Harappan Civilization: Emerging Picture in Hanumangarh District, Rajasthan

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***Abstract**: This paper presents the results of village to village survey conducted in entire Hanumangarh district during 2008 to 2012. During this survey, a total of 574 sites were visited and it revealed a number of new sites in the catchment area of major urban sites like Kalibangan, Sothi and Nohar. The results of the survey can provide vital contributions to our understanding of the rise and fall of Indus Civilization as a whole.*

Keywords: Hanumangarh, Rajasthan, Kalibangan, Civilization, Early Harappan, Mature Harappan, Late Harappan

Introduction

The District Hanumangarh came into existence by carving out from Ganganagar district on July 12, 1994 as the 31st district of Rajasthan state. The district covering a total geographical area of 9656.09 sq. km (DGB 2007: 2) is located between 28°46'30'' to 29°57'20'' North latitudes and 73°49'55'' to 75°31'32'' East longitudes(Ram and Chauhan 2002: 200).It is surrounded by Ganganagar district in the west, Bikaner district in the south-west, Churu district in the south, Sirsa district of Haryana in the east and Firozepur district of Punjab in the north (Figure 1).

The Hanumangarh town was earlier known as Bhatner. In the year 1805, Maharaja Surat Singh of Bikaner seized Bhatner after conquering *Bhatis* and as the day of his victory was Tuesday which is known as the day of god 'Hanuman', Bhatner was renamed as Hanumangarh by him (Hooja 2006: 721). Administratively, it is divided into seven tehsils viz. Bhadra, Hanumangarh, Nohar, Pilibanga, Rawatsar, Sangria and Tibbi with three sub-tehsils ChhaniBadi, Dabli Ratthan, and Pallu. The district has 1906 villages with a total population of 15,17,390 person as per 2001 census.

Geographical Features

The entire Hanumangarh district is covered by quaternary alluvium overlain by thin coating of wind-blown sand. The basement below alluvium consists of rocks belonging

to Palana series and Nagaur group of Marwar super group. Basement rocks consist of mudstone, sandstone and basal evaporations sequence. Quaternary alluvium is mostly fluvial in origin and consists of alternating sequence of sand, silt and clay. The thickness of alluvium varies from 100m in the southern part to over 400m in the northern part which is divided into two units i.e. Younger Alluvium and Older Alluvium. Younger Alluvium covers maximum area of the district whereas Older Alluvium is found only in southern part of the district (DGB 2007:2).

Rivers

The Ghaggar river is the only major river in the district which is locally known as *Nali* and has northeast to southwest course and finally it enters to Pakistan. It is an ephemeral drainage, which sometimes gets flooded during monsoon (Ram and Chauhan 2002: 200). In its upper course, the bed of this river runs in a more or less east-west direction, up to the Indo-Pakistan border and known variously as the Ghaggar, Hakra and Sotra. The Ghaggar is formed by a combination of two rivers which meet near Wallur (Oldham 1893: 55) or the west of Anupgarh (Erikson I959:2). It flows with heavy water in rainy season and remains dry during rest of the seasons. In ancient times, the eastern arm of the Ghaggar was formed by a combination of four rivers namely, (from east to west) Chautang or Drishadvati, Saraswati, Ghaggar and Naival (old course of Sutlej-Beas) or Semnala (Dikshit 1977 60-61).

Previous Work

Not much exploration was done in the area under study. In the early decades of 19th century Lt. Col. Todd (1832:167) explored a small part of this area and reported some ancient sites like Kalibangan. L.P. Tessitori (1916-19), an Italian scholar, in the course of his exploration visited Kalibangan in 1917 and 1918 and has left us an interesting account of his findings. Aurel Stein (1942: 173-82) carried out extensive explorations along River Ghaggar and discovered a number of Proto-historic and Historical sites. A. Ghosh (1989: 98-106) also explored this area and discovered some sites like Sothi, Sherpura and Nohar. The Harappan sites explored by Ghosh were revisited by K.N. Dikshit (1984: 55-77). They confirmed the existence of pre-Harappan pottery in this region. In 1980 K.F. Dalal (1980:40) explored Bahawalpur and Bikaner region along the 'Lost' Saraswati River that is only noteworthy work involving methodical survey and surface collection of ceramics. R. C. Thakran (Personal Communication with the Excavators) also explored some sites falling in Suratgarh and Hanumangarh Districts and conducted excavation at Dabdi, an important Early Harappan site. Later V. Shinde (2008: 77-158) piloted a random survey along the Ghaggar basin in search of Harappan sites. Apart from these explorations, a few sites in the present study area namely, Kalibangan, Sothi, Dabdi (Thakran and Singh 2007), Dabli Vas Chugta (Singh and Petrie 2011) and Karanpura-II (Prabhakar 2012) have been excavated.

