
Archaeology of Wari-Bateshwar

Shahnaj Husne Jahan

Abstract

Wari and Bateshwar are two adjacent villages in Amlabo Union under Belabo police station in Narsingdi district, Bangladesh. It is situated on an isolated bit of the Pleistocene terrace at Manohardi-Sibpur, which is detached from the Madhupur tract by the Old Brahmaputra and the Laksya rivers. Since the 40s of the last century, a large number of cultural materials of Wari-Bateshwar have been reported from surface collections and chance excavations. Systematic archaeological exploration at the site was carried out in 1998-99 season by the author and subsequently a number of excavations conducted at the site since 2000. Archaeological investigations at Wari-Bateshwar revealed that the site had been occupied from the 4th century BC onwards with occasional breaks. The present paper is the detail report of all the evidences from the archaeological record in the form of physical remains unearthed from explorations and excavations till date and analyzes them to understand the nature and behaviors of the people who produced them. This also places Wari-Bateshwar in the macro-level of Indian Ocean maritime trade network during the early historic period.

Introduction

Wari (24°05'46" N Lat. and 90°49'42" E Long.) and Bateshwar (24°05'34" N Lat. and 90°49'40" E Long.) are two adjacent villages in Amlabo union under Belabo police station in Narsingdi district (central Bangladesh) (Fig. 1). Sonargaon, an important town in the vicinity, lies about thirty-five kilometers south-west of the two villages. The course of the Old Brahmaputra River is only four kilometers north-east, that of the Meghna is a few kilometres south and that of the Ariyal Khan River is about three kilometers east from the villages. The confluence of the Ariyal Khan and the Brahmaputra rivers is four kilometers northeast of Wari-Bateshwar. Sitalakshya, the other major river in the vicinity, flows some twenty kilometers west of Wari-Bateshwar.

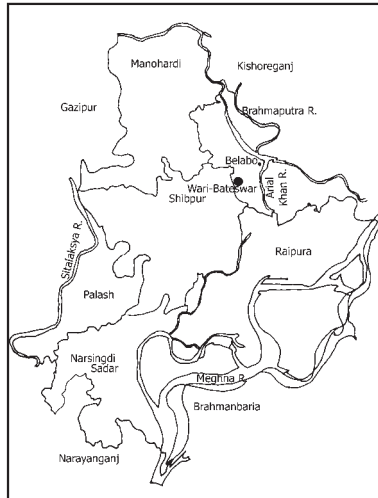


Fig. 1: Location of Wari-Bateshwar in Narsingdi district

Physiography and hydrography

Physiography of Wari-Bateshwar and its neighbourhood is particularly important for the reconstruction of its past. It is situated on an isolated bit of the Pleistocene terrace at Manohardi-Shibpur, which is detached from the Madhupur tract by the Old Brahmaputra Floodplain. Compact Pleistocene clay (which is red and pebble mixed, and in recent times has been referred to as Madhupur clay) is seen in most of the area. However, isolated tracts are also overlain by recent flood deposits of late Holocene age. On the other hand, soil of the Old Brahmaputra Floodplain is composed of sediments carried down by floodwaters.

As one approaches the villages from Narsingdi, one cannot fail to notice mounds and high land separated by irregular belts of marshlands. This is because the landform of the region exhibits two major characteristics: comparatively high convex slope gradient (known as *chala*) and low valleys (known as *byde*) (Akanda *et al.* 2005: 76). The villages of Wari and Bateshwar stand on the *chalas*. LandSat TM image and aerial photographs of Wari-Bateshwar show that there are three depressions in the *byde* (Imran *et al.* 2002: 111). One of these is the *Koira Khal* (also known as the Kaur) and it borders Wari in the north. The other two depressions are the *Dangir Beel* and the *Chargachiya Beel*. It is believed that these depressions were part of an earlier course of the Brahmaputra.

The environment described above immediately brings into relief three important physiographic features of the villages of Wari and Bateshwar. They are: (i) the villages are situated on relative highland, which makes them inaccessible to flood-water, (ii) low-lying marshland exists in the immediate vicinity of the two villages and (iii) the Brahmaputra-Ariyal Khan confluence lies only four kilometers away. These features are substantiated in a recent analysis of LandSat TM and RaderSat SN2 images. The results of the analysis indicates that the villages are located on “high land, free from flood” where food and drinking water are available all the year round; favourable climate is a regular feature; the land is fertile and water manipulation system works favorably and the area is also a “strategically suitable location against intrusion” (Imran *et al.* 2002: 111).

