

Pre-Harappan Cultures

These cultures developed roughly between c. **7000 BCE and 2600 BCE**, laying the foundations upon which the Mature Harappan urban system later emerged. Rather than being a single culture, the **Pre-Harappan phase consisted of multiple regional traditions**, each adapting to local environments while gradually sharing common cultural traits.

This phase is crucial for understanding how Indian civilization evolved from small farming communities into one of the world's earliest urban societies.

Chronological Context

These cultures bridge the gap between early **Neolithic village life and the fully developed urbanism** of the Mature Harappan phase. This long period can be divided into **overlapping cultural stages** based on archaeological evidence.

1. Early Neolithic (c. 7000–5500 BCE)

This phase marks the earliest evidence of sedentary life and food production in the north-western subcontinent. The most important site of this phase is **Mehrgarh**, located at the foothills of the Bolan Pass in Baluchistan.

Archaeological evidence from early levels at Mehrgarh shows: ***Mud-brick houses arranged in clusters, Cultivation of wheat and barley, Domestication of sheep, goats, and cattle, Use of stone tools and bone implements, Absence of pottery in the earliest levels***

This stage reflects a self-sufficient village economy adapted to a semi-arid environment with seasonal rainfall. Cultural life was simple, but the foundations of settled life, food storage, and community organization were firmly established.

2. Developed Neolithic (c. 5500–4000 BCE)

During this period, Neolithic communities expanded geographically and became culturally more complex.

Key developments include: ***Introduction of handmade pottery, Improved mud-brick architecture, Use of ornaments made from shell and semi-precious stones, More formal burial practices***

Mehrgarh continued to be occupied, showing clear cultural continuity. Similar Neolithic settlements appeared in **Baluchistan and adjoining regions**, indicating cultural diffusion and regional interaction.

3. Chalcolithic Expansion and Regional Cultures (c. 4000–3300 BCE)

By this time, **copper metallurgy appeared alongside stone tools**, marking the Chalcolithic phase. Several regional cultural traditions developed during this period, each adapted to local ecological conditions.

Important cultures and sites include: ***Kili Gul Mohammad culture in Baluchistan, Damb Sadaat culture, Nal culture with distinctive painted pottery, Amri culture in lower Sindh***

These cultures show:

Use of copper tools and ornaments,

Painted pottery with geometric and animal motifs,

Expansion of agriculture and pastoralism,

Larger and more permanent settlements

This stage reflects increasing regional specialization within a broader cultural framework.

4. Early Harappan Phase (c. 3300–2600 BCE)

This phase represents the immediate cultural precursor to the Mature Harappan civilization. Key Early Harappan cultures include: ***Kot Diji culture, Late Amri tradition, Early levels at Harappa and Kalibangan***

Archaeological indicators of this phase include: ***Fortified settlements, Standardized pottery forms, Early seals and symbols, Planned layouts and storage facilities***

Geographical Background

River Valleys

One of the most important ecological zones for Pre-Harappan development was the river valleys of the Indus system, including rivers such as the **Indus, Ravi, Chenab, and Ghaggar-Hakra**. These river valleys provided fertile alluvial soils created by annual floods, making them ideal for early agriculture.

Alluvial Plains of Punjab and Haryana

The alluvial plains of Punjab and Haryana formed another major ecological zone. This region offered flat terrain, fertile soils, and seasonal rainfall, which supported both agriculture and pastoralism.

Pre-Harappan sites in this region show evidence of **mixed subsistence strategies**. Settlements were often located near seasonal streams.

Semi-Arid Regions of Baluchistan

Baluchistan represents a contrasting ecological setting. It is characterized by **semi-arid conditions, rocky terrain, and limited rainfall**. Despite these challenges, some of the earliest Pre-Harappan communities developed here.

The site of **Mehrgarh, located near the Bolan Pass**, provides clear evidence of successful adaptation to this environment. Baluchistan's location also made it

a **corridor connecting the Indus plains with western Asia**. This strategic position encouraged early cultural contact and exchange.

Coastal Areas of Gujarat

The coastal regions of Gujarat formed another important ecological zone for Pre-Harappan cultures. These areas offered access to marine resources, riverine systems, and fertile plains.