Methodology and Results

The study of regional interactions and changes, through survey, are now more

common archaeological attentions than the perspective from a single settlement. The exploration led to the discovery of several hitherto unknown sites in addition to the known rich cultural repertoire of Hanumangarh district. The researcher conducted an extensive village-to-village survey in the study region and explored all 1908 villages in the district. The main aim of this exploration was to collect firsthand data about the protohistoric sites located in this region. The material inventory (ceramics and other associated finds of Harappan culture) collected from sites during the exploration were then systematically examined. As a result of this comprehensive survey, 574 archaeological sites were visited in the revenue jurisdiction of district and found over 525 new sites which were previously unknown. Among these, 74 sites related with Harappan culture were plotted on the archaeological map of Rajasthan (Table 1).

The present work is primarily based on the archaeological data available from the extensive survey conducted by the researcher. In addition, substantial help has been taken from Ethnographic and Geographical data. Data gathered in the exploration has been used to reconstruct the settlement pattern though wherever relevant and useful, earlier published data have also been utilized (Table 2).

Table 1: Total Settlements during Harappan Period

Tehsil	Early Harappan	Mature Harappan	Late Harappan
Bhadra	18	5	1
Hanumangarh	4	1	1
Nohar	25	5	-
Pilibangan	4	2	2
Rawatsar	13	-	-
Sangria	2	-	2
Tibi	5	2	1
Total	**71**	**15**	**7**

Cultural Sequence of the Area

Early Harappan Period

The earliest settlers, who belonged to the early farming community, inhabited this region in the beginning of third millennium B.C. They have been identified as Early Harappans. The total number of Early Harappan (Figure 2) sites is 71 and about 80% of total sites are found situated in the Drishadvati river basin. In the Ghaggar/Saraswati basin only 13% of total sites are located and 7% of total sites are positioned in Naival basin that shows this area was free from floods as no major river or big stream posed such problem. The excavations at Kalibangan have presented a good picture of their life-style in the region of our study. The Early Harappan settlement at Kalibangan revealed the concept of fortification. People of this culture introduced rectangular and square houses for the first time. The use of kiln fired bricks was attested to by a drain, the size of bricks being the same as that of sun baked bricks (ratio 1:2:3).

Table 2: Total list of sites related with Harappan culture in Hanumangarh District

