

Archaeological Survey on the East and Southeast Areas of Shahr-i Sokhta: Some Evidence for Making Chronology during the Third and Early Second Millennium BC

Hossein Moradi¹, Hossein Sarhaddi Dadian², Mojtaba Saadatian³, Seyed Mohammad Javad Marashi⁴ and Mohammad Keikha⁵

1. h_moradi57@yahoo.com

2. h_sarhadi56@hotmail.com

3. Mojtaba.saadatian@gmail.com

4. Mj_marashi@yahoo.com

5. mohammad.keikha1367@gmail.com

Abstract

The cultural basin around Shahr-i Sokhta stretches from the Ramshar area north of the site to the Tasuki region known as the Rud-i Biaban area in the south, forming a strip of land approximately 45 km long. The present article is the result of a non-probabilistic survey carried out in April 2019 which covers the east and southeast of Shahr-i Sokhta from Ramshar to Rud-i Biaban. During the surface survey, a total of 32 sites were visited and surface finds including pottery sherds and stone objects such as alabaster vessel fragments and micro blades were collected

and registered. The surveyed sites of the area have various chronologies, from 3000 BC to 2000 BC and later. To better understand the distribution of these sites, a general classification based on the comparative dating of the collected pottery was performed, assigning the sites to three main periods: a) the early third millennium BC; b) Periods III-II of Shahr-i Sokhta and c) Period IV of Shahr-i Sokhta and the Rud-i Biaban phase.

1. Introduction

The cultural basin around Shahr-i Sokhta stretches from the Ramshar area in the north to the lands around the Tasuki region known as Rud-i Biaban in the south, encompassing a strip of territory approximately 45 km long. This cultural area is important in two ways. First, this extensive area of settlement was occupied from the middle of the fourth millennium BC to the Islamic era. Although it underwent moments of crisis, it was still considered to be one of the more attractive areas until the Safavid (Sajjadi 2003: 20-57). The second reason for its importance is that today the transportation routes from large parts of Sistan and Afghanistan to the southeast and centre of Iran pass through this region. For this reason, we have witnessed increasing construction along this route that raises the need for rescue projects such as the 'Salvage Archaeological Project', which facilitates archaeological studies in the disputed landscapes. The present article is the result of a non-probabilistic survey carried out in connection with the Zabol-Zahedan water transfer project in April 2019 (Sarhaddi Dadian - Moradi 2021: 439-446), which covers the areas to the east and southeast of Shahr-i Sokhta from Ramshar to Rud-i Biaban (Fig. 1).

2. Archaeological background

In the 1960s, the Italian IsMEO institute began exploring the area (Tosi 1968) and conducted sporadic studies of the cultural landscape of Shahr-i Sokhta. This led to the identification and recording of data from a number of sites such as Tepe Dash (Biscione *et al.* 1975: 40-44) and Tepe Rud-i Biaban (Tosi 1984: 30).

From 1979 to 1997, no archaeological work was carried out in this area. New archaeological excavations by an Iranian archaeological expedition began in 1997 (Sajjadi 2003), and a series of surveys to record the location of archaeological sites in the area were conducted by the Sistan and Baluchistan Cultural Heritage Organization, recording more than 100 satellite sites around Shahr-i Sokhta. In 2009, the Sistan basin archaeological survey project was entrusted to Mousavi Haji and Mehrafarin from the Archaeological Department of Sistan and Baluchistan University. Surveying and mapping the area, this expedition identified more than 1,200 sites dated to a number of periods (Mehrafarin - Musavi Haji 2011).

In the last few decades, the universities of Sistan and Baluchistan and Zabol have begun a series of excavations in smaller sites around Shahr-i Sokhta: Tepe-Dash (Mortazavi 2010); Tepe Sadegh (Shirazi 2018: 298-306); Tepe Graziani; and Tepe Taleb-Khan 1 & 2 (Kavosh *et al.* 2019: 157).

3. Surveys around Shahr-i Sokhta

During the surface survey of the eastern side of Shahr-i Sokhta to the east of the Zabol-Zahedan road, a total of 32 sites were visited. As mentioned above, some of the sites in this area, such as Tape Taleb Khan 1 (No. 11), Tape Taleb Khan 2 (No. 12) and Tape Rud-i Biaban, had already been excavated. Some sites, such as nos. 1, 3 and 15, have been severely damaged by climatic agents, especially winds and seasonal floods, which have led to the mixing of shards and gravels and their concentration in a small area with no other surface evidence of a settlement.

The surveyed sites have various chronological dating from 3300 BC to 2000 BC or even later. To better understand the distribution of sites, a general classification, based on the comparative dating of collected pottery, was carried out. Based on the typological comparison of their pottery, the sites were classified into three general categories: a) Sites dated to late fourth the beginning of the third millennium; b) Sites related to Shahr-i Sokhta Periods II and III, and c) Sites with pottery related to IV and the Rud-i Biaban Phase (Tab. 1).

Site	Name	Period	Phase	Dates (BC)
1	-	II	5-6	3000-2600
2	-	II	5-6	3000-2600
3	-	II-III	?	-
4	-	I	9-8	3200-3000
5	-	I	9-8	3200-3000
6	-	I	9-10	3350-3100
7	-	I	9-8	3200-3000
8	-	?	?	-
9	-	II-III	4	2600-2550
10	Fibr-e-Nouri	II-III	2-3	2550-2400
11	Tepe Taleb Khan	IV	2-3 - Rud-i Biaban	2550-2400
12	Tepe Taleb Khan (2)	IV	2-3 - Rud-i Biaban	2550-2400
13	-	II-III	?	-
14	-	II-III	?	-
15	-	II-III	?	-
16	Tirak-e Barq	III	2-3	2550-2400
17	-	I	9	3300-3000
18	-	I	8-9	3200-3000
19	-	I-III	4&9	-
20	-	I	8-9	3200-3000
21	-	IV	2 - Rud-i Biaban	2450-2400
22	-	III	3	2550-2450
23	Rud-i Biaban	III	3	2550-2450
24	Rud (1)	IV	2-3 - Rud-i Biaban	2550-2400
25	Rud (2)	III	3-4	2600-2450
26	Taleb Khan (3)	IV	0 - Rud-i Biaban	2000
27	Taleb Khan (4)	IV	0 - Rud-i Biaban and maybe later	2000-1800
28	Taleb Khan (5)	III	3-4	2600-2450
29	Kate Tepe (1)	IV	1-2 - Rud-i Biaban	2450-2300
30	Kete Tepe (2)	III-IV	2-3 - Rud-i Biaban	2550-2400
31	Kate Tepe (3)	III-IV	2 - Rud-i Biaban	2450-2400
32	Kate Tepe (4)	IV	2 - Rud-i Biaban	2450-2400

Tab. 1: surveyed sites.

