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# INTRODUCTION AND A SUMMARY OF THE RESULTS

B.B. LAL

CHAPTER

1

Although in the earlier report on the excavations at Kalibangan we had given a detailed account of the location of the site and its environment, it may not be out of place here to recall some of it, since we don't expect the readers to remember all that; and perhaps some of them may not have even seen the earlier report.<sup>1</sup>

Located on the left bank of the now-dry Ghaggar (ancient Sarasvatī) river in Hanumangarh District of Rajasthan, Kalibangan (Lat. 29° 29' N; Long. 74° 08' E) is one of the most important sites excavated on the Indian side of the border after Independence. As would be seen a little later, it has made some very valuable contributions to our knowledge of the Harappan Civilization (also known as the Indus/Indus-Sarasvatī Civilization). The site is about 6 km south of the nearest railway station, called Pilibangan, which lies between Hanumangarh and Suratgarh. From Delhi, it is a little over 300 km by road in a north-westerly direction (cf. Fig. 1.1).

As one moves in this area, one sees during the winter season luscious fields of wheat interspersed with those of mustard, the latter welcoming the visitor by waving their lovely yellow flowers. But all this is a recent development. In the 1950s when we were exploring the area we were greeted by nothing but sand, often swirling up in the air and blinding us. The

recent environmental change has come up because of the canal that has been laid out in the dry bed of the Ghaggar (Sarasvatī). Likewise, one can well imagine that during the Harappan times when the mighty Sarasvatī itself was flowing past the site the environment must have been no less green. Indeed, the discovery of a ploughed field with criss-cross furrow marks, ascribable to the Early Harappan times,<sup>2</sup> fully endorses such a view.

The ancient site consists of three mounds (Fig. 4.1). Of these, the one in the middle (called KLB-2) is the largest, though it has been badly eroded on the southern side. It measures approximately 240m east-west and seems to have been not less than 360m north-south. That on the west (called KLB-1) measures roughly 240m north-south and 120m east-west. As would have been observed, the longer axis in both the cases is north-south, i.e. almost at right angles to the adjacent river, which is somewhat unusual, since normally habitations stretch along the river. Anyway, both the mounds rise to a height of approximately 10m above the surrounding plains. The third mound, named KLB-3, is a bit away to the east of KLB-2 and is very much smaller in area, approximately 70m x 50m, and only 2.5m in height. The reason for this small size of the last-named mound lies in the fact that it was not a residential complex but was used only for a limited (ritualistic) purpose.

<sup>1</sup> B.B. Lal, J.P. Joshi et al. 2003, *Excavations at Kalibangan : The Early Harappans*, New Delhi : Archaeological Survey of India.

<sup>2</sup> *Ibid.*, pp. 95-98.



Fig. 1.1



In yet another case, a male skeleton bore cut marks near the left knee. The size of the cut incidentally corresponds to that of the blade of an average copper axe of the Harappan period. Perhaps in the course of a quarrel the person was hit by his adversary with an axe, as a result of which there may have been excessive bleeding and the person succumbed to the injury.

After a study of the skeletons, A.K. Sharma states that the average height of an adult male ranged between 1.55m and 1.75m and of the females between 1.45m and 1.55m. He is also of the view that life-expectancy may not have been more than 55-60 years (cf. Chapter 22).

Like any other Harappan site, Kalibangan too yielded a rich harvest of pottery and antiquities. As regards the pottery, it may be stated that since the site was re-occupied hardly within a century of its abandonment by the Early Harappans, the lower levels of KLB-2 contained a mix-up of Early Harappan and Mature Harappan pottery. The former, however, petered out as time passed and only the latter continued. This latter was very profuse and showed a rich variety of painted designs (Chapter 8). The antiquities included, as usual, seals, sealings, inscribed pottery, copper objects, a variety of beads, chert blades and other tools, terracotta figurines and the ubiquitous cakes, etc. All these have been described in the respective chapters. Here we may refer to just a few of them which merit special attention.

Amongst the seals there is one which is cylindrical in shape and is engraved with an interesting scene (Fig. 9.51). At least shape-wise, though not subject-wise, it reminds us that it is unusual in a Harappan assemblage and shows West Asian contacts. Also noteworthy is the occurrence of seven

terracotta 'tablets'. These are thin oblong strips, well-fired, bearing in all cases the same inscription and the horn of a unicorn (Figs. 9.77-9.79). These do not bear any impressions of reed or cord on the reverse, as the normal sealings do. Thus, their purpose seems to have been altogether different. In this context, it may be added that all these came from the Citadel, more importantly from an area lying between the ritualistic platforms on the one hand and the houses to the north which may have been occupied by the priests and other elites. Could these then have some kind of special (religious?) significance?

