Explorations along "Lost" River Sarasvati (Suratgarh Tehsil, Sri Ganganagar District, Rajasthan)

Samunder¹ and Vivek Dangi²

- ¹. VPO Assan, Rohtak 124 421, Haryana, India (Email: samunder1100@gmail. com)
- ². Department of History, All India Jat Heroes Memorial College, Rohtak 124001, Haryana, India (Email: vivek_dangi@yahoo.co.in)

Received: 03 June 2014; Accepted: 07 July 2014; Revised: 18 August 2014

Heritage: Journal of Multidisciplinary Studies in Archaeology 2 (2014): 783-801

Abstract: This paper is a preliminary report of the village-to-village survey along the "lost" river Sarasvati, partly in the Suratgarh tehsil of the Sri Ganganagar district of Rajasthan. A total of 79 sites of various periods have been documented, studied and explored. The present work basically deals with first-hand information of the archaeological settlements of the region. This area is very important to understand the early farming communities. By focusing on this area, we hope to better understand the issue like distribution of Sothi-Siswal and Kot Diji ceramic assemblages. This region is also important to understand the socio-economic and other issues of the Rang Mahal culture of the late Kushana period.

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Keywords: Explorations, River Sarasvati, Mature Harappan, Hakra Ware, Painted Grey Ware, Black and Red Ware, Rang Mahal Pottery

Introduction

Regional archaeology always seems to produce new and unexpected insights, it has enduring value, it is foundational for other studies at different scales, and it is (or should be) essential for heritage preservation. Such studies from regional levels in nature help us understand the currents of the national history from a closer and holistic angle. Many scholars have been paying attention to the study of regional histories since sixties of the twentieth century. But scholars have not paid adequate attentions to the reconstruction of regional histories and their different aspects.

The region of north-west Rajasthan is very rich in archaeological treasures. There are numerous sites of different ancient cultures in this region. A lot of source materials pertaining to the history and culture of this region are buried under these sites which require a lot of efforts to reveal. Its neighboring state Haryana has been extensively explored. Keeping in view all these factors, the present researchers conducted archaeological explorations in the Suratgarh tehsil, the Sri Ganganagar district, Rajasthan.

Geological Framework

The entire study area is covered by the quaternary alluvium overlain by a thin layer of wind-blown sand. The basement below the alluvium consists of rocks belonging to the Palana series and the Nagaur group of the Marwar Super group. Basement rocks consist of claystone, sandstone and basal evaporates sequence. The quaternary alluvium is mostly fluvial in origin and consists of alternating sequences of sand, silt and clay. The thickness of the alluvium varies from 100 min the southern part to over 400m in the northern part.

Topography

The whole district is plain with thick alluvium and wind-blown sand. It shows a general slope towards the south-west direction. In general, the sand dunes are 6 to 8m high, except in the south-western part where they are more intensely developed being sometimes 10 to 15m high. No hill exists in the district. The height varies between 168 and 227 m above the mean sea level (District Census Handbook 1994: LXIV).

Soil

Soils play an important role in agricultural developments and planning of a region. The area under the present study consists of Aeolian, flood plain and desert plain soils with widespread sandy, barren or well cultivated fields, sand dunes of varying heights and well-leveled plains for cultivation. Aeolian soils were formed by the deposition of fine loamy sand by wind and water erosion in the past. These soils are deep with sand to loamy fine sandy soil texture. The main soil types of the study area are discussed below:

Desert Soil: This type of soil is found in the entire study area, except the flood plain of river Ghaggar. This soil contains a high percentage of Ph value (Singh, R.L. 1995:57).

Alluvial Soil: This type of soil is mainly found along the flood plain of the Ghaggar river. In general, it has a red colour but is deficient in lime, phosphoric acid and humus. This type of soil is believed to be good for cultivation (Singh, R.L. 1995:57).

