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A NOTE ON HARAPPAN CULTURE WITH SOME HIGHLIGHTS OF FIRST SEASON'S EXCAVATION AT RAKHIGARHI MOUND NO. 3 (2021-22)

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ABSTRACT

This paper provides a comprehensive overview of the Harappan civilisation, from its early development to its mature and late phases, with a particular focus on the 2021–22 excavation season at Rakhigarhi Mound No. 3 (RGR 3). The study contextualizes the Harappan culture's urbanism, material culture, and mortuary practices, highlighting recent debates surrounding its indigenous origins and the continuity of cultural traditions. Excavations at RGR 3 yielded architectural remains of mud and burnt brick structures, child and adult burials, artefacts including steatite and carnelian beads, terracotta figurines, a gold fragment, and a steatite seal. These findings contribute to understanding Harappan construction techniques, burial stratigraphy, and socio-economic activities. AMS dating situates the occupational deposits within the late Mature Harappan to Late Harappan phases (c. 2000–1800 BCE). Stratigraphic relationships and ceramic assemblages further support these chronological conclusions. The study reaffirms Rakhigarhi's status as a major Harappan urban centre and underscores the need for further systematic excavation to clarify cultural transitions, regional variations, and site chronology.

KEYWORDS: Harappan Civilisation, Excavation, Urbanism, Material Culture.

Harappan Culture – A General Introduction

In the year 1921 with the excavations at Harappa (now in Punjab, Pakistan) by Daya Ram Sahni of the Archaeological Survey of India, the Indian Archaeology entered into a new phase (Sahni 1920-21: 8-26). This culture/ civilisation is named as Harappan due to the mound situated near the village Harappa being the first discovered site of the culture and in archaeological parlance culture is termed based on the first discovered or type site. After the discovery of Harappa, the next year 1922 saw the discovery of the most prominent site of this civilisation at Mohenjodaro in Sindh province of pre-partition India (Marshall 1931). Till 1947, a good number of sites belonging to this culture were discovered, mostly being situated in the valley of River Sindhu (Indus) or its tributaries leading to its nomenclature as Indus valley civilisation (Chakrabarti 2003:160-161). Post-independence, many sites belonging to this culture came to light in the bed of now lost Sarasvati River (Ghaggar-Hakra) in Indian territories of Haryana and Rajasthan (Suraj Bhan 1972) and based on this data, the civilisation can better be termed as Sindhu-Sarasvati civilisation (Gupta 1996).

Harappan culture could be classified as a civilisation based on certain criterions, e.g., town planning, administration, monumental architecture, literacy, surplus economy, metal technology, standard measurement system, shared ceramic idioms etc. The extent of this civilisation is the most extensive among the contemporary ancient civilisations including the Mesopotamian, Egyptian and the Chinese civilisations (Lal 1997). The Harappan civilisation has been found spread from Baluchistan province in Pakistan (Sutka-gen-dor) in the west to western Uttar Pradesh (Alamgirpur) in the east and from Shortu-ghai in Afghanistan/ Manda in Jammu and Kashmir in the north to Daimabad in Maharashtra in the south (Chakrabarti 2003:160-161). The Harappan civilisation is divided into the early, mature and late phases (Bisht 2015: 203–220). The Early Harappan phase is generally dated from around 3200 BCE to 2600 BCE, the Mature Harappan phase from around 2600 BCE to 1900 BCE and the Late Harappan phase from around 1900 BCE to 1700 BCE. The cultural phase which existed before the onset of Harappan/ Early Harappan phase is generally termed as Pre-Harappan and is identified as the Hakra, Ravi or Sothi phases (Chakrabarti 2004**:**23–28). Previously, the early dates were known from Mehrgarh site in Baluchistan where the seventh millennium BCE

Neolithic culture developed into Mature Harappan culture at the adjacent site of Nausharo in the mid third millennium BCE (Jarrige 1995:321–332). Kile-Gul-Mohammed (Fairservis 1956: 169–402) was another contemporary site in Pakistan. Now, similar early cultural phase (Neolithic and Pre-Harappan) has also come to light from Bhirrana in Fatehabad District, Haryana (Rao 2005:60-68) supported by evidence from Rakhigarhi (Nath 2014), Girawad (Shinde *et al.* 2011b), Farmana (Shinde *et al.* 2011a) and Kunal (Khatri & Acharya 1995:84–86; Mani and Singh 2025).