Sr. No.	Name	Tehsil	Longitude	Latitude	Size (ha)	Culture Sequence	Reference
1	Asarjana-I	Nohar	74°38′12.2″	29°11′15.5″	2	EH, Hist.	_
2	Badbirana-V	Nohar	74°54′12.7″	29°08′06″	8	EH, MH, Hist.	_
3	Badbirana-VI	Nohar	74°54′49.1″	29°07′59.5″	2	EH, Hist.	_
4	Bannasar-I	Rawatsar	74°10′50.1″	29°01′44.6″	6	EH, Hist.	_
5	Barwali-I	Nohar	74°57′17.6″	29°15′26.3″	1	EH, Hist.	_
6	Bhagwansar-II	Nohar	74°34′24″	29°02′36.3″	8	EH, Hist.	_
7	BhairoChhani-II	Bhadra	75°19′56.5″	29°10′10″	4	EH, Hist.	_
8	Bhangarh-I	Bhadra	75°20′42.7″	28°55′08.4″	3	EH, Hist.	_
9	Bhanguli-I	Nohar	74°50′55″	28°58′14″	2	EH, Hist.	_
10	Bhinai-I	Bhadra	75°15′40.3″	28°58′13.1″	3	MH, Hist.	_
11	Bhograna-I	Nohar	74°52′30.5″	29°01′25.4″	2	EH, Hist.	_
12	Bhograna-IV	Nohar	74°51′30.6″	29°03′30.1″	2	EH, Hist.	_
13	Birkali-II	Nohar	74°34′30.4″	29°09′09″	4	EH, Hist.	_
14	Chainpura-I	Nohar	74°40′31.9″	29°02′59.9″	2	EH, Hist.	_
15	ChakRajasar-I	Nohar	74°45′16.8″	29°10′20.8″	4	EH, Hist.	_
16	Dabdi-I	Bhadra	75°25′26.9″	29°00′52.4″	2	EH	Thakran 2008
17	Dabli Chugta/ Chakjhana	Hanumangarh	74°10′10.7″	29°30′16.1″	9	EH, Hist.	_
18	Dabliwas Chugta/ Kamana	Hanumangarh	74°10′10.7″	29°31′39.1″	20	EH	_
19	Dalpatpura-II	Nohar	74°47′56.6″	29°05′12.5″	3	EH	_
20	Daniasar-II	Rawatsar	74°08′02.3″	29°57′35.9″	5	EH	_
21	Daniasar-IV	Rawatsar	74°08′56.3″	28°57′59.1″	6	EH, Hist.	_
22	Dhaba-III	Sangria	74°29′21.3″	29°53′07.7″	3	EH, Med	_
23	Dhandhusar-II	Rawatsar	74°10′31.9″	29°04′27.5″	9	EH, Hist.	_
24	Dobi-II	Bhadra	75°12′10.5″	29°03′39.7″	3	EH, MH, Hist.	_
25	Dobi-III	Bhadra	75°13′12.2″	29°03′22.8″	3	EH, MH, Hist.	_
26	Durjana-III	Nohar	74°47′53.8″	29°01′31.2″	3	EH, Hist.	_
27	Gandheli-V	Rawatsar	74°36′06.7″	29°13′33″	5	EH, Hist.	_
28	Hardaswali-II	Rawatsar	74°17′19.8″	29°07′05.1″	2	EH	_
29	Hirnawali	Hanumangarh	74°14′52.6″	29°41′10.2″	1	EH, MH	_
30	Jattan	Bhadra	75°01′35.1″	29°01′37.4″	3	EH, Hist., Med.	_
31	Jhaloda-III	Bhadra	75°21′44.3″	28°58′14″	2	EH, Hist.	_
32	Jhankharanwali	Pilibangan	74°11′11.9″	29°20′21.8″	3	EH	_
33	Jhansal-II	Bhadra	75°23′31.1″	29°12′55.7″	2	EH, MH	_
34	Jhansal-III	Bhadra	75°24′07.1″	29°12′14.8″	2	EH, Hist.	_
35	Jhansal-VII	Bhadra	75°22′33.5″	29°10′46.1″	3	EH, Hist.	_
36	Kalibangan	Pilibangan	74°0750.8″	29°28′27.1″		EH, MH	Lal 2003
37	Karanpura-II	Bhadra	75°05′47.2″	29°06′17.3″	55	EH, MH, LH, Hist.	_
38	Karouti	Nohar	74°53′06.5″	29°09′45.1″	45	EH, MH, Hist.,Med.	_