Let us now remind ourselves that before the 17th century, the Brahmaputra used to flow through Sherpur and Jamalpur, by the Madhupur tract, intersect eastern part of greater Dhaka district, and flow into the Meghna near Langal-bandh and Sonargaon. After the 17th century, the river changed its course. Instead of flowing into the Meghna at Langal-bandh and Sonargaon, it began to flow into the Meghna at Bhairab Bazar. This course is marked in Rennell's map of 1779. The Brahmaputra changed its course again in 1787 due to the earthquake of 1783 and began to flow through the Jamuna, which was till then a tributary. Consequently, Jamuna was transformed into the primary channel. On the other hand, the Brahmaputra was reduced to a subsidiary status and earned for itself the prefix "old", hence the name "Old Brahmaputra". If we allow ourselves the liberty of believing that in the beginning of the 1st millennium AD, the Brahmaputra possibly flowed along what today is known as the Ariyal Khan, then it becomes clear that the marshland, which lies in the vicinity of Wari-Bateshwar was probably a channel of ancient Brahmaputra (Jahan, 1999: 210-212).

Furthermore, we need to remember that during the period 7000-4000 years BP, the funnel shaped mouth of the Bay was possibly much wider than today and Dhaka and the surrounding regions were then at the head of the Bay (Islam, 2001: 142). Because Matuail (in the flood plain 3 km east of Dhaka city, located in between the Balu-Lakshya River on the east and the Budiganda River on the southwest) was under marine influence until about 2,400 Years BP (c. 350 BC), it can be reasonably assumed that the Bay was very close to the southern tip of Narayanganj district and the Brahmaputra would have fallen into the Bay at a point east of the tip.

Genealogy of Scholastic Research

Having thus set the site in its environmental backdrop, we may now proceed to an account of archaeological investigations conducted on it. The earliest report on the site was published in 1933 in a weekly magazine named *Mohammadi*. Since then a large number of cultural material from Wari-Bateshwar has been reported from surface collections and chance excavations (Pathan, 1955; Pathan, 1970; 1974; 1975; 1977; 1980 and 1989; Karim, 1991; Khatun, 1991 and 1994; Chakrabarti, 1992; Basa and Rahman, 1998; Pawankar *et al.* 1998; Ahmed, 2001; Rahman, 2001; Rahman *et al.* 2003; Imam *et al.* 2006; Imam 2007). The first extensive archaeological exploration at the site was carried out in 1998-99 season by the author (Jahan, 1999). The findings of this aroused enough excitement and led to a number of excavations. In 2000, the International Centre for Study of Bengal Art carried out a small-scale trial excavation at the village of Wari (Haque *et al.* 2000: 283-315). Subsequent excavations at Wari were conducted by the Department of Archaeology and Museums, Government of the People's Republic of Bangladesh in three seasons from 2003 to 2005. Besides, S.S.M. Rahman, Department of Archaeology, Jahangirnagar University also carried out small-scale excavations at Wari in 2004 to 2007. The present author carried out an extensive excavation with the Department of Archaeology and Museums, Government of Bangladesh in 2006. This time the excavation was conducted at three neighbouring villages of Narsingdi District. These are Wari and Bateshwar under Amlabo union in Belabo police station and Sonarutala (24°05'28" N and 90°49'18" E) under Kamrabo union in Sibpur police station (Jahan, 2006: 25-29).

Structural Remains

The investigations revealed remnant of two fortified areas (henceforth referred to as outer and inner forts). Both the fortifications are gradually disappearing due to human and natural activities. The outer fort is located at Bateshwar and is locally known as Asam Rajar Garh (Fig. 2). At present it survives up to 4.87 m in height and the average breadth at the base is 35 m. According to the local inhabitants, an Assamese king and a Koch king took refuge here in the late 16th-early 17th century AD and built the rampart as a defensive measure against militant incursion of both the Mughals and the Pathans. The fort encloses a large area with the help of two earthen ramparts built on the south and the west. The northern and the eastern sides of the fort are bounded by the *Koira Khal* and the River Ariyal Khan, respectively. The southern rampart of the fort is 3.5 km long and ends at the River Ariyal Khan. The *Dangir Beel* (138 m in breadth) and the *Bada Baidyar Beel* (42 m in breadth) intersect the rampart approximately 2 km and 3 km respectively from the southwest corner of the fort. The western rampart is about 1.7 km long and ends at the *Koira Khal*. The *Chrgachiya Beel* (130 m in breadth) intersects the rampart at about 1 km from the southwest corner of the fort. The remaining portion of the rampart runs into Sonarutala village.



Fig. 2: A section of the southern rampart of Asam Rajar Garh, Bateshwar

The inner fort is bounded by four earthen ramparts and it encircles the entire village of Wari. The northern and the southern ramparts measure 645 m and the eastern and the western ramparts measure 518 m. The average breadth at the base is 16.5 m. A canal, 30 m in breadth, surrounds the fort on its exterior like a moat. It dries up during the dry seasons but has flowing water during the wet seasons. The remains of the fortified area indicate that the site functioned as an administrative center.