Archaeological sites in Gujarat show evidence of **fishing, shell working, and early trade activities**. The availability of semi-precious stones such as **agate and carnelian** supported craft production.

Regional Pre-Harappan Cultural Traditions

Baluchistan Cultural Traditions

The Baluchistan region occupies a crucial place in the early evolution of Indian culture and civilization. This region witnessed the **emergence of farming communities** and Chalcolithic cultures that laid the groundwork for later urban development. **Sites such as Kili Gul Mohammad, Damb Sadaat, Nal, and Amri** show how early village societies gradually moved toward greater complexity.

Early Settlements

The earliest cultural levels in Baluchistan are represented by sites like **Kili Gul Mohammad**, dated to the early Neolithic–Chalcolithic transition. Excavations reveal **small village settlements with simple mud structures**, indicating permanent habitation rather than seasonal camps. These communities practiced a mixed subsistence economy, combining early **agriculture with pastoralism**.

Evidence of cultivated cereals and domesticated animals suggests that farming was supplemented by herding to cope with the semi-arid environment.

Mud-Brick Architecture

Across Baluchistan sites, mud-brick architecture is a consistent feature. At **Damb Sadaat and Amri**, houses were **rectangular, built with sun-dried bricks**, and often arranged in clusters.

The use of mud-bricks represents an important architectural tradition that later became standard in Harappan settlements.

Painted Pottery

One of the most distinctive features of Baluchistan cultures is their **painting pottery**. Sites such as Nal are particularly famous for **decorated ceramics bearing geometric patterns**, animal figures, and abstract motifs painted in black, red, or brown.

Early Metallurgy

Baluchistan cultures mark the early use of copper, placing them firmly in the Chalcolithic stage. **Copper tools and ornaments recovered from sites like Amri** indicate experimentation with metal alongside continued use of stone tools.

Amri–Nal Culture (c. 4000–3000 BCE)

The Amri–Nal culture flourished in the north-western subcontinent between **4000 and 3000 BCE**. The Amri–Nal culture developed primarily in Sindh and Baluchistan, extending into parts of Gujarat. Important sites include **Amri on the Indus River, Nal in Baluchistan, and associated settlements such as Kot Diji (early levels) and Balakot**.

These regions were ecologically diverse, **combining riverine plains, semi-arid landscapes, and access to mineral resources**. Seasonal rivers and improved climatic conditions during this period supported agriculture and pastoralism.

Fortified Settlements

One of the most significant features of the Amri–Nal culture is the presence of **fortified settlements**. At Amri, excavations revealed a **settlement enclosed by a mud-brick and stone fortification wall**. This suggests concerns for security, territorial control, and community organization.

Within these fortified areas, houses were arranged in a planned manner. **Rectangular mud-brick structures with multiple rooms** indicate long-term habitation and family units. The presence of **designated storage spaces** points to surplus production.

Pottery Tradition

The most distinctive material marker of the Amri–Nal culture is its pottery. Amri–Nal pottery is characterized by: ***Black-on-red ware, Painted geometric patterns, animal motifs such as bulls and birds, controlled firing***

At Nal, pottery shows particularly rich decorative traditions, indicating specialized potters and established aesthetic norms. **The uniformity of pottery styles across wide areas suggests shared traditions.**

This ceramic tradition directly influenced later Harappan pottery forms.

Economic Life

The economy of Amri–Nal communities was mixed and diversified.

Archaeological findings indicate: ***Cultivation of cereals such as wheat and barley, Domestication of cattle, sheep, and goats, Use of stone tools alongside early copper objects***

Fishing and hunting supplemented agricultural subsistence, especially in riverine and coastal zones. Craft activities included **pottery production, bead-making,**

and simple metallurgy. These activities reflect early stages of occupational specialization.

Social Organisation

The Amri–Nal culture shows early signs of **structured social organization**. Fortifications imply collective decision-making and community cooperation. Planned housing and storage indicate coordination beyond household level. Burial practices, though simple, sometimes included pottery and ornaments, suggesting emerging social identities. There is **no evidence of sharp social inequality**, indicating a society that was organized yet egalitarian.

