

2. First Cities of India

2.1 Characteristics of Harappan Civilisation

2.2 Interrelationship between Cities and Villages

2.3 Production, Trade, Organisation and Administration

2.4 Decline of the Cities

2.1 Characteristics of Harappan Civilisation

It has been mentioned earlier that the roots of the Harappan civilisation are to be found in the pre-Harappan culture of Neolithic times at Mehrgarh in Baluchistan. This culture is known as 'Togao culture'. It shows traces of the beginning of the Harappan culture. Jean Francois Jarrige and Richard Meadow conducted the excavations at Mehrgarh. Another neolithic culture of the pre-Harappan period is known as 'Ravi or Hakra culture'. Its remains have been found during the excavations at sites like Harappa (Punjab, Pakistan), Kunal, Bhirrana and Farmana (Harayana).

A few years ago it was strongly believed that the Vedic Aryans arrived in India at about 1500 B.C.E. However, no information was available regarding the period before that. This situation continued till the discovery of Harappa in 1921 and Mohenjodaro in 1922. The discovery of the Harappan Civilisation at these two places stretched the antiquity of Indian history to 3500-3000 B.C.E. At that time a well-developed and rich civilisation had flourished in the Indian subcontinent. It extended from Afghanistan to Maharashtra and from Makaran coast to

Harayana. The total area covered by it is about 1500000 Sq. Kms. The Harappan civilisation belonged to 'Bronze Age'. So far, more than 2000 sites of the Harappan civilisation have been recorded. The remains found at cities like Harappa, Mohenjodaro, Kalibangan, Lothal, Dholavira, Rakhigarhi, etc. are the evidence of the past glory of this civilisation.

The history of these cities had three stages: (1) Early Harappan period (2) Mature Harappan (urban) period (3) Late Harappan period.

The question regarding the authors of the Harappan civilisation still remains mysterious.

Some of the main characteristics of the Harappan cities are noted below.

(1) Systematic Town Planning :

Houses of baked bricks complete with bathrooms, toilets, wells, etc., existence of granaries, Impressive public monuments, English bond masonry (method of using two headers and two stretchers alternatively while building a wall – this method is specially useful in earthquake prone regions), Excellent drainage system, public baths, two or more divisions of the city with each division enclosed by independent fortification walls, Streets crossing each other in right angles and the resulted blocks used for building houses (grid pattern).

(2) Central Administration :

Administrative control over the distribution of water and other resources, Standardisation : For example, the size of bricks in the ratio of 1:2:4, weights increasing in the proportion of 8, set style of shapes and painted designs

of pottery, majestic and non-residential buildings for public administrative offices.

(3) Social organisation : Social hierarchy based on position of power, classes of skilled artisans and individuals based on craft specialisation, belief systems and artefacts/architecture indicative of them, evidence of burials indicative of rituals after death.

(4) Economy : Mass production of goods for trading purpose : For example, well-shaped, beautiful earthen pots, statues, metal objects of gold, silver, copper and bronze, various types of beautiful beads, etc., concentration of factories and residences of artisans in a particular area of the city for the sake of convenience of production, flourishing internal and distant trade, administrative control over trade transactions.

(5) Use of Developed Writing System : The script on Harappan seals.

Some Cities of the Harappan Civilisation

Harappa : Harappa is situated on the banks of the river Ravi (District Sahiwal in Punjab, Pakistan). The ancient site of Harappa had spread on 150 Hectares. The first excavation at Harappa began in 1921. More excavations were conducted at the site, from time to time. Among them the excavations conducted in 1946 by Sir Mortimer Wheeler

is important. At that time, he was the Director General of the Archaeological Survey of India. During the excavation he could trace the fortification wall around the citadel of Harappa.

The first settlement of the Early Harappan period was established around 3300 B.C.E. It evolved to the Mature Harappan (urban) phase around 2600 B.C.E. It reached its peak during 2450-1900 B.C.E. Around 1900 B.C.E. some internal changes begin to appear in the Harappan cities. This is the time of the onset of the Late Harappan phase. This phase indicates the decline of Harappan civilisation.