In 2004, Rahman exposed another structural remain. It is a 180 m x 5 m compacted area identified as the road. In the following year, he exposed another compacted area leading perpendicularly away from the 180-metre-long area and he identified his new finding as a by-lane. In the excavation in 2006 conducted by this author, four trenches were taken in the west, north-west and the south of the 180-metre-long area. All these investigations revealed two overlying compacted areas made of brick grits (both 10 cm in thickness), the upper level of which appears to be connected to the 180-metre-long area. Indications received from all the investigations conducted so far suggest that Rahman's reading of the compacted area as a

road and a by-lane is misleading. It is possible that the area was a public space in the form of an open-air floor that extended over a large area of the south-eastern part of the inner fort. The upper level may have been necessary when the initial (lower) level had weathered away. Potsherds and beads found on the upper floor suggest that the open-air public space may even have functioned as an exchange center similar to *hats* seen in rural Bangladesh even today.

In the north-western segment of the same fort, laid bricks were found 8-9 cm below the surface covering an area 32 x 28.30 m in dimension during the excavation of 2006. Though no alignment could be ascertained, it is not unlikely that the excavated brick strata formed the lowest level of what was once a brick-built structure, which is lost today because of pilferage by local inhabitants. The sizes of the bricks vary between 41 x 22 x 3 cm and 44 x 21 x 4 cm. Similar bricks have also been found in a reservoir (6.5 x 5 m) unearthed at Wari from excavations conducted by the Department of Archaeology and Museums, Government of Bangladesh in three seasons from 2003 to 2005 (Alam *et al.* 2004). Some pieces of tiles have also been found during the excavation of 2006.

Antiquities

Artifacts obtained so far from chance excavations, archaeological explorations and excavations in and around the site of Wari-Bateshwar are some stone implements, a grey soft stone amulet, a quern with a pestle, a four-legged sandstone quern (36.57 cm x 22 cm) bearing three auspicious symbols (a *swastika* and two *nandipadas*) in relief, a ring stone, celts of fossil wood, a large number of triangular-shaped iron implements similar to prehistoric stone hand-axes (Fig. 3), iron arrowheads, iron spearheads (Fig. 4), iron nails, some lumps of iron ore, copper bangles, a bronze armlet, fragments of high-tin bronze knobbed vessels (Fig. 5), terracotta beads and balls, numerous potsherds of red ware (both course and fine), grey ware (both course and fine), red slipped ware, black slipped ware, Northern Black Polished ware, Rouletted ware (Fig. 6), earthen knobbed ware, glass beads (both translucent and opaque), finished as well as unfinished semi-precious stone beads (Fig. 7) and a large number of silver punch-marked coins (Fig. 8).