3.1. Sites dated to the second half of the fourth and early third millennium BC (ca. 3550-3000 BC)

Eight sites with cultural materials dated to the second half of the fourth millennium BC are located around Shahr-i Sokhta (Fig. 2). The presence of such sites in an area of 500 square metres at a distance of one kilometre from Shahr-i Sokhta is interesting because it had been assumed that the materials related to the formation of the settlement during the Proto-Elamite were located only in the 'Eastern Residential Area' of the site, the location of the earliest archaeological layers (Amiet - Tosi 1978: 9). However, recent surveys show the presence of pottery similar to Phases 9-10 in seven small sites located about 1-2 kilometres south of Shahr-i Sokhta. Similar evidence has been obtained from the Proto-Elamite layers in rooms 88 and 88a in the 'Eastern Residential Area' (Sajjadi *et al.* 2021: fig. 3). These satellite sites are not very extensive and are built on heights of modest altitude. Due to the high degree of natural erosion, large parts of them have been destroyed, and except for one area, the height of the remains does not exceed about half a metre above the ground. Unlike Period II and III sites, which are built on relatively high natural *kaluts* scattered over the plain, these sites are very close together, about 100 to 200 metres apart, and are located on the natural surface (severely eroded) of the plain. The only cultural material found in these sites is a light Buff Ware together with some Grey and Red Ware. However, painted and plain Buff Ware is more visible here than other areas. In terms of form, this pottery is classified into two categories: bowls and jars. Vessels are mostly deep or shallow conical open bowls. The motifs include light brown parallel bands below the rim or on the middle section of the body. The jars are globular, classed as pseudo-Jemdet Nasr, with two or four short handles (Fig. 3, no. 7, Fig. 4, nos. 1, 6 and 11). They are thus of the proto-literature, and were found in layers associated with Phases 9 and 10 of Shahr-i Sokhta (Moradi 2021: fig. 24), and in other coeval sites in southeast Iran such as Tepe Yahya (Potts 2001: fig. 1.40). The distribution of such pottery close to the main site of Shahr-i Sokhta indicates that probably the first phase of development in Sistan, and specifically the southern Hirmand Delta, began in the late of second half of fourth millennium BC, with Shahr-i Sokhta Phase 9 (Sajjadi - Moradi 2018: 717).



Fig. 1: cultural landscape of Shahr-i Sokhta (left, Kavosh *et. al* 2019: fig. 1).



Fig. 2: areas associated with later fourth and early third millennium materials.

Site No. 4

This site is located about 800 metres southeast of Shahr-i Sokhta, with a low eroded height (about half a metre above the surrounding land at the highest point), with a low concentration of cultural material including pottery fragments, stone vessels and other items on the surface. The painted Buff Ware of this site belongs to Period I, Phase 9, i.e. around 3000 BC (Fig. 3, nos. 1-6 and Fig. 4, S4.1-5).

Site No. 6

This area is located 600 metres northwest of Site No. 4. At the centre of this low mound is a rectangular kiln measuring half a metre on each side. Also found were Buff Ware vessels decorated with solid geometric designs together with jars with lug-shaped handles (Fig. 3.7-10), similar to the Yahya IVC1 (Mutin 2013) and Jemdet Nasr types (Matthews 1989: fig. 11.3).

Site No. 7

This area is located 300 metres north of area number 6 and reaches a height of about 2 metres above the surrounding land. A fragment of a jar with a lug-shaped handle classified as pseudo-Jemdet pottery was found in this area, mixed with the remains of stone and marble vessels (Fig. 4, S7.11-13).

Site No. 17

This site is one of the areas belonging to Phase 9, Shahr-i Sokhta I, located near Sites No. 4 and No. 5, to which, along with Site No. 6, it is similar in terms of the quality of the available cultural materials. The ancient remains, which are covered with black pebbles, are no more than half a metre below the surface of the plain (Fig. 2, S.17).

Site No. 18

This site is located one kilometre southeast of Shahr-i Sokhta, 100 metres east of area No. 5. It is a hill with a diameter of approximately 40 metres about one metre above the surrounding terrain. Cultural materials include pottery, stone utensils

and marble items. The pottery includes Buff, Grey and Red Ware, the first two of which have painted geometric black patterns (Fig. 4, S.18.14-17). A piece of a cylindrical bowl with an everted rim is one of the interesting finds from this area (Fig. 4, S.18.17). It is related to Phase 9 of Shahr-i Sokhta, found in workshop 35 (Moradi 2021: fig. 20.17).

Site No. 19

This area is located 1200 metres southeast of Shahr-i Sokhta, about 1.5 metres above the surrounding terrain, with abundant pottery consisting of plain Buff, Red and Grey Ware. Patterns on the Buff Ware include triangles below the rim on the inside, associated with early Period II. A sample of light Buff Ware painted with rhomboids from Phase 9 of Shahr-i Sokhta is among the pottery collected at the site.

Site No. 20

Almost 500 metres east of Site No. 19, Site No. 20, 2.5 metres above the surrounding terrain, is the highest hill in this series of sites (Fig. 2, S.20). Items of Reddish and Buff Ware are scattered on the surface. Simple striped patterns are painted on deep bowls, a special style used around 3000 BC (Fig. 3, nos. 11-15).

3.2. Sites dated to Periods II and III (ca. 3000-2400 BC)

There are 16 sites in this group. The materials from sites located at some distance from Shahr-i Sokhta mostly belong to the second half of Period III and early Period IV. Most of these sites are larger than those of Period I, which are located on top of natural *kaluts* (Fig. 5).

Site No. 2, located 500 metres east of Shahr-i Sokhta, differs from other coeval sites in terms of both the dimensions and quality of its cultural materials, including pottery, which shows high diversity in designs and patterns and is mostly related to Period II and the mid third millennium BC (Fig. 5, No. S.2). Other sites coinciding with Periods II and III are scattered along a hypothetical line running north-south for about 40 km from Shahr-i Sokhta to Rud-i Biaban. Other landmarks dated to this period include Tepe-Rud-i Biaban on the eastern

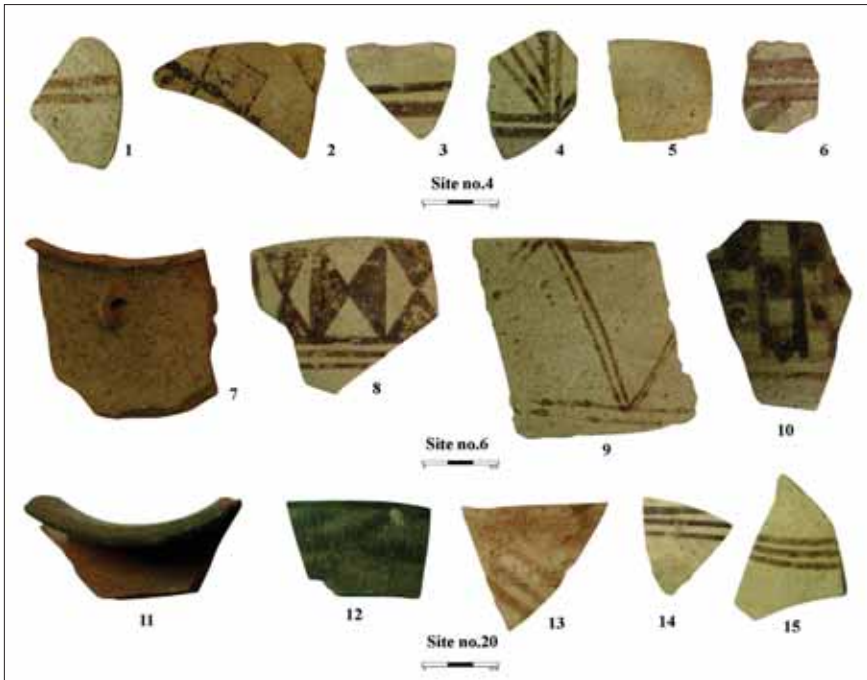


Fig. 3: pottery dated to the late fourth and early third millennium BC.

side of the southern end of this hypothetical line, which seems to belong entirely to the second half of Period III (Lazzari 2019: 11). Other large sites in this area are mostly located in Rud-i Biaban and generally belong to Period III and early Period IV (2600-2300 BC). The pottery of these areas includes various forms with linear motifs, hatched leaves or other hatched linear designs with thin lines that are characteristic of the motifs of Period III (Fig. 6 and 7). However, there are also areas such as Sites 24, 29 and 30 that have both materials belonging to Period III and materials from later phases.

