
Archaeological Investigations in the Gomti Basin, Middle Ganga Plain

Prabhakar Upadhyay¹

¹. Department of Ancient Indian History, Culture and Archaeology, Banaras Hindu University, Ajagara, Varanasi, Uttar Pradesh – 221 005, India (Email: prabhakarupadhyay.bhu@gmail.com)

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Abstract: The Gomati river having a catchment area of 18,750 square kilometer flows through the vast area of upper and middle Gangetic plains. A good number of Mesolithic sites mostly located on the palaeo-channels (living or dried-up lakes) have been reported from the catchment area of the river in middle Ganga plain. Our field investigation confined to the lower Gomti basin along the present course of the river has brought to light more than six dozen new sites belonging to pre-NBPW period to medieval period. In this paper we propose to present a brief summary of the archaeological investigation which throws new light on different aspects of early cultures of middle Ganga plain.

Keywords: Gomti Basin, Hariharpur, Mesolithic, Middle Ganga Plain, Pre-NBPW, NBPW, Sunga-Kushana

Introduction

The Gomti river, also known as the Gumti or Gomati, is a monsoon and groundwater fed perennial river of the Ganga plain. It is one of the important tributaries of the Ganga. It originates near Mainkot, from a lake – ‘Gomat Taal’ (formally known as Fulhaar Jheel) in Madhotanda, about 30 km east of the Pilibhit town in Uttar Pradesh at an elevation of 185 m. (about 55 km south of the Himalayas foothills). The river flows through an incised valley southward through the districts of Sitapur, Lucknow, Barabanki, Sultanpur and Jaunpur before meeting the Ganga river at Kaithi, district Ghazipur, bordering Varanasi (at an elevation of 61 m) after traversing 950 km in south, south-east direction (Irrigation and Water Resources Department, Government of Uttar Pradesh, India). Throughout its stretch, there are many tributaries such as Kathina, Bhainsi, Sarayan, Gon, Reth, Sai, Pili and Kalyani, originating within short distances. Among these, Sai river is a major tributary of Gomti, which joins the Gomti near Jaunpur.

River Gomti drains a basin of about 18,750 square kilometres. Majority of the surface area of the Gomti basin is generally flat, sloping towards south and south-east with

altitude varying from 200 m to 62 m above mean sea level. For about 450 km from the origin, the difference in the elevation is about 100 m and for the remaining stretch of 500 km, there is an elevation difference of only 25 m. The river is characterized by sluggish flow throughout the year, except during the monsoon season. It is very winding river particularly in its lower parts. This fact may have given rise to the erroneous notion that the name of the river is derived from the word *ghumati* (winding).

The Indian cities of Lucknow, Sultanpur and Jaunpur are located on the banks of the Gomti. The Hindus believe that the river is daughter of Vedic sage Vashistha, and bathing in the waters of the Gomti can remove their sin. The banks of Gomti are generally steep and scoured by ravines, which carry down the drainage from the land on either side. From time immemorial the study area was a melting pot of numerous ethnic groups, which were responsible for the rise, and growth of several prehistoric, protohistoric and early historical cultures.

Previous Work Done in the Area

A. C. L. Carlleyle (1885: 97-105) who explored some sites of archaeological importance put the area under study on the archaeological map of the world as early as 1885. Carlleyle reported a number of sites in this area including Zoharganj, Masaon Dih, Chandravati and Vairahata (Carlleyle 1885: 109). A small excavation made in 1879 by Carlleyle at Zoharganj found the sequence going back to Mesolithic age at a depth of 10 m. Further at Mason Dih, near Zoharganj, a few kilometres away from the bank of the Ganges, he found superlative quality of NBPW and few punch-marked coins. In 1891, Fuhrer (1891: 212-230) listed some more sites in the area including Bhitari, Chandravati and others. Cunningham has made small excavations at Bhitari and results were published by Fuhrer.

It may be noted that all these explorations were mainly carried out with a view to listing antiquities, old forts and monuments in the area and the ceramic evidence, which is so commonly used today in the explorations of early historical site, was not utilized in those days. After the end of 19th century no significant archaeological investigation was done for the subsequent six decades and it was only in 1968-69 that the Banaras Hindu University conducted excavations at Bhitari which was started well-planned and was a systematic work in the area (IAR 1968-69: 38-39).

Exploration along Gomati River

A team of the Archaeology Unit of the Department of AIHC and Archaeology, Banaras Hindu University under the direction of Prof. Vibha Tripathi conducted an exploration along the Gomti river in Saidpur *tehsil* of Ghazipur, Kerakat *tehsil* of Jaunpur district and some part of Varanasi district in 2005-06 (Tripathi et al. 2008: 39-52). After this exploratory work which brought to light more than 30 new sites, a protohistoric site, Hariharpur was excavated by the Department of AIHC and Archaeology, Banaras Hindu University under the direction of Prof. Vibha Tripathi in session 2006-07. The

excavation revealed a sequence of three cultural periods from Pre-NBPW to Sunga-Kushana period. Besides participating in the exploration and excavation, the present author visited a few more new sites of the region in 2007 (Upadhyay 2009: 13).