Fig. 3: Triangular-shaped iron tools from Bateshwar

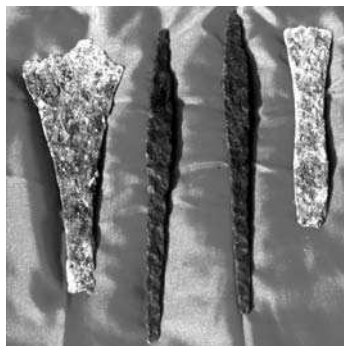


Fig. 4: Iron spearheads, Wari-Bateshwar

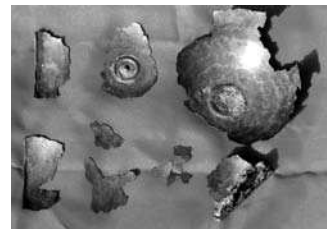


Fig. 5: Fragments of high-tin bronze knobbed vessels from Wari-Bateshwar

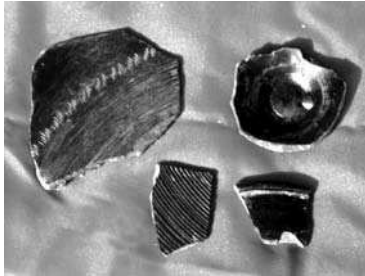


Fig. 6: Rouletted ware from Wari-Bateshwar

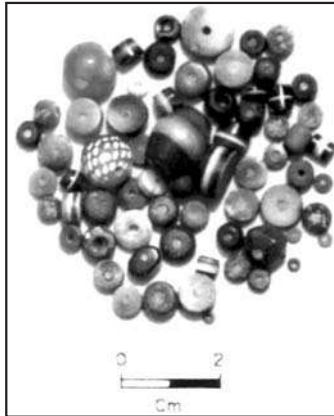


Fig. 7: Semi-precious stone beads from Wari-Bateshwar



Fig. 8: Silver punch-marked coins from Wari-Bateshwar

Grey Soft Stone Amulet

Among the stone antiquities mentioned above, the most interesting finding from Wari is a grey soft-stone plaque. It is rectangular in shape (with the four corners rounded off), measures 52 x 22 mm and has two holes on the two corners of the upper side. Motifs engraved within an oval frame in the center of the plaque provide some information regarding the religious aspects of the inhabitants of Wari-Bateshwar. The motifs depict a scene where two devotees are offering obeisance to a deity. The deity is placed on the mouth of a pitcher and holds a sword in the right hand and a shield in the left. The deity has been identified as goddess or *ghata devi* by Chakrabarti (1996: 77-80) and as a tribal war-god (?) by Imam *et al.* (2006: 1). It has been dated to the Mauryan period (Chakrabarti, 1996: 78).

Semi-precious Stone Beads

A large number of semi-precious stone beads have been discovered from Wari-Bateshwar. A close scrutiny of the beads revealed that they are mostly made of carnelian (including the etched variety), agate, quartz, amethyst, crystal, chalcedony, chert and jasper. Their shapes are divergent and include the following: globular, cylindrical, pentagonal, oval, trapezoid, rectangular, triangular, hexagonal, barrel, disc, spherical, crescent and diamond. Although most of these show one perforation, some show as many as four. The holes have been bored with remarkable skill, except in the cases of carnelian and agate, where the bores (made from both ends) fail to meet in a straight line. Along with these beads, a large quantity of core material, flakes, chips, beads without perforation and broken pieces of beads have also been discovered from the site. Discovery of etched beads, a special type of agate and carnelian beads with a white design etched on their polished surfaces, is an important indicator of trade between South and Southeast Asia during the Early Historic Period.

Applying a paste of natural soda and crushed shoots of *kirar* (*Capparis aphylla*) on polished agate and carnelian beads, and then baking/firing leads to etching on the beads. The technique has been known in South Asia since the Harappan Civilisation (3rd-2nd millennium

BC). However, it fell into disuse, to be revived again in the Ganga Valley between c. 600 BC and 200 AD.

Similar beads have also been reported from Mahasthan in Bangladesh, Bangarh, Chandraketurh, Harinarayanpur and Deulpota in West Bengal, India. Etched beads have also been found in a number of countries in Southeast Asia including Myanmar (at Beikthano), Malaysia (at Tanjong Rawa, Kalumpang island, Kuala Selinsing), Indonesia (at Leang Buidane cave in Salebabu Island) and the Philippines (in Palawan Island). It has been found even in Yunnan province in China, one in Tomb 13 at Shi Zhai Shan and another in Tomb 24 at Lijiashan dated to the Western Han period, one of the beads is of carnelian and is cylindrical in shape (Jahan, 2002: 133).

Triangular Shaped Iron Objects

The most enthralling finding from the Wari-Bateshwar excavation 2006 conducted by the author with the Department of Archaeology and Museums, Government of Bangladesh was a hoard which was 125 x 58 x 53 cm. Unearthed at Bateshwar, the hoard contained 359 triangular iron objects shaped like prehistoric stone hand-axes. The objects measure between 13.5 x 10 x 7 cm and 16.5 x 7.5 x 6 cm and their weight varies between 1.75 to 2.90 kg. Similar objects have been found earlier from chance excavations at the site, and are now preserved at Pathan's private collection. Reading these decontextualized artifacts, Chakrabarti (1992: 58) suggests that these are "iron blooms which were imported to the site as raw material". However, detailed first-hand examination of these objects in context, which was possible in the excavation of 2006, clearly showed that these are finished products with uniform shape and clearly marked working edge. All available indications suggest that these triangular objects were iron implements that were used as chisels for cutting and shaping wood and stone. Further, concentration of iron ore in Rajarbag (a neighbouring village) and Bateshwar areas suggest that the raw material for these implements was obtained locally.

Knobbed Ware

Discovery of fragments of two high-tin bronze (a copper-tin alloy, which contains more than 20% Sn) knobbed vessels from Wari-Bateshwar mentioned above are only example among all known sites in Bangladesh and West Bengal. Knobbed vessels (so called because a conical knob, circumscribed by a series of concentric grooves or incisions, stand at the centre of the inner surface of the vessel's base). Similar high-tin bronze vessels of knobbed variety have been found at Ban Don Ta Phet in west-central Thailand. Another bowl of this variety, but this one made of bronze, has been found at Than Hoa Province of Vietnam (currently preserved in the Musee Guimet, Paris) (Glover, 1996a: 84, fn. 17).