Site No. 1

This eroded and very small area is located about 500 metres east of Shahr-i Sokhta but the presence of pottery residues suggests that one of the pottery workshop of the surrounding sites was probably located here (Fig. 7, no. 5).

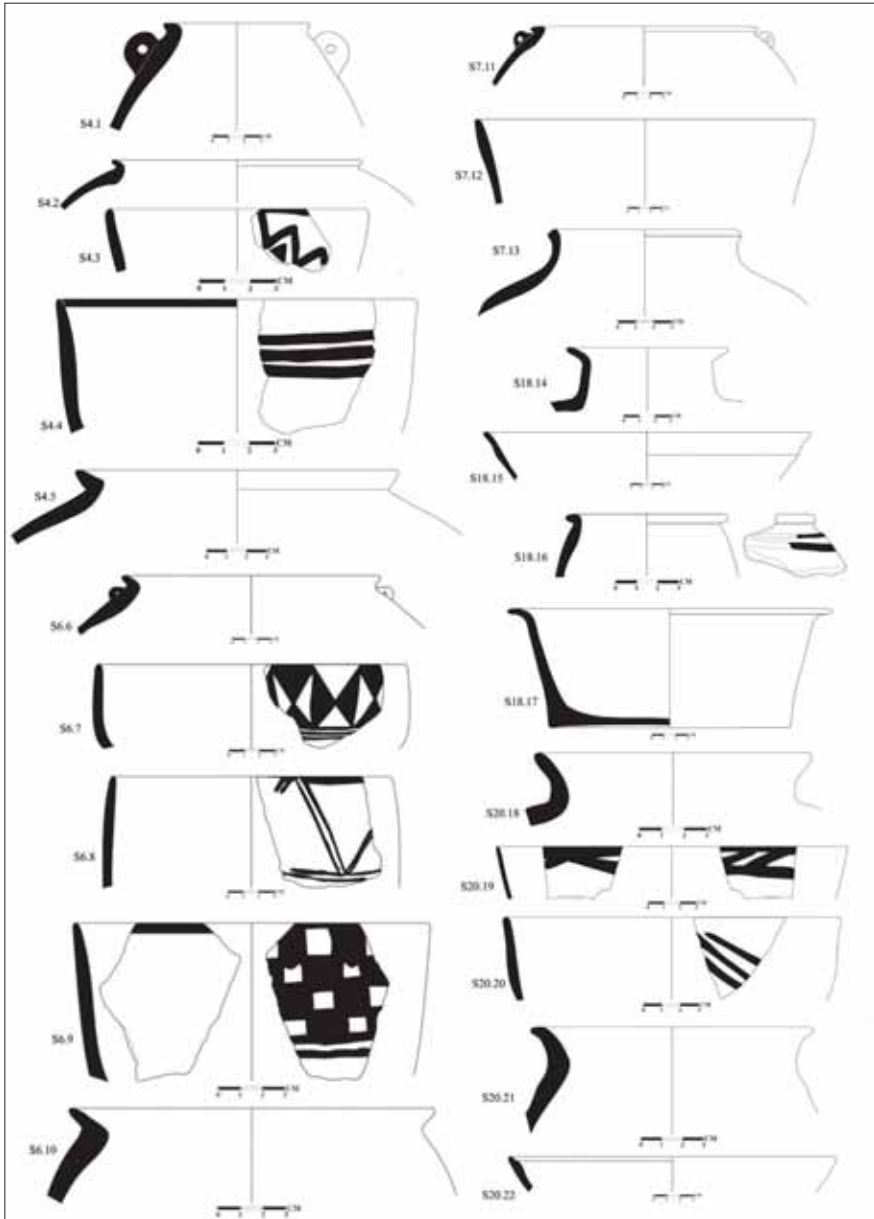


Fig. 4: designs seen on pottery from late fourth millennium BC and early third millennium BC.

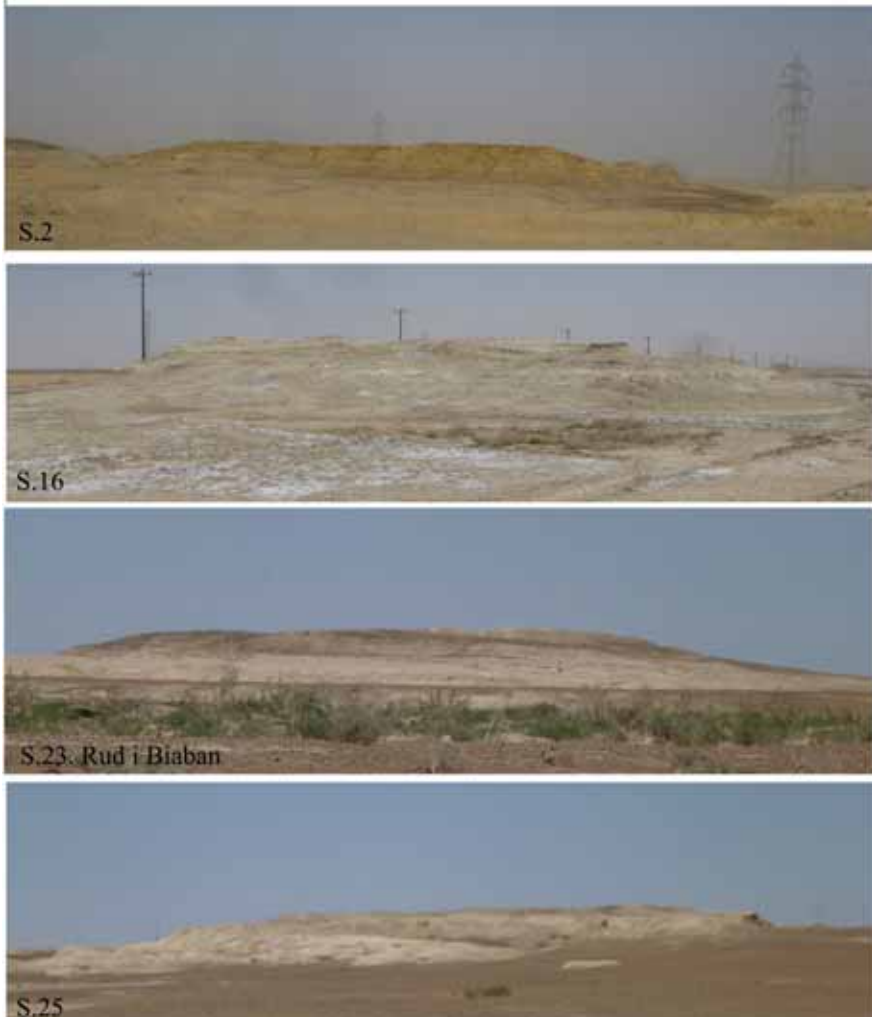


Fig. 5: areas dated to Periods II and III (3000-2400 BC).

