

Theme 1

BRICKS, BEADS AND BONES

(THE HARAPPAN CIVILIZATION)

- Indus valley civilization is also known as **Harappan civilization**.
- It started flourishing along River **Indus** (now in Pakistan) at around **2600 B.C.**.
- **Harappa** was the **first site** of this civilization discovered by archaeologists.
- It was an **URBAN** civilization. Its writing is **not** deciphered
- After 1900 B.C., most of the sites were abandoned due to some reasons.
- By 1900 B.C. major part of the civilization ended.

Period of Harappan Civilization

- The civilization is dated between **2600 BCE** and **1900 BCE**.
- The period of the civilization is broadly **divided** in to three:
 1. **The Early** Harappan culture (Before 2600 BCE)
 2. **The Mature** Harappan culture (2600 BCE to 1900 BCE)
 3. **The Late** Harappan culture (After 1900)

Some important sites of Harappan civilization

Harappa,

Kalibangan,

Lothal,

RakhiGarhi,

Dholavira,

Chanhudaro,

SutakagenDor,

Mohenjodaro,

Balakot,

Kot Diji,

Rangpur,

Nageshwar,

Ganeriwala etc.

Major Developments in Harappan Archaeology

- 1875-Report of Alexander Cunningham on Harappan seal.
- **1924-John Marshall** announced the discovery of **Harappan civilization**.
- 1925-Excavation began at Mohenjodaro.
- 1944-R E M Wheeler became the Director General of ASI.
- 1946- R E M Wheeler excavates at Harappa.
- 1955-S.R.Rao begins excavation at Lothal.
- 1960-B.B Lal & B.K Thaper begins excavations at Kalibangan.
- 1974-M.R.Mughal begins explorations in Bahawalpur.
- 1990-R.S Bisht begins excavations at Dholavira.

Early archaeological cultures

- There were several archaeological cultures in the region **prior** to the Mature Harappan.
- These cultures were associated with **distinctive** pottery, evidence of agriculture, pastoralism and some crafts.
- The settlements were **small** in size and had no large buildings.

Subsistence strategies of the people

• **Subsistence strategies** of the people included **hunting** and **gathering, cultivation, pastoralism, and distribution**.

- People relied on many plants and animals, fishing and agriculture for their **food**.
- There are evidences of bones of animals which prove that people consumed **meat**.

***Terracotta models** of oxen, plough etc.show that people relied on **agriculture** too. Different types of food available to the people

- The Harappans ate **wide range** of plants and animal products, including fish.
- Archaeologists found **grain** such as wheat, barley, lentils, chickpea and sesame at the Harappan sites.
- In Gujarat, **Millets** have been found. **Rice** was found rarely.
- Bones of cattle, fish, fowl, sheep, goat, buffalo, pig, boar, deer, and gharial are found at the sites. Studies indicate that these animals were either **domesticated or hunted** by the Harappans

Agricultural technologies of Harappans

- Agriculture was the main occupation of the Harappans.
- The prevalence of agriculture is indicated by finds of **grains**.

- It is very difficult to reconstruct actual agricultural practices carried out by the Harappans.
- **Terracotta sculptors** of the bull and their representation on the seals indicate that bull was known to them.
- From this, the archaeologists assume that the **oxen** were used for ploughing.
- Moreover, the Archaeologists have also found **terracotta models of the plough** at sites in **Cholistan** and at **Banwali (Haryana)**.
- Evidence of a **ploughed field**, associated with early Harappan levels have also found at **Kalibangan(Rajasthan)**.
- The field had two sets of furrows at right angles to each other, suggesting that **two different crops were grown together**.
- Most of the Harappan sites were located in **semi-arid** regions. So, to enhance agricultural produce, they needed facilities of **irrigation**.
- **Traces of canals** have been found at the Harappan site of **Shortughai** in **Afghanistan**.
- It is also likely that water was drawn from **wells** was used for irrigation.
- Besides, **water reservoirs** found in **Dholavira (Gujarat)** may have been used to **store water** for agriculture.
- Processing of food required grinding equipment as well as vessels for mixing, blending and cooking. These equipments were made of stone, metal and terracotta

Layout of Mohenjodaro:

Architectural features of Mohenjodaro

(Town Planning)

- The most spectacular part of Harappan structure is the large scale town layout.
- The city of Mohenjodaro was divided into two halves i.e. **the Citadel** and the **lower city**

Citadel- It was built on mud brick platforms. It was walled and separated from the Lower Town.