Of the inscribed pottery there are at least two examples which deserve special attention. On these the inscriptions were engraved after firing and the noteworthy point is that the signs partially overlap. It has been observed that in all the cases concerned the sign on the right is overridden by the next one on the left. This shows that in each case the sign on the right was inscribed first and then came the one on the left. Such a disposition of the signs conclusively proves that the direction of writing in the Harappan script was from the right to the left (Figs. 9.144 and 9.148).

Amongst the other objects, particularly noteworthy is a terracotta example of the *lūga-cum-yoni* (Fig. 21.75). Although stone examples, separately of the *lūga* and *yoni*, had been found at Mohenjodaro, this is an example wherein the two go together. Two bulls, one in terracotta (Fig. 21.16) and the other in bronze (Fig. 12.15) are very good examples of Harappan art. Special attention also needs to be drawn to a terracotta *kernos*, with seven lamps set on the hollow ring (Fig. 21.76) – a type which, like the cylinder seal referred to earlier, is extraneous to the usual Harappan repertoire and points towards West Asian contacts.

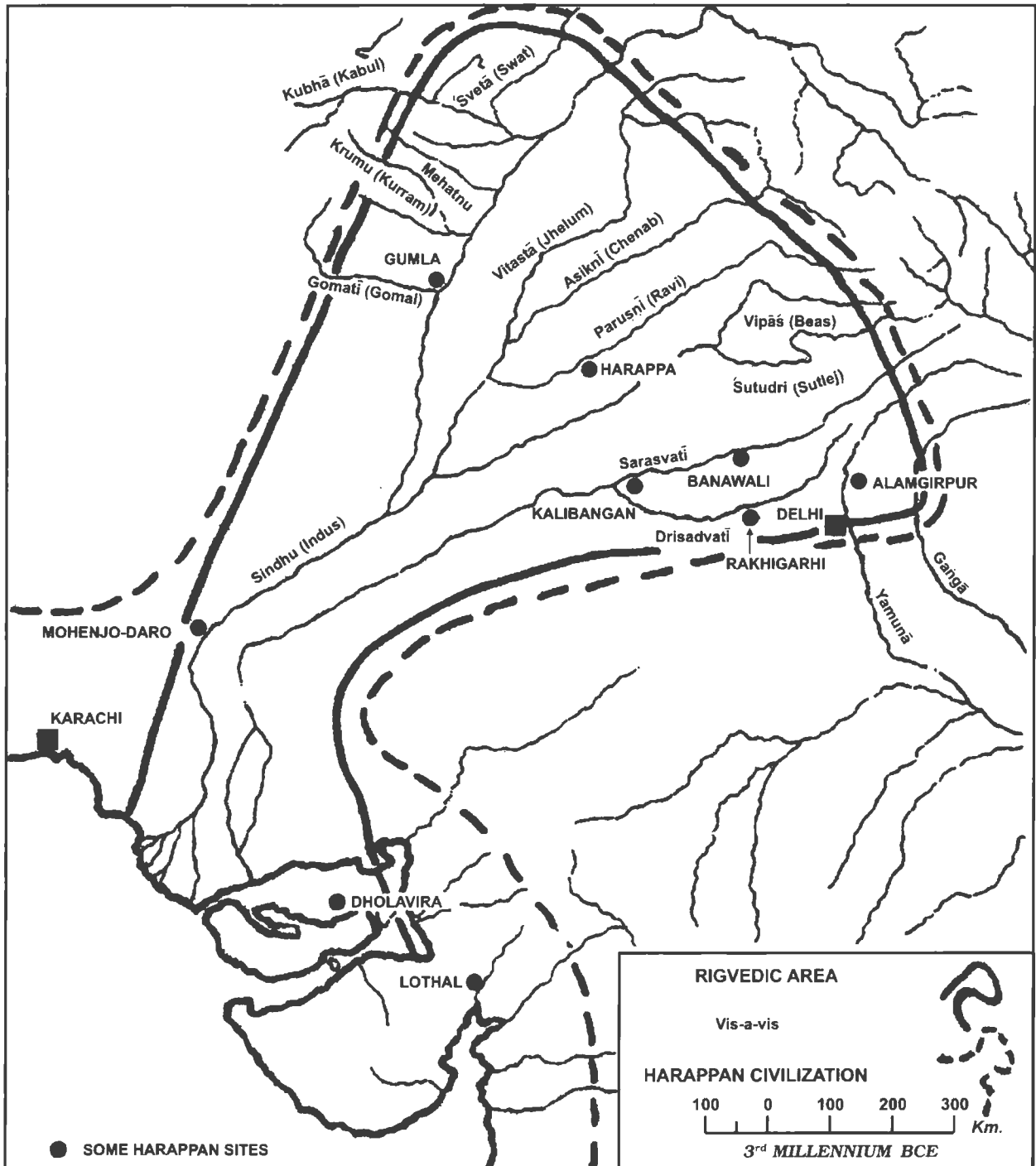


Fig. 2.6 Map showing a correlation between the Rigvedic area and the spread of the Harappan civilization, in the 3<sup>rd</sup> millennium BCE