Site No. 2

This site is located 500 metres east of Shahr-i Sokhta, and at 5 metres above the surrounding terrain it is one of the highest sites in the surveyed area. It is about 50 metres long and 30 metres wide. (Fig. 5, S.2). The density of pottery and other cultural materials on the surface is high. Most of the material belongs to period II, the first half of the third millennium BC (Fig. 6, nos. 1-4 and Fig. 7, nos. 1-4).

Site No. 3

This small site is located 300 metres south of site No. 2. The archaeological materials from the site include plain Buff and Grey Ware, fragments of marble vessels and stone objects. (Fig. 13, S.3).

Site No. 9

This very small and heavily eroded site is located east of a modern industrial kiln. The site is about 0.5 metres above the surrounding countryside, 30 metres long and 40 metres wide. A small number of pottery samples were collected; they include painted Grey Ware and plain and painted Buff Ware, as well as a brick-coloured fragment. The patterns on these fragments can probably be assigned to the middle of Period III, about 2500 BC (Fig. 6, nos. 6-7 and Fig. 7, nos. 19-21).

Site No. 10 (Tepe Fibr-e Nouri)

This site is located right next to the road. The installation of a fibre-optic transmission cable to the east of the site has damaged parts of the hill. The site is about 5 metres above the surrounding countryside and is 30 metres in diameter. The collected pottery consists of Buff, Reddish and plain Red Ware. The shape of the vessels indicates a dating to the second half of Period III and early Period IV (Phases 3 and 2 around 2450-2300 B.C).

Site No. 15

Site No. 15 is located 15 km south of Shahr-i Sokhta, 300 metres from Site No. 14. Fragments of plain Buff Ware and a few pieces of marble bowls were found on its surface (Fig. 6, no. 5).

Site No. 16

This site is located 10 km south of Shahr-i Sokhta. This is a small hill with a height of about 5 metres, 70 metres long, located on a natural *kalutak*. An electricity transmission pole has destroyed parts of the central section of the site. The pottery includes plain and painted Buff Ware with simple linear motifs, as well as Reddish and Grey Ware fragments. The shape of the vessels indicates the second half of Period III or the beginning of Period IV, i.e. 2450 to 2300 BC (Fig. 5, S.16).

Site No. 23

Site No. 23 (Tepe Rud i Biaban), with a trapezoidal shape, is a hill with a height of 8 metres, located 30 km southeast of Shahr-i Sokhta, close to the dried bed of a river with the same name (Fig. 5, S.23). This site can be considered the most distant of Shahr-i Sokhta's prehistoric satellites. It is an industrial area, with evidence of pottery kilns operating around the half of the third millennium BC. The surface of the mound is covered with ceramic residues and deformed pottery, scattered over a very large area with a high density. The ceramics include painted Buff Ware with fine and elaborate designs (Fig. 6, nos. S23.17-27). Motifs include hatched leaves or other motifs with delicate hatching, which are characteristic of the second half of Period III. This site is a centre for pottery production in the final phase of Shahr-i Sokhta's development, indicating the presence of industrial specialization on the Sistan plain (Tosi 1984: 29-30).

Site No. 25

Located 200 metres northwest of Tepe Rud-i Biaban, it is 6 metres high and about 100 metres in diameter. The pottery of this area, unlike that of Rud 1 (Site No. 24), is significantly in harmony with the pottery of Tepe Rud-i Biaban, which probably supplied this site with pottery products (Fig. 5, S.25).

Site No. 28

Site 28 is located 500 metres northwest of Site No 27. It is 4 metres high with

a diameter of 100 metres. The height of the mound is not uniform and it slopes gently to the south. The pottery found at the site reflects the tradition of Periods II and III of Shahr-i Sokhta, and it includes Buff, Red and Grey Ware (Fig. 6, nos. S28. 8-16). The quantity of marble vessels among the cultural materials of this area is significant (Fig. 13, no. S.28).

Site No. 31

Site No. 31 is a hill 4 metres high and 70 metres in diameter, located to the north of Site No. 30. The pottery of this site is classified into Buff and Reddish Ware. The painted Buff Ware is chronologically comparable to Phase 3, Period III. Unpainted pottery similar to that of sites 29 and 30 is comparable to that of Shahr-i Sokhta IV and the Rud-i Biaban phase (Fig. 6, nos. S.31. 28-30).

3.3. Sites coeval with the second half of Period IV and the Rud-i Biaban Phase (ca. 2400-2000 BC)

During recent surveys, 10 sites yielded a sort of pottery that was already known from earlier excavations. Although some samples of this pottery are comparable to that of Period IV, others do not show any connection to known Period IV pottery and are perhaps associated with the pottery found in the most recent layer of the Burnt Building (Biscione 1979: Figs. 4 and 8) and in the upper layer of workshops 20 and 26 (Sajjadi - Moradi 2016: fig. 20.1-2). It should be remembered that these sites are of large dimensions and are located on large Kalutaks (Fig. 8). Among this group, Tepe Taleb-Khan, Tepe Graziani and sites 29 and 30 all have a height of more than 15 metres and diameters of 100-150 metres, and are considered large among the archaeological sites of the Sistan plain (Fig. 9). They are located along a branch of the Rud-i Biaban river 15 to 30 km south of Shahr-i Sokhta and belong to the sites of the Rud-i Biaban basin.

The pottery of this group consists of a variety of fine and coarse Buff, Reddish and Grey Ware, with a large concentration of unpainted brick-coloured ceramics. Some painted and unpainted forms show connections with Phase 3, late Period III, and Phase 2, Period IV (Fig. 10). There are also unpainted items, including



Fig. 6: pottery from sites dated to Periods II-III and early Period IV.

