point of view both the clusters of pottery belong to the later part of the Phase II habitation which is dated to the later part of the Urban Harappan. It is at this stage the Sorath Harappan elements started to become dominant along with the introduction stone slabs as the popular building material for structural construction.

Deep vertical excavation in the trench Ik2 revealed an overall cultural deposit of 3.70m comprising 15 different layers. The earliest habitation deposit in this trench is found lying over a sandy deposit unlike the weathered and reddened surface of the dune in the other two deep trenches within the fortified area. It showed erosional

features suggesting modification by fluvial agents. The early layers in this trench revealed regular structural construction outside the main wall in the eastern part of the settlement started coming up only at a later stage as the habitation started expanding.

Evidence of regular habitation in the form of remains of plastered floors and mud-brick remains started appearing in the upper layers. Material remains unearthed from the layers below this are mainly marked by classical Harappan ceramic vessels and a few Anarta type pottery, especially convex sided bowls with incurved rim, basins with out-turned rim and small or medium pots with a flaring rim and elongated constricted neck. The classical Harappan pottery including a few black slipped jars, perforated pottery, several beakers, dishes and dish-on stand. It also included a few beads of agate, amazonite, lapis and steatite; terracotta toy cart-frames and wheels and shell bangles with incised chevron decoration, thereby suggesting little distinction between the artefacts inside and outside the main fortification. However, their number appears to be higher inside than outside.

The excavation team included members of the teaching faculty, researchers, students and technical staff from the Department of Archaeology

#### Faculty members

Dr. P. Ajithprasad	Professor, Director of the Excavation
Mr. S. Pratapachndran	Associate Professor

#### Researchers

Ms. Charusmita Gadekar	Research Scholar
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#### Technical and logistical Support

Mr. PR Khatri	Draftsman
Mr. Sukhram A Ratwa	Draftsman
Mr. Kanti I Parmar	Artist Modeller
Mr. Rajesh Brahbhatt	Laboratory Assistant

#### Masters Students

Mr. Avinandan Mukherjee  
Ms. Ananaya Chakrabarti  
Ms. Mou Mukherjee  
Mr. Subham Malik  
Mr. Ravindra Deora  
Mr. Gopalakrishnan Balasubramanian

### ***MSU Department of Archaeology website updates***

The website for the Department of Archaeology at MSU was that was redesigned in 2013 was updated with information on new projects as well as new publications by the faculty. Chhutki Infotech of Vadodara continued as the web specialists.

### ***Continued Documentation of Department Collections.***

Staff and Students in the Department have continued with the long term project of documenting and updating the inventory of all finds from previous and current seasons of excavations. These data are being recorded on hard copy notebooks and entered into the filemaker database that is the main digital reference for the materials.

### **Other activities**

The faculty and students in the Department are engaged in many other research projects that have been undertaken in collaboration with international colleagues and colleagues from other institutions in India. The faculty have submitted articles on their research to national and international journals, including journals in Pakistan that are published by the Department of Archaeology, Hazara University Mansehra.

### **Reassessing Palaeolithic Sites in Kachchh, Gujarat, India**

By P. Ajithprasad and James Blinkhorn

The Maharaja Sayajirao University Baroda, Gujarat, India and PACEA U. of Bordeaux, France

Dr. P. Ajithprasad of the Maharaja Sayajirao University, Department of Archaeology and Ancient History along with Dr. James Blinkhorn of the PACEA, University of Bordeaux, France initiated a Stone Age research project in July 2014. The project goals were to reassess the stratigraphic and cultural context of the Palaeolithic assemblages in Kachchh with to determine their chronology and cultural affiliations. Kachchh forms an important link to regions further west of the sub-continent and consequently this region has gained importance in the wake of competing hypotheses regarding the route followed by the anatomically modern humans from Africa into the Indian subcontinent. By locating primary context Palaeolithic and Mesolithic sites through intensive survey (fig 1) this project will help to clarify the current debate on hominin dispersal.