The evidence of the first excavations at Harappa had indicated that the city of Harappa was divided into two parts - the 'Citadel' and the 'Lower Town'. However, recent excavations show that it had four divisions. Apart from the citadel and the lower town there were factories and the quarters of artisans in the Southeast part of the city. The area toward the north of the citadel had a granary and the quarters of the workers working there. It is obvious that the officials staying in the citadel supervised over the granary and the workers working there. A few working platforms were found near the granary.

For additional Information : 1. The archaeological cultures are named after the site where the characteristic pottery and artifacts of the culture were discovered for the first time.

2. The river known as 'Ghaggar-Hakra' flows only during the monsoon. It originates in the Siwalik hills in the Himachal Pradesh and flows to Rajasthan through Punjab and Haryana. From there it enters the desert of Cholistan in Pakistan. Ultimately it enters the Rann of Kutch. Its

bed remains dry through the year except during the monsoon. It is known as Ghaggar in India and as Hakra in Pakistan. A number of Harppan settlements were discovered along its dry beds during exploratory surveys.

3. Many scholars are of the opinion that the dry beds of Ghaggar-Hakra are the traces of the vanished river 'Saraswati'. Satellite images of are being studied in depth by scholars to gather more information about these dry beds.



You would like to know : Before the discovery of the Harappan civilisation, Alexander's invasion in 326 B.C.E. was the only evidence available in the context of ancient History of India and Pakistan. How this situation entirely changed because of the discovery of the Harappan cities, is a fascinating story. It began in the year of 1829. Charles Masson, a British traveller was the first one to visit and write about the archaeological remains at Harappa. He thought that these remains could be that of the capital of King Porus who fought with Alexander. Lieutenant Alexander Burnes, a British officer was the next one to visit this site.

Sir Alexander Cunningham was the first Director General of the Archaeological Survey of India. His attention was attracted to the site

of Harappa by the reports written by Masson and Burnes. He conducted excavations at Harappa during 1872-73 C.E. After that for next 48 years no excavations were conducted at the site. However, during this long interval the curiosity for Harappan site among the European scholars had not vanished. A general impression prevailed among them that the Harappan seals had some connection with the Mesopotamian civilisation.



The drawing of a Harappan seal published by Sir Alexander Cunningham. The Harappan seal here appears to be rectangular. However, Harappan seals, in reality are square in shape.

Mohenjodaro : The excavations at Mohenjodaro by Rakhaladas Banerjee began in 1921-22. He concluded, because of the similarity between the seals and other



Harappan Pots

artefacts, that the ancient civilisations of Mesopotamia and Harappa had cultural ties with each other. In 1923-

24 to gather more information about Mohenjodaro Madho Sarup Vats, Kashinath Narayan Dikshit, Earnest Mackay and others conducted further excavations under Sir John Marshall's direction. He was the Director General of the Archaeological Survey of India at that time. During these excavations various artefacts, houses and public monuments were unearthed.

Mohenjodaro was built on the banks of the river Sindhu (Indus) in Pakistan (District Larkana, Sindh). It was not possible to reach the bottom layer during the excavations because of the high levels of groundwater. However, it is likely that a neolithic settlement contemporary to the one at Mehrgarh existed there.

Areawise, Mohenjodaro is the biggest city, among those discovered in Pakistan so far. It was thought that the city was divided into two fortified sections, namely the 'Citadel' and the 'Lower Town'. However, there was an additional section of the market. In this section were found various workshops, kilns for baking pottery and beads.

The remains at Mohenjodaro were considerably intact. So the glory of the city was revealed in way of the houses, majestic buildings, wide streets, etc. Thus the evidence of the impressive town planning, and public administration, characteristic of the Harappan civilisation came into light. The town planning of the Harappan cities can be easily compared with the town planning of a modern city like



A multi-roomed house at Mohenjodaro

Chandigarh. Considering the economic and human resources required for the creation of a pre-planned city like Mohenjodaro, it is obvious that it was created to serve a distinctive purpose.