In the Table that follows all the dates are given, mentioning the level to which they belong.

**Table: Mature Harappan Radiocarbon Dates from Kalibangan**

Strati-graphic Level	Sample No.	Material	Based on 5568-Year Half-life	Based on 5730-Year Half-life	Calib-3 correction (1 Sigma and 2 Sigma)
Late	TF-599	Inorganic fraction of animal bones	1930±100 BP AD 20± 100	1990±105 BP 40±105 BCE	1 Sig BCE 32 (AD80) AD223 2 Sig BCE 166 (AD80) AD336
Late	TF-138	Charcoal	3075±100 BP 1125±100 BCE	3165±105 BP 1215±105 BCE	1 Sig BCE 1427 (1378,1345,1319) 1168 2 Sig BCE 1522 (1378,1345,1319) 1014
Late	TF-244	Charcoal	3250±90BP 1300±90 BCE	3340±95 BP 1390±95 BCE	1 Sig BCE 1620 (1516) 1419 2 Sig BCE 1737 (1516) 1316
Late	TF-143	Wood	3510±110 BP 1560±110 BCE	3615±110 BP 1665±110 BCE	1 Sig BCE 1959(1872,1840,1811, 1808, 1781) 1683 2 Sig. BCE 2135 (1872, 1840, 1811, 1808, 1781) 1524
Late	TF-946	Wood Charcoal	3605±100 BP 1655±100 BCE	3715±105 BP 1765±105 BCE	1 Sig BCE 2124(1940) 1778 2 Sig BCE 2271(1940) 1684
Late	TF-149	Charcoal	3675±140 BP 1725±140 BCE	3780±145 BP 1830±145 BCE	1 Sig BCE 2275(2033) 1828 2 Sig BCE 2463(2033) 1681
Late	TF(BS)-149	Charcoal	3585±120 BP 1635±120 BCE	3695±125 BP 1745±125 BCE	1 Sig BCE 2124(1919) 1747 2 Sig BCE 2279(1919) 1621
Late	TF-150	Charcoal	3740±100 BP 1790±100 BCE	3850±105 BP 1900±105 BCE	1 Sig BCE 2285(2137) 1976 2 Sig BCE 2460(2137) 1881
Late	TF-605	Charcoal	3810±105 BP 1860±105 BCE	3925±110 BP 1975±110 BCE	1 Sig BCE 2454(2272,2258,2204) 2043 2 Sig BCE 2558(2272,2258,2204) 1934
Late	P-481	Charcoal	3885±70 BP 1935±70 BCE	4000±75 BP 2050±75 BCE	1 Sig BCE 2462(2392,2387,2337) 2202 2 Sig BCE 2560(2392, 2387, 2337) 2069
Late	TF-153	Charcoal	3910±105 BP 1960±105 BCE	4025±110 BP 2075±110 BCE	1 Sig BCE 2558(2452,2423,2405) 2200 2 Sig BCE 2853(2452, 2423,2405) 2038
Late	TF-25	Charcoal mixed with charred bone	3930±110 BP 1980±110 BCE	4040±115 BP 2090±115 BCE	1 Sig BCE 2568(2457) 2207 2 Sig BCE 2860 (2457) 2045
Late	TF-942	Charcoal	4055±110 BP 2105±110 BCE	4175±115 BP 2225±115 BCE	1 Sig BCE 2864 (2575, 2511, 2510) 2460 2 Sig BCE 2889 (2575, 2511, 2510) 2282
Middle	TF-152	Charcoal	3615±85 BP 1665±85 BCE	3720±90 BP 1770±90 BCE	1 Sig BCE 2121 (1948) 1789 2 Sig BCE 2195 (1948) 1741
Middle	TF(BS)-152	Charcoal	3570±125 BP 1620±125 BCE	3675±130 BP 1725±130 BCE	1 Sig BCE 2116 (1892) 1741 2 Sig BCE 2277 (1892) 1538
Middle	TF-142	Charcoal	3635±100 BP 1685±100 BCE	3740±105 BP 1790±105 BCE	1 Sig BCE 2136 (1975) 1828 2 Sig BCE 2283 (1975) 1705
Middle	TF-141	Charcoal	3705±110 BP 1755±110 BCE	3810±115 BP 1860±115 BCE	1 Sig BCE 2275 (2124,2082,2043) 1931 2 Sig BCE 2456 (2124,2082,2043) 1766