In continuation of the previous investigation, another team of the Archaeologists of the Department under the direction of present author and assisted by Dr. Rahul Raj and Shri Tarkeshwar Nath Pandey explored the areas along the bank of Gomti river up to Naipura village in Kerakat *tehsil* of Jaunpur in session 2008-09 and brought to light nearly four dozen new ancient settlements along the Gomti river (Upadhyay 2017: 210-219). Among these, the pre-NBPW phase is represented at the ancient settlements of Mahadewa, Narahan, Kirakat, Chaharam Patti, Bhadehri and Belaon (Figure 1). Besides this, we have also conducted another exploratory work in 2013-14 in Badalapur, Khutahan and Baksha blocks of Badalaur *tehsil* of Jaunpur district along the Gomti river which brought to light 11 new sites of archaeological importance.

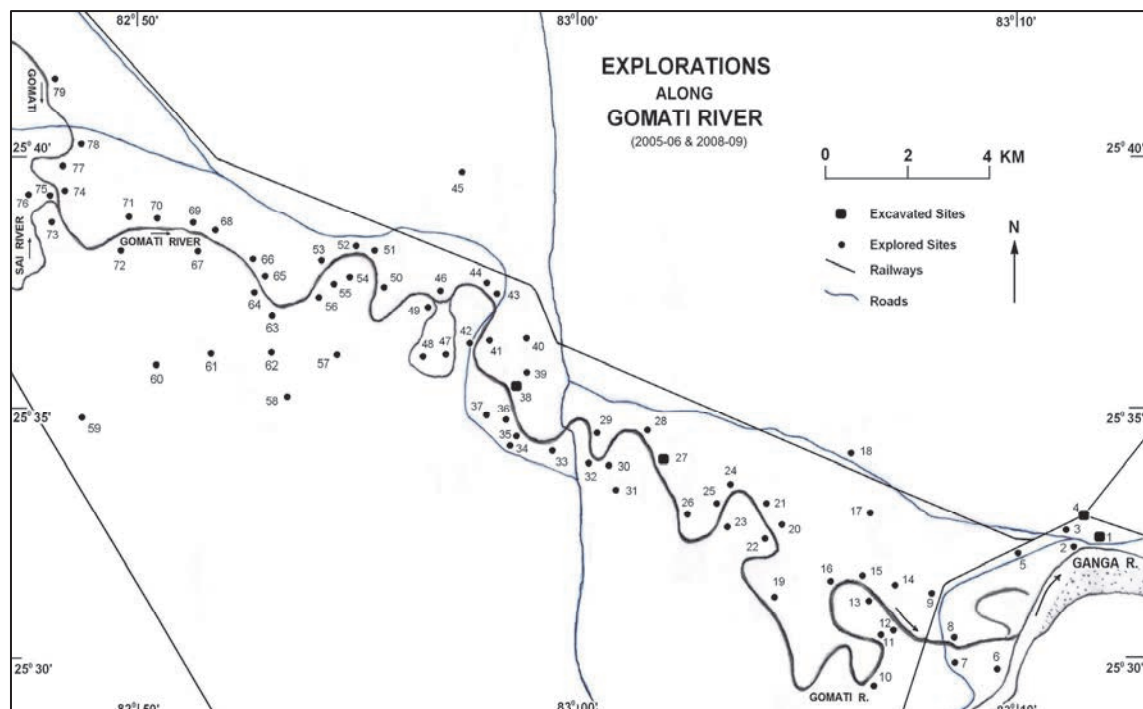


Figure 1: Explored sites along the Gomti river, district Ghazipur, Varanasi and Jaunpur

As mentioned above, our exploratory work along the Gomti River brought to light a large number of new sites in the lower Gomti basin. The main objective of these explorations was to visit the sites for random sampling in order to assess archaeological potential of different areas. In the course of the explorations a variety of potsherds belonging to different cultural periods were brought to light. The main potsherds are Red Ware, Black-and-Red Ware, Black slipped Ware, Grey Ware, NBPW and Red ware belonging to Sunga-Kushana, Gupta and Medieval periods. So far, we have been able to explore more than seven dozen sites of archaeological importance which is listed in Table 1.