Kalibangan : The site of Kalibangan is 205 kilometres away from Bikaner. It is located in the Hanumangarh district of Rajasthan. It was one of the important urban centres of the Harappan civilisation, situated on the banks of the river Ghaggar. L. P. Tessitore, an Italian linguist had visited Kalibangan during his study tour of the region. He had reported that Kalibangan is an ancient site and it could be prehistoric. It was confirmed to be a Harappan city only after the excavations began there in 1960. It was conducted under the direction of Brijabasi Lal, the then Director General of the Archaeological Survey of India and Balkrishna Thapar.

At Kalibangan two settlements, one of the Mature Harappan period and the other of the Early Harappan period, were found. Kalibangan was a small city compared to Harappa and Mohenjodaro. The division of the city into the 'Citadel' and the 'Lower Town' was found here also. The site of Kalibangan is important for two things. The first is the ploughed field of the Early Harappan period. This field is dated to about 2800 B.C.E. The furrow marks in this ancient field are similar to the furrows of modern fields in the surrounding area. The other thing is the series of six to seven fire altars in the citadel. Evidence of fire alters inside the houses of common people has also been

unearthed. Apart from this there was a house with a series of fire altars outside the fortification wall. Some of them contained animal bones. According to some archaeologists, this might be indicative of fire worship.

Lothal : The centre of the Harappan civilisation at Lothal was situated near the Gulf of Kutch, in Gujarat, 80 kilometres away from Ahmedabad. It is known for the remains of Harappan dock. Lothal was excavated from 1955 to 1960 under the supervision of S.R. Rao.

The 'Citadel' and the 'Lower Town' at Lothal do not have separate fortification walls. Rather they are surrounded by a single fortification wall.

Lothal was established on the banks of the river Bhogao. The presence of platforms built for stalls, a warehouse, and the dock confirm that Lothal was an important Harappan port and trading centre. The architecture of the dock at Lothal is an example of the engineering excellence of ancient people. At present Lothal is away from the sea. However, in the ancient times Lothal was in the delta region of the gulf of Kutch. It is clear that the Harappan settlers of Lothal had a good knowledge of the high and low tides and accordingly the rising and receding pattern of Bhogao waters. The dock was built to facilitate the entry of boats during the high tide and their exit during low tides. Once the boats entered the dock, the water was drained out through a sluice gate into a canal. The sluice gate of baked bricks was built to reduce the water level in the dock as and when required. Then the repair work of the boats was completed and with the rise of water the boats could sail back.

Dholavira : Dholavira was discovered by J.P. Joshi, the Director General of Archaeological Survey of India. The site is in 'Khadirbet' in Gujarat (Dist. Kutch). Excavations at the site were started by R.S. Bisht in 1990. Among the excavated Harappan



The Water Tank at Dholavira

sites, extentwise Dholavira is the fifth largest city. Its town planning is somewhat different compared to other Harappan cities.

An Early Harappan settlement was discovered at Dholavira. There was a protective wall built around it by using mud bricks (unbaked bricks) and dressed stones. The layers above this settlement had the Harppan city of Mature Harappan phase. It was surrounded by an outer fortification wall. The settlement within the outer fortification was divided into four sections.

(1) Citadel (2) The adjacent section reserved for high officials (3) Lower Town – These three sections had walls, which separated them from each other. (4) The fourth section inside the outer fortification did not have any additional separating walls. This fourth section was perhaps meant for the workers. A dam of baked bricks and stone was built to obstruct the water of two streams, which flowed near the closed city and the water was diverted to canals and lakes. This was the most ancient system of planned water management.

Rakhigarhi : In the Hissar district of Haryana is situated the site of Rakhigarhi, a Harappan city. It is on the distance of 150 kilometres from Delhi. It is located on the banks of Chautang (ancient Drishdvati river). Rakhigarhi is the largest Harappan site, among all the sites from India and Pakistan. Its total area was more than 350 Hectares. The excavations at Rakhigarhi started in

1963. It continued in 1997-2000. Later, Dr. Vasant Shinde of the Deccan College, Pune also conducted excavations at the site.