Drainage

Sarasvati: Sarasvati is the most important water channel in the present study area. It originates in the Sirmur hills and passing through Haryana it enters Rajasthan. Following through Hanumangrah, it enters the Sir Ganganagar district a few kilometers north-east of Suratgarh and it continues further westwards below Fort Abbas, the Cholistan region of Pakistan where it is called as Hakra or Wahind. After entering Sindh, it moves parallel to the Indus river and anciently flowed into the Rann of Kachchh. Sarasvati seems to have been a mighty river in the past as indicated by some dry beds 2-3 km wide along and a number of scholars had proved this (Oldham 1896:322-343; Yash Pal *et al.* 1980:317-31; Ghosh *et al.* 1979:446-451). A large number of archaeological settlements located along its bed also support this opinion.

Chautang: Chautang originates in the Siwalik hills and passes through the Jagadhari tehsil of the Yamaunanagar district, and then it crosses the National Highway No.1 near Nilokheri and passes through the Nisanag village in the Karnal district. It loses itself in the sand dunes of Jind. After Jind, its dry course can be traced from Hansi to Hissar. It then enters Rajasthan and passing through Nohar, Badhara and Ravatsar, it joins Sarasvatia few kilometers east of Suratgarh, near Rangmahal. Well-known archaeological sites like Rakhigarhi, Siswal, Khararalipur, Sothi, Nohar and Rangmahal are located along its dry bed.

Methodology

An extensive village-to-village survey in the region, with the help of a GPS handset (Garmin, GPS map 60CSx) to record correct co-ordinates of sites, was conducted. Proper sampling of the pottery and other remains from the surface and exposed sections was done. The chronology of the sites was decided on the basis of the diagnostic ceramic shapes of ancient cultures. The estimation about the size of sites was made on the basis of the area, up to which cultural deposits were found and not on the basis of the distribution of the pottery. Cultural materials discovered from the survey and housed at different museums were analyzed and studied. The available published literatures and survey reports including unpublished dissertations were examined and their data were also included in this study.

Previous Work

The region under this study is extremely rich from an archaeological point of view and thus, has been the focus of researches for a long time. Archaeological activities in the area were initiated in the early half of the nineteenth century by Lt. Col. James Todd (1882), However, he did not give much details to the archaeological wealth of the region. During 1916-19, L.P. Tessatori, an Italian scholar, who was engaged in the bardic and historical survey of Rajputana, gave details regarding some archaeological sites in the study area. His report was never published, and only stray references to this study are available. He had written in detail about the site of Rangmahal, located in the present study area. Later in 1942, Sir Aurel Stein explored the area between Hanumangarh and Fort Derawar (Bahawalpur, Pakistan). His explorations were mainly focused on the 'lost River Saraswati'. He stated that there were no prehistoric mounds with pottery of Chalcolithic period, although he explored Kalibangan and gave records. Stein (1942: 173-182) writes:

"...offer interest as marking an extensive site used mainly for burnt bricks and pottery. There composite almost entirely of kiln remains. The painted sherds found among them leave no doubt the kiln having been worked down to Kushana period".

This shows that while he was able to locate the site, his observation regarding the cultural sequence of the site was completely wrong. In 1947, the Indian subcontinent was divided into two countries, viz. India and Pakistan. This led to the most of the known and excavated Harappan sites fallinginthe political boundaries of Pakistan

leaving only two outposts Kotla Nihang Khan in Punjab and Rangpur in Kathiawad. After four years of the partition, A. Ghosh (1952:37-45), then Director General of Archaeological Survey of India, carried out systematic explorations along the dried river Saraswati, in the northern part of Bikaner. As a result of this survey, A. Ghosh proved the observations of A. Stein that there is no prehistoric mound between Hanumangarh and Fort Derawar wrong. On the other hand, A. Ghosh put Kalibangan in a proper chronological sequence. He discovered about 25 prehistoric sites between Hanumangarh and Anupgarh. Baror, Tarkhanewala Dera and Chak 86 were also discovered by him. Apart from these explorations, he conducted trial excavations at Tarkhanewala Dera and Chak 86. Katy Frenchmen Dalal (1972) of Deccan College, Pune, explored some already reported sites for her Ph.D. thesis. After a long gap, Vivek Dangi (2010) of M.D. University, Rohtak carried out explorations at a few sites in the area under the present study. Rang Mahal (Rydh 1959) is the only excavated site in the study area but a few sites have been excavated in the vicinity of this study area, viz. Kalibangan (Lal et al. 2003; Lal 1997, 1998). Baror (Sant et al. 2005: 50-55), Tarkhanewala Dera (Trivedi 2009) and Chak 86 (Trivedi 2009) help us to understand various socioeconomic aspects of the past cultures.