- The citadel was probably used for special public purposes.
- The Lower Town was walled. Several buildings were made on the platform that served as foundation.
- Labour was mobilized at a very large scale.
- The settlement was first planned and then implemented.
- Bricks used in the buildings were uniform in size.
- The roads and streets in the lower town were laid out in a grid pattern, intersecting at right angles.
- The streets and drains were first laid out and then houses were built on the same pattern.

- **The Lower Town** of Mohenjodaro provides examples of residential buildings.
- Most of these were centred on a courtyard, with rooms on all sides.
- Different activities like cooking, weaving etc. were carried out in the courtyard particularly during the hot and dry seasons.
- There were no windows along the walls on the ground floor. So privacy could be maintained.
- The main entrance did not provide view of courtyard and interior. Every house had bathroom paved with bricks which was connected through the wall to the street drains.
- In some houses remains of staircases to reach second storey or roof have been found.
- Many houses had wells which were reachable from outside for the use of outsiders. It is estimated that the total number of wells in Mohenjodaro was about 700.

Drainage System of the Harappans

- One of the striking features of Harappan cities was the well planned drainage system.
- Every house was connected to the street drains.
- The drains were made of mortar, lime and gypsum.
- They were covered with big bricks which could be lifted easily to clean the drains.
- For sewage from the houses, pits were provided at either side of the street.
- Very long drainage channels were provided at intervals with sumps for cleaning.
- In smaller settlements such as Lothal, the houses were built of mud bricks and drains were made of burnt bricks.
- Little heaps of materials mostly sand have frequently been found alongside the drains.
- This shows that the drains were cleaned at regular intervals.

The Great Bath

- On citadel, some special buildings were built like 'The great bath of Mohenjodaro'.
- Such buildings were used on some religious occasions or on public gatherings
- The Great Bath was a large rectangular tank surrounded by corridors on all four sides.
- There were two flights of steps on north and south leading into the tank.
- The tank was made watertight by laying bricks on the edge and using mortar and gypsum.
- Rooms were made on three sides of the tank, with one room having a large well.
- The water from the tank flowed into a huge drain.
- Across the lane there was a smaller building with eight bathrooms, four at each side of a corridor, with drains from each bathroom connecting to a drain that ran along the corridor.

Tracking Social Differences: Strategies to find out social differences

1. Studying Burials

- Strategies to analyze social and economic differences amongst people living within a particular culture include study of burials.
- At burials in Harappan sites the dead were generally laid in pits.
- Some of the pits were lined by bricks.
- Some of the burials contained ornaments, pottery etc, may be a belief that these things can be used after life.
- In some instances the dead were buried with copper mirrors.
- Jewelleries were found in both men and women burials which mean that both men and women used ornaments.
- But in general, Harappans never believed in burying precious things with the dead.

2. Studying Artefacts

- Studying artefacts is another strategy to find out social differences.
- Artefacts are divided into utilitarian and luxuries.
- Utilitarian artefacts include objects made of stone or clay. These include querns, pottery, needles, flesh-rubbers etc. and are usually found distributed throughout settlements.
- Luxury artefacts are rare objects made of valuable materials are generally concentrated in large settlements like Mohenjodaro and Harappa. For Example, little pots of faience were used as perfume bottles.

Finding out about craft production :

Raw materials required for craft production

- The variety of materials used to make beads is remarkable: stones like carnelian (of a beautiful red colour) jasper, crystal, quartz and steatite; metals like copper, bronze and gold; and shell, faience and terracotta or burnt clay.

Methods of making craft by the Harappans

- Sometimes beads were made of two or more stones by cementing together, while some of stone with gold caps.
- They were made in different shapes such as cylindrical, spherical, barrel-shaped, and segmented.
- Some were decorated by painting and some had designs etched on them.
- They made bangles, ladles out of shells.