Table 1: List of Explored Sites

Site No.	Name of the Site	Material Remains
1	Zoharganj	Mesolithic to Kushana-Gupta period
2	Aurihar (Varah Temple)	Kushana-Gupta
3	Aurihar	Medieval pottery, Late Medieval fort
4	Mason Dih	Pre-NBPW to Gupta period
5	Gopalpur	Kushana pottery
6	Kaithi	Kushana-Gupta remains, brickbats
7	Rajwari	Kushana pottery
8	Kharauna	Kushana-Gupta remains, brickbats
9	Sidhauna	Red Ware
10	Dharauhara	Red Ware
11	Duduwan	Black-and-Red Ware, Red Ware
12	Saraiya (Raipur)	Early Historic, NBPW
13	Lakshmisempur (Tekuri)	Kushana
14	Amehta	Kushana remains and brickbats
15	Niruddinpur	Kushana and Gupta remains
16	Gauri	Red Ware
17	Sarvarpur	Kushana remains
18	Saraiya (Baheri)	Early Medieval period
19	Bahura	BRW, BSW, NBPW, Kushana coin, iron slag
20	Newada-I	Kushana remains, brickbats
21	Newada-II	Kushana pottery
22	Niyar	Kushana-Gupta pottery, TC discs and balls, fragments of ring well, iron slag.
23	Bavatpur	Gupta potsherds TC animal figurines
24	Barahpur	Kushana remains and structures
25	Chandepur	Red Ware
26	Bhagtauli	Gupta period, terracotta and brickbats
27	Muari (Balrampur)	BRW, BSW, NBPW, RW, Glazed Ware, beads, iron slag and Early Medieval sculptures
28	Saripur	BRW, BSW, NBPW, RW, beads, slag
29	Chaubepur	Red Ware
30	Koilan	BRW, BSW, NBPW, Red Ware
31	Bhidur	Black Slipped Ware, Red Ware
32	Balua	Kushana pottery
33	Ramgarh	Kushana pottery
34	Bhainsa	Kushana pottery
35	Kusare	Kushana and Medieval pottery
36	Bansipur Tadi	Kushana and Medieval pottery
37	Brahamanpur	Gupta period
38	Hariharpur	BRW, BSW, NBPW, Sunga-Kushana and

		remains of Early Medieval periods
39	Kop Kalan (Mukaripur)	BSW and Kushana remains
40	Hairharpur Chaauni	Kushana pottery
41	Balua	Kushana pottery
42	Gobra	Kushana pottery
43	Mahadewa Malihan	Kushana pottery
44	Mahadewa	BRW, Painted BSW, GW, NBPW, bead and terracotta animal figurines
45	Khargasipur	Medieval pottery and brickbats
46	Saraunj	Medieval pottery
47	Bhitri	Kushana pottery
48	Gopalpur	Kushana pottery
49	Masora	Kushana pottery and figurine
50	Charareth	Kushana pottery
51	Narahan	BSW, GW, RW, slag and brickbats
52	Kirakat (Kerakat)	BRW, BSW, RW and brickbats
53	Sihauli	Kushana pottery and animal figurine
54	Udai Chanpur	Kushana pottery
55	Chaharam Patti	BSW, Kushana remains, bricks and animal figurines
56	Bansnari	Kushana remains and brickbats
57	Thana Gaddi	BSW, Kushana remains
58	Sohani	Kushana pottery and bricks, Medieval potsherds
59	Oena	BSW, Kushana remains
60	Chhati Dih	Gupta pottery
61	Kanwani	Gupta pottery
62	Kharagsenpur	Medieval pottery
63	Tandwa	Medieval pottery
64	Awar	Medieval pottery
65	Sarauni Purab Patti	Kushana remains and brickbats
66	Sarauni Pachhim Patti	Kushana pottery
67	Mai (East and West)	Medieval pottery
68	Pasewa	Medieval pottery
69	Gopalpur Pasewa	Kushana remains and brickbats
70	Bada Pasewa	Medieval Pottery
71	Birampur	Kushana and Gupta pottery
72	Bhadehari	BRW, BSW, NBPW, RW
73	Udpur	Kushana and Gupta pottery
74	Bijaipur	BSW, GW, RW, Kushana, iron slag
75	Rameshwar (Rajapur)	Early Medieval Sculptures
76	Rajapur	RW, Medieval pottery

77	Patkhauli	Kushana-Gupta and Medieval pottery, terracotta figurine, agate bead, iron slag
78	Belaon	BSW, NBPW, Kushana, terracotta figurines and iron slag
79	Naipura	Kushana-Gupta pottery
80	Naurangabad	Gupta and Post Gupta pottery
81	Dadari	Kushana, Gupta and Post Gupta pottery
82	Kachhora	Gupta and Post Gupta pottery
83	Gaura	Gupta and Post Gupta pottery
84	Melupur	Kushana, Gupta and Post Gupta pottery
85	Krishnapur	Kushana, Gupta and Post Gupta pottery
86	Gopalapur	NBPW, Kushana, Gupta and Post Gupta pottery
87	Khutahan	Gupta and Post Gupta pottery
88	Baderi	Gupta and Post Gupta pottery
89	Kodar Khurd	Gupta, Post Gupta and Medieval pottery
90	Chhangapur	Gupta and Post Gupta pottery

On the basis of surface findings that include potsherds, stone tools, sculptures, bricks and architectural remains these sites have been classified period-wise as pre-NBPW Period, NBPW Period, Sunga Period, Kushana Period, Gupta Period, Post Gupta and Medieval periods (Table 2). The period-wise distribution suggests that the area was first colonized by Mesolithic population of Vindhya region.