In order to ascertain the origin of high tin bronze knobbed vessels, one needs to remember that the use of the alloy was known to South Asia since vessels made of the alloy (high tin bronze) has been found at sites such as the Bhir mound at Taxila in Pakistan, Adichanallur in the Nilgiri Hills and Coimbatore in South India. Strabo's *Geography* (15.1.67) vouchsafes that the use of the alloy was known in this region as early as the fourth century BC. Although these evidences make it possible to believe that high tin bronze ware could have been

manufactured in South Asia, there still remains the possibility that it was imported from Southeast Asia, possibly Thailand because tin is found in abundance in Thailand and Malaysia and quite a few sites (Kok Khon in Sakorn Nakorn Province, Ban Chiang and Ban Nadi in north-east Thailand and Huai Pan near Chombung in Ratchaburi Province) have yielded similar high tin bronze vessels.

A sherd of coarse grey knobbed ware was found at Wari from the excavation in 2000 (Haque *et al.* 2000: 297). Similar earthen variety of knobbed vessels have been discovered at quite a few sites in South Asia such as Harinarayanpur (West Bengal, India), Sisupalgarh (Orissa, India) and Anuradhapura (Sri Lanka).

The function of knobbed vessel has intrigued scholars. Although it has been discovered in diverse contexts, scholars believe that the vessel was used for identical purpose, which was not secular or utilitarian such as cooking or serving of food. Rather, as Glover (1996b: 143) rightly surmises, they possibly "served some special purpose for ritual and funerary use only". He interprets the motif of the base knob and concentric circles as a mandala, "a schematic cosmological symbol representing perhaps Mount Meru and the surrounding oceans".

Northern Black Polished Ware

Sherds of Northern Black Polished Ware (NBPW) and Rouletted Ware have been recovered from excavations at Wari. NBPW is usually made of superfine clay of the Ganga Plain. It is well fired, thin sectioned, and has a strikingly lustrous surface. It was a precious deluxe ware. Beside Wari-Bateshwar, the ware has been reported from Mahasthan (Bangladesh), Bangarh, Chandraketugarh and Tamluk (West Bengal, India). Kalahandi and Sisupalgarh (Orissa), Amaravati-Dharanikota, Amaravati-Vaddamanu and Chebrolu (Andhra Pradesh), Arikamedu, Alagankulam and Korkai (Tamil Nadu), Eran and Ujjain (Madhya Pradesh), Hastinapur, Ahichchatra, Sravasti, Kausambi, Rajghat and Sarnath (Uttar Pradesh), Rajgir, Vaishali, Chirand and Pataliputra (Bihar). In Pakistan, it has been found at Udegram, Charsada and Taxila, in Nepal at Tilaurakot, and in Sri Lanka at Mantai, Anuradhapura-Gedige and Tissamaharama.

Rouletted Ware

Rouletted Ware is so called because a variety of forms including triangles, diamonds, parallelograms, wedges, and dots are 'rouletted' on a particular type of pottery. It is usually wheel-thrown, gery in colour and slipped, with an unusually smooth surface, well fired with a metallic sound. It was also a luxury ware. This type of ware has also been yielded from Mahasthangarh in Bangladesh, Chandraketugarh, Deulpota, Atghara, Harinarayanpur and Hadipur (24 Parganas) Tamluk, Tilda, Bahiri, Borol and Natshal (Medinipur), Mangalkot (Bardhaman), Saptagrama (Hugli) in West Bengal, India. Other sites in India which yielded Rouletted ware are Sisupalgarh, Manikpatna and Radhanagar (in Orissa); Junnar, Paithan, Nasik, Nevasa, Ter (in Maharashtra); Kondapur, Salihundam, Vamulapadu and Satanikota (in Andhra Pradesh) Maski, Brahmagiri and Chandravalli (in Karnataka), Kanchipuram, Karaikadu, Arikamedu, Kaveripattinam, Karur, Manigramam, Uraiyyur, Alagankulam and Sengamedu (in Tamil Nadu), Ayodhya (in Uttar Pradesh) and Rajghat (in Uttar Pradesh).

Sites which yielded Rouletted Ware in Sri Lanka are Kantarodai, Mantai, Tissamaharama, Ambalantota and Anuradhapura-Gedige. In Pakistan, the ware has been reported from Taxila. Rouletted Ware has also been found in a number of sites in Southeast Asia. These are Beikthano (in Myanmar), Bukit Tengku Lembu (Malaysia), Kobak Kendal and Cibutak (in Java, Indonesia) and Sembiran (in Bali, Indonesia) and Tra Kieu (in Vietnam).

