
Sarazm (Tajikistan) No 1141rev

Official name as proposed by the State Party:

Sarazm

Location:

Penjikent District,
Soghdian Province
Tajikistan

Brief description:

Sarazm is an archaeological site bearing testimony to the development of human settlements in Central Asia, from the 4th millennium BCE to the end of the 3rd millennium BCE. Sarazm demonstrates the early development of proto-urbanization in this region, illustrated by the sophistication of its dwellings, its infrastructures, and its portable objects. It came into being because of complementarity, initially between pastoralism and early agrarianism, and later between the exploitation of mineral resources in the Bronze Age and the development of handicrafts. Sarazm demonstrates the existence of tangible and cultural interchanges between regions over great distances, and an initial development of trade links between the steppes of Central Asia, Turkmenistan, the Iranian plateau, the Indus Valley, and the Indian Ocean.

Category of property:

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention of 1972, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), Annex 3, this is a *town no longer inhabited* in the category *Historic towns and town centres*.

1. BASIC DATA

Included in the Tentative List: 19 June 2000

International Assistance from the World Heritage Fund for preparing the Nomination: 23 November 2001

Date received by the World Heritage Centre:
27 January 2009

Background: This nomination has been deferred (31 COM, Christchurch, 2007):

Decision 31 COM 8B.29:

The World Heritage Committee,

1. *Having examined Documents WHC-07/31.COM/8B and WHC-07/31.COM/INF.8B.1,*

2. *Defers the examination of the nomination of Sarazm, Tajikistan, to the World Heritage List to allow the State Party to consider submitting a new nomination, in order to:*

a) *Explore further the values and significance of the property;*

b) *Give consideration to extending the installation of protective covers to all the excavated features on the site;*

c) *Reduce the level of excavation on the site and to divert the emphasis to the use of non-invasive techniques of geophysical prospecting for further exploration of the property;*

d) *Give consideration to setting up a conservation unit on the site.*

Consultations: ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management and independent experts.

Literature consulted (selection):

Amiet, P., "L'âge des échanges inter-iraniens, 3500-1700 avant J.-C." in Ligabue, G., et Rossi-Osmida, G. (éd), *Sulla via del oasi, tesori dell'Oriente Antico*, Padova, 2007, p. 64-67.

Besenal R., Isakov A.; "Sarazm et les débuts du peuplement agricole dans la région de Samarkand", *Arts asiatiques*, 44, Paris, 1989, pp. 5-20.

Isakov A. I., *Sarazm*, Dushambe, Donish, 1991.

Isakov A. I., "Sarazm: An agricultural center of ancient Sogdiana", *Bulletin of the Asia Institute*, 8, Bloomfield Hills (USA), 1994, pp. 1-12.

Lyonnet, B., "Sarazm, céramiques : Chalcolithique et Bronze ancien", *Mémoires de la mission archéologique française en Asie centrale*, Paris, Broccard, 1996.

Technical Evaluation Mission: 9-12 August 2009

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 18 January 2010, requesting it to provide a summary of the new results obtained through research since the nomination examined in 2007, and to indicate how they add to or modify the values of the property which have already been established or tentatively suggested.

ICOMOS received additional documentation from the State Party answering its questions, dated 14 and 26

February 2010; this documentation is taken into consideration in this evaluation.

Date of ICOMOS approval of this report: 17 March 2010

2. THE PROPERTY

Description

The archaeological site of Sarazm is located in the valley of the River Zeravchan, on its left bank, at an average altitude of 910m. It is situated 15km to the west of the town of Penjikent, and 45km to the east of Samarkand (Uzbekistan). Sarazm - the name means "the beginning of the land" - is at the opening of the mountainous region surrounding the river bed, and at the gateway of a large plain that opens up to the west. It is a strategic location which is conducive to interchanges.

The nominated property is located on an alluvial terrace, a short distance away from the river, protecting it from flooding, near the river's confluence with a mountain stream. The terrace runs from west to east over a distance of around 1.5km, and its width varies from 400m to 900m. The protohistoric settlement seems to have covered an area of some 50ha at its apogee, when Sarazm had a population of about 3,000 inhabitants.

The settlement consisted of built areas, open spaces, and reservoirs. Sarazm does not have a clearly defined plan. The proto-urban ensemble, which had no protective enclosure, extended in various directions with no clear boundaries unearthed up to now.

The main archaeological zone of the property is covered by steppe vegetation and is protected by a recently installed metal fence. Thirteen excavation zones, representing less than 4% of the protected land, have been studied by archaeologists; partially backfilled, they leave visible the remnants of the structures unearthed (see Conservation).

To ensure better protection of the most interesting excavated areas, five large roofs have been constructed. Visitors can thus actually see the archaeologists' finds as they are unearthed. Conventional archaeological explorations have been reduced, and are being redirected towards geophysical survey methods, so as to obtain a non-destructive understanding of the remains of Sarazm. The most spectacular portable objects unearthed by the archaeological research have been deposited in the museum of nearby Penjikent.