39	Kikarali	Nohar	74°38′54″	29°12′32.7″	4	EH, Hist.	_
40	Ladam-I	Rawatsar	74°09′57.4″	28°51′42.1″	5	EH	_
41	Lakhasar-II	Nohar	74°42′39.7″	29°01′53.3″	2	EH, Hist.	_
42	Lakhuwali Ward-2	Pilibangan	74°03′04.1″	29°28′31.6″	4	EH, Hist.	_
43	Lalana Bas Dikhanada	Nohar	74°52′46.7″	29°04′42.8″	4	EH, Hist.	_
44	Lalana Bas Uttarada-II	Nohar	74°55′49.4″	29°07′40″	2	EH, Hist.	_
45	Lalana Bas Uttarada-II	Nohar	74°55′26.4″	29°07′36.3″	5	EH, MH, Hist., Med	_
46	Manuka	Hanumangarh	74°13′55″	29°44′49.8″	1	EH, Hist.	_
47	Moter-II	Rawatsar	74°12′34.8″	29°03′14.6″	4	EH, Hist.	_
48	Mothsara-I	Bhadra	75°12′15.2″	29°00′08″	4	EH, Hist.	_
49	Munsari-I	Bhadra	75°02′16.3″	29°06′38.5″	3	EH	_
50	Munsari-II	Bhadra	75°02′35.3″	29°06′23.6″	2	EH, Hist.	_
51	Nagrasari-I	Nohar	74°45′53.9″	29°01′43.1″	2	EH, Hist.	_
52	Naival	Tibbi	74°33′18.4″	29°34′24.4″	15	EH, MH, LH, PGW, Hist.	Stein 1989
53	Nanau-II	Nohar	74°31′48.8″	29°05′11.1″	10	EH, Hist.	_
54	Nohar	Nohar	74°50′23.1″	29°14′48.8″		EH, MH, Hist.	Ghosh 1952; IAR 1972-73
55	Nyangal-IV	Bhadra	75°12′57.4″	29°08′04.8″	2	EH, Hist.	_
56	Nyolakhi-III	Rawatsar	74°28′55″	29°06′12.4″	6	EH, Hist.	_
57	Pilibangan Mandi	Pilibangan	74°05′06.8″	29°29′52.2		MH, LH, Hist.	Tessitori 1917-18; Stein1989
58	Pohadka-II	Rawatsar	74°22′47.9″	29°06′55″	4	EH, Hist.	_
59	Pohadka-III	Rawatsar	74°22′44″	29°07′38.1″	4	EH, Hist.	_
60	Ramsaranarayan-I	Hanumangarh	74°17′34.9″	29°33′21.3″	9	LH, PGW, Hist.	_
61	Ranisar-II	Nohar	74°37′09.9″	28°57′47.4″	2	EH, Hist.	_
62	Raslana-II	Bhadra	75°02′33.5″	29°02′27.5″	2	EH, Hist.	_
63	Rawatsar Kasba	Rawatsar	74°25′58.5″	29°16′06.2″	12	EH, Hist.	_
64	SalemgarhMasani	Tibbi	74°27′42″	29°33′55.2″	30	EH, Hist.	_
65	Saliwala	Tibbi	74°30′11.5″	29°44′32.2″	7	EH, MH	_
66	Sangthia-III	Nohar	74°40′05.3″	28°59′06.5″	2	EH, Hist.	_
67	Shah Pini	Sangria	74°18′47.8″	29°50′00.8″	10	EH, Hist.	_
68	Sherpura-II	Bhadra	75°14′48.3″	29°09′17.7″	2	EH, HIst.	_
69	Sherpura-III	Bhadra	75°14′34.1″	29°10′09.3″	4	EH, Hist.	_
70	Sirasar-IV	Rawatsar	74°07′53.7″	28°57′56.1″	3	EH, Hist.	_
71	Soti Badi-VI	Nohar	74°50′15.8″	29°11′33″	4	EH, MH, Hist.	Ghosh 1989; Dikshit 1984
72	Surewala-I	Tibbi	74°31′59.2″	29°35′12.5″	13	EH, PGW, Hist.	_
73	Surewala-II	Tibbi	74°30′59.1″	29°34′30.7″	20	EH, PGW, Hist.	_
74	Ummewala	Pilibangan	74°01′04.7″	29°42′03″	4	EH, MH	_

EH- Early Harappan, MH- Mature Harappan, LH- Late Harappan, PGW- Painted Grey Ware, Hist-Historical, Med- Medieval