The early researches in the Harappan archaeology have suffered due to partisan views of many scholars. Firstly, it was difficult for the western scholars to accept an Indian civilisation of such a great antiquity that seemed to challenge their dating of world civilisations as per Biblical theories and secondly, it was not fitting in the framework of the Aryan Invasion Theory. So, at its discovery, the culture was termed pre-Aryan or Dravidian in an attempt to create a divide among the Indian society. There also has been an attempt to relate the rise of urban Harappan character with the most urban phase of the Mesopotamian civilisation in a bid to show the Harappans dependent on the west Asiatic society, thus justifying the western colonialism. This also led to a kind of divide between the Mature Harappan and the Early Harappan cultures considering them two completely separate cultures. It is only because of the excavations of last two-three decades, particularly those done by the Archaeological Survey of India that we now know for sure that Early Harappan culture is evolving into the Mature Harappan culture with certain changes in the material culture. Many sites in Haryana and Rajasthan have shown a thick deposit of transitional phase showing overlapping between the early and mature phases. Previous studies focussed on the presence of uniform Harappan attributes ignoring the significance of the regional characteristics of different sites in different geographical zones. The over-emphasis on standard Harappan attributes led to wrong identification of cultural milieu at few peripheral sites and their chronology. Due to the bias for Harappan characteristics, many cultures particularly those of the Ganga-Yamuna doab could not be studied properly.

At many Early Harappan sites, use of unbaked as well as baked bricks is observed. The size of such bricks is more often in 1:2:3 ratio. During the Mature Harappan phase the size of bricks is often found in 1:2:4 ratio and for the transitional phase between the two any of the ratios

can be observed. During excavations, one should not expect only bricks in the standard ratio, other types of clay lumps were also used for construction in *kaccha* houses. The Early Harappans were also literates as is attested by the use of script, particularly on seals and sealings but in that phase either the use of script or animal motifs is observed on seals and sealings unlike the Mature Harappan phase when most of the seals and sealings have both the animal motifs as well as the use of script. The transitional phase has not been defined in details in any of the reports, so our knowledge is limited about the material culture of this phase. The fortification of cities had started during the Early Harappan phase as is observed at Amri (Casal 1964) and Kot-diji sites (Khan 1965). During the Mature Harappan period all the major cities were fortified and generally divided into citadel (upper town) and lower town. From Dholavira three partitions of the city have come to light (Bisht 2002). The Harappans did not construct many magnificent buildings like the Egyptian pyramids or the Mesopotamian ziggurats but various public structures were constructed like the Great Bath at Mohenjodaro (Marshall 1931), Granaries at Harappa (Marshall 1931), Khirasara (Nath *et. al* 2013), Dockyard at Lothal (Rao 1979), and Fire-altars at Kalibangan (Lal 1997). Since most of the Harappan cities followed a set town planning, it is believed that there was some administrative authority before such constructions were initiated and to look afterwards to enforce rules and regulations. The Harappans had a remarkable drainage system with covered culverts and soak pits so that maximum quantity of water could be utilised and preserved.

One important aspect of the Harappan society is its mortuary practices. In the present state of our knowledge, it can be safely concluded that the majority of the population practiced cremation as is practiced by the Hindu society today but the practice of burying the dead was also prevalent among some sections of the society. Burial mounds/ sites have been found from some Harappan sites like Harappa (Vats 1940), Rakhigarhi (Shinde *et al.* 2020), Lothal (Rao 1979) and Dholavira (Bisht 1991), slightly away from the main habitation area. All such burials belong to the Mature Harappan period only. It is difficult to confirm at present state of our knowledge whether those buried were natives of those sites or not. If yes, what cause led to bury their mortal remains when majority of deceased were being cremated? Recently a burial site possibly belonging to Early Harappan phase has been exposed in Kachchh district (Rajesh and Abhayan 2023).