Stone Age sites belonging to the Palaeolithic and the Mesolithic periods were reported from several parts of Kachchh from the late 1950's onwards. Our recent reconnaissance survey revealed well defined Acheulian (Fig.2&3) and Middle Palaeolithic flake based assemblages stratified in two distinct alluvial gravels separated by detrital material. The artefacts are recovered from the sections exposed by the rivers flowing both north and south off the central plateau. Our short survey suggests the Acheulian sites are far less in number compared to the Middle Palaeolithic sites. Flake tools produced by prepared core technique predominate the Middle Palaeolithic assemblages (fig.4). As quartzite was not locally available the artefacts were made of fine-grained siliceous sandstone that were hard and flaked like quartzite. Such sandstone outcrops were extensively exploited for raw material purpose.

Diminutive bifaces are relatively poor in the assemblages recovered in the survey, though a small biface similar to the diminutive handaxe is collected from one of the sites belonging to the Middle Palaeolithic flake based industry. There are, however a few bifacial points made of fine siliceous sandstone (Fig.5) and chert/jasper along with several Middle Palaeolithic flakes with a tang-like constriction at the proximal end (fig.6). These have the appearance of an Aterian-like tanged point/scrapper. The discovery of these pieces acquires significance in the light of current debate about the

coastal versus inland dispersal route for the spread of Modern Human ancestors from Africa into South Asia.

We are planning to date the artefact bearing sediments and have collected a few TL samples for this purpose. Studies focussing on the geological context of the assemblages and their technological features, and extensive survey of the region are planned for a better understanding of the Palaeolithic cultural developments in the region.

#### Research Team

Dr. P. Ajitprasad. The M S University of Baroda

Dr. James Blinkhorn. PACEA, University of Bordeaux, France

Mr. Avinandan Mukherjee. Masters Student, MSU, Baroda

#### **Excavations at Dhansi, Madhya Pradesh**

By Dr. K. Krishnan and P. Chauhan

Dr. K. Krishnan was able to undertake a small scale excavation at the site of Dhansi, in Hoshangabad District, Madhya Pradesh. It is in central Narmada and located near Hathnora on its opposite bank. He and his colleagues have come across a good number of flakes resembling the Olduvian types on a gravel horizon, which stretches for about 300 m.length. The lowest level of sediment that caps this gravel bed is dated to 1.5 million years and the top of the sediment is dated to 0.7 million years BP. This dating was done by the GSI (Geological Survey of India). If these dates can be confirmed through future cross dating techniques it would indicate that the stone tool horizon is older than 1.5 million years. Slightly away from this region, that is, over 700 meters away, he has recovered Acheulian hand axes, cleavers etc but all from layers that lie above the gravel horizon. Last year he had put two trial trenches measuring 2 x 2 m and had collected a large number of artefacts. The analysis of these are going on. This season he is undertaking new efforts to date the site employing dating methods such as Palaeomagnetic, Cosmogenic and TL-OSL. His team also has Palynologists, Palaeontologists, Quaternary sedimentologists. This work comes as a part of the Department's MoU with Stone Age Institute, Indiana University where Dr. Parth Chauhan was working. Now Dr. Chauhan works in Chandigarh and holds an honorary fellowship at the Stone Age Institute. During the survey in the Narmada Valley and the Vindhya he has identified several spots that yield tools of heavy duty types to refined ones. Dr. Krishnan began working in the Narmada River Valley around six years ago, with lower Narmada as the region of investigation. These earlier projects were funded by the Department of Science and Technology, Govt. of India. Within the lower Narmada he identified several Palaeolithic sites along the junction of Narmada and its tributary Kaveri. The Toba ash layer that dates to around 74,000 years ago was reported from a nearby region, but the layers were not independently dated. He has also found many other sites towards the interior region, possibly along an old course of Narmada. It is unfortunate that with the increase in agricultural and industrial developments along the Narmada within the region of Gujarat many sites are disappearing. He has been able to record some of them. Some of the information on Dhansi excavation will be put up on the MSU Department website. He plans to continue with the regional exploration next year, 2014-15 along Narmada. He and his team from MSU plan to excavate a small rural Harappan site along the Lilka river in Bhavnagar District. These sites yield lot of Micaceous Red wares and the main

objective is to excavate the best representative site for a season to get the sequence and collect samples for radio carbon dating.