Most of the time NBPW and Rouletted Ware are found together in the same context at Wari-Bateshwar. As Dilip Chakrabarti (1992: 178) has ascertained, the chronology of NBPW in the eastern parts of South Asia is 300 BC to 100 BC. (Chakrabarti, 1992: 178) we may accept the similar date for Rouletted Ware as well. An XRD analysis performed by Vishwas D. Gogte (1997: 69-85 and 2001: 197-202) shows that "Rouletted Ware was produced at multiple production centres in the lower Ganga plain with the epicentre in the Chandraketurah-Tamluk region of Bengal". Gogte (2001: 198) conducted another XRD analysis on Northern Black Polished Ware and Rouletted Ware from Mahasthan in Bangladesh and found that the clays used in the production of all varieties of Northern Black Polished Ware having surface colours of black, red, brown, golden yellow and silver have been found to be exactly identical with those of the Rouletted Ware found at the site. It has been shown that in the production of Northern Black Polished Ware and Rouletted Ware not only the same technology was employed but also that they were produced from the same type of clays of the Ganga Plain. It was also suggested that the lustrous Rouletted Ware might simply be treated as yet another variety of Northern Black Polished Ware with an indented circular decoration.

Hence it can be concluded that NBPW and Rouletted Ware were both produced in the lower Ganga plain. However, because it has not been possible to identify kilns at Wari-Bateshwar which may have produced this type of wares, it is not possible to state with certainty where the production centres may have been located. Nevertheless, the findings of NBPW and Rouletted Ware indicate that they were produced at Wari-Bateshwar.

Punch-marked Coins

A large number of silver punch-marked coins found at Wari, Bateshwar and in neighbouring villages such as Kandua, Marjal, Joshor, Kundarpara, Jaimangal, Candipara, Patuli, Chula, Harisangan and Govasia serve as corroborative evidence to substantiate Wari-Bateshwar's claim as a maritime port frequented by merchants. The claim is all the more valid because the number is far greater than that obtained from other areas in Bangladesh which have also yielded similar coins (i.e., Bogra, Rajshahi and Mymensingh) (Karim, 1991: 5). It is also significant that most of these coins (found from 1933 to 1999) were discovered in earthen containers, at six spots at Wari, all of which are located on the margins of marshlands. The coins are mostly circular, oval, rectangular and square in shape but a few are irregular. Various symbols such as sun, elephant, arrow, cow, tree, flower, deer, owl, lobster, boat, wheel, 'trishul', six armed devices, mountain, mountain surmounted by a crescent, tortoise, fish, bird etc. Among these boat, fish and lobster seen on some of these coins, cannot escape attention because they signify maritime connection.

Conclusion

Of all the materials discussed above, Northern Black Polished Ware, Rouletted Ware, high-tin bronze knobbed vessels, earthen knobbed vessel, and semi-precious stone beads (specially the etched variety) deserve special attention because the distribution pattern of these artifacts connect Wari-Bateshwar with sites in South and Southeast Asia mentioned above. Further, physiographic evidence discussed at the beginning of this essay and archaeological evidence discussed above indicate that during the early historic period, Wari-Bateshwar functioned as a maritime port and was already integrated in the Bay of Bengal littoral trade network.

The location of Wari-Bateshwar on the bank of an ancient course of the Brahmaputra can only mean that it was an estuarine port. However, no man-made installations have been unearthed on the margins of the marshland and hence we may believe that no jetties were constructed at the harbour. The port site was possibly made up of a few public utilities, warehouses and production centres for manufacturing semi-precious stone beads, pottery including NBPW and Rouletted Ware.

No indication is available which may determine the cause for the decline of Wari-Bateshwar as a port. One may nevertheless tentatively suggest that one of the reasons was the change of course of Brahmaputra. Because of the fall, some other site/s in the neighbourhood must have taken up the role of Wari-Bateshwar. In support of this argument we may remind ourselves that in c. 643 AD, Bhaskaravarman offered Hiuen-Tsiang official attendants to accompany him should he desire to return to China by the Southern Sea route (i.e., by way of Java or Sumatra) (*Life*, Book V; Beal, 1973: 188; Baruah, 1985: 75). The Nidhanpur copperplate inscription of Bhaskaravarman (Gupta, 1967: 32-40) issued from Karnasuvarna renewing an earlier grant of revenue-free land in Candrapura *vishaya* (in the southern part of present Sylhet district as the Pascimabhaga copperplate land grant of Srichandra proves; Gupta, 1967: 116-117), clearly show that the entire tract of land from Murshidabad (where Karnasuvarna was located) to Sylhet, including the entire downstream course of the Brahmaputra was within his domain. Hence, one may reasonably assume that Bhaskaravarman was referring to a port on the estuary of the Brahmaputra, which replaced Wari-Bateshwar. The assumption is reasonable given the fact that the two copperplates of Devakhadga issued in c. 665 AD and found at Ashrafpur (a village under Shibpur police station; Laskar, 1907: 85-91) indicate settlement at the area. A bronze votive stupa and remains of old bricks and fragmentary walls testifying the existence of a ruined Buddhist monastery at Ashrafpur (Zakaria, 1984: 414) are further indications that a prosperous urban centre capable of patronising a Buddhist monastery flourished in this area. Sonargaon, hardly 35 kilometres to the southwest of Wari-Bateshwar, served as a port from the mid-14th century AD and it was at this port that Ibn Battuta boarded a junk bound for Java. This strengthens the belief that in the intervening period between the fall of Wari-Bateshwar and the rise of Sonargaon there must have been one or more ports in the vicinity of these two sites.