When it comes to the larger settlements of the Harappans, the site at Mohenjodaro stands out. The other major settlements of the civilisation are: Rakhigarhi, Harappa, Ganweriwal, Dholavira, Kalibangan, Baror, Balakot and Kot-diji. As far as the finding of antiquities of the Harappans is concerned, it is a fact that the maximum number of antiquities were acquired from excavations at Mohenjodaro and Harappa, the two richest metropolis of the civilisation. Lothal in spite of being a comparatively smaller settlement was again equally rich and prosperous for being an important trade centre (Rao 1979). If we take a look at common Harappan antiquities, we observe the following items: seals and sealings; beads made of gold, silver, copper, terracotta, shell, steatite, faience and semi-precious stones; bangles made of terracotta, shell and faience; metal ornaments, implements and other objects most prolifically in bronze; terracotta figurines; terracotta spindle whorls; toy cart frames; stone weights and measures; gamesman and dice; terracotta hopscotches; chert blades; terracotta cakes; stone pestle and muller; stone drill bits; sculptures in stone and metals etc.

One of the most significant antiquities of the Harappans is the seal and seal impression. Most of the seals are made of steatite and some of terracotta. These are generally square or rectangular in shape with animal motifs and undeciphered script letters engraved on them. Some circular and cylindrical seals are also known which are related to the long distance trade of the Harappans with the cotemporary western civilisations. There was a time when during the excavations the finding of a seal was taken to confirm a site's association as Mature Harappan site.

Terracotta figurines form an important part of Harappan antiquarian collection. Human figurines particularly female are found in abundance at sites lying in Pakistan, particularly Mohenjodaro, Harappa and Chanhudaro. In Indian Territory, only Lothal and Bhiranna have produced few human specimens, otherwise these are generally absent (Lal 2002). The female figurines most probably represent the mother goddesses and are well adorned with appliqué decorations (Sonawane and Ajithprasad 2012:26-37). The animal figurines are found at all the Harappan sites and humped bull figurines form the most popular theme.

The metal objects of the Harappans are more prominently made of copper/ bronze, though precious metals as gold and silver were also known and occasionally used. The metal objects include beads, bangles, rings, copper mirrors etc. among ornamental items and chisels, axes, celts, swords, knives, arrowheads, fish-hooks etc. among the utilitarian implements and weapons.

Among the semiprecious stone beads, the Harappans produced a great variety. Beads of various sizes and shapes made of carnelian, agate, jasper, chalcedony, lapis lazuli etc. are encountered. The Khambhat region in Gujarat was an important centre of lapidary work along with centre of shell production (Sonawane and Ajithprasad 2012:26-37). Semiprecious stone beads were part of internal as well as external trade of the Harappan civilisation. Etched carnelian beads, mostly of cylindrical and round shapes were exported to the contemporary western cities. These were exported along with cotton, spices and other agricultural produces. Lapis lazuli was retrieved from Badakshan mines in Afghanistan (Kenoyer 1997:262-280). The Harappans had a very wide network of trade. Most of the sites were well linked on the land route and certain sites like Lothal near Ahmadabad and Balakot on Makran coast near Karachi played important role in external trade through sea (Rao 1979). The land route linking the ancient west Asian cities to Harappan cities passed via Seistan (Lal 1997). The Harappan Civilisation maintained overseas trade links with Mesopotamia, Bahrain, and Oman, exporting items like beads and textiles. Archaeological finds such as seals and Mesopotamian texts referencing "Meluhha" suggest active maritime commerce (Chakrabarti 1990).