KLB-1  
CONCORDANCE OF HARAPPAN STRATA

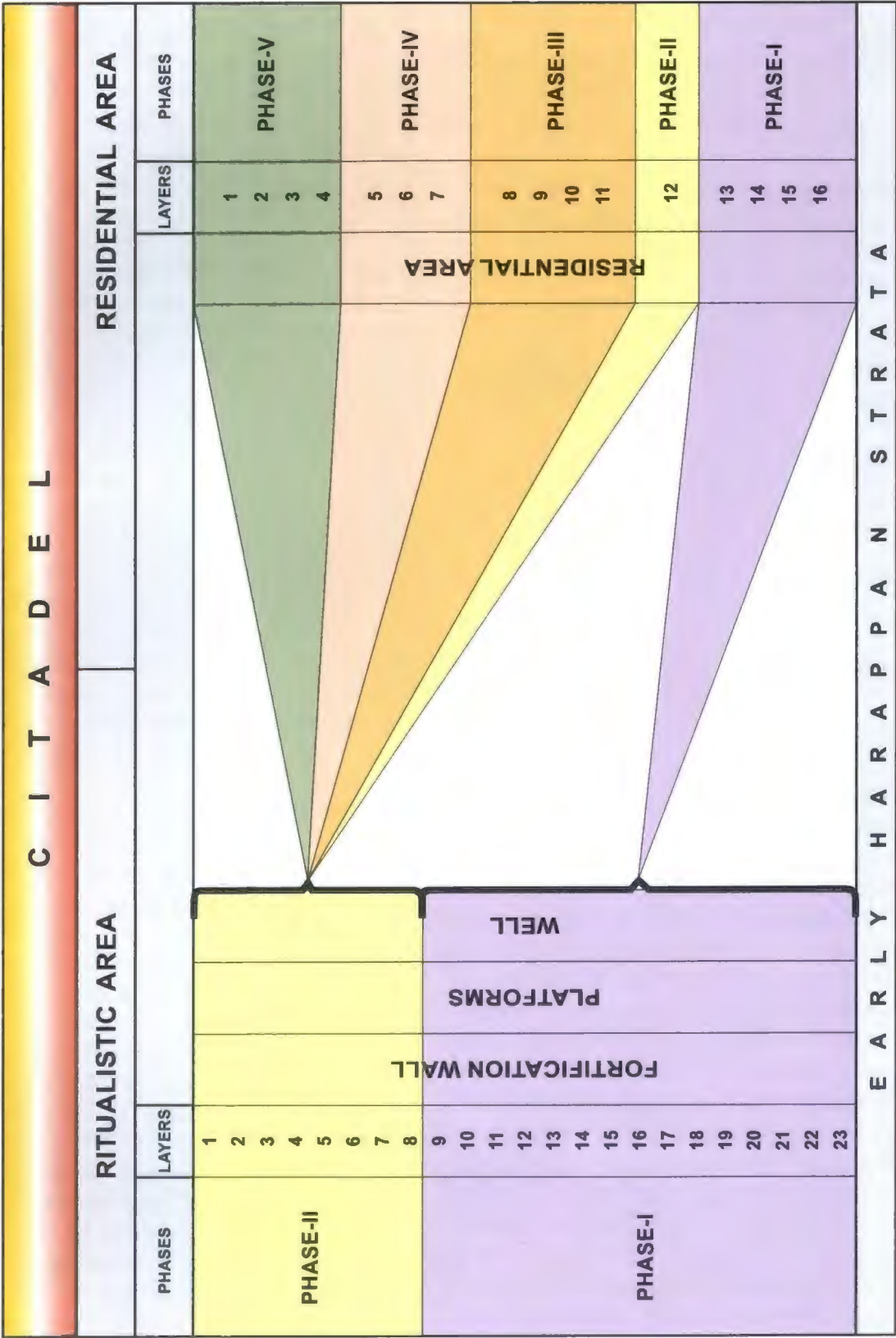


Fig. 5.6





*Fig. 5.8 KLB1 Tunnel section below the Harappan (Period II) fortification wall on the north showing two successive phases of the early Harappan (Period I) fortification wall, looking north-west*