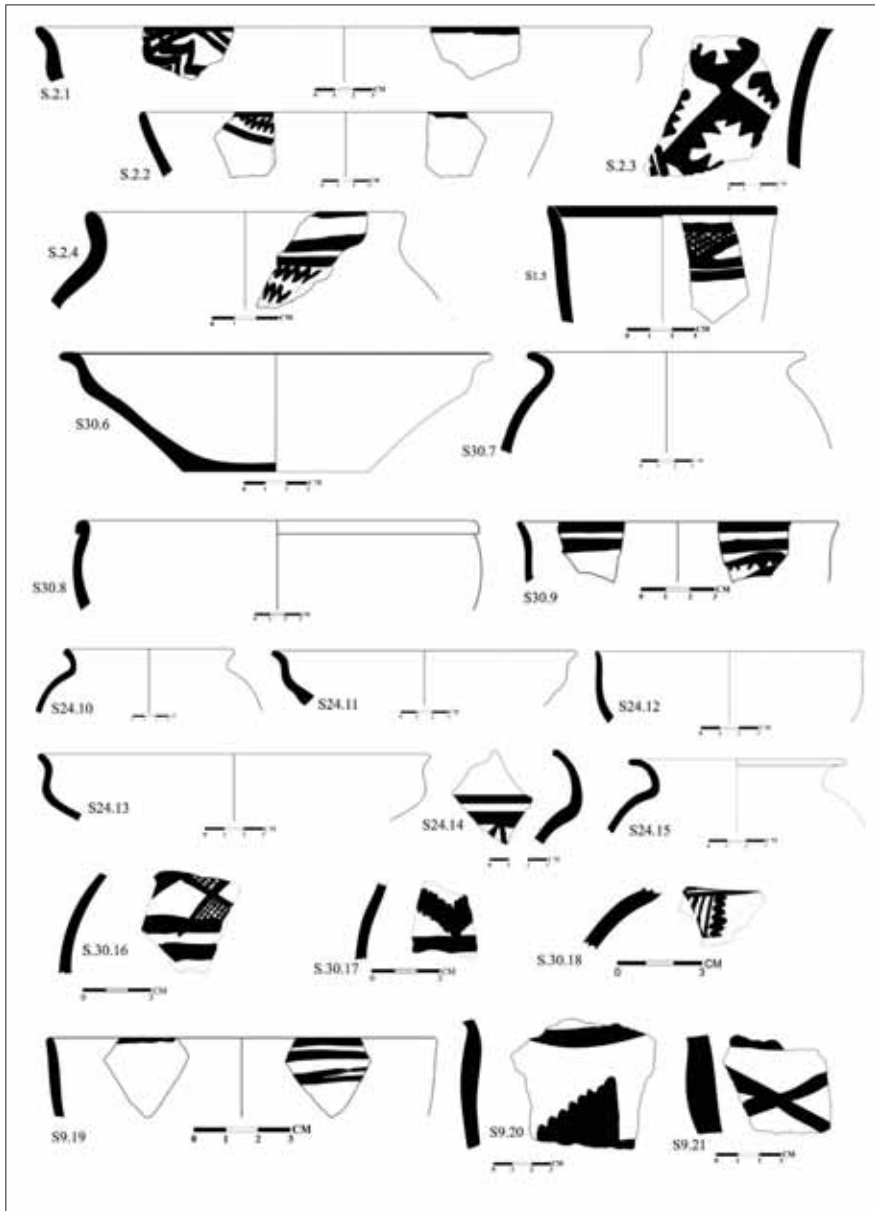


Fig. 7: patterns seen on pottery from sites coeval with Shahr-i Sokhta II-early IV.



Fig. 8: view of the sites related Rud-i Biaban phase.

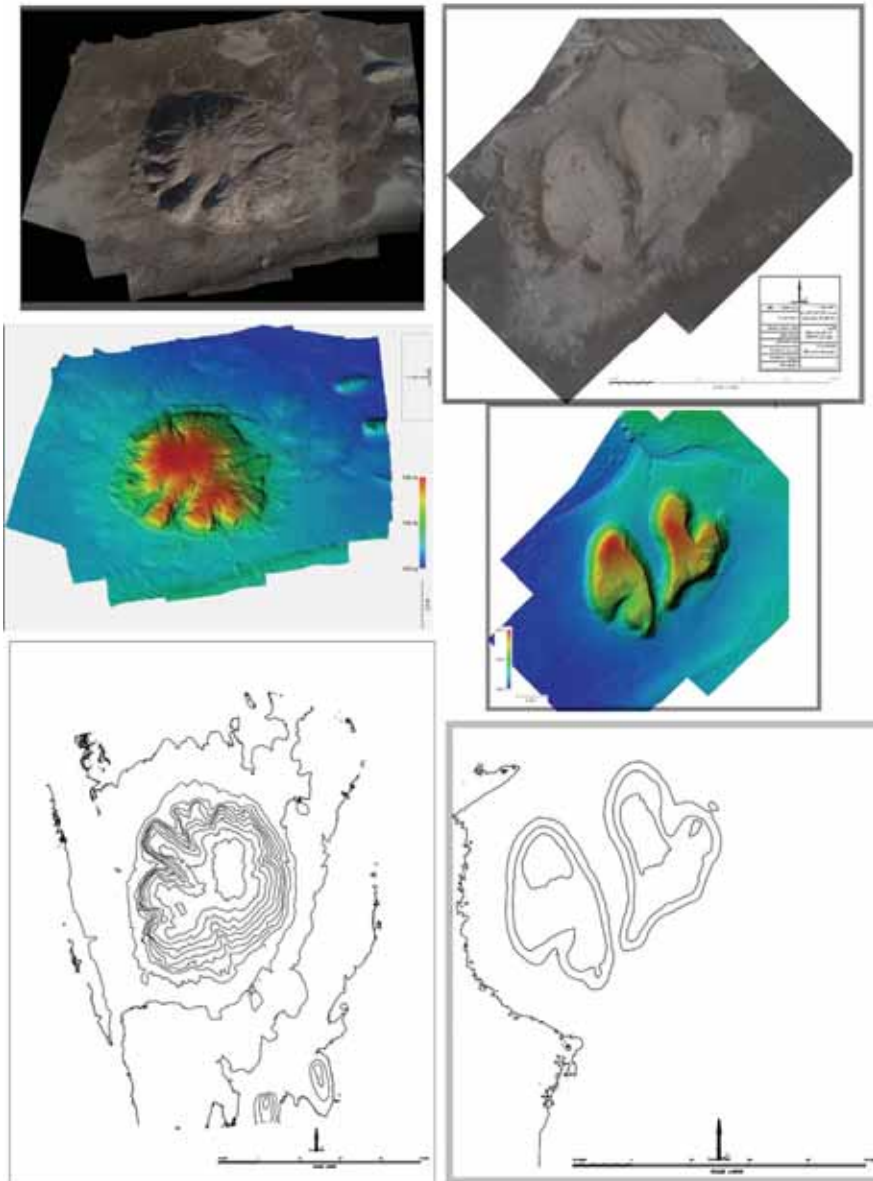


Fig. 9: aerial photo, orthophoto and topography of Site No. 29 on the left and Site No. 30 on the right (M. Saadatian).

jars with everted rims and shallow bowls similar to rare specimens from the most recent phase of the Burnt Building and the upper layers of workshops 20 and 26 (Moradi in this volume).

Some fragments have a thick ochre or dark brown slip on the outer body. In one sample a potter's mark is incised, and on another specimen a goat is painted in a light reddish brown colour (Fig. 10, S30.2). None of these types has been reported among the pottery of Shahr-i Sokhta were reported from BMAC sites in Khorasan

The unpainted and slipped painted Buff Ware of Phase 3, Period III, was found in Tepe Graziani, 10 km southeast of Shahr-i Sokhta, in a context dated to 2550-2450 BC (Helwing *et al.* 2019: 155), and in several other sites, such as No. 30. In some sites, including Nos. 24, 26 and 27, the pottery was more uniform. Based on the pottery classification, the following groups of sites were found in the area of Rud-i Biaban: 1) sites with Phase 3, Period III, pottery; 2) sites with Phase 3 pottery alongside unpainted Buff and brick-coloured Ware, comparable to ceramics from the last phase of the Burnt Building and areas 20 and 26; and 3) sites with more uniform pottery including unpainted Buff and brick-coloured Ware with everted rims, carinated bodies, a dark slip and in some cases grooved bodies. The latter type is not reported for Shahr-i Sokhta.