In spite of a number of excavations at Harappan sites our knowledge about the culture is still very limited. The most important reason for that is our failure to decipher their script. Though, there are certain evidences that confirm the continuity of the Harappan traditions in the modern Hindu society. Yoga is a very important example of that continuity as certain human figures seated in Yogic posture are found depicted on Harappan seals and in the form of terracotta figurines (Lal 1997). The *pipal* tree was very sacred to them as found depicted on various seals and pots and it is still the most sacred tree for the Indian populace (Marshall 1931). Similarly, predominantly found bull figurines indicate its ritual importance and the bull is very well connected with Bhagavan Siva. There is a clear gap in our understanding when it comes to the transition from the Harappans to the early Historic Indian societies. More and more

archaeological sites need to be identified and proper excavations are required at some of such sites to resolve various problems.

Rakhigarhi

Rakhigarhi, about 150 km to the north-west of Delhi, situated in District Hisar of Haryana is one of the most important Harappan sites of the Indian subcontinent and the biggest in India. It comprises seven mounds which are situated in close proximity to each other forming a closely knit archaeological unit whereas mound nos. 8 and 9 in spite of being part of broader archaeological complex are situated at some distance than the seven closely situated mounds. To the list of these nine, two more mounds have been added recently as mound nos. 10 and 11 by the team of Deccan College led by Prof. Vasant Shinde but these are also situated far apart than the rest seven mounds. Large scale excavations were undertaken at different mounds of Rakhigarhi by the Archaeological Survey of India under the supervision of Dr. Amarendra Nath from 1997-2000 (Nath 2002). As per Dr. Nath, RGR 1, RGR 2 and RGR 6 were excavated to a considerable extent and revealed pre-formative (Pre-Harappan), Early Harappan to Mature Harappan deposits. RGR 7 was reported as a necropolis of Mature Harappan period (Nath 2014). A team of Deccan College led by Prof. Shinde did take up excavations at RGR 7 from 2013-2016 and brought out to notice remains of a huge number of burials (Shinde 2016). The studies on these burials have been published by Prof. Shinde in a number of publications. The studies threw light on the nature of burials, positions of the skeletons, grave goods, gender, age of the buried etc. The most popular aspect of Rakhigarhi studies has been the DNA analysis carried out on human skeletons from RGR 7 which established the identity of the dead as that of indigenous origin (Shinde 2019).

In 2021, fresh excavations were taken up at Rakhigarhi by the Archaeological Survey of India under general direction of Dr. Sanjay Kumar Manjul and the primary author being the co-director. The team of Institute of Archaeology took up excavations at RGR 1 and the team of Excavation Branch II under the author's direction chose RGR 3 for excavations. Fresh excavations were also undertaken at RGR 7, Dr. Vinay Kumar Roy being the supervisor there. The excavations at RGR 1 re-established the chronology of the site as was earlier proposed by Dr. Nath. The excavations at RGR 7 were rewarding as for the first time it was established that the underlying deposit below the Mature Harappan burials belonged to Early Harappan

and possibly Pre-Harappan period. Since RGR 7 is low lying and very close to the old bed of River Drishdvati, it is interesting to get a deposit of about 2-3 m below the surface. It is pertinent to mention here that the Mature Harappan burials are present on the surface level itself as the entire area has been levelled for agricultural activity, so the overlying deposit of the burials is lost forever. There are different phases of the burial activity as the burials are encountered at different depth levels as well.

To systematically explore the site, initial excavation commenced with two trenches of 10 x 10 meters near the top of the mound, in the south-west direction of the *Majaar* on RGR 3 (Figure 1). Subsequently, additional trenches were excavated, comprising three trenches with two quadrants each and two trenches with one quadrant each.

Figure 1: General view of the mound before excavation

General Plan of the Excavated area:

Figure 2: General Plan of the excavated area

Key Findings from each Trench

Trench S30 W10

Quadrant I: The excavation revealed a mud-brick structure accompanied by a mud floor. Notably, a few fallen burnt bricks were found alongside human remains, including one adult burial and a separate child burial. A burial discovered beneath a structure composed of burnt bricks suggests that it predates the construction of the overlying architectural feature. This stratigraphic relationship implies that the interment may correspond to the Late Harappan phase (Figure 3). However, a definitive chronological attribution necessitates further archaeological investigation, including stratigraphic analysis, material culture assessment, and, if possible, absolute dating techniques to establish its precise antiquity.