Based on all these studies, it appears that the site was occupied continuously from the early historic to modern times without any break. The presence of the punch-marked coins not only indicates that the inhabitants used money-based economy but also suggest that they possessed considerable purchasing capacity. It is also apparent that the site was a production

centre for manufacturing: (1) semi-precious stone beads (as indicated by the recovery of a large quantity of core and waste materials such as semi-precious stone blocks, flakes and chips, non-perforated, semi-perforated and broken pieces of semi-precious stone beads); (2) pottery (indicated by innumerable potsherds recovered from the site), (3) various types of iron objects (as the discovery of the hoard of triangular-shaped iron implements and various iron tools such as arrowheads spearheads and nails indicate). Further, concentration of iron ore in Rajarbag (a neighbouring village) and Bateshwar areas suggest that the raw material for producing iron objects were obtained locally. The distribution pattern of Northern Black Polished Ware, Rouletted Ware, knobbed vessels, semi-precious stone beads (specially the etched variety) and glass beads establishes that the site functioned as a maritime port and was already integrated in the Bay of Bengal littoral trade network between 3rd century BC and 3rd century AD.

References

- Ahmed, B. 2001. Wari-Bateshwar Prapta Raupyer Chapankita Mudra, Shalpa Mulyaban Prastar Gutika O Kanch Gutika: Ekti Parjalochana (in Bengali), in E. Haque eds. *Hakim Habibur Rahman Khan Commemoration Volume*, The International Centre for Study of Bengal Art, Dhaka, pp 367-404.
- Akanda, M., K. Hossen, S.M.K. Ahsan and S. Sen. 2005. Nature of Archaeological Records on Floodplain: A Geoarchaeological Interpretation of Wari-Bateshwar, Bangladesh, *Pratnatattva*, 11: 75-86.
- Alam, Md. S., M.M.A. Bashar, M.A. Bakar Siddique, M. Majibar Rahman, A. Abdullah, and Md. Sadequzzaman. 2004. Wari-Bateshwar Sampratik Pratnatattvik Khanan, a seminal paper presented at the national seminar titled *Sampratik Pratnacharcha* organised by the Department of Archaeology, Government of Bangladesh and Bangladesh Itihas Parishat (Department of Islamic History and Culture, University of Dhaka), held on May 28, 2004 at Lalbagh Fort, Dhaka.
- Baruah, S.L. 1985. *A Comprehensive History of Assam*. Munshiram Manoharlal Publishers, New Delhi.
- Basa, Kishor K. and S.S.M. Rahman 1998. Bronze Knobbed Bowls from Wari, Bangladesh: Implications for Trade, *Journal of Bengal Art*, 3: 291-298.
- Beal, Samuel (Tr.) 1973. *The Life of Hiuen-Tsiang by Shaman Hwui Li with an introduction containing an account of the works of I-tsiang* (second edition, first published by Kegan Paul, Trench, Trubner & Co, London in 1911). Munshiram Manoharlal Publishers Pvt. Ltd, New Delhi.
- Chakrabarti, D. K. 1992. *Ancient Bangladesh: A Study of the Archaeological Sources*. University Press Ltd, Dhaka.
- Chakrabarti, D.K. 1996. Two Examples of Mauryan Art from Bengal, *Journal of Bengal Art*, 1: 77-80.
- Glover, I. C. 1996a. The Southern Silk Road: Archaeological Evidence for Early Trade between India and Southeast Asia, in A. Srisuchat eds *Ancient Trades and Cultural Contacts in Southeast Asia*, The Office of the National Culture Commission, Bangkok, pp57-94.
- Glover, Ian C. 1996b. Recent Archaeological Evidence for Early Maritime Contacts between India and Southeast Asia, in H. P. Ray & J. F. Salles eds. *Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean*, Manohar Publishers, New Delhi, pp129-158.
- Gogte, V. D. 1997. The Chandraketugarh-Tamluk Region of Bengal: Source of the Early Historic Rouletted Ware from India and Southeast Asia, *Man and Environment*, XXII (1): 70-85.
- Gogte, V. D. 2001. XRD Analysis of the Rouletted Ware and Other Fine Grey Ware from Tissamaharama, in H. J. Weisshaar, H. Roth and W. Wijeyapala eds. *Ancient Ruhuna: Sri Lankan-German Archaeological Project in the Southern Province*, Volume 1, Verlag Philipp Von Zabern, Mainz Am Rhein, pp. 197-202.
- Gupta, K. (edited with translations, notes, etc.) 1967. *Copperplates of Sylhet*, Volume I (7th-11th century), Lipika Enterprise, Sylhet.
- Haque, E., S.S.M. Rahman and S.M.K. Ahsan. 2000. A Preliminary Report on Wari-Bateshwar Trial Excavation by International Centre for Study of Bengal Art, *Journal of Bengal Art*, 5: 283-315.
- Imam, A. 2007. Wari-Bateshwar and Archaeology of Bangladesh, In *Kalhar: Studies in Art, Iconography, Architecture and Archaeology of India and Bangladesh*, (G. Bhattacharya, G. J. R. Mevissen, M. Mitra and S. Sinha eds.), Kaveri Books, New Delhi, pp 32-48.
- Imam, A., B. Ahmed, M. Imran. 2006. Religious and Auspicious Symbols Depicted on Artifacts of Wari-Bateshwar, *Pratnatattva*, 12: 1-12.