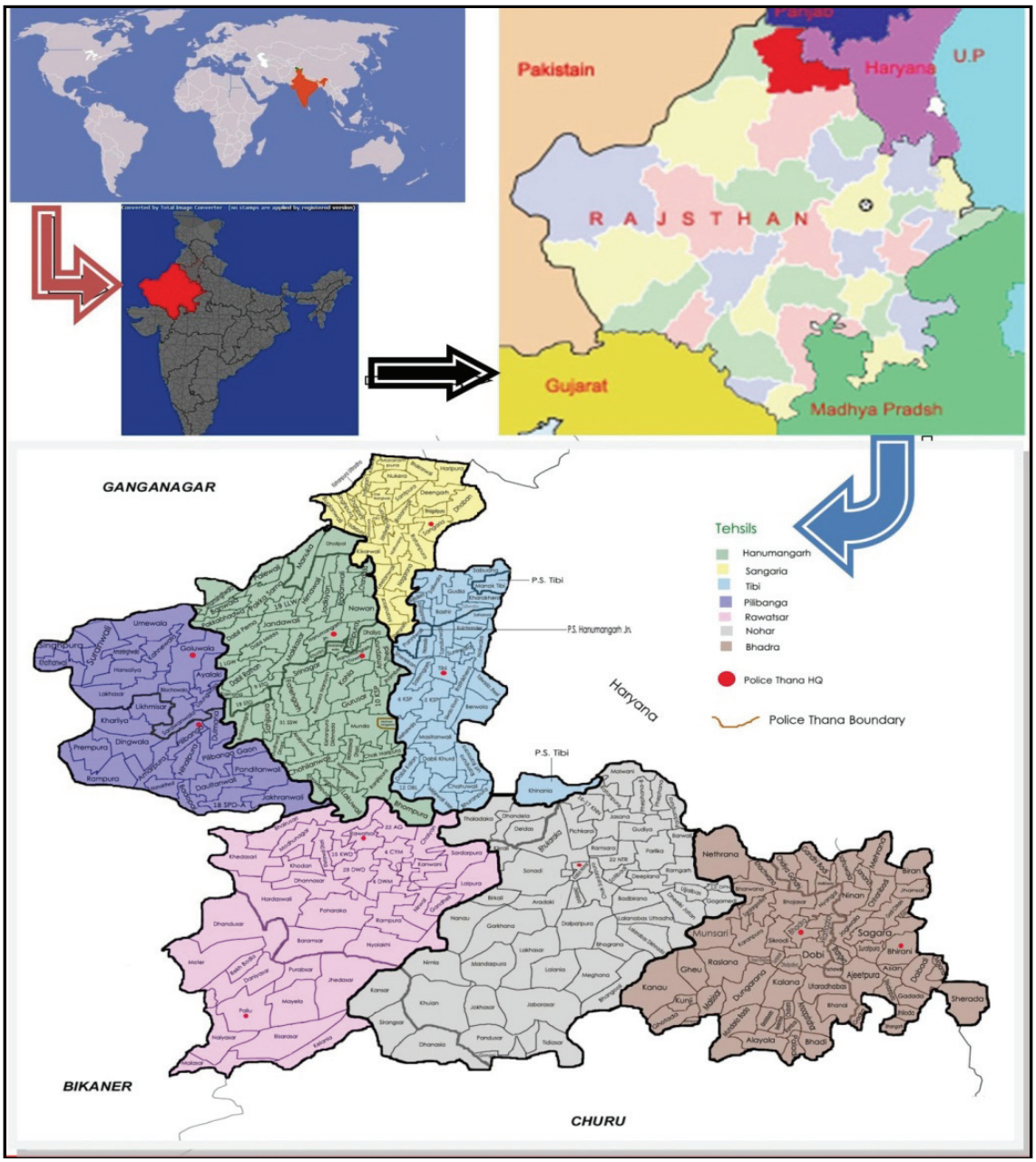

Figure 1: Map showing Hanumangarh District in global earth context

The pottery of this phase have already been chronicled from various excavated settlements like Kalibangan (IAR 1962-63: 20-23) (Period-I), Sothi (Dikshit 1984: 531-37), Dabdi-I (Thakran and Singh: Personal Communication), Dabliwas Chugta in Hanumangarh district, Baror (Sant *et al.* 2005: 50-59) in Ganganagar district of Rajasthan, Rakhigarhi (Period-I) (Nath 2001: 43-45), Siswal (Bhan 1972: 315) in Hisar district; Banawali (Bisht 1982:113-124), Bhirrana-IIA (Rao *et al.* 2005-06: 45-49) in Fatehabad district; and Mitathal (Bhan 1975:103-109) in Bhiwani district of Haryana state. These sites have a rich variation of shapes and painted designs of pottery, which in turn establish a regular evolution of the art of pot making in early Harappan times.