At Rakhigarhi, all characteristics of the Harappan cities were present. It was the main centre of the Harappan civilisation in its eastern region. At this site too, evidence of fire altars like Kalibangan have been found.

Indeed, cemeteries were found at various other Harappan sites, but the human skeletal remains from there were not studied to analyse the hereditary characteristics of the population. However, the human bones from Rakhigarhi were subjected to genetic analysis. Scientists believe that in due course it would provide satisfactory answers to the question of the origin of Harappan people.

For Additional Information : (1) Many sites of the Early Harappan and Mature Harappan (Urban) phases have been found in the basin of the river Ghaggar. The latest research based on the evidence from sites like Kunal, Bhirrana, Farmana, Girwad and Mitathal, etc. indicate a possibility of the rise of the Mature Harappan more than 5000 years ago. If this is proved in due course, then it may be said that it first developed in the Ghaggar basin. Evidence from Rakhigarhi may prove to be instrumental in reaching positive conclusion in this context.

(2) The Harappan sites of Mohenjodaro, Harappa, Ganweriwala in Pakistan and Rakhigarhi and Dholavira in India have been declared as World Heritage sites.

2.2 Interrelationship between Cities and Villages

We have seen that the Harappan cities arose as a result of the process of the development and expansion of the pre-Harappan settlements. The city people are dependent on the natural resources and villages in their vicinity in order to meet the needs of urban way of life and urban

administration. The raw material needed for Harappan industrial production included clay, various siliceous and semi-precious stones, metals, etc. The interrelationship between Harappan cities and villages was dependent on the mechanism of making available, things like food grains and the raw materials.

Not that all the pre-Harappan settlements were transformed into cities and towns. Some of them did not change notably. There was a network of small towns, small and big villages and camp sites of semi-nomadic people, which functioned to cater to the needs of major urban centres of the Harappan civilisation. It included villages in remote regions as well. The best example of it is the Harappan settlement of 'Shortugai' in the Badakshan province of Afghanistan. This region is rich with mines of lapis lazuli. There was a great demand for this semi-precious stone in Mesopotamia. The Mesopotamian epics describe Goddess Inanna's palace, the walls of which were embedded with this stone. This stone was a very important commodity in the Harappan trade with Mesopotamia.



Lapis lazuli stone

2.3 Production, Trade, Organisation and Administration

In the early phase of agriculture, making earthen pots and farming were the jobs of women. The pots fashioned by women were handmade. They used a digging stick for sowing the seeds. With these methods women could manage production, just enough to meet the family needs or at the most those of the extended family. Surplus production was not possible with their methods.

The use of bullocks as draft animals (for ploughing and transport) had begun in the Early Harappan period. The use of wheel enabled speedy and mass production of pottery. Use of ploughs pulled by bullocks enhanced the agricultural production. The clay replicas

of ploughs are recovered from the Harappan site at Banawali in Haryana. It became possible to obtain necessary commodities in exchange of agricultural produce. This was the beginning of barter system. The food grains were exchanged, especially to obtain salt, metals and precious objects.

During the Mature (urban) Harappan period the sphere of commodity exchange expanded and their import-export increased to a great extent. The internal and distant trade received momentum. Trade with distant places like Mesopotamia became regular. Trade with Mesopotamia had begun during Early Harappan times. The Akkadian empire was founded in 2334 B.C.E. by Emperor Sargon I. During his reign the Harappan trade with Mesopotamia flourished and the Harappan cities reached their peak. One of the administrative records of emperor Sargon describes the trade with distant places. It seems that the importance of trade by land routes passing through Iran and Central Asia had diminished in the Mature Harappan period and the sea trade had become the preferred mode. 'Dilmun', 'Makan' and 'Meluhha' are mentioned as three important centres on the sea route. Dilmun is identified with Bahrain, Makan with the coastal region of Oman-Iran-Baluchistan and Meluhha with the region of Harappan civilisation. Copper was available in large amounts in Meluhha. The name Meluhha is supposed to have its origin in the red colour of copper. The commodities exported from Meluhha to Mesopotamia included copper, ivory objects, lapis lazuli, carnelian beads, textiles, timber as well as monkeys and peacocks. The bodies (mummies) of dead royalties in Egypt were wrapped in blue coloured cloth. Indigo, necessary for dyeing this cloth was exported by Harappan traders. Harappan traders are likely to have received wool, gold and silver in exchange for these commodities.