Stratigraphy

Four stratigraphic levels have been unearthed at Sarazm, corresponding to four main successive periods of continuous settlement, from the middle of the 4th millennium BCE to the end of the 3rd millennium BCE. The approximate dates for the four periods are as follows:

Period I	3500-3300 BCE
Period II	3200-2900 BCE
Period III	2900-2700 BCE
Period IV	2700-2000 BCE

Sarazm was a vast proto-urban settlement which reached its maximum extension in Period III. Agriculture was based on irrigated and semi-irrigated farming close to the river and on the terrace itself, together with cattle breeding. Hunting apparently no longer played more than a minor role at Sarazm.

Architecture

The remains of buildings at Sarazm comprise dwellings, workshops for craftsmen, storage areas (granaries), palatial buildings, and religious buildings. All were essentially built of unburnt brick (adobe), which was extremely easy to use, cut, and shape. Roofs were flat with wooden beams, covered by a network of branches and reeds supporting one or several layers of clayey earth. There were doors and windows with sometimes quite complex systems, proving mastery in the implementation of ventilation and lighting. River stones were used during the last period of occupation.

Residential areas

Multi-room complexes are very frequent for all periods of occupation, with main rooms and adjacent wings. They comprise living areas with adjoining storerooms, workshops, kitchens, and outbuildings. Most of them have a fenced courtyard in which craft activities were carried out. Several related families living together occupied the residential complexes. The residential complexes were separated by squares, and wide or narrow streets, or spaces for cattle. Water reservoirs were also present inside the settlements.

Inside the rooms, religious functions corresponding to Period II were carried out in small domestic shrines, with round hearth-altars in the middle. From Period III onwards, the shrines became larger, with square and round hearth-altars. In some cases, the shrines were built in a location which was separate from the dwellings. The walls of the ceremonial buildings were often reinforced with buttresses and usually covered with paintings.

Monumental buildings

Three types of monumental structure characteristic of the development of the proto-urban culture of the ancient Orient have been discovered at Sarazm: a communal granary, a religious building, and a palatial complex.

Irrigation

The irrigation system of Sarazm is probably one of the most sophisticated of the Chalcolithic and Bronze Age in Central Asia. There are two successive phases: plain irrigation close to the main river, and terrace irrigation

from terraces using water from canals collecting water from the mountains. Remnants of canals and dykes have been unearthed.

Burials

No large necropolis has yet been found at Sarazm, but an excavation led to the discovery of a funerary enclosure with a round plan, in which were buried a woman, a man, and an adolescent. On and around the skeleton of the woman were found thousands of beads (steatite, lapis lazuli, cornelian, turquoise, and silver). Her hair was decorated with solid gold beads. Her hands were adorned with bracelets of sea shells probably originating from the Indian Ocean. The necropolis bears similarities to those of Turkmenistan, but the stone enclosure wall is reminiscent of the funerary customs of the Eurasian steppes.

Workshops and craft activities

For Periods I to III, the painted ceramics are hand-made; the potter's wheel appears in Period IV. The working of semi-precious stones (turquoise, lapis lazuli, agates, etc.), of which there are considerable deposits in the region, is one of the activities of the workshops, together with metallurgical production in the Bronze Age. The remains unearthed are pottery kilns, clay moulds, crucibles, etc., together with metal objects.

A two-deck pottery kiln, dating from the early 3rd millennium BCE, bears witness to the development of ceramics production at Sarazm; nothing similar exists elsewhere in Central Asia before 2000 BCE.

All the discoveries made show that Sarazm, in addition to its agrarian populations, became a craft centre, particularly in the 3rd millennium BCE, supplying manufactured products to its own population and to a vast hinterland. The town made ornaments and tools, using not only local and regional resources, but also resources transported over distances of more than 1,500km, such as seashells. To date, Sarazm is the most important metallurgical centre known to have existed in Central Asia in the 3rd millennium BCE. It illustrates interchanges and exchanges over long distances.

Buffer zone

The buffer zone includes the location of the archaeological base for personnel, and a storage area which will ultimately become a small site museum.

Today, part of the village of Sahibnazar is located inside the north and west parts of the buffer zone, and the village of Avazali is in the north-east section. These villages are inhabited by farmers who work the surrounding land. A specific protection regime applies in this area (yellow zone).

History and development

The proto-urban settlement of Sarazm dates back to the first half of the 4th millennium BCE. It may have been established on an earlier village of farmers dating back to the Neolithic. In its earliest level, a particularly rich funerary circle testifies to the existence of an important settlement in around 3500 BCE.

In geographical terms, Sarazm is situated at a point of contact between a mountainous area and an extensive plain. In the 4th millennium BCE, contacts developed between nomadic shepherds from the mountains and the agrarian populations of Transoxiana, on the basis of economic complementarity. The mountains that frame the main valley, to the north and south of Sarazm, are rich in a variety of mineral raw materials and metal ores. They can be crossed by high valleys and passes which are accessible in the summer, particularly to the south.

In addition to its own farming produce, it seems that Sarazm established itself, at a particularly early date near the beginning of the 4th millennium BCE, as a centre for inter-regional interchanges over long distances, particularly with the plains of Turkmenistan and the steppes of the north-east. Archaeological evidence, particularly from studies of ceramics, then demonstrates the great variety of contacts established by Sarazm over the course of its history. The remains reflect both pre-Elamite and Baluchistani influences, and tangible and cultural interchanges with the Indus Valley.

