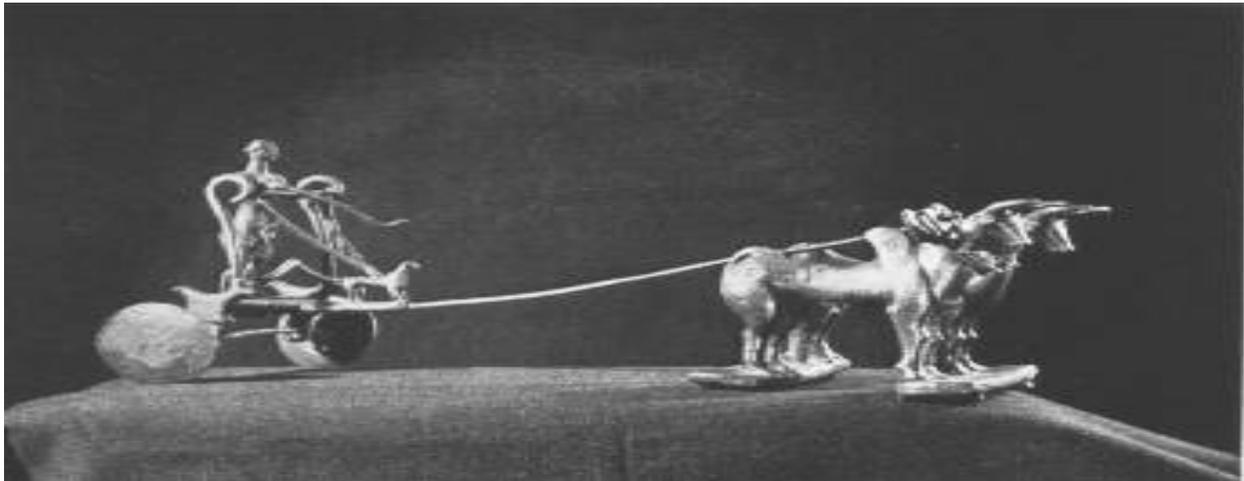


THE HARAPPAN GENIUS



Bronze Chariot, Daimabad

The early years of the 20TH Century witnessed the discovery of remains of the Indus civilization simultaneously at Harappa & Mohenjodaro, revealing to the world that existed in India a glorious civilization which was not only as that of Mesopotamia or Egypt but more advanced than them in some respects. Explorations carried out in the post-Independence period brought to light nearly 2000 Indus Settlements of which a vast majority are located in India, and the area covered by them [over One Million Sq. Km.] exceeds the total area of Egypt & Mesopotamia. Selective excavations have revealed many new features of the civilization that were not known till now.

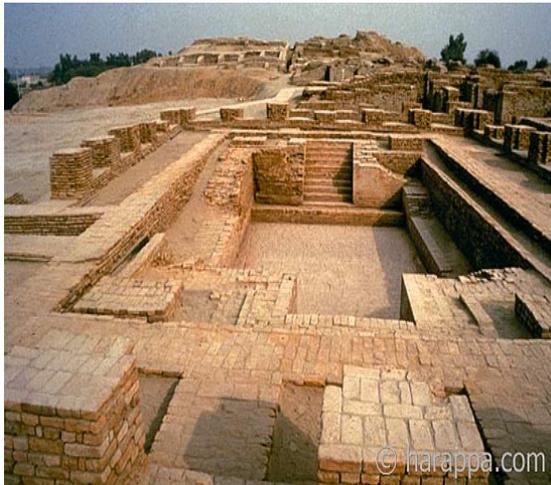
TOWN PLANNING

The Indus Civilization is also known as the Harappan Civilization as it was first discovered at Harappa. Earlier, it was thought that Harappan Cities were divided into 2 parts – the Citadel & the Lower City. However, recent evidence, particularly from Dholavira [Gujarat], shows that it was divided into 4 distinct localities, which were occupied respectively by rulers in the Citadel, Noblemen in the Bailey or Castle, Merchants, Traders, Farmers & Craftsmen in the Middle Town & the working class in the Lower Town.

The entire township had strong fortifications but the first three sectors had additional enclosure walls, making them ghetto – like units. The obvious implication is that it was a class – structured society with a rigid hierarchical order in which residents of different areas were not supposed to mix with each other.

Mohenjodaro (Sindh) was a brand new metropolis, planned & built like Delhi, long after it was abandoned by the earlier inhabitants whose remains lie buried in subsoil water. It was the largest most prosperous city of the ancient world as is evident from the impressive buildings of baked bricks on stone foundations. The multi roomed & storied mansions had tiled floors, paved baths, covered wells & an underground drainage system. The average house was about 100 – 200 Sq. m. comparing favourably with the citadel in the west while the lower city in the east was probably divided into 3 parts, of which the DK area in the north was for Industrial workshops & kilns as it has yielded bronze artifacts. In the south, the HR area was occupied by the elite with elegant spacious mansions [extending to 300 Sq. M.], some of which contained hoards of Gold &

Jewelry. In between, there were houses of the common people in the VS area along poorly aligned streets.