The Harappan cities had a reserved section for the industrial production. There

were also exclusively industrial settlements. Chanudaro in Sindh was an important industrial town. It is apparent that the outposts in Gujarat were specially established for the convenience of trade. It was easier to reach the sources of copper, chank shells and semi-precious stones from the outposts like Kuntasi, Nageshwar, Bagasara, etc. in Kutch-Saurashtra. It was also easier to ship out the finished goods from these outposts located near the coast of Saurashtra. Carrying out all the operations like procurement of the raw material, production of finished goods and its export from one and the same region, certainly proves to be beneficial for trade. Harappan people built the trading outposts with this view in mind. These were small in extent, but were important industrial centres. Dholavira was the city built to oversee the trading transactions. Lothal was an important sea port.

For Additional Information :

Mesopotamia is known for its grand temples. The administrative system of Mesopotamian cities revolved around the administration of these temples. Mesopotamian temples are known as 'ziggurats'. The high priest of the temple used to be the ruler of the city. The social life, cultural events, power and hierarchy of officials, etc. were organised in accordance with the rituals and festivals of the presiding deity of the temple. The notion of a 'Priest-King' of the Harappan civilisation was formulated by presuming its close similarity with the Mesopotamian culture. Mesopotamia was rich in agricultural production. However, it did not have enough sources of precious metals, gems and timber. These things were imported there. Many of the Mesopotamian brick inscriptions contain the lists of imported commodities and the place names from where they were imported. The exports from Mesopotamia included textiles, pottery and leather products.

It is clear that a well organised administrative system existed to manage the industrial production, import-export, the interrelationship between cities managing trading operations and villages around them. The town planning, standardisation of bricks, weights, seals, shapes and ornamentation of various objects, etc. confirm the presence of such administrative system. However the nature of Harappan polity, whether it was a single state or a federation of small states, is not yet known. The cities like Mohenjodaro, Harappa, Dholavira and Rakhigarhi were perhaps regional capitals. Cities like Mohenjodaro, Kalibangan, Lothal and Rakhigarhi were important religious centres.

2.4 Decline of the Cities

1. When Harappan civilisation was discovered, it was presumed that its cities were destroyed by invading tribes who came from outside. Indra is described as ‘Purandara’ meaning the destroyer of fortified cities. The Harappan cities were fortified, thus befitting the definition of ‘pura’. Sir Mortimer Wheeler on this basis concluded that Indra destroyed the Harappan cities. In turn, he declared that the Vedic Aryans destroyed the Harappan cities under the leadership of Indra. This declaration by Wheeler received a general approval among the scholars at that time. However, more concrete evidence in the context of Harappan civilisation is available now, which does not agree with Wheeler’s opinion. It is now known that the Harappan civilisation began to decline around 2000-1900 B.C.E. People had to migrate elsewhere. With this, began the Late Harappan period.

The Harappan civilisation deteriorated as the cumulative effect of various factors such as decline in trade, climatic changes, weakening of the economy, etc.

The Harappan trade with Mesopotamia was on the decline in the Late Harappan period because the Mesopotamian economy had weakened. One reason of it was

continuous internal conflicts in Mesopotamia. Along with it increasing salination of agricultural land was the main reason of the decline of the Mesopotamian civilisation. It weakened the Mesopotamian market that was available to the Harappan goods.

2. Deteriorating environment was the main reason of the decline of Mesopotamia. Similarly, climatic changes and deteriorating environment were the main reasons of the decline of the Harappan civilisation too. Around 2000 B.C.E. the climate became increasingly arid and there were frequent famines. Degradation of cultivable land was on the increase. It is mentioned earlier that sites of Harappan civilisation have been discovered in large numbers in the basin of Saraswati, which is now known as Ghaggar/Hakra. The interrelationship between Harappan cities and villages that formed the support system of the socio-economic life of the cities dwindled in this period. The devastating earthquake in the Saraswati basin was the major reason responsible for it. The earthquake raised the ground level of the river bed causing a barrier causing Sutlaj and Yamuna, the tributaries of the Saraswati to change its course. As a result the Saraswati dried up and the Harappans had to migrate elsewhere. Harappan cities were abandoned.