During the 3rd millennium BCE, Sarazm was an important centre for tin and bronze, and for copper and lead, in Central Asia. In addition, Sarazm developed production of manufactured goods: ornaments, ceramics, and tools. It also drew its prosperity from the exploitation of other regional resources: semi-precious stones such as turquoise, agate, and lapis lazuli, and also wool and leather. Sarazm was the first centre in Central Asia - probably from the start of the 3rd millennium BCE - to establish commercial relations and a network of cultural interchanges on such a large geographical scale. The town had connections to the west with Turkmenistan extending as far as the Aral Sea, to the north-east with the Eurasian steppe as far as Siberia, to the south-west with the Persian plateau as far as Mesopotamia and perhaps further, and to the south with Bactria, to Baluchistan and the Indus Valley, and as far as the Indian Ocean (sea shells). Findings at Sarazm in particular confirm the permanency of interchanges with the mountains of the Hindu Kush.

During the Bronze Age, Sarazm became a rich proto-urban settlement. The town had a sophisticated culture which required complex organization, and the capacities to erect dwellings with a wide range of different rooms and decorated monumental buildings. This was a centre where a large number of complementary activities were developed in an economy based on agriculture and cattle-breeding on the one hand, and the processing of local mineral resources and handicrafts on the other.

This led to a situation which is emblematic of the beginnings of urbanization, with socially diversified settlement, professional specialization, and a certain degree of sophistication in architectural construction and technical achievements.

Sarazm seems to have declined between the middle and end of the 3rd millennium BCE. No evidence of occupation has been found for subsequent periods, and it seems likely that nomadic shepherds then once again inhabited the region. The reasons why Sarazm was abandoned by its inhabitants have not yet been identified. Various scholarly hypotheses have been advanced: a population migration, an epidemic, or military attacks on a settlement which was prosperous but which was located in a non-fortified urban ensemble.

Following an accidental discovery by a villager in 1976, excavations on the site began in 1979. Since then excavations have been carried out at thirteen different places, covering a surface area of about 2.5ha (the archaeological urban area is estimated to be around 47ha). The excavated zones have been partially backfilled to preserve them from destruction. However, this solution turned out not to be fully satisfactory, as the structures unearthed were then subject to visible natural deterioration. This is why five of the excavation zones have been covered with metal shelters.

ICOMOS considers that in the new dossier and in the additional documentation of 14 and 26 February 2010, the State Party has satisfactorily taken into consideration Recommendation a) of the Committee decision 31 COM 8B.29.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Comparative analysis

Initially, the State Party points to comparisons established some years ago with other Chalcolithic and Bronze Age settlements in a vast region to the west and south-west of the property, with a view to understanding the proto-urban culture of Sarazm and its connections. Some analogies have been demonstrated with monumental buildings discovered on several sites from the same period, such as the public storage buildings at Altyn Depe (Turkmenistan), the monumental religious building at Geoksyur (Turkmenistan), and the system of rooms from the 3rd millennium BCE and the disc-shaped hearth-altars of Mundigak III-IV (Afghanistan). Sarazm clearly belongs to the proto-urban cultural ensemble of southern Turkmenistan, which is also confirmed by the arrangement of the dwellings and objects: painted ceramics of the same style (Namazaga), characteristic stone weights, ornaments, etc.

In a closer geographical context, links exist with the archaeological sites of Margiana and Bactria, which can be detected in ornamental items, lead weights, and

funerary practices in the Bronze Age.

Another influence is reflected in the presence of large monumental funerary stone circles with buried individuals, recalling cultural practices of the steppes of Afanasevo and southern Siberia (Kazakhstan, Russian Federation). This link is confirmed by the presence at Sarazm of some ceramics that are typical of these cultures.

A cylindrical seal discovered at Sarazm and other archaeological finds can be compared with those of Proto-Elamite sites in Iran, particularly Tepe Hissar and Shahr-i Sokhta. They establish a link with these societies, and further afield with 4th and 3rd millennium Mesopotamia. This point distinguishes Sarazm from the whole of Turkmenistan, which to date has no proven links of this type. There is also a connection with the civilization of Ur in Mesopotamia in the middle of the 3rd millennium, as a result of the discovery of a thin gold rosette with twelve petals.

The importance of metals at Sarazm, and of its long-distance links with other regions, have been confirmed by recent studies, particularly with regard to its role in the control of tin, essential for the making of bronze. Similarly, its activity in semi-precious stones is also emphasized.

Archaeologists have also advanced new hypotheses, based on the suggestion of resemblances between Sarazm and sites that are today better known in the Jiroft Valley and Sistan Basin in Iran, and even with sites such as Mundigak in Afghanistan, Ra's al-Jinz in Oman, and Lothal in India.

Following these comparisons, the State Party stresses the interest and originality of Sarazm that distinguish it from the other proto-urban sites of the Chalcolithic and early Bronze Age (4th millennium to the middle of the 3rd millennium BCE). It is in particular the largest town currently known to have existed in these periods in this part of Central Asia.

At a very early date, Sarazm had a complex economy, based on the one hand on agriculture and cattle-breeding, and on the other on the exploitation of the region's mineral resources, the result of the remarkable geological riches of the high valley of the Zeravchan which have already been mentioned. Sarazm then became an important region for the production and control of metals.