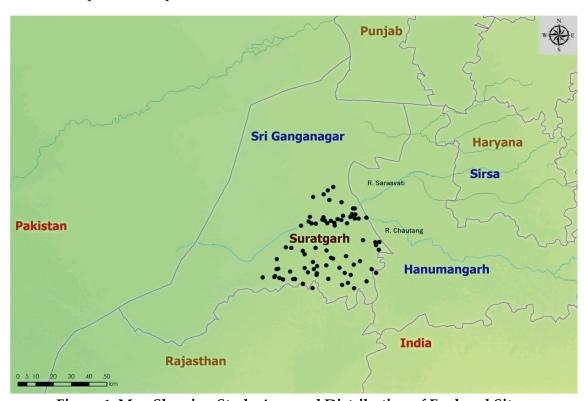


Figure 1: Map Showing Study Area and Distribution of Explored Sites

The earlier surveys carried out by previous scholars were not systematic; most of surveys were focused on the bed of river Ghaggar. For the first time, the systematic village-to-village survey was carried out by the present researchers. During the explorations, 79 sites were explored (Fig. 1; Tables 1 and 2). Some important sites located in the adjoining study area were also explored. Except Ladana, Birthwala-I,

Chak 2 GDSM-2, Chak 7 SGM and Chadser, most of the sites were placed on the archaeological map for the first time. The explored sites are discussed alphabetically and described briefly with their location, size and cultural bearings in the following table.

Table 1: Explored Sites in the Study Area

Sr.	Site Name	Explored Sites in Latitude	Longitude	Area in	Cultural
No.		2442444		Hect.	Sequence
1	Amarpura-1	29° 22′ 33.5″	73° 58′ 31.3″	1	Hist.
2	Amarpura-2	29° 23′ 27.6″	73° 59′ 06.1″	1.5	Hist.
3	Amarpura-3	29° 23′ 19.7″	74° 00′ 17.4″	1	Hist.
4	Bachrara	29° 01′ 49.7″	73° 55′ 52.3″	3	Hist.
5	Bhajewala	29° 15′ 29.4″	74° 02′ 58.4″	3	Hist.
6	Bhajushar	29° 04′ 52.7″	73° 58′ 49.8″	3	Hist.
7	Bhopalshar (3 BPM)	29° 04′ 01.7″	73° 32′ 25.2″	3	Hist.
8	Birmana-1 (Chak 3 BMN)	29° 11′ 01.9″	73° 42′ 49.2″	2	Hist.
9	Birmana-2 (Chak 1 BMN)	29° 08′ 44.3″	73° 45′ 42.5″	3	Hist., Med.
10	Birmana-3 (Chak 2 BMN)	29° 06′ 32.5″	73° 46′ 04.0″	2	Hist.
11	Birthwala-1	29° 07′ 02.2″	73° 54′ 54.4″	3	PGW, Hist.
12	Birthwala-2	29° 07′ 57.4″	73° 54′ 36.6″	2	HW
13	Chadshar	29° 06′ 42.2″	74° 06′ 05.3″	2	LH, Hist.
14	Chak 2 GDSM-1	29° 06′ 31.5″	73° 33′ 40.7″	1	EH, Hist.
15	Chak 2 GDSM-2	29° 06′ 24.8″	73° 33′ 09.5″	2	Hakra, EH,
					Hist.
16	Chak 22 LGW	29° 31′ 39.1″	73° 52′ 31.8″	2	PGW, Hist.
17	Chak 26 LGW	29° 29′ 23.5″	73° 49′ 11.8″	2	Hist.
18	Chak 32 PBN	29° 21′ 20.3″	73 [°] 51′ 45.3″	3	PGW, Hist.
19	Chak 335 RD	29° 05′ 44.4″	73° 37′ 52.3″	2	Hist., Med.
20	Chak 34 PBN	29° 20′ 35.1″	73° 50′ 32.5″	3	Hist.
21	Chak 35PBN	29° 20′ 42.5″	73 [°] 53′ 00.1″	.5	LH, Hist.
22	Chak 43 PBN	29° 20′ 25.0″	73° 46′ 31.4″	2	PGW, Hist.
23	Chak 46 PBN	29° 20′ 29.6″	73° 45′ 05.1″	3	Hist.
24	Chak 47 PBN	29° 21′ 03.0″	73° 44′ 03.6″	2	PGW, Hist. BRW
25	Chak 5 SGM	29° 21′ 21.5″	73° 49′ 46.0″	3	Hist.
26	Chak 52 PBN	29 [°] 19′ 45.9″	73 [°] 41′ 25.4″	3	PGW, Hist.
27	Chak 6 SGM	29° 22′ 25.2″	73° 49′ 11.1″	2	Hist.
28	Chak 7 SGM	29° 21′ 38.8″	73° 48′ 49.3″	2	Hakra, EH,
					MH, Hist.