The settlements that came up on the remains of the Harappan cities were not developed and rich. These settlements belonged to Late Harappan people. The pottery, houses, funerary customs of these people were different. The Late Harappan people were also forced to migrate because of natural calamities. New villages were settled by the Mature Harappan and Late Harappan people wherever they went. It gave rise to new rural cultures. The spread of these new cultures is seen in Rajasthan, Gujarat, Malawa and Maharashtra. These new cultures are known as ‘Chalcolithic Cultures’. We will learn about these cultures in the next lesson.

Note : Terminology

- (1) Pre-Harappan Cultures - Cultures of the period preceding the Harappan civilisation
- (2) Early Harappan period - Early (beginning) Harappan phase
- (3) Mature (Urban) Harappan period - Fully developed phase of Harappan civilisation
- (4) Late Harappan period - Period after the decline of the mature (Urban) phase
- (5) Post Harappan cultures - Rural cultures that came up after the Harappan civilisation vanished.

Exercise**Q.1 Choose the correct alternative and complete the sentence..**

- (1) In the early phase of agriculture, making pots and farming were the jobs of women.
 - (a) copper (b) bronze
 - (c) earthen (d) stone
- (2) Lothal is known for its ancient
 - (a) agriculture (b) dock
 - (c) textiles (d) tools
- (3) A general impression prevailed that the Harappan seals had some connection with the civilisation.
 - (a) Chinese (b) Greek
 - (c) Mesopotamian (d) Egyptian
- (4) The bodies (mummies) of dead royalties in Egypt were wrapped in coloured cloth.
 - (a) white (b) black
 - (c) red (d) blue

Q.2 (A) Choose the correct reason and complete the sentence.

The major reason for the decline of the Mesopotamian civilisation was -

- (a) foreign invasion
- (b) deteriorating environment
- (c) loss in trade
- (d) migration

(B) Find the incorrect pair and write the correct ones.

- (1) Dilmun (a) Bahrain
- (2) Makan (b) Oman-Iran-Baluchistan coastal region

- (3) Shortugai (c) Mesopotamia
- (4) Meluhha (d) Region of Harappan civilisation

Q.3 Explain the statements with reasons.

- (1) The remains found at cities like Harappa, Mohenjodaro, Kalibangan, Lothal, Dholavira, Rakhigarhi, etc. are the evidence of the past glory of this civilisation.
- (2) Lapis lazuli had a very important place in the Harappan trade.
- (3) Harappan civilisation declined.

Q.4 State your opinion.

- (1) The Harappan cities and villages in the vicinity were interdependent.
- (2) The Harappan cities seem to have a well-organised administrative system.

Q.5 Answer the following question with the help of given points.

Write about the characteristics of Harappan cities with the help of given points.

- (a) Town planning
- (b) Social organisation
- (c) Administration
- (d) Economy

Activity

Collect information and illustrations with the help of internet about the town planning of the Harappan cities and Chandigarh. Compare them.



Timeline

Some important sites of Harappan Civilisation - Excavations and Excavators



(Rakhaldas Banerjee)
Mohenjodaro



(B. K. Thapar)



(Dayaram Sahni)
Harappa



(Mortimer Wheeler)
Harappa



(B. B. Lal)
Kalibangan



(R.S. Bisht)
Dholavira



(Vasant Shinde)
Rohrigarhi

1829

Charles Masson
visits Harappa

1872-73

Harappa
(Alexander Cunningham)



1921-1922

Mohenjodaro
(John Marshall
and others)



1923-24

1946

Lothal
(S. R. Rao)



1955

1960

Rohrigarhi
(Archaeological
Survey of
India)

1963

1990

Rohrigarhi
(Archaeological
Survey of
India)

1997

2015