

Excavations at Kalibangan

The ancient site of Kalibangan was situated on the left bank (southern bank) of river Ghaggar, in tehsil Pilibangan, district Hanumangarh of Rajasthan between the parallels of $29^{\circ}47'N$ $74^{\circ}13'E$. The name of river Ghaggar was Sarswati during the ancient times. Kalibangan is about 400 kilometres from Jaipur, the state capital of Rajasthan. It was first identified as Harappan site by James Tod (as Kalibeng) while he was describing the antiquities near Bikaner during 1829 to 1832. Then Amlanand Ghosh, former Director General, Archaeological Survey of India visited this site in 1951. Then it was excavated under the directorship of B B Lal during nine successive field seasons from 1960-61 to 1969-70. The other excavation team members were B K Thapar, M D Khare, K M Srivastava and S P Jain.

The site was scattered over an area of a quarter of a kilometre. There were two ancient mounds named as KLB-1 in west and KLB-2 in east. KLB-1 was 9 metre high and identified as citadel while KLB-2 was 12 metre high and bigger and identified as lower town. The excavations at Kalibangan revealed two cultural periods i.e. Pre-Harappan and Harappan.

The Pre-Harappan settlement was excavated at KLB-1, western mound. It was also citadel mound. This settlement was fortified with a thick wall made of mud bricks. The rampart was nearly 2 metre wide. But during latter stages it became 3.70 to 4.10 metre wide. The bricks measures $30 \times 20 \times 10$ cm. were used in the rampart. The same sized bricks were used in the construction of houses. But some time it measures $30 \times 15 \times 7.5$ cm. A

course of these bricks in headers was followed by stretchers. Such a system of laying bricks is known as 'English Bond'. The walls were also mud plastered. The houses seem to have comprised a courtyard, four or five rooms. Platforms were also constructed in front of the houses. The floors in the houses were built by rammed earth. For the sewage water, the burnt brick drains or soakage jars were found.

The pottery of this period is almost wheel turned with fine fabric. But they are not well fired as Harappan pottery. The pottery of this period is divided into six fabrics viz. fabric A to fabric F. The pot sherds are red and pinkish in colour; and painted with black colour. Sometimes painting with white colour is also found. The painted motifs yielded horizontal bands, criss-cross, triangles, moustache like designs, four-petalled flowers and animal designs. The main pottery types are represented by vases with out-curved rim, bowls, basins, globular jar, lids, and dishes.

The antiquities include beads of semi precious stones (agate, chalcedony and carnelian), bangles of glass and terracotta, wheels of toy cart, fragment of terracotta humped bull, quern and mulers; copper objects like celt and bangles. The other important findings are microliths which are in the form of straight sided blades, lunates and trapezes. The most important evidence of Pre-Harappan culture from Kalibangan is plow-field.

Harappan settlement was found at both the mounds, KLB-1 in west and KLB-2 in east. Like other Harappan cities, Kalibangan has the same two tier system of township, citadel and lower town. Citadel was situated at KLB-1 and lower town was excavated at KLB-2. The

area of citadel was 240x120 metre. There were four entrance gates in the citadel in all four sides. Some platforms made of mud and mud bricks were also recovered outside the citadel. Some important structures, probably for ritualistic purposes were raised over these platforms. Rectangular fire-places were also found adjacent to a room.

The excavations at lower town uncovered the characteristic Indus chess-board plan with oblong block of houses, sub-divided by streets. The arterial streets, running north to south were 7.25m and 3.25m wide. Terracotta nodules were used for metalling the road surface. Where elaborate street-drains did not exist, house-drains which were either of wood or of baked burnt bricks discharged their water into soakage jars buried in the streets. The each house had a frontage on at least two or three streets. The houses comprised a series of rooms with a courtyard. These houses were built of mud bricks measuring 30x15x7.5cm. Backed bricks were used only in the drains or well.

The lower town was also covered with a rampart. This rampart was also built of mud bricks. The bricks used in the rampart measured 40x20x10cm. and 30x15x7.5cm.

The Harappan period i.e. period II comprised Indus pottery. The main types are goblets with pointed bases, perforated cylindrical jars, dishes on stands, cylindrical beakers, perforated cups with handles, tall jars with S-shaped profile, and globular vessels. These were painted with designs like circles, *pipal*-leaves, fish-scales etc. The other finds include seal and sealings, weights, terracotta figurines of human and animals, terracotta bangles, copper objects, beads of semi precious stones,

and terracotta cakes. Some chert blades were also the noteworthy findings. The ceramics of the Harappa period overlapped with pre-Harappans.

The faunal remains were represented by humped cattle, buffalo, pig, elephant, ass, rhinoceros, camel and species of deer.

The burial evidences were like those at Harappa and Lothal. The burials were in the shape of oblong, oval or circular and rectangular. Evidence of trepanning in the form of six circular holes in the skull of a child was also recovered.

There was a third mound at Kalibangan known as KLB-3. It was 80 metres distant from the lower town towards east. There were four or five fire pits surrounded by clay. The radiocarbon dates from the excavations at Kalibangan suggest that pre-Harappan settlement may be assigned between 2400-2200 BCE and Harappan settlement between 2300 or 2200-1700 BCE.