Kot Diji Culture (c. 3300–2600 BCE)

The Kot Diji culture represents the **most advanced Pre-Harappan cultural phase and forms the immediate background to the rise of the Mature Harappan civilization**. Named after the site of Kot Diji in present-day Sindh, this culture flourished roughly between **3300 and 2600 BCE across parts of Sindh, Punjab, and adjoining regions**.

Archaeological discoveries show many defining features of Harappan urbanism—**planned settlements, technological standardization, and social organization**. Major sites associated with this culture include **Kot Diji, Amri (upper levels), Rehman Dheri, Kalibangan (early levels), and Harappa (early levels)**.

Excavations at these sites reveal **cultural layers lying directly beneath Mature Harappan deposits**, clearly establishing Kot Diji as a precursor phase. The presence of similar material remains across a wide area suggests strong cultural connections.

Fortifications and Planned Settlements

One of the most significant features of the Kot Diji culture is the appearance of fortified settlements. At Kot Diji, archaeologists uncovered a **stone and mud-brick fortification wall** surrounding the settlement. Similar defensive structures were found at Rehman Dheri and Kalibangan.

The settlements show early planning with **defined residential areas, storage facilities, and open spaces**. This reflects a shift from loosely organized villages to structured communities, a hallmark of emerging urbanism.

Pottery

Kot Diji pottery shows a **high degree of standardization**, signaling technological maturity and cultural cohesion. The pottery is primarily **wheel-made**, with consistent shapes and surface treatment.

Common pottery forms include: ***Jars with flaring rims, Bowls and dishes on stands, Storage vessels***. Decoration typically consists of **black-painted geometric designs on a red surface**, along with stylized animal motifs.

Metallurgy and Tool Use

The Kot Diji culture marks an important stage in early metal use. Excavations have yielded copper tools and ornaments, including: **Knives, Arrowheads, Bangles, Beads**. Stone tools continued to be used alongside metal, suggesting technological coexistence rather than replacement.

Early Seals & Symbols

Another significant development during the Kot Diji phase is the **appearance of early seals and graffiti marks**. Seals made of terracotta and stone have been found, bearing simple geometric symbols and animal figures.

Graffiti marks on pottery may represent potters' marks, clan symbols, or early forms of record-keeping. These developments anticipate the complex seal system of the Mature Harappan phase.

Major Changes in Pre-Harappan Phase

Technological Developments

1. Early Pottery Traditions

The earliest Pre-Harappan pottery was **handmade and coarse**. At early farming sites like Mehrgarh, pottery initially appears in simple forms with **thick walls and minimal decoration**. Over time, pottery technology improved significantly. **By the Chalcolithic phase, the potter's wheel was introduced at several sites**, allowing vessels to be thinner, more uniform, and more efficiently produced.

2. Painted Pottery

As pottery techniques advanced, decoration gained importance. Painted pottery from Pre-Harappan contexts often features **black or dark red designs on red or buff surfaces**. Motifs such as intersecting lines, fish, leaves, and stylized animals appear repeatedly, indicating shared symbolic preferences.

3. Metallurgy

One of the most significant technological developments of the Pre-Harappan period was the **introduction of metallurgy**. Excavations at sites such as Mehrgarh, Nal, and Amri have yielded copper tools and ornaments, including: ***Small blades and chisels, Pins and awls, Beads and simple ornaments***

Architecture

1. Permanent Villages

The earliest Pre-Harappan settlements began as small, stable villages rather than mobile camps. At sites such as **Mehrgarh, continuous occupation over several millennia** demonstrates the shift from seasonal habitation to

permanent settlement. Excavations at Mehrgarh reveal **clusters of houses arranged close** to each other, indicating long-term residence.

2. Construction Techniques

Early Pre-Harappan houses were simple but functional. Archaeological evidence shows both **circular and rectangular structures**, built using **mud, mud-bricks, and reeds**. The **consistent use of mud-brick construction** suggests growing architectural knowledge. **Sites such as Amri and Kot Diji reveal deliberate layout of houses** along lanes and open spaces.