Based on the typology of pottery, it can be assumed that some pottery specimens, in particular unpainted Buff and slipped Ware, can be attributed to Phase 0 of Shahr-i Sokhta (Biscione 1979: 239). In the case of Fig. 10 S.29.12 and 6, S.30.2 and S.27.6-8, considering the patterns and grooves on the body, it can be assumed that they are subsequent to Period IV. Due to the abundance of sites with this type of pottery in the Rud-i Biaban region, the group 3 sites are considered to belong to the Rud-i Biaban phase.

As mentioned above, pottery fragments similar to these items have been found only in limited quantities in the upper layers of the Burnt Building and workshops 20 and 26, layers that are not related to the main body of the buildings and thus indicate a new phase of occupation on the ruins of the previous structures (Moradi in this volume). C14 dating of Building no. 26 indicates ca. 2400 BC, possibly

Phases 3 and 2 of Shahr-i Sokhta late Period III or early Period IV (Ascalone *et al.* in press). Pottery similar to that of the Rud-i Biaban area can probably be dated to a later period at Shahr-i Sokhta itself, indicating that the Burnt Building was occupied for a short time after the fire around 2000 BC (Biscione 1979: 239). It should be noted that the date provided for the final phase of occupation in the Burnt Building is 1800 BC (Salvatori - Tosi 2005: fig. 12), which casts doubt on the accuracy of the dates of this phase. Perhaps the answer to this question lies in the analysis of data from the Rud-i Biaban region. It seems that the settlement sequence in this area runs from the final years of Phase 3 (2550-2450 BC) until the beginning of the second millennium BC (ca. 1800 BC), and is seen in sites with Buff and brick-coloured pottery such as Nos. 26, 29 and 30. The accidental discovery by two young tourists of two stone pillars belonging to the BMAC (2300-1750 BC) (Biscione - Vahdati 2011: 238) in the Rud-i Biaban area may confirm our hypothesis. Such stone pillars, dated to the period 2200-1800 BC (Salvatori 2008: 89-90; Masson 1988: 96) can help to fill the chronological void from the end of 2300 BC to the beginning of the second millennium in the Sistan plain (Fig. 13 below). More over some types of pottery from site Nos. 29-32 are similar to those one from BMAC sites and until now, except along the Rud-i Biaban river in Afghani Sistan no evidence of BMAC material of southern Turkmenistan, north-eastern Iran, northern Afghanistan, parts of Tajikistan and Uzbekistan and the Sistan basin has been reported in Iranian Sistan (Tahmasebi Zave 2015: 1).

Thus, we appear to be dealing with three chronological phases in the Rud Biaban area. First, we have Tepe Rud-i Biaban and some other sites with painted pottery that reflects the evolution of the style associated with Phase 3, Period III, where pottery with simple flaring, everted rims and carinated bodies is absent. This reflects the Shahr-i Sokhta sequence (Phases 3 and 2) that was to mature at Tepe Rud-i Biaban and seems to be dated to 2400 BC. The second phase includes the upper layer of Graziani and sites No. 29 and No. 30, which have only a small quantity of painted pottery related to Phase 3, Period III and Period IV.2 and a higher quantity of unpainted Buff and Reddish Ware with flared rims and

carinated bodies that may be attributed to the transitional phase between Periods III and IV of Shahr-i Sokhta (probably Phase 1), dated to 2300 BC. The third phase includes sites such as No. 26 and No. 27, which have completely uniform pottery attributed to the Rud-i Biaban phase, which means that the sites with uniform unpainted Buff and Reddish Ware and in some cases grooved pottery (maybe Phase 0 of Shahr-i Sokhta) may be dated to around 2000 BC.

Pottery similar to the above-mentioned Rud-i Biaban-Phase specimens is not reported outside of Sistan, although some specimens are similar to material from Period I of BMAC dated to the period 2100-1900 BC (Hiebert 1994: 77). This similarity is of a general nature and differences in the details remain. For example, fragment no. 6 from Site No. 29 in figure 11 (S.29.6), and fragment no. 1 from Site No. 30 (S.30.1) are comparable to specimens from Period I of BMAC (Hiebert 1994: fig. 4.36.IV; Vahdati 2014: fig. 8).

In addition, sample S32.3 in Fig. 11 is comparable to specimens dated to Period I of BMAC in layers 0 to 2 of Altyn Tepe, due to the similar carination in the lower part of the body (Hiebert 1994: fig. 4.36.XXII). The grooved vessels from sites No. 27 and No. 30 in figure 10 S.27.6-8 and S.30.7 are similar to a rare specimen from G.N.1256 at Gonur Tepe, which is dated to the first quarter of the second millennium BC (Sarianidi 2007: 56 fig. 12).

Site No. 11: Tepe Taleb-Khan

This site is located 50 metres east of the Zahedan-Zabol road and 15 kilometres southeast of Shahr-i Sokhta. It was excavated by the department of archaeology of the University of Zabol. Based on a comparison of the pottery, it could be dated to the period from the third quarter of the third millennium to the beginning of the second millennium BC, i.e. the end of Period IV. The site has yielded some Rud-i Biaban phase type pottery (Fig. 10, S11.1-2).

Site No. 12: Tepe Taleb Khan 2

Tepe Taleb Khan 2 is located approximately 900 metres northeast of Tepe Taleb Khan 1 and is severely threatened by the railway project. The site is about 6 metres above the surrounding countryside and its diameter is about 60 metres.

Site No. 21

The site is located 15 km southeast of Shahr-i Sokhta and consists of two ridges with a significant quantity of pottery. It differs from other sites surrounding Shahr-i Sokhta in terms of the homogeneity of its cultural materials, since it contains both Buff Ware painted with motifs dated to the beginning of the third millennium BC and the common brick-coloured pottery of the second half of Period III and early Period IV (Fig. 10, S.21.1-2).

Site No. 24

Located 100 metres west of Tepe Rud-i Biaban, the site has an approximate height of 6 metres and a diameter of 60 metres, with the remnants of a modern brick building. The pottery is of the Shahr-i Sokhta IV type, together with a small quantity of painted Buff Ware. The pottery includes vessels with carinated bodies, bowls with everted rims and globular jars with flared rims and ochre slip, already seen in the upper levels of buildings 20 and 26, Tepe Taleb-Khan 1 and 2, and a number of other satellite sites (Fig. 11, S.24.1-3).

Site No. 26

This site is located 2 km east of Tepe Taleb-Khan. It is a large trapezoid hill 8 metres above the surrounding countryside with an approximate diameter of 150 metres. The pottery is in line with the tradition of Site No. 24 (Fig. 11, S.26.1-3).

Site No. 27

Site No. 27 is located near Site 26 and consists of two small adjacent hills with a height of 8 metres and a diameter of approximately 30 metres. The pottery of this small site is similar to that of Site No. 24. It includes grooved pottery from the Parthian period in Sistan (Fig. 10, S.27.1-8 and Fig. 11, S.27.2). These items are coarse ware and different from the grooved specimens of Kuh-i Khawje, despite the apparent similarity. The pottery assemblage includes only one Grey Ware fragment of the third millennium BC.