Table 2: Period-wise Distribution of Sites

No.	Name of the Site	Culture							
		Mesolithic	Pre-NBPW	NBPW	Sunga	Kushana	Gupta-	Post Gupta	Medieval
1	Zoharganj 25°32'22" : 83°12'40"	Δ	√	⊕	*	●			
2	Aurihar (Varah Temple) 25°32'17" : 83°12'00"					●	○		
3	Aurihar 25°32'30" : 83°11'10"							×	
4	Masaon Dih 25°32'50" : 83°11'25"		√	⊕	*	●	○		
5	Gopalpur 25°32'11" : 83°10'00"					●			
6	Kaithi 25°29'30" : 83°09'30"					●	○		

7	Rajwari 25°30'20": 83°08'42"		•			
8	Kharauna 25°30'30": 83°08'40"		•	O		
9	Sidhauna 25°31'13": 83° 08'10"					+
10	Dharauhara 25°29'20": 83°06'30"					+
11	Duduwan 25°30'26": 83°06'55"	√				+
12	Saraiya (Raipur) 25°30'45": 83°07'20"		⊕			
13	Lakshmisempur (Tekuri) 25°31'10": 83°06'30"		•			
14	Amehta 25°31'15": 83°07'30"		•			
15	Niruddinpur 25°31'35": 83°06'50"		•	O		
16	Gauri 25°31'25": 83°05'57"					+
17	Sarvarpur 25°33'00": 83°06'32"		•			
18	Saraiya (Baheri) 25°34'20": 83°06'05"					X
19	Bahura 25°31'19": 83°04'32"	√	⊕	•		
20	Newada-I 25°32'50": 83°04'33"		•			
21	Newada-II 25°33'05": 83°04'20"		•			
22	Niyar 25°32'45": 83°04'20"		•	O		
23	Bavatpur 25°32'45": 83°03'20"			O		
24	Barahpur 25°33'25": 83°03'25"		•			
25	Chandepur 25°33'06": 83°03'13"					+
26	Bhagtauli 25°32'50": 83°02'35"			O		
27	Muari (Balrampur) 25°33'55": 83°01'58"	√	⊕		X	+
28	Saripur 25°33'55": 83°01'58"	√	⊕			+

	25°34'38": 83°01'27"					
29	Chaubepur 25°34'30": 83°00'28"					+
30	Koilan 25°34'00": 83°00'45"	√	⊕			+
31	Bhidur 25°33'36": 83°00'55"		⊕			
32	Balua 25°33'57": 83°00'23"				●	
33	Ramgarh 25°34'16" : 82°59'37"				●	
34	Bhainsa 25°34'18" :82°58'34"				●	
35	Kusare 25°34'28" : 82°58'55"				●	+
36	Bansipur Tadi 25°34'39" : 82°58'14"				●	+
37	Brahamanpur 25°34'55": 82°57'58"					O
38	Hariharpur 25°35'27": 82°58'34"	√	⊕	*	●	X
39	Kop Kalan (Mukaripur) 25°35'40": 82°58'50"		⊕		●	
40	Hairharpur Chaauni 25°36'33" : 82°58'55"				●	
41	Balua 25°36'22" : 82°58'17"				●	
42	Gobra 25°36'18" : 82°57'47"				●	
43	Mahadewa Malihan 25°37'16" : 82°58'12"				●	
44	Mahadewa 25°37'31" : 82°57'30"	√	⊕			
45	Khargasipur 25°39'55" : 82°57'07"					+
46	Saraunj 25°37'20" : 82°57'00"					+
47	Bhitri 25°35'57" : 82°57'14"				●	
48	Gopalpur 25°35'55" : 82°56'38"				●	
49	Masora 25°36'58" : 82°56'47"				●	