29	Chak R-29	29° 21′ 51.6″	73° 54′ 06.8″	3	PGW, Hist.
30	Chak R-37	29° 22′ 56.2″	73° 58′ 55.1″	3	PGW, Hist.
31	Chak RPM-1	29° 22′ 54.8″	73° 55′ 58.6″	2	Hist.
32	Chak RPM-3	29° 21′ 36.1″	73° 55′ 24.1″	3	Hist.
33	Chak-37	29° 19′ 54.1″	73° 53′ 10.6″	3	PGW, Hist.
34	Deispura	29° 02′ 30.2″	73° 57′ 54.0″		Hist.
35	Faridshar	29° 08′ 02.6″	73° 59′ 50.5″		Hist.
36	Gopalshara-1	29° 03′ 29.2″	73° 39′ 34.7″	2	PGW, Hist.
37	Gopalshara-2	29° 03′ 26.6	73° 38′ 56.8″	2	Hist., Med.
38	Govindshar	29° 04′ 18.8″	73° 32′ 41.2″	2	Hist., Med.
39	Gudli (4 BKSM)	29° 09′ 26.8″	73° 33′ 09.3″	2	LH, Hist.
40	Gushaishar	29° 05′ 35,9″	74° 07′ 40.5″	3	Hist.
41	Haridaswali	29° 12′ 04.5″	73° 42′ 09.2″	1	Hist.
	(Chak1 BPM)				
42	Harisinghpura	29° 07′ 28.3″	73° 47′ 08.2″	2	Hist.
43	Indrashar-1	29° 03′ 45.6″	73° 34′ 09.0″	2	Hist, Med
	(Chak2 DGM)				
44	Indrashar-2	29° 03′ 16.7″	73° 35′ 24.0″	3	Hist.
	(Chak1 DO)				
45	Kalushar	29° 12′ 37.8″	74° 08′ 30.3″		Hist.
46	Kannohar-1	29° 14′ 54.7″	74° 07′ 19.3″	5	Hist.
47	Kannohar-2	29° 14′ 02.0″	74° 07′ 30.8″		Hist.
48	Kasdu	29° 05′ 31.1″	73° 56′ 45.9″		Hist.
49	Ladana	29° 12′ 14.7″	73° 50′ 23.5″	1.5	Hakra, Hist.
50	Ladder	29° 00′ 51.1″	74° 00′ 03.9″	3	Hist.
51	Lalgadhiya-1	29° 06′ 53.8″	73° 42′ 52.6″	3	Hist.
	(Chak 2 LGM)				
52	Lalgadhiya-2	29° 05′ 33.3″	73 [°] 43′ 59.4″	3	Hist.
53	Maler-1	29° 05′ 19.0″	73° 47′ 08.5″	2	Hist.
54	Maler-2	29° 04′ 48.2″	73° 47′ 01.0″	3	Hist.
55	Manak Thedi-1	29° 22′ 05.8″	74° 01′ 25.9″	1	Hist.
56	Manak Thedi-2	29° 22′ 06.7″	74° 00′ 02.0″	1	Hist.
57	Nirwana	29° 28′ 33.9″	73° 45′ 33.0″	2	Hist
	(Chak3 NRDB)				
58	Prempura	29° 27′ 00.7″	73° 55′ 26.8″	2.5	Hist.
59	Raghunathpura-1	29° 12′ 56.0″	73° 38′ 09.2″	2	Hist.
60	Raghunathpura-2	29° 13′ 07.9″	73° 36′ 13.8″	2	Hist.
	(Chak 1 BPSM)				
61	Rameshra	29° 27′ 42.5″	73° 51′ 09.4″	1	Hist.
	(Chak 20 STB)				
62	Rampura-2	29° 25′ 10.8″	73° 59′ 25.9″	4	PGW, Hist.
63	Rampura-3	29° 25′ 12.2″	74° 00′ 01.8″	1	Hist.