Figure 3: S30 W10 (Qd-I)

Quadrant II: No distinct structural features were identified, though patches of mud flooring were observed.

Quadrant III: Another mud-brick structure was unearthed along with human burial remains.

Quadrant IV: A mud-brick structure running in a north-south direction was documented. Additional artefacts recovered from this trench included bone fragments, cylindrical and circular beads made of carnelian and steatite, potsherds, as well as fragments of terracotta bangles and cakes.

Trench S30

Quadrant I: This section contained a human burial aligned in a north-south direction, along with traces of a mud-brick structure. Additionally, a few burnt bricks and a kiln were uncovered (Figure 4).

Figure 4: S30 (Qd-I)

Quadrant II: A sun-dried brick wall running north-south was identified, accompanied by a hearth with ash deposits. The quadrant also yielded burnt bricks, bone fragments, carnelian and steatite beads, potsherds, and terracotta artefacts such as bangles and cakes (Figure 5).

Figure 5: S30 (Qd-II)

Quadrant III: The most striking discovery in this quadrant was a massive brick wall constructed using burnt bricks with a 1:2:4 ratio, comprising eighteen courses. Parallel to this

Figure 6: S30 (Qd-III)

wall was another structure made of sun-dried mud bricks in a 1:2:3 ratio. Notably, the skeletal remains of a young child were discovered within a mud-brick wall, which had been constructed by cutting through an earlier mud-brick structure (Figure 6). This stratigraphic relationship suggests that the burial postdates the original construction, however the activity of interment may belong to the late Harappan phase. Additionally, a large pot was discovered toward the southern side of the burnt brick wall.

Figure 7: S30 (Qd-IV)

Quadrant IV: A sun-dried mud-brick wall running east-west was documented. A pit containing potsherds, beads, terracotta bangles, and cakes was also found. Among the most significant discoveries from this quadrant was a small fragment, likely made of gold, recovered from a pit (Figure 7).

Trench S30 E10

Quadrant IV: This quadrant was excavated to determine the extent of the burnt brick wall identified in Trench S30. The findings suggested that the massive burnt brick wall ended here, turning northward along with a parallel sun-dried mud-brick wall. Another burnt brick wall with some discontinuous courses was also observed. Other discoveries included a pit containing bone fragments, terracotta bangles and cakes, steatite beads, and potsherds (Figure 8).

Figure 8: S30E10 (Qd-IV)

Trench S40

Quadrant I and II were taken up for excavation in this trench. Burnt brick wall seems to be ending in this quadrant. Among the notable artefacts recovered were a broken perforated jar, also known as cut ware (Figure 9), a broken disc on a stand, potsherds, steatite and carnelian beads, chert micro-blades, and terracotta bangles.

Figure 9: S40 (Qd-I)

Trench S40 W10

Quadrant I: Excavation uncovered a few sun-dried mud bricks aligned east-west, along with pits on both sides. These pits contained potsherds, terracotta bangles and cakes, bone fragments, and steatite beads.

Quadrant II: A significant discovery in this quadrant was a narrow, uncovered burnt brick drainage channel running east-west, flanked by mud-brick walls (Figure 10). A few courses of burnt bricks were also visible above the drainage channel on the eastern side. Additional artefacts included bone fragments, carnelian and steatite beads (both cylindrical and circular), potsherds, and terracotta fragments along with a steatite seal.

Figure10: S40 W10 (Qd-II)

Trench S40 W20

Quadrant II: This section revealed two sun-dried brick walls running north-south with a pit between them. The pit contained potsherds, beads, terracotta bangles, and cakes (Figure 11).