Site No. 29

Site No. 29, built on one of the largest *kaluts* on the edge of the plain, is one of the most extensive. 15 km southeast of Shahr-i Sokhta and 5 km east of Tepe Taleb Khan (Figs. 8 and 9), it is about 15 metres above the surrounding countryside and about 150 metres in diameter. The surface of the site, which is located next to the bed of the Rud-i Biaban river, is covered in Buff and Red Ware. The pottery is comparable to that of Site No. 24, but painted sherds related to Period III can be observed. There is also a small quantity of painted Red Ware with dark brown motifs, not common in the Shahr-i Sokhta tradition (Fig. 10, S.29.1-18, and Fig. 11, S.29.1-18). A piece of a bronze stamp seal and pieces of marble vessels are among the other finds (Fig. 13).

Site No. 30

Site No. 30 is located 30 km southeast of Shahr-i Sokhta in the Rud-i Biaban basin. The site is 8 metres above the surrounding terrain and trapezoid in shape, lying on a north-south axis, with two ridges on its north and south sides. Based on the materials scattered over its surface, it could be dated to Period III and early Period IV, as well as the Rud-i Biaban phase. The pottery consists of unpainted and painted Buff and brick-coloured Ware (Fig. 10, S.30.1-8, Fig. 11, S.30.1, 3, 4, 8).

Site No. 32

This small semi-circular site is about 4 metres above the surrounding countryside. The pottery follows the same tradition and composition as Site No. 31, although it is mostly attributed to Period IV of Shahr-i Sokhta and the Rud-i Biaban phase (Fig. 10 and 11, S.32.1-4).

4. Conclusion

The pottery and small finds discovered in an area stretching 40 km southeast from Shahr-i Sokhta belong to three phases in harmony with the Shahr-i Sokhta



Fig. 10: Rud-i Biaban phase pottery.

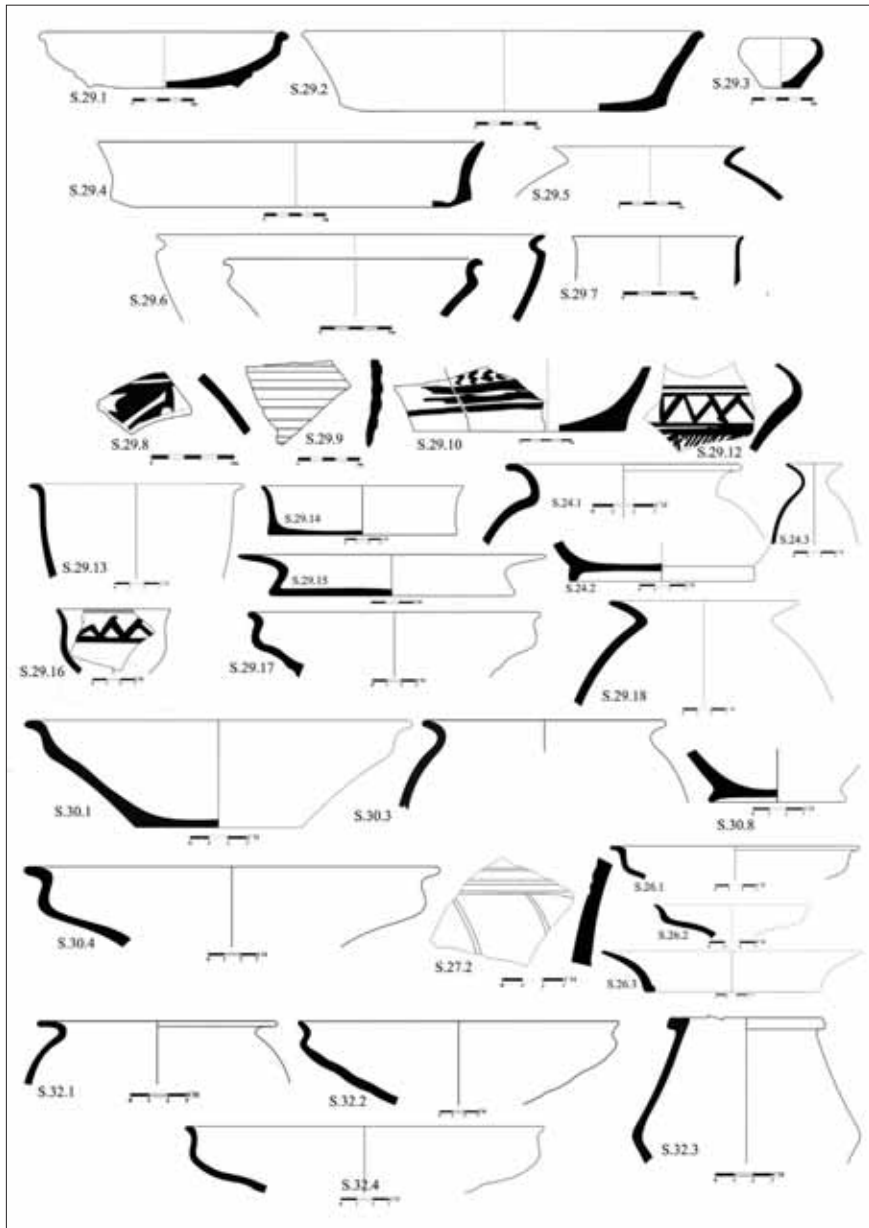


Fig. 11: Rud-i Biaban phase pottery.