50	Charareth 25°37'41" : 82°55'53"			●	
51	Narahan 25°38'41" : 82°55'33"	⊕	*	●	
52	Kirakat (Kerakat) 25°38'04" : 82°55'17"	√	⊕	*	●
53	Sihauli 25°37'49" : 82°54'20"			●	
54	Udai Chanpur 25°37'35" : 82°54'50"			●	
55	Chaharam Patti 25°37'24" : 82°54'34"	⊕		●	
56	Bansnari 25°37'14" : 82°54'11"			●	
57	Thana Gaddi 25°36'00" : 82°54'25"	⊕		●	
58	Sohani 25°35'16" : 82°53'17"			●	+
59	Oena 25°34'55" : 82°48'32"	⊕		●	
60	Chhati Dih 25°35'48" : 82°50'22"				○
61	Kanwani 25°36'11" : 82°51'30"				○
62	Kharagsenpur 25°36'18" : 82°52'54"				+
63	Tandwa 25°36'43" : 82°53'00"				+
64	Awar 25°37'24" : 82°52'38"				+
65	Sarauni Purab Patti 25°37'39" : 82°53'10"			●	
66	Sarauni Pachhim Patti 25°37'49" : 82°52'36"			●	
67	Mai (East and West) 25°38'06" : 82°51'36"				+
68	Pasewa 25°38'14" : 82°52'05"				+
69	Gopalpur Pasewa 25°38'31" : 82°51'40"			●	
70	Bada Pasewa 25°38'37" : 82°50'44"				+
71	Birampur			●	○

	25°38'53" : 82°49'48"							
72	Bhadehari 25°38'06" : 82°49'31"	√	⊕	●				
73	Udipur 25°38'40" : 82°47'56"			●	○			
74	Bijaipur 25°39'26" : 82°48'22"		⊕	●				+
75	Rameshwar (Rajapur) 25°39'22" : 82°47'56"						×	
76	Rajapur 25°39'22" : 82°47'56"							+
77	Patkhauri 25°39'53" : 82°48'05"			●	○			+
78	Belaon 25°40'19" : 82°48'40"		⊕	●				
79	Naipura 25°41'43" : 82°48'02"			●	○			
80	Naurangabad 25°58'3.6" : 82°29'17.3"				○		×	
81	Dadari 25°58'15.6" : 82°28' 3.9"			●	○		×	
82	Kachhora 25°59'50.9" : 82°27'19.9"				○		×	
83	Gaura 25°58'2.3" : 82°30'36.3"				○		×	
84	Melupur 25°57'40.9" : 82°30' 50.7"			●	○		×	
85	Krishnapur 25°57'42" : 82°31' 35.4"			●	○		×	
86	Gopalapur 25°56'39" : 82°33' 3.8"		⊕	*	●	○	×	
87	Khutahan 25°58'51.9" : 82°34'33"					○	×	
88	Baderi 25°55'13.4" : 82°32'29.5"					○	×	
89	Kodar Khurd 25°54'48.7" : 82°33' 5.7"			●	○		×	+
90	Chhangapur 25°53'31.4" : 82°34'4.6"					○	×	
		1	11	20	6	55	26	16 24

Out of these 90 sites, the pre-NBPW phase is represented at the ancient settlements of Zoharganj, Masaon Dih, Duduwan, Bahura, Muari, Saripur, Koilan, Hariharpur,

Mahadewa, Kirakat and Bhadehari. Zoharganj located on the left bank of Ganga river near Saidpur on the Varanasi-Ghazipur road is the only site where Carlleyle (1885: 97-105) found a sequence going back to the 'Mesolithic Age'. Pre-NBPW phase is also attested at three other excavated sites namely Masaon Dih, Hariharpur and Saripur (Tripathi et al. 2008: 45, Singh et al. 2009: 6) located in the explored area. Sherds of BSW, BRW, NBPW, Grey ware and Red Ware of early variety were found from mounds of Hariharpur and Saripur during field survey (Figures 2 and 3) which were selected for excavation by Banaras Hindu University. These excavations provide a firm cultural sequence of the sites located along the Gomti river.