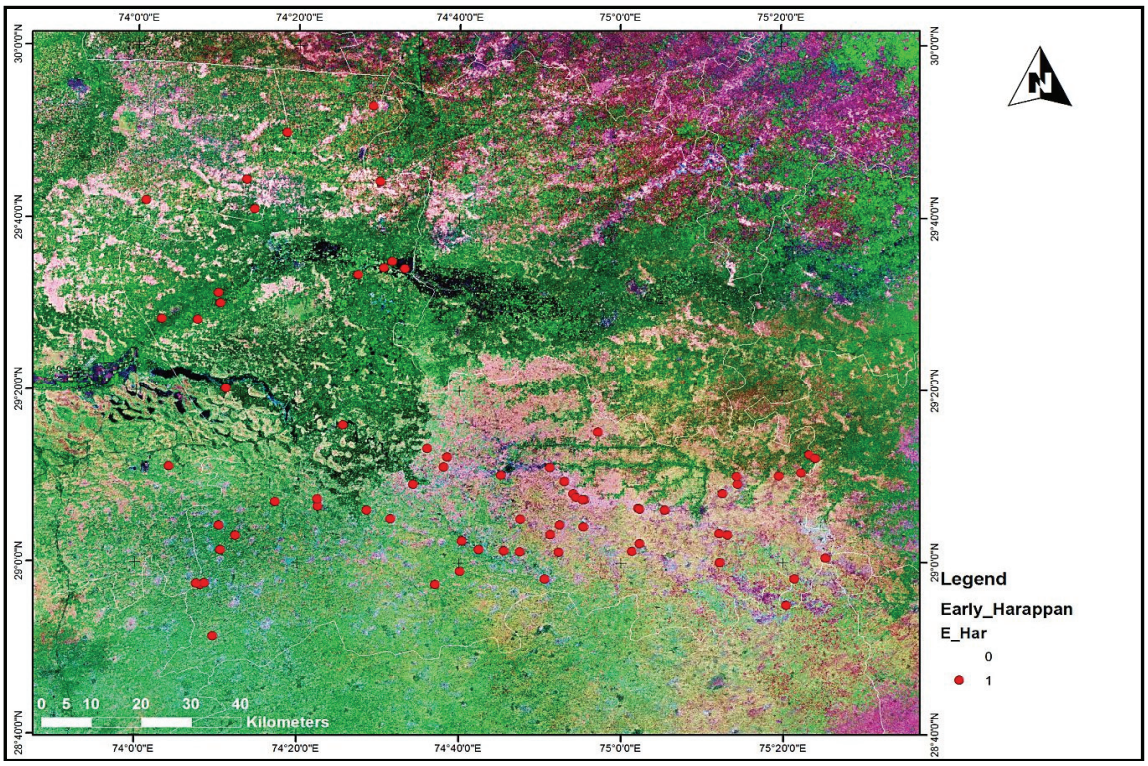

Figure 2: Map showing distribution of Early Harappan settlements in Hanumangarh district

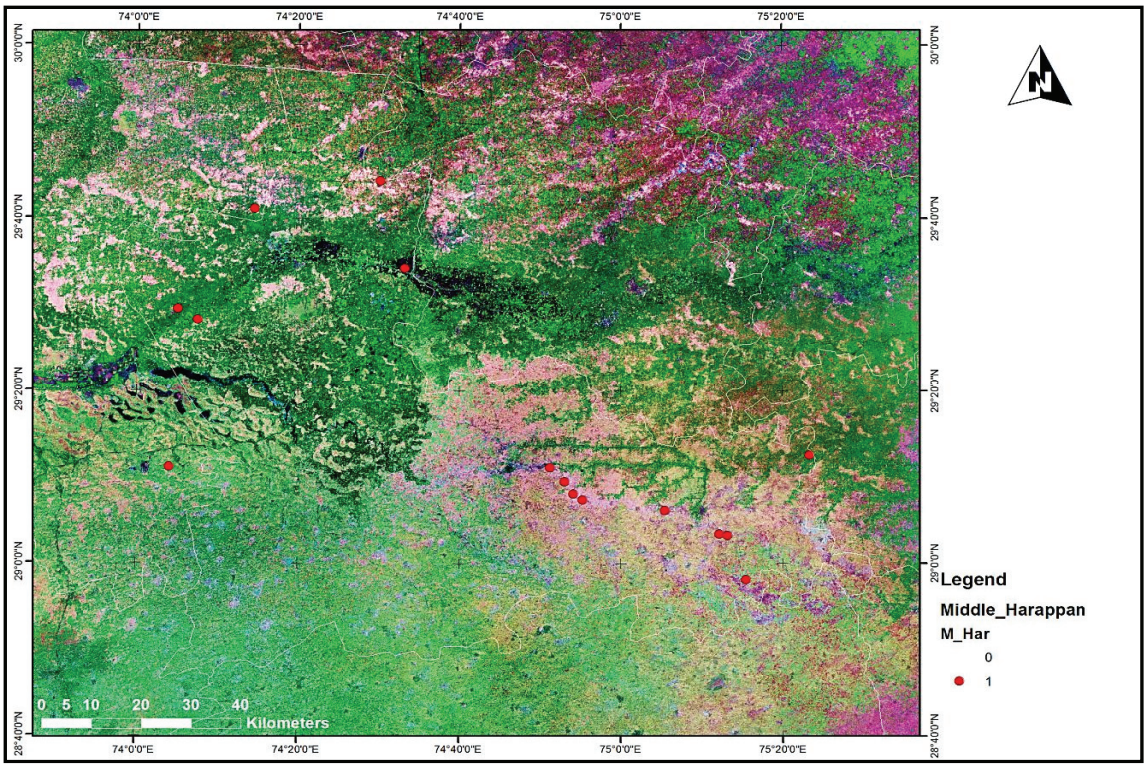

Figure 3: Map showing distribution of Mature Harappan settlements in Hanumangarh district