64	Rangmahel	29° 20′ 36.6″	73° 57′ 21.7″	4	Hist.
65	Rayanwali	29° 10′ 35.2″	73° 57′ 10.0″	2	Hist.
66	Raziyashar Station	29° 03′ 38.7″	73° 51′ 05.1″	2	Hist.
67	Sangeet (4 APM)	29° 13′ 02.5″	73° 46′ 33.7″	3	Hist.
68	Sanwarsar	29° 02′ 58.8″	74° 04′ 20.4″	3	Hist.
69	Sardargarh	29° 22′ 27.2″	73° 44′ 31.1″	4	Hist.
70	SardarpuraBikka	29° 30′ 34.9″	73° 50′ 35.0″	1	Hist.
71	Shivnathpura-1	29° 02′ 02.4″	73 [°] 42′ 20.5″	4	EH, Hist.
72	Shivnathpura-2	29° 00′ 45.2″	73° 45′ 38.6″	2	Hist.
73	Surjanshar	29° 03′ 50.6″	73° 28′ 21.0″	2	Hist.
	(Chak 11 GM, 2LM)				
74	Thakurwala	29° 22′ 24.5″	74° 04′ 04.9″	3.5	Hist.
75	Thethar	29° 14′ 59.8″	74° 08′ 40.2″	3	Hist.
76	Thukrana	29° 09′ 04.9″	74° 02′ 02.1″	8	Hist.
77	Udaypur Godaran-1	29° 07′ 45.9″	73° 50′ 19.6″	3	Hist.
78	Udaypur Godaran-2	29° 10′ 03.5″	73° 51′ 58.7″	3	Hist.
79	Udaypur Godaran-3	29° 09′ 48.4″	73° 52 38.8″	3	Hist.

Hakra = Hakra Ware Culture, EH = Early Harappan, MH = Mature Harappan, LH = Late Harappan, PGW = Painted Grey Ware, BRW = Black-and-Red Ware, Hist. = Historical, Med. = Medieval

Table 2: Number of Sites of Various Cultures from the Study Area

Sl. No.	Cultural Period	Number of Sites
1	Hakra	4
2	Early Harappan	4
3	Mature Harappan	1
4	Late Harappan	3
5	PGW and BRW	11
6	Historical (Rangmahal)	78
7	Medieval	5

Discussion

The geographical setting of the area under the present study, especially the availability of water and fertile soil suitable for agriculture and vast pastoral lands for stock raising, played an important role in attracting the early farming communities.

The area under the present study was first occupied by the people of the Hakra ware using culture. The term 'Hakra Culture' was defined by Rafique Mughal after his survey in the Cholistan desert (Mughal 1982: 90) along the river Hakra (Ghaggar). During our explorations, four sites yielded the remains of this culture. In the area under the present study,not even a single site has been excavated so far. But in the adjoining area two sites, viz. Kalibangan and Baror (Sant et al. 2005:55), have been excavated. At Kalinabgan, no separate horizon of this culture was found. The Hakra