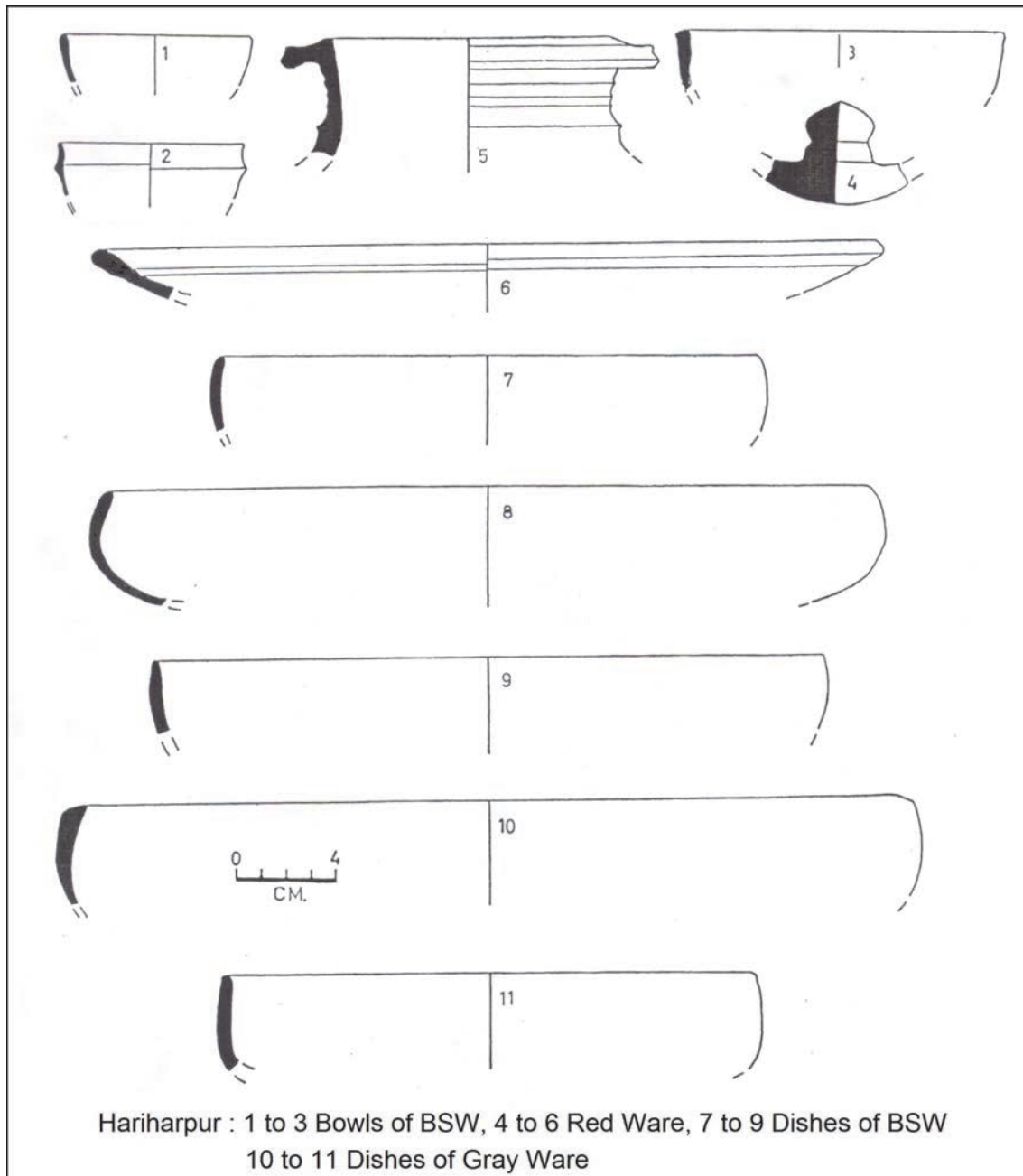


Figure 2: Pottery from Hariharpur, district Jaunpur

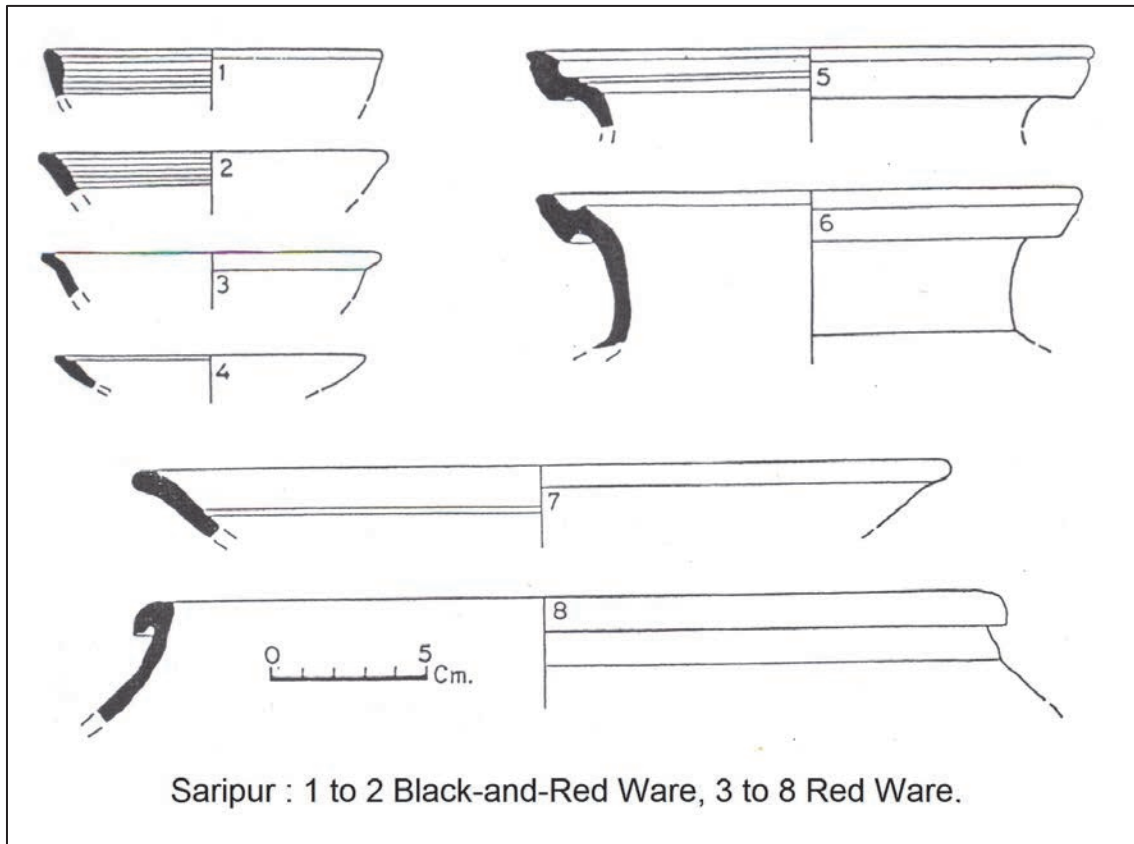


Figure 3: Pottery from Saripur, district Jaunpur

For a better understanding of the general feature of the cultures of the region a summary of the excavation at Hariharpur is presented here. The ancient mound of Hariharpur ($25^{\circ}36'23''$: $82^{\circ}58'20''$) extending in a wide area is located on the left bank of river Gomti, two km west of Chandwak market in Jaunpur district. The mound is partly eroded and plantations have come up over a large part of the mound which also bears a temple of the Aghori sect. The site was earlier reported (Chakrabarti et al. 1999: 165) but the explorers could not assess the chronology because of heavy plantation. The mound at Hariharpur is one of the most impressive mounds located along Gomti river (Figure 4). It was, therefore, decided to undertake a small scale excavation at the site to find out the cultural sequence and the nature of deposit and prospects of further works at the site. With this objective, Department of AIHC and Archaeology, Banaras Hindu University has conducted excavations at the mound under the direction of Prof. Vibha Tripathi in the session 2006-07 (Tripathi 2008: 205-209). The excavation revealed three-fold cultural sequence: Period I: Pre-NBPW period, Period II: NBPW period, and Period III: Sunga-Kushana period.

Period I: Pre-Northern Black Polished Ware Culture (Circa 1000 BCE - 700-600 BCE)

Period I was represented by 0.80 m thick deposit belonging to pre-NBPW culture. The cultural deposit of this period was found only in layers six and seven in Trench XA-1

(Figure 5). This indicates towards the fact that during the pre-NBPW period the settlement was of a smaller size. The small finds of this period comprised bone points, terracotta beads, pottery discs, iron and copper objects. The main ceramic industries of this period are Red Ware, Black Slipped Ware and Black-and-Red Ware. Black-and-Red Ware without any surface treatment has been recovered in good number. In Black Slipped Ware, plain bowls, pedestalled bowls, beakers and dishes are the main types (Figure 6). In Red Ware, bowls, dishes and vases are the principal types.