Tank, Mohenjodaro



Harappan Well, Mohenjodaro

The Harappan architectural style is exemplified by its elaborate town planning & its unique method of construction of headers & stretches made possible by the novel size of the bricks – 4:2:1 [40 X 20 X 10 Cm.] It is now known as the English bond, which was introduced in England only in the Medieval Ages.

Every house in Mohenjodaro had a well for water, which was lined with specially made wedge-shaped bricks. The Harappan wells are probably the earliest of their kind in the world. There were paved arrangements for drawing water. Bathroom floors were paved with fired bricks fitted on edge & toilets too were provided. Sewage was drained out through terracotta pipes joined to underground drainage. The drains had sluice gates or grills. This is the earliest evidence of underground drainage for which the Harappans devised a new type of arch – ‘The Corbelled Arch’.

The Great Bath at Mohenjodaro is a unique structure of the ancient world. It is a Tank [12 X 7 X 2.4 M. deep] built of fired bricks & is remarkable for the waterproofing & engineering skills of the Harappans. A thick layer of bitumen [natural tar] along the sides and probably beneath the floor, made it fully watertight.

The house had an open courtyard in the center with rooms arranged on all sides. This is what is known as the Chatuhshala plan of the Shilpa Texts & continues till today. It afforded security as well as privacy for women & the open courtyard provided ventilation. In fact, the open courtyard is a very important feature of an Indian House, as much of the life is lived in the open because of the hot & humid climate.



Dockyard, Lothal



Fire Altar, Lothal

SOCIETY

Harappan town planning indicated that it was a class structured society in the hierarchical order, but at the same time it is evident that there was hardly any difference between the rich & the poor because even smaller houses were of about 100 Sq. m. in size, which would be like the present day two bedroom apartment. The larger residences had an area of about 300 Sq. M; some of which have yielded jewelry hoards at Mohenjodaro.

The division of society into 4 classes calls to mind the Varna system of the Vedic Period. It is interesting that a similar arrangement was prevalent in Asia at Altyn Depe [Turkmenistan], which was occupied from 4000 BC to 2300 BC. The settlement was divided into 4 parts, the occupant's funerary customs & even different rules of descent. These groups were identified as chief priests, bureaucrats, farmers & herders, craftsmen & hunters.

This evidence belongs to the late 3RD millennium BC whereas the planned Harappan Townships had come into existence even earlier if the evidence from Rehman Dheri [in Pakistan], which belongs to the late 4TH Millennium is any indication. It is therefore highly likely that the Harappans may have influenced the Central Asians. This inference gains strength by the discovery of Harappan artifacts in Central Asia, and even at Altyn Depe. It may also be noted that the same pattern of town planning was in vogue even in the historical period, as is clear from the description of Vaishali [in Bihar] which was divided into three parts, one each for Kshatriyas, Brahmins & Vaishyas & these localities can be identified with the present Raja Vishal-ka-Garh, for royalty & Kshatriyas, Kund – grama [Baso Kund] for Brahmins & Vanijya-grama for Baniyas. And there is the fourth locality, Koluha, Varaha – Mihira too allotted four different parts of a city to the four different Varnas in his Brihat Samhita.

ECONOMY

Harappan prosperity was based on highly profitable trade with West Asia for which written evidence is available in West Asian documents. The inscribed seals record imports from 3 different countries in the East Dilmun, Makan & Meluhha. Of these, Meluhha is now convincingly identified as India for the simple reason that the articles exported from this country are available only in India, as for instance carnelian, shell, ivory, copper, wood, textiles & so on. Some Meluhhan Merchants were settled in West Asian cities & there were even Meluhhan towns like the China Towns of our own times. Imports from Meluhha are recorded

but we do not know what were the imports into India. It is highly likely that we really did not need anything from West Asia & therefore they had to pay for the imports in gold, as the Romans did later in the early centuries of the Christian Era. Jewelry hoards have been discovered at Harappan Sites like Mohenjodaro & Lothal, and the recent ones from Kunal [Haryana] & Manda [Jammu & Kashmir].