It was also a major centre for handicrafts, using regional mineral resources and also imported seashells for jewellery. Its skills in the use of kilns enabled it to develop ceramics. It also transformed raw materials from local agriculture (weaving and leather). It is argued that Sarazm was a veritable protohistoric manufacturing town.

Sarazm also provides tangible documentation about the interchanges across Central Asia, well before the existence of the Silk Route. It displays elements originating from distant and extremely different cultures, encompassing a vast region from the steppes of Central Asia to Iran, and from Pamir to the shores of the Aral Sea.

The architecture of Sarazm presents analogies with that of other Central Asian regions of the same period, particularly in Turkmenistan, but more generally, its buildings are more complex and sophisticated. There is, moreover, no protective enclosure, whereas many protohistoric settlements of this period protected themselves with earth banks, moats, etc.

ICOMOS considers that the comparative analysis provided in the dossier is not very different from the previous one, bearing in mind that the recommendation adopted by the World Heritage Committee in 2007 was specifically to “*Explore further the values and significance of the property*”. Sites dating from the same period, such as Moenjodaro in Pakistan (inscribed in 1980), could be examined.

ICOMOS asked the State Party, in its letter dated 18 January 2010, to provide a summary of the new results obtained in the research field since the dossier examined in 2007, and to explain how these results add to or modify the values of the property that had already been established or tentatively suggested. The answer was provided by the State Party in the additional documentation sent in February 2010. The report on the research work carried out in 2007-2009 and its results was drawn up by the archaeological department of the Sarazm Reserve. The results clearly reflect the dynamism of the research carried out over this period, with the participation of international teams. The recent discoveries (kilns, buildings, portable objects, particularly metal ones, non-destructive structural surveys, etc.) firstly reinforce the already established value of the site, in terms of the size of the settlement, and validate the very long period of occupation of Sarazm. Secondly, the interchanges and long-distance relations of Sarazm, particularly with the Middle East, have been reinforced by this recent research work. Recommendation a) of decision 31 COM 8B.29 has been taken into account and the answer provided is satisfactory.

In view of the additional information provided, ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The development of Sarazm fully demonstrates the

protohistoric conditions for intercultural contacts and interchanges between various central Asian cultural traditions, during the Chalcolithic period and the Bronze Age.

- The geostrategic situation of Sarazm was the key to its unique development from the 4th millennium BCE. This centre of settlement, one of the oldest in Central Asia, is situated between a mountainous region suitable for cattle rearing by nomadic pastoralists and a large valley conducive to the development of agriculture and irrigation by the first settled populations in the region.
- The slopes of the Zeravchan valley contain natural geological resources which enabled Sarazm to become a major centre for bronze and tin metallurgy, particularly in the 3rd millennium BCE, and a proto-urban handicraft centre for the making of ornaments and tools for a vast region.
- These new developments gave rise to a considerable number of social changes, such as the beginning of specialization of production, the formalization of commercial exchanges, the appearance of social classes, and town-planning, which led to the development of a complex settlement with highly sophisticated architectural structures.
- Sarazm was the first centre in Central Asia to have trade relationships with peoples over a very extensive geographical area, ranging from the Eurasian steppes of Turkmenistan and the Aral Sea to the north and west and extending to the south and south-west to the Indus and the Iranian plateau, as far as the Indian Ocean. It became a rich and prosperous town with an elaborate culture which made a powerful contribution to the protohistoric development of the region.
- As testimony to an innovative ancient culture, the 5,500-year-old archaeological site of Sarazm holds unique scientific and cultural interest for archaeologists, visitors, and the inhabitants of Tajikistan and the region as a whole. Sarazm makes a major contribution to the extension of knowledge of protohistoric civilizations in Central Asia. Alongside the well known neighbouring civilization zones (Elam, Indus), Central Asia emerges as a veritable cultural entity, even in its north-eastern edges, at periods dating back to those of the oldest agrarian societies.

ICOMOS considers that Sarazm is an important archaeological site at Central Asian level, and that it fully illustrates proto-urban development and the birth of networks of tangible and cultural interchanges over long distances, from the end of the Neolithic until the Bronze Age. Some of the values asserted by the State Party had initially seemed to be fragmentary, particularly as regards metallurgical skills, handicrafts, and early long-

distance interchanges. However, the most recent archaeological research (2007-2009) has confirmed the importance of the property in the metallurgical field and in early long-distance interchanges. The recent research work has furthermore given consideration to essential matters relating to the conservation of the property.

Integrity and Authenticity

Integrity

The integrity of Sarazm as an archaeological site is good, as the site was abandoned at the end of the 3rd millennium BCE and there was no subsequent urban resettlement. The site was affected at a surface level by agricultural activities which were relatively shallow in depth, and by the recent development of villages around the site. The presence of the most recent occupation layer is satisfactorily represented, despite surface alterations caused both by agriculture and natural processes.

The site covers the area of successive ancient settlements, from 3500 BCE to 2000 BCE, and all periods are represented in the remains. It therefore constitutes a full testimony to the proto-urbanization of Central Asia by the first settlements and their continuation through the development of craft and commercial functions.