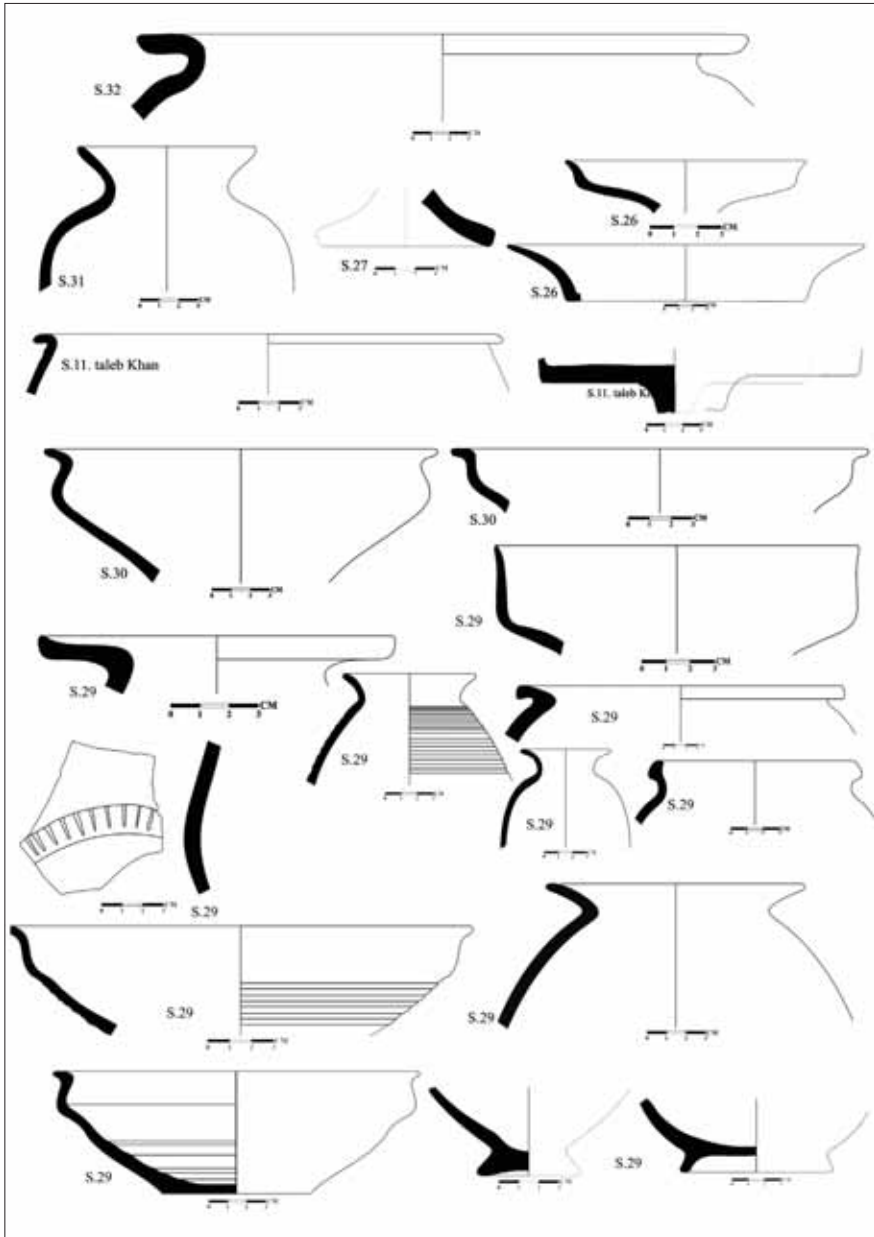


Fig. 12: Rud-i Biaban phase pottery.

sequence, each category representing a stage in the development of Sistan culture from the third to the early second millennia BC.

The first group of sites are very small settlements located two kilometres southeast of Shahr-i Sokhta. The cultural materials associated with this group are mostly related to the early third millennium BC and coincide with the first phase of development in this settlement. Remnants of materials related to Phase 9 (3300-3100 BC), have been found in the 'Eastern Residential Area' at the deepest levels and the formation of a large and populous settlement seems to have begun in this period. New discoveries show that groups of people who settled around the site in the late fourth and early third millennium BC had exactly the same cultural materials as their neighbours in the 'Eastern Residential Area' at Shahr-i Sokhta.

These findings show that the area of the city in the early third millennium BC was larger than previously thought and we are dealing with the first phase of urban development in the southern Hirmand Delta. The second group of sites, very small and scattered, is dated to the first half of third millennium BC, i.e. 3000-2600 BC. The excavation of Tepe-Dasht and Tepe-Sadegh, which are dated to this period, show that in general, the population in the mid third millennium BC was concentrated in Shahr-i Sokhta itself, and unlike the Rud-i Biaban phase, the periphery was of little importance, with a much smaller number of settlements than the subsequent period, scattered over the plain.

This comparison makes sense when considering the next category of sites, dated to the late third millennium and early second millennium BC. The largest site, number 2, is located very close to Shahr-i Sokhta, but the other sites are very small. The assumption that the population at this time was concentrated in Shahr-i Sokhta itself, the surrounding area being of little importance, is consistent with archaeological data obtained from excavations in the graveyard and residential areas. However, following this phase, in the last quarter of the third millennium BC, which marks the final stage of development of the southern Hirmand Delta the number of sites increased. The pottery from this stage found at the sites is mixed with materials from the Rud-i Biaban phase and Shahr-i Sokhta Phase 0 (around 2000 BC). It seems that the Rud-i Biaban phase is probably associated

with the contexts of this stage of development and represents the final stage of settlement in the southern Hirmand Delta. The presence of cultural materials from this stage, corresponding to the Rud-i Biaban phase, indicates the third category of sites, whose material remains are very limited in Shahr-i Sokhta itself, being found in the upper layers, exhibiting its final phase of occupation. It seems that from 2300 BC the growth of the settlements was outside the main site of Shahr-i Sokhta, along the tributaries of the Rud-i Biaban river. Simultaneously with the shrinking of occupation in Shahr-i Sokhta around 2000 BC, scattered but large settlements formed in the Rud-i Biaban basin, probably surviving, based on the presence of the above-mentioned stone pillars discovered there, until around 1800 BC. The settlements of this period were built on large kalutaks in order to be safe from floods and seasonal rains, but the inhabited areas were small and scattered across the plain.

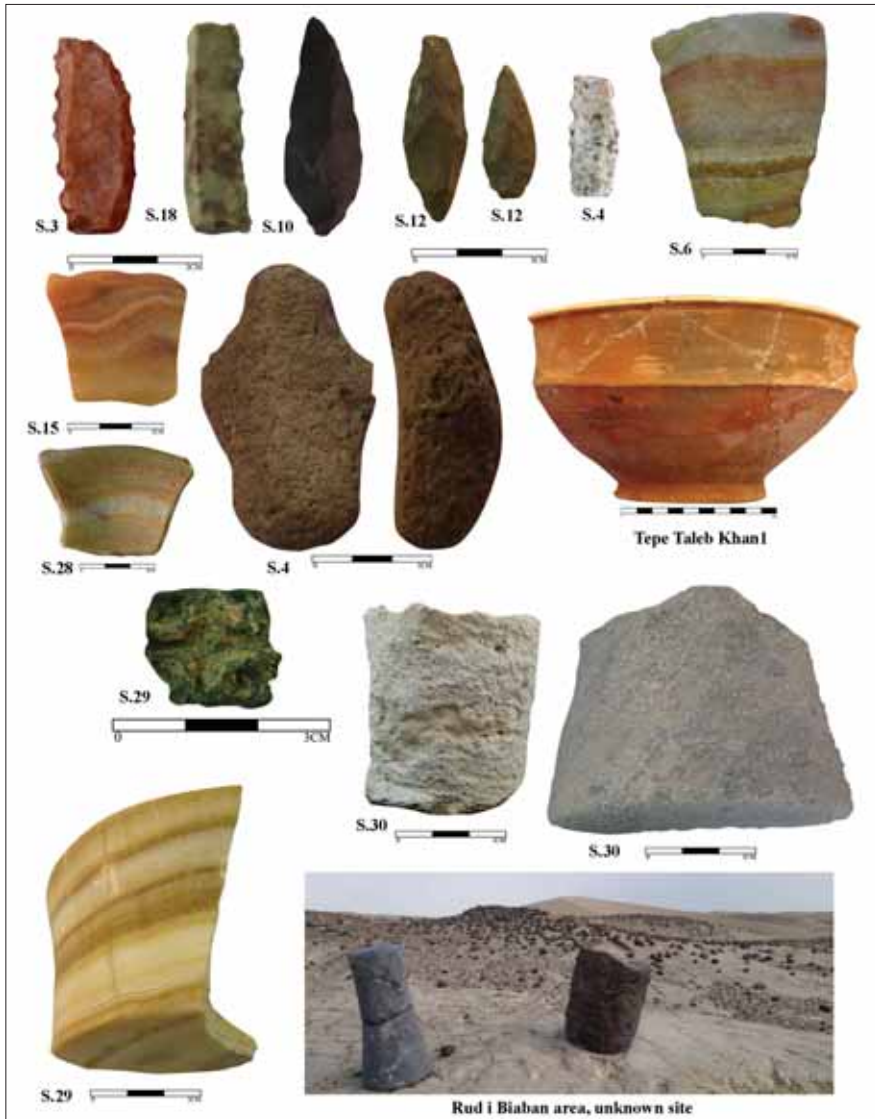


Fig. 13: small finds from the surveyed area.

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