3. Fortifications

One of the most significant architectural developments of the Pre-Harappan phase is the **appearance of fortifications**. At sites like Kot Diji and Amri, stone and mud-brick walls surrounded the settlements. The presence of defensive architecture indicates **increasing population density & competition over resources**

4. Storage Structures

Archaeological discoveries of storage facilities provide strong evidence of surplus production. At Mehrgarh and later Pre-Harappan sites, **large storage rooms** and bins have been identified within houses and communal areas.

Surplus management is a defining feature of early civilization, as it supports population growth, craft specialization, and social differentiation.

Economic Life

The economy was neither purely agricultural nor entirely pastoral. Instead, it was **a mixed and adaptive system**, shaped by local ecology, climatic conditions, and growing social needs.

Agriculture formed the backbone of Pre-Harappan economic life. At Mehrgarh, one of the earliest Neolithic settlements, charred grains of wheat and barley have been recovered from storage pits and house floors.

Pastoralism

Alongside farming, pastoralism played an essential role in Pre-Harappan subsistence strategies. **Animal bones recovered from sites such as Mehrgarh, Kili Gul Mohammad, and Damb Sadaat** show domestication of cattle, sheep, and goats.

Craft Production

Early pottery was handmade and coarse, but over time, wheel-made pottery with painted designs became common. Sites such as Amri and Nal have yielded distinctive ceramic traditions, suggesting skilled potters and shared cultural styles.

Bead-making using semi-precious stones, shell, and bone also developed. Chipped stone tools, copper objects, and bone implements found at Pre-Harappan sites indicate experimentation with materials and techniques.

Emerging Social Differentiation

Pre-Harappan communities were largely village-based and kin-oriented. Excavations at sites such as **Mehrgarh, Amri, and Kot Diji indicate that most houses were similar in size and construction**, suggesting an absence of sharply defined social classes.

However, **subtle signs of differentiation** are visible. At Mehrgarh, some houses contain storage facilities and craft tools, while others do not. This differentiation reflects functional specialization rather than inherited inequality.

Burial Practices

At Mehrgarh and Nal, burials were generally simple, but not uniform. For example, some individuals at Mehrgarh were buried with multiple ornaments, while others had none. Such variation suggests recognition of social identity but **not rigid stratification**. There is **no evidence of elite tombs** or monumental burial structures.

Ritual Life

Pre-Harappan ritual practices were closely tied to fertility, nature, and ancestry. **The discovery of terracotta figurines**, particularly female forms, points toward fertility symbolism associated with agricultural success and reproduction. **Animal motifs on pottery and figurines** suggest reverence for natural forces and totemic beliefs. **Fire installations and ash layers at sites such as Kalibangan indicate ritual use of fire**, possibly for household or community ceremonies.

Cultural Continuity into the Harappan Phase

One of the most significant aspects of the Pre-Harappan phase is its **continuity into the Mature Harappan civilization**. **Mud-brick architecture** developed at Mehrgarh and Amri later evolved into **standardized Harappan construction** techniques.

Agricultural practices, including the cultivation of **wheat and barley**, continued with greater scale and organization. **Pottery traditions became more refined** but retained earlier shapes and decorative motifs. **Craft specialization**, visible in early bead-making and metallurgy, expanded into **large-scale urban industries** during the Harappan phase.

This continuity demonstrates that Harappan urbanism was an indigenous development rooted in long-term cultural processes, not a sudden or externally imposed phenomenon.

Post-Harappan Cultures

c. 1900 BCE – c. 1300 BCE

Rather than a sudden collapse, this phase reflects a long process of transformation, in which **urban systems declined but cultural traditions continued** and adapted to new environmental and social realities.

Archaeological evidence across the north-western subcontinent clearly shows that Indus civilization did not disappear; it reorganized itself into regional cultural traditions.

Chronological Background

Between roughly 2600 and 1900 BCE, the Indus Valley Civilization reached its most stable and mature form. This period is marked by fully developed urban centers such as **Mohenjo-daro in Sindh, Harappa in Punjab, and Dholavira in Kutch**. These cities display highly standardized features—**uniform brick sizes, planned street grids, advanced drainage systems, large public structures, and regulated craft production**.

Archaeological layers from this phase show **consistent maintenance of infrastructure**. Streets were periodically relaid, drains were cleaned and repaired, and public buildings such as granaries and water reservoirs were kept functional.