-
- Imran, Masood, S. M. K. Ahsan, S. M. Monzurul Huq and S. Sen 2002 Interpreting the Landscape of Wari-Bateshwar: An Interogation using GIS and Remote Sensing, *Pratnatattva*, 8: 105-115.
- Islam, M. S. 2001. *Sea-level Changes in Bangladesh: The Last Ten Thousand Year*, Asiatic Society of Bangladesh, Dhaka.
- Jahan, S. H. 1999. Wari-Bateshwar: An Important Centre for Maritime Acitivity in Ancient Bengal, *Journal of Bengal Art*, 4: 207-216.
- Jahan, S. H. 2002. Early Maritime Trade Network of Bengal, *Man and Environment*, XXVII (1): 127-138.
- Jahan, S. H. 2006. *Excavating Waves and Winds of (Ex)change: A Study of Maritime Trade in Early Bengal*, John and Erica Hedges Ltd, Oxford.
- Karim, M. R. 1991. Some Silver Punch-marked Coins of Wari-Bator, In *Proceedings of Fourth South Asian Archaeological Congress*, Bangladesh Directorate of Archaeology, Ministry of Cultural Affairs, Dhaka.
- Khatun, H. 1991. Wari-Batesvar: an Unexplored Proto-historic Site in Bangladesh, In *Proceedings of Fourth South Asian Archaeological Congress*, Bangladesh Directorate of Archaeology, Ministry of Cultural Affairs, Dhaka.
- Khatun, H. 1994. Wari Bateshware Prapta Ekti Durlav Shilpakarma Parichiti (In Bengali), *Charukala*, 1 (1): 87-89.
- Laskar, G. M. 1907. Ashrafpur Copper-Plate Grants of Devakhadga, *Memoirs of the Asiatic Society of Bengal*, I (6): 85-91.
- Pathan, M. H. 1970. Brahmaputra Sabhyata, Dainik Purbadesh, Dacca, 12 Baisakh. 1377 B.S.
- Pathan, M. H. 1974. Banglar Adi Itihaser Bismrita Adhyay: Wari-Bateshwar, *Monthly Purbachal*, September/October.
- Pathan, M. H. 1977. Pracin Banglar Chapankita Mudra, *Monthly Purbachal*, Ashvin.
- Pathan, M. H. 1980. Wari-Bateshwarer Aitihashik Nidarshan, *Saptahik Bichitra*, 10 February.
- Pathan, M. H. 1989. *Pratnatattik Nidarshan: Wari-Bateshwar*, Grantha Suridh Prakashani, Narsingdi.
- Pathan, M. H. 1955. Purva Pakistane Pragaitihashik Sabhyata, in *Daily Azad*, Dacca, January 30.
- Pawankar, S., M.M. Hoque, S.M.K. Ahsan & S.S.M. Rahaman. 1998. Semi-precious Stone Beads from Wari and Bateshwar, *Journal of the Asiatic Society of Bangladesh*, 43 (2): 25-37.
- Rahman, S.S.M. 2001. Glass Beads from Wari-Bateshwar, Bangladesh: A Preliminary Archaeological Analysis, *Journal of Bengal Art*, 6: 201-209.
- Rahman, S.S.M., S.M.K. Ahsan and H. Pathan 2003. A Note on Ritual Artifacts from Wari-Bateshwar, *Pratnatattva*, 9: 49-55.
- Zakaria, A.K.M. 1984. Bangladesher *Pratnasampad* (in Bengali), Bangladesh Shilpakala Academy, Dhaka.