Figure 4: Ancient mound of Hariharpur, District Jaunpur, Uttar Pradesh



Figure 5: Photograph of Section Facing South of Trench XA-1



Figure 6: Pottery of Period I, Black-and-Red Ware and Black Slipped Ware

Period II: Northern Black Polished Ware Culture (c. 700-600 BC to 200 BC)

Period II was marked by the occurrence of the NBPW with a maximum 1.80 m thick deposit. Sanitation awareness of the people of the period is evidenced from the finding of ring-wells (Figure 5). The site revealed beautiful specimens of NBPW with rich variety. Steel blue, black and silvery shades of NBPW are commonly found with occasional pieces of chocolate and red coloured sherds (Figure 7). The other ceramic assemblage of this period consists of Black Slipped Ware, Grey Ware and Red Ware. Straight-sided corrugated bowls, dishes with incurved rim are the principal types in Black Slipped Ware, Grey Ware and NBPW. Bowls, lipped basins and vases are the main types in Red Ware. The small finds comprise copper and iron objects, bone points, pottery discs, glass bangle, beads of glass and semi-precious stones. Terracotta objects include beads, wheels, disc, bangle, skin rubber and dabber.



Figure 7: Pottery of Period II, Dishes and Bowls of NBPW

The pottery of this period is generally made of fine grained and well-levigated clay, which are well fired. Among the characteristic pottery shapes, special mention may be made of bowls with flanged and corrugated sides, sharpened, nail headed, out turned and featureless rims in Black Slipped Ware, NBPW and Red Ware. Other types of this period are dishes, vases, basins and storage jars of Red Ware. Dishes and bowls are common in Black Slipped Ware, Grey Ware and NBPW.