The Turning Point Around 1900 BCE

Around 1900 BCE, a clear shift became visible in the archaeological record across multiple regions. This turning point does **not appear as a gradual transformation** unfolding over several generations.

Excavations at Mohenjo-daro reveal that upper occupational layers show **poorer construction quality**. Bricks were reused from earlier buildings, **houses**

encroached upon streets, and drainage systems were no longer systematically repaired. **At Dholavira, the abandonment of massive stone-built water reservoirs** marks a significant breakdown in civic management.

De-Urbanization

The Late Harappan phase marks a decisive turning point in the evolution of Indian culture and civilization. One of its most visible features is de-urbanization, a slow and uneven process in which some IVC cities lost their urban character.

1. Decline of Urban Planning

During the Mature Harappan phase, cities were defined by strict planning—**straight streets, standardized bricks, covered drainage systems, and carefully maintained public spaces**. In the Late Harappan levels, this urban discipline began to break down.

At Mohenjo-daro, excavations of the uppermost layers reveal narrow lanes cutting across earlier wide streets. **Houses were built directly over drainage** channels, blocking them. The street grid system became irregular, indicating that central civic control over urban planning had weakened.

Similarly, at Harappa, later occupation layers show **the absence of new large-scale construction**. Instead of planned rebuilding, people reused older structures in an uncoordinated manner.

2. Decline in Construction Quality

Another clear indicator of de-urbanization is the **decline in construction quality**. In Mohenjo-daro, houses in late levels were **built using reused and broken bricks** taken from earlier buildings. **Brick ratios became irregular**. Walls were thinner, foundations weaker, and construction techniques simpler.

At Harappa, the later phases show smaller, **poorly constructed dwellings** replacing earlier well-built houses. The use of durable baked bricks declined, and

mud bricks became more common, suggesting reduced access to resources and skilled labor.

3. Breakdown of Public Infrastructure

Public infrastructure—especially **drainage, water management, and communal buildings**—was the hallmark of Harappan urbanism. Its neglect in the Late Harappan phase is one of the strongest signs of urban decline.

At Mohenjo-daro, **drains were no longer cleaned or repaired**. Many were blocked or filled with debris. Wells fell into disuse, and bathing platforms were abandoned.

At Dholavira, one of the most striking examples comes from the **abandonment of its water harvesting system**. Massive reservoirs, channels, and dams that once ensured water security were no longer maintained.

4. Population Decline

At Harappa, burial evidence and reduced housing density suggest that people gradually moved away from the city. There is **no widespread evidence of warfare or sudden catastrophe**. Instead, settlements shrank slowly, with some neighborhoods abandoned earlier than others.

Mohenjo-daro shows **repeated rebuilding at lower levels** but very limited occupation in later phases, implying that residents eventually left the city rather than maintaining it.

This pattern supports the **idea of out-migration**, possibly toward smaller rural settlements better suited to changing environmental conditions.

Decline in Standardization

During the Mature Harappan phase (c. 2600–1900 BCE), standardization was one of the defining features of the civilization. **Baked bricks followed a**

consistent ratio of 1:2:4, visible from Harappa in Punjab to Mohenjo-daro in Sindh and Dholavira in Gujarat.

Similarly, **cubical stone weights** based on binary and decimal systems have been recovered from almost all major urban sites. **Seals made of steatite** were widespread and uniform in shape & size

One of the clearest indicators of declining standardization is the **near disappearance of standardized weights** from Late Harappan contexts. This decline indicates a **breakdown in regulated trade systems**. Without standard weights, long-distance trade would have become difficult.

Seals, which once symbolized administrative and cultural unity, became fewer and simpler in the Late Harappan phase. Excavations reveal a **sharp reduction in finely crafted steatite seals**. At several Late Harappan sites, **seals are replaced by simple stamp impressions or disappear entirely**. This suggests that formal administrative mechanisms, such as ownership marking and controlled exchange, were no longer widespread.

Beginning of the Late Harappan Phase

Together, these developments mark the beginning of the Late Harappan phase, which extended from around **1900 BCE to 1300–1000 BCE**, depending on the region. Instead of large urban centers, smaller settlements and rural communities became dominant.