Figure11: S40 W20 (Qd-II)

Trench S20 W10

Quadrant I & IV:

Only quadrant I & IV of this trench were excavated. A burnt brick structure having bricks of mature Harappan ratio was noticed. A small mud brick structure is also noticed towards the southeastern corner of the quadrant-IV. A pot surrounded by mud floor was also present. Other notable findings were the fragments of TC bangles and cakes, steatite beads and potsherds (Figure 12).

Figure 12: S20 W10 (Qd-I & IV)

Antiquities

The antiquities recovered during the excavation include a steatite seal, small number of fragmented terracotta animal figurines and a thin strip of yellow metal, tentatively identified as gold along with usual Harappan findings.

Figure 13: Harappan Seal

A steatite seal having criss-cross pattern was found from the Trench-S40W10. No character of Harappan script or any animal depiction is present on the seal (Figure 13).

Figure 14: Animal Figurine

The animal figurine (Figure 14) is a small terracotta figurine, likely crafted to represent a hippopotamus. It is handmade from fired clay.

Figure 15: Animal Figurine

The animal figurine (Figure 15) is a small terracotta figurine, likely representing a bull. Made of fired clay, the figurine features prominent upright horns, rounded eyes, and a short snout—common characteristics in depictions of bulls from this period. Its body is compact, and its form is stylized rather than anatomically detailed. The artefact (Figure 16) is a finely crafted object made of yellow metal (probably gold).

Figure 16: Metal strip

Measuring approximately 2 cm in length, its elongated form and split end suggest it may have served a symbolic or decorative purpose, potentially as a hairpin, pendant, or ritual item. Artefacts such as carnelian and steatite beads, terracotta bangles, chert micro-blades, and gold fragments offer valuable insights into the technological advancements and trade networks of the Harappan civilisation. The findings contribute to a deeper understanding of the settlement patterns, burial practices, and material culture of one of the most prominent sites of the Harappan Civilisation. Only a few meters could be excavated during the current season, and further excavation is required to gain a more comprehensive understanding of the occupational sequence and cultural transitions at the site.

Pottery

Excavation was carried out in the upper part of the mound, the pottery found during the excavation remains mostly of Late Mature Harappan and late Harappan phase (Figure 17 to Figure 20).

Figure 17

Figure 18

Figure 19

Figure 20

Chronology

The deposit at RGR 3 could be excavated at the upper levels only. The top deposit definitely belongs to the late mature Harappan or the late Harappan phase. Below the top deposit lies the mature Harappan deposit which seems to be the most prominent deposit at Rakhigarhi. Out of the five AMS samples analysed at IUAC, Delhi two dates come closer to the time of Harappan deposit and indicate a late phase of mature Harappan period datable to around 2000-1800 BCE.

S. No.	Sample Name	Sample ID	pMC value	Radiocarbon Age (BP)	Comment
1.	M(0,1)/II/S-1	IUACD#22C5559	62.363±0.335	3793±43	
2.	$N_{30}W_{40}$/S-1	IUACD#22C5560	Sample could not be graphitized properly due to less carbon content		
3.	$S_{40}W_{20}$ /S-8	IUACD#22C5583	95.216±0.452	393±38	
4.	$S_{30}W_{10}$/I/S-19	IUACD#22C5603	95.906±0.295	335±24	
5.	M(0,1) S-3	IUACD#22C5561	62.494±0.280	3776±36	

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Stratigraphy:

Since not much deposit could be excavated in any of the trenches, the period exposed largely remains late mature Harappan with some elements of late Harappan also surviving in few trenches. Area excavated as shown in the section below vary from few centimetres to about 2 meters. The section exposed are shown in the drawings (Figure 21 to Figure 23).