- Special tools were used for craft work.
- Specialized drills have been found at Chanhudaro, Lothal and more recently at Dholavira.
- Nageshwar and Balakot were specialized centres for making shell objects.
- Chanhudaro was the centre of crafts production. It was specialist in bead-making, shell-cutting, metal-working, seal-making and weight-making.

Identifying centres of production.

- How centers of production were identified by the archaeologists? Simply by evidences of tools, raw materials, unfinished objects, rejects, waste materials, etc.

Strategies for procuring materials for craft production

- The Harappans procured materials for craft production in various ways.
- Two methods of procuring materials for craft production
 1. They established settlements in Nageshwar, Balakot and Shortughai.
 2. They might have sent expeditions to areas such as the khetri region of Rajasthan (for copper) and south India (for gold).
- Nageshwar and Balakot were areas for shell.
- Shortughai, in far-off Afghanistan, was the best source of lapis-lazuli, and Lothal which was near sources of carnelian, steatite from south Rajasthan and north Gujarat and metal from Rajasthan.
- Expeditions to the khetri region and south India established communication with local communities.

Contact with distant lands (Trade relation with the world)

- Archaeological finds suggest that the Harappans maintained long distance trade.
- The main source of long distance contacts includes seals, weights, dice and beads.
- Harappans probably had trade contacts with the Oman peninsula.
- Chemical analyses have shown that both the Omani copper and Harappan artefacts have traces of nickel, which suggests a common origin.
- There are similarities between certain other types of objects found at this site.
- A Harappan jar coated with a thick layer of black clay has been found in Oman.
- Mesopotamian texts refer to contact with regions named Dilmun (probably the island of Bahrain), Magan and Meluhaha, possibly the Harappan.

Seals and Sealings

- Seals and Sealings were used to facilitate long distance communication.
- When a bag of goods was sent from one place to another, its mouth was tied with a rope.
- On the knot was affixed some wet clay on which one or more seals were pressed, leaving an impression.
- If the bag reached with its sealing intact, it meant that it had not been tampered with.
- The sealing established the identity of the sender.

Characteristics of Seals and Script

- Harappan seals usually have a line of writing.
- Seal had the name and title of the owner.
- The seal had a motif (generally an animal) which conveyed a meaning to those who could not read.
- Seals were basically used to convey the identity of the sender and to facilitate long distance communication.
- The Harappan inscriptions are short.
- The script was not alphabetical and written right to left.
- Many signs were used and they are around 375-400 in numbers.
- The script still remains undeciphered to date.

Weights

- Exchangers were regulated by a precise system of weights usually made of a stone called chert (a kind of stone, generally cubical with no markings).
- Lower denominations of weights were binary (1, 2,4,8,16,32 etc.), while the higher denominations followed the decimal system

Ancient Authority

- ⌘ Different arguments put forwarded by the archaeologists over the central authority of Harappa
- There are three major views about the existence of a central authority in the Harappan society.
- Some archaeologists are of the opinion that there were no rulers in the Harappan society and that everybody enjoyed equal status.
- 2. Others are of the opinion that there was no single ruler but several rulers. Monenjodaro had a separate ruler, Harappa had separate and so on.
- 3. Some others suggest that there was a single state. This theory was based on the similarity of artefacts, planned settlements etc.
- The last opinion considers being more plausible as it is doubtful that such complex decisions were made and implemented collectively by entire communities.

The End of the Civilization

The Evidences that reflected the disappearance of Harappan civilization by 1800 BCE

- By 1800BCE most of the mature Harappan sites were abandoned.
- The expansion of population and its migration took place towards Gujarat, Haryana, Western U.P etc.