This phase was not uniform across the subcontinent. In some regions, such as Gujarat and eastern Punjab, Harappan traditions persisted longer, while in others, urban life declined more rapidly.

Regional Cultures

As the Mature Harappan urban system weakened after c. 1900 BCE, the Indus civilization did not vanish. Instead, it **fragmented into several regional**

cultural traditions, each adapting Harappan cultural elements to local environmental, economic, and social conditions.

Four important cultural expressions of this transformation are the Cemetery H culture in Punjab, the Jhukar culture in Sindh, the Rangpur culture in Gujarat, and Painted Grey Ware–related traditions in the north-west and upper Ganga plains.

Cemetery H Culture (Punjab Region)

The Cemetery H culture, dated roughly between **1900–1300 BCE**, represents the Late Harappan phase in the **Punjab region**, particularly around Harappa itself. It is named after **Cemetery H at Harappa, where a distinct burial tradition was discovered.**

The most striking feature of this culture is its **new burial practice.** Unlike the extended inhumation burials of the Mature Harappan period, Cemetery H burials often involved **urn burials**, sometimes with cremated remains placed inside pottery jars. This change suggests a significant transformation in beliefs about death and the afterlife.

Pottery from Cemetery H shows clear continuity with Harappan forms but also important changes. **The pottery is generally less standardized and often decorated with painted motifs, including peacocks, floral designs, and geometric patterns.** These designs indicate the emergence of new symbolic expressions while retaining older ceramic traditions.

Settlement evidence suggests a decline in urban life. **Large public buildings disappear, and habitation shifts toward smaller settlements.**

Agriculture and pastoralism continued, showing that subsistence strategies remained stable even as social organization changed.

Jhukar Culture (Sindh Region)

The Jhukar culture, dating to approximately **1900–1500 BCE**, represents the Late Harappan phase in Sindh, especially around lower Indus sites such as Jhukar and Mohenjo-daro (late levels).

Archaeological layers at Mohenjo-daro show **poorly constructed houses using reused bricks, encroachment on streets, and lack of urban maintenance**. This indicates urban decay rather than sudden abandonment.

Jhukar pottery is generally coarse, thick, and crudely made, often lacking the fine finish of Mature Harappan ceramics. This reflects a decline in centralized craft production and a shift toward household-level manufacturing.

Trade evidence declines sharply. **Standardized weights, seals, and imported materials become rare or absent**. This suggests that long-distance trade networks had collapsed, and communities were increasingly reliant on local resources.

Despite economic contraction, many Harappan cultural traits survived.

Domestic architecture still followed rectangular layouts, and basic agricultural practices continued. The Jhukar culture therefore represents economic simplification with cultural continuity.

Rangpur Culture (Gujarat Region)

The Rangpur culture, dating from roughly 1900–1300 BCE, represents the Late Harappan tradition in Gujarat, especially at sites such as **Rangpur, Lothal (late phase), and Rojdi**.

This region shows one of the strongest examples of continuity from the Harappan period. Unlike the Indus core areas, Gujarat's settlements did not collapse abruptly. Instead, they gradually **transformed into smaller, rural communities**.

Pottery remains well-developed, with red ware, black-painted designs, and regional stylistic innovations. Bead-making, shell working, and semi-precious stone crafts continued, though on a reduced scale.

Agriculture adapted to local conditions, with **evidence of millet cultivation alongside traditional Harappan crops.** This shows economic flexibility in response to changing climate and water availability.

The Rangpur culture is significant because it illustrates how regional ecological advantages allowed Harappan traditions to survive longer and transform more smoothly into post-urban cultural systems.

Painted Grey Ware–Related Traditions (North-West and Upper Ganga Plains)

In parts of Punjab, Haryana, Rajasthan, and the upper Ganga-Yamuna Doab, Late Harappan traditions **overlap with early Painted Grey Ware (PGW)**–related cultures, dated roughly from 1300 BCE onward.

These traditions show:

Small village settlements

Use of painted pottery with simple grey surfaces and black designs

Mixed subsistence economy combining agriculture and pastoralism

While PGW itself belongs to a later cultural horizon, several elements—such as settlement patterns, house forms, and subsistence strategies—appear to have roots in Late Harappan rural traditions.