type pottery was found in the lower levels of the Early Harappan deposits (Madhu Bala 2003:219-221). At Baror, a separate horizon of this culture was found and the excavator labelled it as the Pre-Harappan (Sant et. al 2005: 50-55). Baror, a site located in the mid-Ghaggar Basin (the Sri Ganganagar district of Rajasthan) and close to the Indo-Pak border (very near to the Cholisthan region), has yielded the remains of the Hakra period from the lowest levels in a limited area; no brick structure was found, however some ashy bands and postholes indicates that the first settlers at Baror lived in huts (Sant et al. 2005:51). The Hakra pottery recovered from various sites can be classified into four types on the basis of the surface treatment and fabric, viz. i) incised ware, ii) appliqué ware; iii) black burnished ware; iv) grey ware (Fig. 2). The common shapes in this pottery are small-sized vases, jars and basins. About 30% of pottery was found handmade. Apart from pottery, a large number of micro blades of non-Rohri chert along with bladelets, flakes and cores and sand stone kitchen objects were found during the course of explorations. The Hakra pottery recovered from the area under the present study is different from the Hakra pottery recovered from the lowest levels of Kunal (Khatriand Acharya1995), Bhirrana (Raovet al. 2004, 2005 and 2006), Girawad (Uesugi 2011) and the Pre-Harappan pottery recovered from the exploration (Dangi 2007, 2009a, 2009b, 2010 and 2012).



Figure 2: Hakra Ware

The area under the present study is very important for the study of the Early Harappan phase/culture of the Harappan civilization in general and for our understanding of the spatio-temporal distribution of the Sothi-Siswal and Kot Diji ceramics in particular.

This area is located between the major zone of the Sothi-Siswal pottery in the east and the one of the Kot Diji pottery in the west. During the course of explorations, four sites belonging to this culture were explored and the material culture recovered from the surface was studied in detail. At these Early Harappan sites, the Kot Diji and the Sothi-Siswal were recovered in equal percentages. A few sites towards the Indo-Pak border near Anupgarh were also explored and it was found that as we move towards west, the percentage of the Kot Diji pottery increases and as we move to Kalibangan and further east the Sothi-Siswal pottery started increasing. The common shapes in the Early Harappan pottery include vases, jars, flanged vases, bowls and basins. The painted motifs include black bands, hatched triangles, circles and criss-cross lines. In the case of bowls and basins, the inner surface is decorated with comb-incised parallel grooves, straight, wavy or criss-cross. The main shapes in the bichrome pottery include vases of small to medium sizes. These were decorated with geometric or floral motifs, outlined in black and filled with a white pigment.

Most of the Early Harappan pottery was usually thrown on a slow wheel; the rim and neck portion are finished by smoothening with rotation whereas the body portion is finished without rotation, as striations and finger impressions of smoothening and scraping are observed on the surface in an irregular way. Usually the wall of the pottery has an uneven thickness. The loop-handled vases with a ring base are quite common (Figs. 3 and 4).



Figure 3: Early Harappan Pottery



Figure 4: Early Harappan Pottery

The cultural phase that follows the Early Harappan period in the region represents the urban Harappan civilization. Only one site related to this phase were identified in this region. This site yielded classical Harappan pottery including perforated jars, goblets, dish-on-stands with a flaring rim, lids (Figs. 5 and 6) etc. along with other Harappan artefacts. The typical Harappan artefacts such as chert blades, beads of semi-precious stones and copper objects (Fig. 7) were found during the course of explorations.

The fourth cultural phase in the proto-history of this region is distinguished by the Late Harappan culture or degenerated phase of Harappans. The classical Harappan shapes like goblets, perforated jars and classical Harappan paintings fell out of use but some shapes such as beakers, nail headed bowls, dish-on-stands with a long stem, etc. continue with modifications. The common pottery types are dish-on-stands with a ribbed junction, dish-on-stands with a broad and short stand, vases with a projected undercut rim, jars with a wide and narrow mouth, globular vases with a flanged rim, beakers with an out-turned rim and flasks treated with a fine red slip (Fig. 8). All the three Late Harappan sites were established on fresh ground. Not a single site of this period has been taken up for excavation till the date but in the upper Ghaggar basin a number of sites have been excavated which throw a welcome light on the various aspects of this culture. The area under the present study is lying between three different cultural zones of late phases of Harappan viz. Cemetery H culture, Mitathal IIB / Bara culture and Jhukar - Jhangar culture. It is very difficult to say which culture gave strong influences in this area during the Late Harappan period. The potsherds recovered in the explorations show some similarities with Cemetery H pottery and Mitathal IIB pottery.