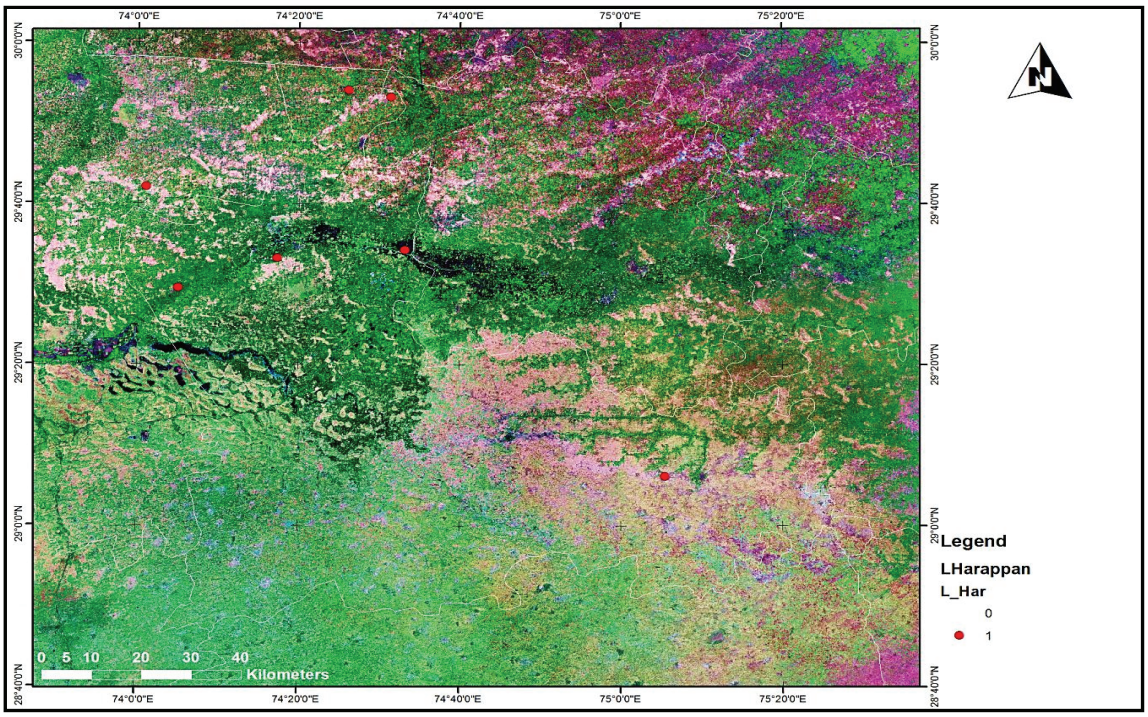

Figure 4: Map showing distribution of Late Harappan settlements in Hanumangarh district

The early Harappan pottery collected from the area under study is suggestive of the further eastward extension of that tradition. Increasing settlement of early Harappan further eastward is another best example for this debate. No doubt the pottery bears close association with that of the type-sites in regard to their shapes, decorations and surface treatment. This has been amply demonstrated in the colour scheme-usually decorated in black and chocolate colour over plain, occasionally polished, red surface and shapes.

Regarding the decoration mechanism a synthesis of painting and incision techniques is indicated. The former is usually accomplished in black colour, though occasionally chocolate colour is also applied. The painted designs are mainly consisting of linear patterns. Prominent among them are thick black bands (a salient feature of this phase), horizontal lines, zig-zag or wavy lines and oblique or vertical strokes. The natural and geometrical designs are noticeable by their complete absence. Only a few sites having this type of pottery viz. Kalibangan, Sothi, Dabliwas Chugta, Dabdi, Karanpura etc. in regard to incision technique of decoration wavy or flowing finger marks, comb pattern, oblique nail impressions in registers, chevron pattern, etc., may be enumerated. In regard to shapes the overall scenario does not seem different in any manner. Because many typical shapes representing the A to F fabrics of early Harappan ceramic ware are visible in circulation.