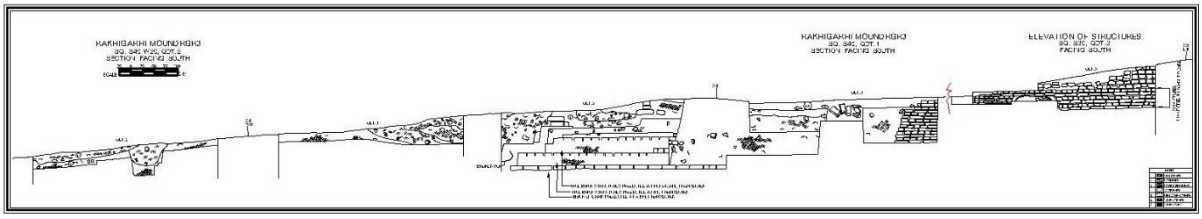

Figure 21

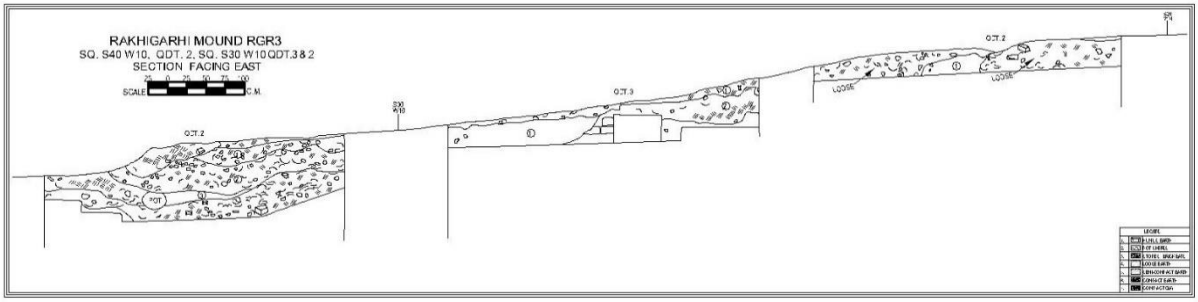

Figure 22

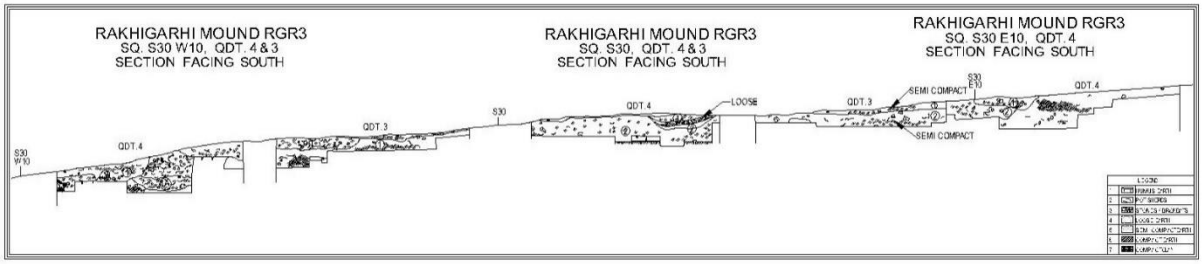

Figure 23

Conclusion:

The excavation at Rakhigarhi, particularly at RGR 3, revealed significant structural remains, burial sites, and artefacts indicative of Harappan urban planning and craftsmanship. The discovery of mud-brick and burnt-brick structures, including walls, drainage systems, and hearths, suggests a well-developed settlement with organised construction techniques. The presence of human burials, including child burials, further highlights the site's socio-cultural aspects.

The pottery assemblage predominantly belongs to the Late Harappan phase, characterised by a range of utilitarian wares with reduced craftsmanship compared to the Mature Harappan period. The ceramics are mostly wheel-made with minimal decoration, reflecting a shift towards more functional forms. Among the findings, a considerable number of Late Harappan potsherds were recovered, indicating sustained habitation during this phase. Additionally, a very limited number of Mature Harappan potsherds and fragments of perforated jars were identified, suggesting either residual presence from earlier occupation layers or the reuse of older material by the Late Harappan inhabitants. The longer wall made of burnt bricks was the highlight of excavations and must belong to the Mature Harappan phase (Figure 4).

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