The adobe remains left exposed after the excavations (particularly after the earliest excavations) have undergone a process of natural degradation as a result of climatic effects, and particularly the cycle of moisture/freezing/thawing. However, this process seems to have been brought under control by partial protective backfilling, the shelters erected in the early 2000s, and the implementation of a programme of active conservation measures (cooperation with the CRATerre organization). The recent non-invasive analyses carried out using external geophysical methods, the results of which have been published since the first nomination dossier was drawn up, demonstrate a good state of conservation and integrity of the remains that have not been excavated and remained underground. Recent tests on parts which had previously been excavated and then backfilled show that the base of the built structures in the ground has been relatively well conserved. The integrity of the urban settlements at different periods, completed by surveys carried out by archaeologists (see Description and History), may be described as stabilized and satisfactory.

The integrity of the landscape is affected by the protective shelters, but their presence is inevitable at present as they are necessary for the conservation of the property.

ICOMOS considers that the new research carried out using geophysical surveys and recent evaluations of the state of conservation of the property are in line with recommendations b) and c) of Committee decision 31

COM 8B.29 and that the efforts undertaken should be continued.

ICOMOS considers that the integrity of the property and its control are closely associated with its conservation. The situation following the recent research, carried out since the first nomination dossier was drawn up, and the current conservation programme for the adobe remains have stabilized the integrity of the property at an acceptable level. However, the uncertainty surrounding the exact boundaries of the site is detrimental to the full and complete application of the concept of integrity.

Authenticity

As an archaeological site, Sarazm is fully authentic. All the original elements are still in their original location, where they were left at the time the site was abandoned, and any decay is purely the result of natural effects. Furthermore, the site has not been affected by uncontrolled excavations and treasure hunting, as this has not occurred in Sarazm, and the local population has always cooperated well with the archaeologists.

ICOMOS considers that the integrity of the nominated property is acceptable and under control, as a result of the works and programmes currently under way; however, integrity is not fully defined because of a lack of knowledge about the exact boundaries of the property. Authenticity is satisfactory. Overall, ICOMOS considers that the conditions of integrity and authenticity have been met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii) and (iii). Three of the criteria proposed in the nomination dossier examined in 2006 have been withdrawn ((iv), (v), and (vi)). ICOMOS considers that this delineates the most important values of the property, in accordance with the recommendations of the Committee when it examined the first nomination dossier, thus enabling a better evaluation of the levels of value.

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that Sarazm was a strategic meeting point between the nomadic pastoralists of the mountains and the agrarian populations of Transoxiane, from the end of the Neolithic. Through organizing the trade between these two complementary groups, and then by producing metals, tools, and craft products thanks to the abundant raw-material resources in the region, Sarazm constituted a prosperous and enduring proto-urban settlement. It is today considered to be the extreme north-eastern point of the establishment of Chalcolithic and then Bronze Age

civilization in Eurasia and is related to the Proto-Elamite, Mesopotamian, and Indus worlds.

In the 4th and 3rd millennia BCE, the town developed as a major trading centre in Central Asia, in a region extending from the Eurasian steppes to the Aral Sea, and from Turkmenia and the Iranian plateau to the Indus Valley, facilitating trade and cultural interchange and contributing to the birth of the major trans-Eurasian trade routes.

ICOMOS considers that archaeological research at the present time has satisfactorily established the significance and the long time-span of the tangible and cultural interchanges associated with the proto-urban settlement of Sarazm, in 4th and 3rd millennium BCE central Asia.

ICOMOS considers that this criterion has been justified.

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that Sarazm bears exceptional testimony to the development of proto-urban civilization in Central Asia, at a considerable distance from the traditionally acknowledged basins of Egypt, Mesopotamia, and the Indus valley. Sarazm considerably extends the area in which a proto-urban culture is believed to have existed, with many local variants, stretching from the Iranian plateau to Turkmenistan and from Central Asia to Baluchistan. It is a unique testimony to the encounter resulting from these different cultural interchanges in the Chalcolithic and the Bronze Age.

ICOMOS considers that in the additional documentation of February 2010 the State Party has provided satisfactory confirmation and additional archaeological evidence to support the inscription of the property on the basis of this criterion.

ICOMOS considers that Sarazm is a remarkable human settlement which is exceptional because of its geographical situation, in Central Asia, and the scale of its proto-urban development, in the 3rd and 4th millennia BCE. The town played a major regional role in the exploitation of metals, particularly tin and copper.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iii) and conditions of authenticity and integrity; and that Outstanding Universal Value has been demonstrated.

4. FACTORS AFFECTING THE PROPERTY

Development pressures

Located on a rather arid terrace area, the Sarazm site was not farmed in the modern era before the 1950s, when modern irrigation canals were dug. With the gradual increase of the population in the Zeravchan valley, people were in search of more land for agriculture. The migratory trend towards the Penjikent district was reinforced following the serious flooding which occurred in the neighbouring mountains in 2005-2006.

However, farming activities are prohibited inside the property, which is protected by a metal fence, and they are controlled in the buffer zone (the State Party has indicated that it considers farming activities to be declining in the buffer zone).

At the northern limit of the territory of the ancient protohistoric site of Sarazm and to its west, two contemporary villages have developed: Sahibnazar and Avazali. They occupy a large proportion of the buffer zone and they are tending to expand, but they have not encroached on the property itself. The villages consist of family dwellings of modest dimensions.

The buffer zone is crossed by earth roads and an asphalt road that lead to the villages of Sahibnazar and Avazali. These roads, like the building developments of the 2000s, do not appear on the official map in the nomination dossier, which shows an outdated map. They are, however, perfectly visible on satellite photos from the mid-2000s. A road crosses the property from one end to another.