The economy of this rural culture was mainly depended on agriculture. The remarkable discovery of a ploughed field at Kalibangan situated to the south-east of

the settlement. A terracotta plough found from Banawali (Haryana) gives an idea about the farming technology during this period in the region.Trade was also a part of their economy but at very limited scale. Bull figurines and terracotta toy-cart frames give an idea of transportation. Excavations at Kalibangan, Sothi, Dabdi and Dabliwas Chugta/Kamana have yielded many objects made of gold, silver, agate, lapis lazuli and Rohri chert while source of their raw material was not there. The presence of these objects in this area gives an idea of trade relations with the places where their raw material was available. These relations played an important role in the cultural intercourse between Early Harappan domains.

Mature Harappan Period

The cultural phase that follows the Early Harappan in the study area is represented by the mature phase of Harappan culture (Figure 3) which is known as an urbanized phase of ancient India during protohistoric times. Only 15 sites have yielded the remains of this culture such as 'S' shaped jars, goblets, perforated jars, dish-on-stand with long stem, Chert blades, cubical weights, beads of semi-precious stones, terracotta humped bull figurine, triangular cakes, etc.

Out of these only three sites (19.5%) namely Kalibangan, Soti Badi-VI and Karanpura-II have yielded classical Harappan evidence while 69% sites are without typical Harappan traits which may have continued with Early Harappan tradition. R.S. Bisht explaining this phenomenon more precisely expresses that qualitative and quantitative presence of the classical Harappan elements was dependent on the socio-economic or political status of a given site. Harappan ceramic assemblage mainly belongs to red ware, made of well levigated clay, turned on fast wheel and generally well fired. It is found generally painted in black. The excavation at Tarkhanewala-Dera has yielded remains of a single culture i.e. mature Harappan. The excavator (Trivedi: 238) of the site has divided the ceramic of this site into five major groups viz. red ware, grey ware, red slipped ware, black on red ware and other decorated ware.As regards the surface treatment, red slip of fine quality is usually applied, giving it a very fair and attractive look. The pottery is made of well-Ievigated clay, which shows fabulous accuracy in firing technique as the core is usually brick-red creating a metallic sound on strike.

The painted designs have been accomplished in dark black colour offset nature. And further standardization is attained in relation to painted designs (Quivron 1994: 16, fig. 7:G2). These include natural as well as geometric. Among them mention may be made of fish scale, peacock, triangles, diamonds, etc. It is to be noted here in this case that all these characteristic features of the mature phase are not regularly visible on the surface of the sites in the region. But some of the features are verified during explorations. However the limited presence of such elements of the Harappan tradition is more than enough to attest the human existence at some settlements in this area.

Late Harappan Period

After the mature phase of the Harappan culture, the region has been represented by a

deurbanized phase of the culture which is the late phase of Harappan culture (Figure 4). During this phase there was an immense decrease in the settlements certainly due to unfavorable conditions which compelled them to migrate in the east in Sutlej-Yamuna divide, particularly in the parts of Haryana and western Uttar Pradesh. The pottery of this phase also represents the declining phase of the Harappan civilization. It is the fusion of Early Harappan and Harappan types but on the whole Late Harappan pottery is dominated by the Harappan fabric with some modification of shapes, potting, surface treatment, design and decorations. It is dominantly wheel-made and well fired red ware. It is generally consisted of a dull red ware of medium to sturdy fabric of soft firing technique. Occasionally its exterior tends to peel off giving a look of the decline. During the course of exploration only a few sites of this phase have been found in the region and these have not yielded pottery in much quantity from their surfaces. Moreover, no site of this phase has so far been subjected for excavation in the study area though; we are not in a position to discuss the transformation from the mature phase of Harappan period to the late Harappan phase in the region.

Conclusion

It is customary to draw a sequel to any research undertaken. In view of this one can see that district Hanumangarh had been inhabited by a large number of people from early Harappan phase. During subsequent phase, one observes that about a quarter numbers of settlements deeply show that urban centers had not maintained their rural colonies as well for crop production and livestock keeping. This indeed, reveals a more complex organizational strategy. Probably sustained horizontal excavations can reveal many significant features of the management techniques of mature Harappan society. The late Harappans show a sudden amalgamation and a flimsy occupation in this region.

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