Period III: Sunga-Kushana Period

The cultural deposit of Period III was found with maximum thickness of 1.30 m. The ceramic industry of period III comprises essentially of Red Ware of different variety (Figure 8).

The principal types include various types of vases, spouted vessels, cooking vessels, sprinklers, inkpot lids, bowls and miniature pots. Other small finds comprise terracotta beads, balls, discs, beads of stone and glass, glass bangles, copper and iron objects and copper coin. In these trenches, flimsy structural activities of fired bricks were also noticed.

Remains of Early Medieval Period

A number of statues belonging to Early Medieval period have been found at the mound. Several of these images are being worshipped in the village. The small scale excavations brought to light cultural remains of Pre-NBPW, NBPW and Sunga-Kushana periods but structural and iconographical remains scattered on the mound suggest that the site was in prosperous condition at least up to 10th century AD.



Figure 8: Pottery of Period III, Red Ware

Observations

The explorations along the Gomati river and small-scale excavation at Hariharpur heralds a new beginning in the archaeology of the Ganga-Gomti basin. Although the evidence of human activities is noticed as early as the Mesolithic period (at Joharganj) but up to the second millennium BCE human activities were confined to riverbanks. The excavation at Hariharpur is the first excavation in the lower Gomti basin revealing the Proto-historic and Early Historic cultures. The small-scale excavation ascertained a cultural sequence going back to 1st millennium BCE from the Pre-NBPW period up to 10th century AD. Recent excavations in the territory of Kashi *Mahajanapada* especially around Varanasi, such as excavations at Agiabir (Tripathi and Upadhyay 2007: 121-129, 2009: 50-57), Anai (Tripathi and Upadhyay 2006: 93-102, 2013), Hariharpur (Tripathi 2008: 205-209), Aktha (Jayaswal 2003: 61-180), Ramnagar (Jayaswal and Kumar 2006: 85-92), Latif Shah (Upadhyay 2017a: 53-75) and explorations along the important tributaries of Ganga like, Karamnasa, Varuna, Beso, Gangi and Gomti suggest that up

to the beginning of 1st millennium BCE middle Ganga plain was dotted with important human settlements of various dimensions.

These excavations, including the one at Hariharpur clearly testify that during the NBPW period, i.e. around 600 BCE there were several prosperous centres in Kashi *Mahajanapada* the capital being Varanasi, the present site of Rajghat. The quality and variety of NBPW potsherds bear testimony to this fact. During the Sunga-Kushana and Gupta period the area becomes more important as evident from structural activities at number of sites serving as satellite settlements for major sites in the area such as Bhitari, Msason Dih, Chandrawati, Bairat and also Hariharpur. Explorations along the important tributaries of Ganga like Varuna and Gomti suggest that after the Gupta period a good number of urban sites seems to be deserted. At many sites, we come across sculptures pertaining to the Early Medieval period, 9th - 10th century AD, but up to this period their economic importance had been lost and some of them had been transformed into a religious centre. This scenario is common in middle Ganga plain in the Early Medieval period.

Noteworthy is the finding of iron slag at large number of sites of Varanasi region especially located along Gomti, Varuna and Ganga river. Iron slag lumps are frequently found on the surface of settlements belonging to Sunga-Kushana and Gupta periods. These slag lumps suggest iron smelting activity at the sites of the region. Similar slag lumps are also found from strata belonging to pre-NBPW and NBPW periods. What were the sources of iron ore to be smelted at these sites? Was it collected from iron rich granules from ponds or river bed? Were the neighbouring hills of Vindhya-Kaimur supplying the iron ore to the sites of the plain? It seems that besides the finished iron objects, iron ore was also a commodity of trade. Iron smelting furnaces have also been traced in Kushana period at Khairadih, an urban site located on the right bank of Ghaghara river far from the resource area of iron ore. Thus, the trade mechanism of iron between the sites of middle Ganga plain and Vindhya-Kaimur region needs more attention of the scholars.

Due to very gentle slope of the plain of the region and very slow current of water, river Gomti frequently changed its course leaving old meanders and paleochannels. The present river course is dotted with large number of sites from pre-NBPW to Medieval/modern period. Human activities of Chalcolithic and Iron Age periods seem to be confined to the present river course. Antiquity of some of the pre-NBPW sites may go up to the Neolithic period but traces of human activities before the Chalcolithic period are expected to be found on the banks of the old water bodies such as meander scar, lakes and paleochannels. This presumption is based on the finding of evidence of human activities of Mesolithic period at Joharganj (25°32'22": 83°12'40") in Ghazipur district (Carlley 1885: 97-105) and Epi-Paleolithic site of Garhwa (25°23'45": 82°53'45") in Varanasi district (Sharma et al. 1980: 118). Hence, the extensive exploration of the area near the dried-up lakes and ponds is required for the documentation of material remains of Neolithic and Mesolithic period.

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