The State Party indicates that no new development has been authorized in the buffer zone since 2001, and strict rules are applied depending on the agricultural uses to which the land is put and on their public owners (private ownership of land does not exist in Tajikistan).

ICOMOS considers that the pressure resulting from the development of farming, and the demand for private housing has been subject to regulatory control by the State Party for several years now. This effort should be continued and encouraged.

ICOMOS considers that particular care should be taken to ensure controlled and restricted use of the road crossing the property, so that it does not affect its conservation or the expression of its value (straying of domestic animals, uncontrolled circulation of cars and light commercial vehicles, uncontrolled visitor access to the site, etc.).

Tourism pressures

Up to now the number of visitors has been very limited and there have been no reports of any damage caused by visitors. This point has been taken into account in the

project aimed at increasing visitor numbers. No visits will be made without the presence of a trained guide; during the visits, the various facets of preservation of the property will be presented and explained. Visitors will not be allowed to get closer than 1m from the excavation trenches, and the areas surrounding the excavations will be maintained, and if necessary repaired and reinforced.

ICOMOS considers that the data provided by the State Party concerning population trends, town planning, and roads in the buffer zone must be updated, as satellite photograph monitoring indicates that changes have occurred both in the housing and in the road network.

Environmental pressures

The site is affected by the local continental climate, which has detrimental effects as a result of rapid changes in temperature and a long period of nocturnal freezing during the year. Frost, combined with the possible presence of humidity in the remains after snow or rain, is the most significant factor of deterioration of the adobe structures.

The archaeological remains may also suffer damage from livestock if surveillance is inadequate, wild animals (birds' nests, rodents, animal burrows), and the natural growth of steppe grasses and scrub.

Natural disasters

The only risk of a natural disaster in this zone is that of earthquakes. The probability of the property being affected is, however, very low, as most of the remains are low structures. The property has no steep slopes, and there is therefore virtually no landslide risk.

A strip of land in the buffer zone completely surrounds the property and its fence; it constitutes a circular thoroughfare and is used by the farmers in the buffer zone; it also provides very convenient access to the boundaries of the property if an intervention is necessary.

Impact of climate change

There is no proven threat from climate change at the present time.

ICOMOS considers that the main threats to the property are the risk of the development of uncontrolled building, uncontrolled use of the road which crosses from one end of the property to the other, and the pressure of the natural elements (freezing/thawing, animals, and wild plants). More generally, data relating to agricultural development, dwellings, and traffic inside the property and its buffer zone must be included in the monitoring of the property and give rise to appropriate measures.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The area of the property is 15.9ha. There are no inhabitants inside the property boundaries.

The buffer zone around the property is continuous. Its surface area is 142ha. Its boundary to the south is the A377 main road, which forms a straight line; its boundary to the north is a disused irrigation canal on the edge of the villages of Avazali and Sahibnazar; its boundaries to the west and east are roads leading from the main road to the villages.

The buffer zone is divided into three parts, governed by different regulations and used for different purposes:

- The main part (in yellow on the plan, 110.5ha) is a private zone of housing and agriculture, that has been controlled since 2001;
- The second part (in red, 25ha), in the south-east, is exclusively agricultural and under the direct control of the State Party;
- The third part (in grey, 6.5ha) is currently the area around the property where traffic and shared agricultural use are allowed, as already indicated; it does, however, include formerly excavated areas, which were later backfilled and can no longer contribute to the visual value of the ensemble; it is subject to strict regulation, and the archaeological base is established there by special permission, because of its mission.

Some 300 families live inside the buffer zone (all of them in the yellow zone).

ICOMOS considers that the extent of the property is defined by a clearly identified heritage space and by visible remains, notably following the most recent excavations, which were non-destructive or less destructive than the first excavations. This approach is satisfactory at the moment, but future extensions need to be planned for, as the possible surface area of the ancient settlements is estimated to be between 45ha and 50 ha. It therefore extends into the existing buffer zone, and possibly further. The fact that the extent of the property may increase must be taken into account by the State Party.

ICOMOS considers that the boundaries of the property are acceptable, and correspond with the current state of knowledge about ancient settlements at Sarazm; their possible extension in the future, depending on possible future discoveries, could lead to revisions. The buffer zone is adequate, but the same observation applies as for the property.

Ownership

By resolution of the Government of the Republic of Tajikistan No 198 and land certificate No 006981 issued on 19 April 2001, the plot of land of 47.34ha, known as the Sarazm Reserve, formed by the property and the grey and pink parts of the buffer zone, is the property of the Republic and under its direct responsibility.

The main part of the buffer zone (in yellow) is public property, assigned to the management of the inhabitants, farmers, and communal officials of the villages of Avazali and Sahibnazar (Jamoat of Sarazm).

Protection

Legal Protection

Historic and cultural monuments are protected by the Constitution, and are governed by the laws and normative texts of the Republic of Tajikistan.

The Constitution of the Republic of Tajikistan (§ 44) requires all citizens to respect and protect historic and cultural monuments.

The protection, management, and monitoring of historic and cultural monuments are governed by the Culture Law of the Republic of Tajikistan, ratified on 13 December 1997.