Figure 5: Mature Harappan Pottery

For the proto-historic period, the last phase is characterized by the advent of the PGW people (Figs. 9 - 11). Eleven PGW sites were located and all the sites were inhabited on the fresh ground. So far as not even a single site has been excavated in the area under the present study, but in the adjoining region Chak 86 has been excavated. There is a variation in the ceramics of this culture in Haryana and Rajasthan. Grey ware and PGW are similar in both the regions but the associated red wares exhibit number of differences. In the Suratgarh and Anupgarh regions of the Sri Ganganagar district, the red ware is medium to fine fabric and not even a single sherd of a coarser fabric was noticed. Some of the sherds were found decorated with black bands, whereas the red ware pottery is largely coarse in fabric and is unpainted in Haryana (Dangi 2010:391-392).

During the Historical period, the area was thickly populated as is indicated by the discovery of 78 sites. All the sites yielded typical pottery of the Rang Mahal tradition. The sixth group of the ceramic industries in the study area belongs to the Historical red ware. The Historical period of the study area is known as 'Rang Mahalculture' if we depend on ceramics. The Rang Mahal pottery is wheel turned and is reddish, pinkish and yellowish in colour. The Rang Mahal pottery is well-fired and it usually have a brick red core, although some fragments have a grey core between two red walls. The main shapes in this type of pottery are globular jars, carinated vessels, flask-shaped jars, spouted jars, sprinklers, stove-like vessels, cooking *handis*, storage jars, pans, pans with loop handles, tripod vessels, jugs with handles, beakers, globular bowls, conical bowls, basins, lids, stands, lamps, incense burners, perforated bowls and vases.



Figure 6: Mature Harappan Pottery



Figure 7: Copper Objects



Figure 8: Late Harappan Pottery



Figure 9: Painted Grey Ware



Figure 10: Painted Grey Ware Associated Black and Red Ware



Figure 11: Painted Grey Ware Associated Red Ware



Figure 12: Rang Mahal Pottery



Figure 13: Rang Mahal Pottery



Figure 14: Rang Mahal Pottery



Figure 15: Rang Mahal Pottery

The most striking features of the Rang Mahal pottery is the painted designs. Most of the pottery is painted with a black pigment and both geometrical and natural motifs are found in paintings (Figs. 12-15). According to Hanna Rydh (1959), the excavator of Rang Mahal, "the first reaction of the archaeologists on seeing the Rang Mahal Painted pottery is to compare it with the Mohenjo-Daro/ Harappa painted pottery and to wonder whether there is a connection between the two".

As we move towards the east of Rang Mahal the paintings on the historical pottery became lesser and lesser. In Haryana there are a few painting on the pottery of this period and if we see pottery of the Ganga plain, historical pottery is largely plain and without painting.

Conclusion

The present study has placed 65 new sites on the archaeological map of India. The geographical area under the present study is marked by the Sarasvati flood plain, sand dunes and shifting dunes. Most of the study area except for the Sarasvati dry bed and flood plain is covered by sand. There is no perennial source of water, but sometimes during heavy raining, the flood water from Haryana through river Ghaggar floods the region and deposits new fertile alluvial soil. All of the important Harappan and PGW sites are located on this flood plain.

The authors explored 79 sites and recorded their correct location with the help of GPS; such micro level studies shall contribute to our understanding of the history of this region, especially to the study of settlement pattern. In the present situation, this kind of study focusing mainly on explorations has its own importance because most of the archaeological sites are either being converted into the agriculture fields or the soil is removed for making roads, canals and domestic structures. Even today it is very difficult to spot an intact mound. By this study, we not only recorded the sites but also retrieved cultural materials which would have otherwise been lost forever.

Acknowledgements

It is our pleasant duty to acknowledge many individuals who enlightened us during the research work, Profs. Manmohan Kumar, P.P. Joglaker, Dr. K.N. Dikshit, Dr. B.R. Mani, Dr. R.S. Bisht, and Dr. J.S. Kharakwal for their support, valuable suggestions and encouragements. We are grateful to Dr. Ajit Kumar and Dr. Rajesh for accepting this paper for publication. We owe sincere thanks to Dr. Akinori Uesugi for his supports in all ways.

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