- After 1900 B.C. sites which existed marked the transformation of material culture i.e. disappearance of distinctive artefacts of civilization like weights, seals, distant trade, etc. Writing, long-distance trade, and craft specialization also disappeared.
- House construction techniques deteriorated and large public structures were no longer produced.
- This indicates a rural way of life named late Harappan

Several explanations for the decline of Harappan civilization

- ⌘ The reasons responsible for the end of the civilization is still unknown. But probable reasons are;
 - ⌘ Climatic Change
 - ⌘ Deforestation
 - ⌘ Excessive floods
 - ⌘ Over use of the landscape
 - ⌘ The shifting and or drying up of rivers
 - ⌘ Invasion most probably by the Aryans
 - ⌘ Harappan state might have ended because there are evidences of absence of distinctive art facts like seals, pottery, etc
- Discovering the Harappan Civilization

Cunningham and his Confusions

- Cunningham was the first Director General of ASI (Archaeological Survey of India).
- He was known as the father of Indian archaeology.
- He began archaeological excavations in the mid 19th century.
- His main interest was in the archaeology of early history from 6th century BCE-4th century CE, and later periods.
- He used the accounts left by Chinese pilgrims who had visited the subcontinent between the 4th and 7th centuries CE.
- He also collected, documented and translated inscriptions found during his surveys.
- Site like Harappa did not fit well in his area of investigation.
- Although Harappan artefacts were found during the 19th century and some of these reached Cunningham.
- But he did not realize how old these were as they were not part of the itinerary of Chinese pilgrims and was not known as an Early Historic city.
- An English man gave a Harappan seal to Cunningham.
- But he was unable to place it in the time frame with which he was familiar. He thought that Indian history began with the first cities in the Ganga valley.
- So, it is assumed that he missed the significance of Harappa.

Different methods adopted by Marshall and Wheeler in reconstructing Harappan civilization

- Daya Ram Sahni and Rakhal Das Banerji found similar seals at Harappa and Mohenjodaro respectively.
- Based on these finds, in 1924, John Marshall, Director General of the ASI, announced the discovery of a new civilization in the Indus valley to the world.
- Marshall tended to excavate along regular horizontal units, measured uniformly throughout the mound, ignoring stratigraphy of the site.
- This meant that all the artefacts recovered from the same unit were grouped together, even if they were found at different stratigraphic layers.
- As a result, valuable information about the context of these finds was irretrievably lost.

R.E.M Wheeler rectified this problem. He recognized that it was necessary to follow the stratigraphy of the mound rather than dig mechanically along uniform horizontal lines.

Problems faced by archaeologists in the interpretation of religious practices of Harappa

- Harappan script is not helpful in understanding the Harappan civilization. The script remains undeciphered till date.
- Material remains help the archaeologists to reconstruct Harappan life.
- Organic material such as cloth, leather, wood and reeds generally decomposed while stone, burnt clay, metal etc.survive.Materials such as pottery, tools, ornaments, and house hold objects are available.
- Recovering artefacts is just the beginning of the archaeological enterprise. Archaeologists then classify their finds.
- The second, and most complicated, is in terms of function: archaeologists have to decide whether, for instance, an artifact is a tool or an ornament, or both, or something meant for ritual use.
- An understanding of the function of an artefact is often shaped by its resemblance with presentday things-beads, querns, stone blades and pots are obvious examples.
- Archaeologists also try to identify the function of an artefact by investigating the context in which it was found. Whether it was found in a house, in drain, grave or in kiln.
- The problems of archaeological interpretation are perhaps most evident in attempts to reconstruct religious practices. • Attempts have also been made to reconstruct religious beliefs and practices by examining seals, some of which seem to depict ritual scenes. Others, with plant motifs, are thought to indicate nature worship.
- Many reconstructions of Harappan religion are made on the assumption that later traditions provide parallels with earlier ones. This is because archaeologists often move from the known to the unknown, that is, from the present to the past.

Archaeologist's attempts to reconstruct the religious practices of Harappan people

- The discovery of pots, querns, beads etc in the Harappan sites and their graves provide enormous information
- Traces of cotton and dresses depicted on seals and sculptures, give us an idea about the dressing style of the Harappan people
- The terracotta figurines of women indicate the worship of mother goddess.
- Plant motifs seem to suggest the practice of nature worship.
- The conical stones indicate linga worship
- In Some seals a figure shown seated cross legged in a 'yogic' posture, sometimes surrounded by animals has been regarded as a depiction of proto-Siva that is an early form of one of the major deities of Hinduism.
- Some animals such as the unicorn depicted on seals seem to be mythical, composite creatures.
- The two important structures that have been found by archaeologists are: The fire altars found at Kalibangan and Lothal and The Great Bath at Mohenjodaro, something meant for ritual use.