Sarazm has the legal status of a "Historic and archaeological reserve" as defined by the resolutions of the Government of the Republic of Tajikistan No 391 of 21 September 2000 and No 198 of 19 April 2001.

The first resolution declared that Sarazm was a "Historic and archaeological reserve"; it defined its extent and entrusted the Academy of Sciences of the Republic of Tajikistan and the Presidents of the District of Penjikent and the Province of Soghdian with the responsibilities of preservation and management (financing, allocation of land and control of prohibition of all construction on the site).

The second resolution established and organized the "Sarazm Historic and Archaeological Reserve." It is managed by the Archaeological Base of Penjikent under the supervision of the Institute of History, Archaeology, and Ethnography of the Academy of Sciences.

An agreement was concluded between the District of Penjikent (Hukumat), the representatives of the villages of the commune of Sarazm (Jamoat), and the Historic and Archaeological Reserve on 31 October 2005. It stipulates in particular that any chance find made by a local inhabitant during agricultural work or at the surface must be handed over to the Reserve, and that the location of the find must be precisely indicated. If the villagers are planning to move earth for any reason, they are required to notify the Reserve so that archaeologists

can be present during the earth moving.

Traditional Protection

The site was discovered in 1976 by a villager who found a few objects on the surface of a freshly ploughed field, including a bronze axe. This marked the beginning of fruitful collaboration between the archaeologists and the local population, which is aware of the importance of the site and of the need for it to be protected.

Effectiveness of protection measures

The protection measures seem to be effective.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

Inventories, recording, research

All documentation and reports relating to the property are conserved in the archives of the Penjikent Archaeological Base.

To date, all archaeological research carried out under the various programmes has been regularly documented, so that the information is available and can be used for further activities of research, interpretation, or education without delay .

Many research articles have been published in various international archaeological reviews since the 1980s (Bibliography of site studies, pp. 37-39 of the nomination dossier).

An adobe architecture conservation research programme has been undertaken as part of an international partnership (France).

A programme about the influence the architecture of Sarazm may have had on constructions in the region in later periods is under way.

Another international programme (Italy) is planned for 2010-2012, with a view to carrying out non-destructive geophysical surveys.

ICOMOS notes that these measures are in line with recommendations made by the Committee when the first nomination dossier was evaluated.

Present state of conservation

The most exposed excavation zones are protected by roofs constructed in 2004-2005; they contain remains which were in a good state of conservation when the property monitoring mission was set up by the State Party in 2007-2008. The remains do not require any immediate consolidation work.

Amongst the initial excavations, which were not protected by roofs, some were insufficiently backfilled when the excavations were completed, which has damaged the vestiges that remained exposed. They have, however, stabilized through a natural process, and recent analyses of walls that were reburied at a later stage, supplied since the first nomination dossier was drawn up, show that the conservation situation is not as bad as expected. Furthermore, these initial excavations made possible the establishment of initial documentation which was essential for an understanding of occupation levels and of the importance of Sarazm in protohistory. They were carried out carefully, with the help of a large number of surveys and stratigraphic studies, using probes in areas of limited size.

Most of the surface area of the property has not been excavated, and the most important parts of the excavated zones have been protected by shelters. This suggests that the property is in a relatively good state of general conservation, despite some irreversible losses.

Active Conservation measures

At present, only some of the zones that have been excavated are protected by metal shelters. Those protected are, however, the largest zones to have been excavated.

The adobe structure conservation programme should enable these structures to be monitored and conserved. The programme has been operational since 2009 and the results recorded are encouraging.

ICOMOS takes a positive view of the efforts made for the conservation of the adobe structures, and wishes to stress the importance of ensuring that they are implemented as widely as possible and systematically monitored.

Maintenance

Weeding is carried out by the staff of the Base.

Effectiveness of conservation measures

ICOMOS considers that the conservation work carried out up to now is satisfactory. A study to consider the possible extension of the excavated zone areas to be protected by shelters would be useful.

ICOMOS considers that the conservation measures taken up to the present are satisfactory. They reflect a qualitative improvement in line with the recommendations made by the Committee when the first nomination dossier was examined. These measures must be continued and carried out systematically.

Management

Management structures and processes, including traditional management processes

Management of the protection of historic and cultural monuments is carried out by the Ministry of Culture, in conjunction with the Academy of Sciences. The Ministry prepares and applies legislation on monuments and sites; its approval is required for national research programmes and conservation projects, for which it requests funding from the Government.

The Academy of Sciences, via the Institute of History, Archaeology and Ethnography, supervises the drawing up of the scientific programmes. It establishes international cooperation agreements and coordinates field studies. The Academy allocates budgets for the running of the Archaeological Base of Penjikent and the Sarazm Reserve, and for projects for research and the conservation of the property.

The term "Sarazm Historical-Archaeological Reserve" defines the property as an administrative and scientific entity; it is attached to the Penjikent Archaeological Base. The Penjikent Archaeological Base runs the Sarazm Base, located on the site, the main tasks of which are the management of the archaeological site, the reception of scientific missions, the management of the archaeological object storage room (site museum), and visitor reception. It ensures the preservation and conservation of archaeological finds. It also manages Penjikent Museum and its archive room, with regard to excavation results and documentation relating to the Sarazm site.