A Seal showing Boat with Crows, Mohenjodaro

Trade with West Asia had started much earlier in the Early Harappan period 3200 BC to 2600 BC but increased from 2500 BC & peaked around 2350 BC during the rule of Sargon of Akkad. With the increase in demand for luxury goods like beads of semi-precious stones & ivory, Harappan Merchants came to Gujarat for raw materials & established their settlements there. These settlements were quite small, of about 2 or 3 hectares in extent, but were heavily fortified as at Surkotada & Pabumath in Kutch. Shortly after that they found it convenient to establish their workshops in Saurashtra & export finished goods to West Asia. These were not very different from the Industrial estates of our times & produced specialized articles – for instance, shell at Nageshwar & beads & pottery at Kuntasi. A huge Dockyard was built at Lothal near Ahmedabad which is the earliest of its kind. Its dimensions [219 X 37 m.] are almost the same as those of the Indira Dock at Mumbai. Lothal & Chanhu – daro [in Sindh] were important Industrial Centers.

Quite a few ports have been noticed in Kutch & Saurashtra. Boats carried Cargo & they kept close to the Coast. A Boat is depicted on a Harappan Seal, that also shows crows which were packed in cloth, secured with ropes & sealed with clay lumps, which were authenticated with seals. Such seals have been recovered at Lothal.

ARTS

Harappan Stone Sculpture is rather rare, but a few Bronzes have been reported which bear eloquent testimony to the superb skills of the Harappan artists. The dancing girl from Mohenjodaro is well known but not the Bronze hoard from Daimabad [Maharashtra]. It consists of 3 animals – an Elephant, Rhino & Bison, all very naturalistically fashioned. But the most important is the bull chariot with a male deity driving it. It is the finest battle chariot of the ancient world.



Bronze Model of Rhinoceros, Daimabad



Bronze Bull, Mohenjodaro

Terracotta figurines have been found in good numbers – comprising Mother Goddesses, women engaged in daily chores & a variety of animals which are obviously toys. But artistically the finest are the steatite seals. The realistic representations of human & animal figures & the meticulous engraving of inscriptions represent the high watermark of the Harappan Art.

RELIGION



Harappan Jewelry

A sizable number of Terracotta female figurines have been found at Harappa & Mohenjodaro, which suggest that the Indus Religion was centered round a Mother Goddess with which the unicorn was associated & fire worship was also a part of it. Even the deity on the seal showing a human figure surrounded by Wild Animals, according to some, is a female. Mother Goddess worship was in vogue in Punjab & Sindh whereas fire worship was predominant in



Rajasthan, Haryana & Gujarat as is evident from fire altars, at several sites. However, no structure which can be associated with the religious beliefs of the people has been encountered as yet except the apsidal shrine containing a fire altar at Banavali [Haryana].

Recently, Shiva – Lingas have been found in Kalibangam & Rakhi Garhi and a sort of Pillar Cult was also in vogue if the Dholavira evidence is any indication. The depiction on seals demonstrates that plants [papal] & animals [bull] were also worshipped. The people believed in life after death & buried the dead, although cremation was also practiced by a few. Anthropologists tell us that the Indus population resembled the people of present day India.

ORIGIN

The antecedents of the Indus civilization are now known. Its roots go back to the 5TH Millennium BC; when a new group of people entered the subcontinent from the northwest & settled in the Indus Valley. The excavation at Mehrgarh in Baluchistan has revealed that some 10000 years ago. Neolithic Farming communities had occupied the Indus Valley whose economy was based on subsistence agriculture, stock raising & hunting – fishing. They lived there from 7500 BC to 5000 BC. The new people introduced wheel made painted pottery, copper technology & mother goddess worship. They buried the dead & their skeletons are characterized by 'Carabelli's Cusp' in their dental pattern, a feature that is found in the present European & some South Asian populations. This culture has been labeled 'Togau' Culture [4500 BC to 3800 BC] after the site, where it was first found. In course of time, these people spread eastwards into the Saraswati Basin [the present Hakra in Pakistan & Ghaggar in India] where the Hakra Culture [3800 BC to 3200 BC] evolved & further developed into the early Harappan [3200 BC to 2600 BC], which has substantially contributed to the formation of the Indus Civilization.

END OF THE INDUS ERA

The Indus Civilization flourished in the 3RD millennium due to the highly profitable trade with West Asia. But equally important was the favourable environment. Palynological Studies indicate that the rainfall during the third millennium was quite high; even in the desert areas of Rajasthan, where the rainfall is today hardly five inches; it was about 24 inches in the ancient past. However, there was a drastic change in climate after 2000 BC when it started getting more & more arid. Simultaneously, the river Saraswati started drying up in the lower basin, because its 2 major tributaries, the Sutlej & the Yamuna, changed their courses & joined the Indus & the Ganga respectively. As a result, decline set in & the late Harappan phase [2000 BC to 1500 BC] is marked by degeneration in every field. Agriculture suffered, trade dwindled, the cities vanished & de-urbanization set in. the environment became more & more adverse in course of time & the late Harappans vanished from the scene by the middle of the 2ND millennium BC.