ICOMOS considers that the measures introduced for the creation of the Archaeological Reserve of Sarazm take into consideration recommendation d) of Committee decision 31 COM 8B.29 and that the efforts made must be continued.

Policy framework: management plans and arrangements, including visitor management and presentation

The governmental decisions of September 2000 and April 2001 (see Protection) define the general administrative, scientific, and financial framework of the operation of the Sarazm Reserve; they also define its missions and ensure that the necessary human and material resources are provided.

A management plan covers the period 2006-2010. It first sets out a medium-term vision for the future of the site, as a development space shared between the local rural community and the archaeological site, as a space for historical knowledge and cultural tourism. It lists the strengths and weaknesses of the Reserve and the threats hanging over the property. It defines the priorities: development of conservation techniques, raising awareness of the property and its values,

developing visits and tourism, consolidating the revenues associated with the management of the property, better organization of the documentation and enrichment of the data currently available, and strengthening the technical capacities of the Reserve.

With regard to the actions announced, in connection with the general objectives set out above, it is hard to determine exactly what has been achieved, what is currently under way, and what has remained merely an intention. The plan is, however, currently being implemented. Furthermore, there is no presentation of actions carried out in partnership with foreign institutions, both as regards research (non-destructive geophysical research and archaeological studies – Italy, Germany), the conservation of the property (CRATerre programme, France), or presentation of the property (site museum, USA).

The management plan states that a special effort will be made with a view to the permanent opening of the site for visitors, including visitor information projects (signage, interpretation, website) and the site museum project.

ICOMOS considers that a full report on the actions carried out during the 2006-2010 management plan should be drawn up and submitted to the World Heritage Committee. This report on actions carried out or in progress must be used as the basis for drawing up the next management plan.

Risk preparedness

There is no specific programme in this respect. However, the fencing system and the traffic space around the property may be considered as factors which help prevent risks.

Involvement of the local communities

Close relations have been maintained between the Reserve management and the local communities since the property was discovered by a villager in 1976. The local inhabitants are proud of the property and respect it. They are keen to collaborate with the archaeologists and help to protect the property by their presence.

Resources, including staffing levels, expertise, and training

The Reserve staff currently consists of one director and thirteen other staff members (researchers, administrative employees, technicians, and guards). There is, however, no full-time conservation manager on the site.

The cooperation missions for archaeological research and the conservation of the property have enabled foreign scientists and professionals to make a contribution, to complement local competencies, and to assist with training.

ICOMOS considers that professional and scientific training initiatives for Reserve personnel are a priority. ICOMOS wishes to encourage the State Party to develop such initiatives, particularly in a regional context. Training initiatives linked to international cooperation projects must form an important part of the archaeological research and conservation programmes.

Effectiveness of current management

As no report has been provided stating the results of the current management plan (2006-2010), it is difficult to give any quantified appraisal of the effectiveness of current management.

However, ICOMOS welcomes the efforts made in the field of conservation, and particularly the training of local personnel in conservation techniques, together with the determination shown both to protect the site and to ensure that it is opened to visitors on a permanent basis.

ICOMOS considers that the efforts currently being made in the protection and conservation of the property must be continued and encouraged through international cooperation, as must efforts made to bring about permanent staffing of the site. This will involve, in particular, the development of visitor reception facilities (site museum, signage, presence of guides, etc.)

The strengthening of the teams and the training of personnel must be priority targets for the management of the property.

Compared with the first nomination dossier, the possibility of the presence of a conservation unit on-site has been raised, and the management system has been extended, in accordance with recommendation d) of decision 31 COM 8B.29. The management plan that will be ending in 2010 should lead to an overall improvement in the conservation and management of the property.

ICOMOS considers that the management system for the property is in place, and that it has begun to be expanded and to operate satisfactorily. A certain degree of fragility remains, however, as presence on the site of the property itself is limited. The management authority must ensure that it produces a report on the actions carried out, which can be used for the next management plan, and must increase the staffing of the Sarazm Archaeological Reserve in terms of both numbers and level of training.

6. MONITORING

The Penjikent Archaeological Base is responsible for monitoring the conservation of the property. It acts under the supervision of the national authorities (Institute of History, Archaeology and Ethnography of the Academy of Sciences of the Republic of Tajikistan). It draws up an annual report based on eleven technical indicators that define monitoring operations and observations.

No annual monitoring report has, however, been included with the nomination dossier.

ICOMOS considers that the announced monitoring measures are adequate for conservation, provided that the annual monitoring reports are in fact produced.

ICOMOS considers that monitoring should be extended to include the buffer zone, with regard to agricultural and housing development, and to the use of the roads that cross the property and the buffer zone.

7. CONCLUSIONS

ICOMOS recognizes the Outstanding Universal Value of Sarazm, but wishes to point out a certain degree of fragility in its management, which means that the active continuation of international cooperation is necessary.

Compared with the first nomination dossier, the recommendations of further exploring the values and significance of the property and the use of non-invasive geophysical techniques have been taken into account, and action has been taken to ensure the presence of a conservation unit on the site, in line with the recommendations of Committee decision 31 COM 8B.29.

Recommendations with respect to inscription

ICOMOS recommends that Sarazm, Tajikistan, be inscribed on the World Heritage List on the basis of ***criteria (ii) and (iii)***.

Recommended Statement of Outstanding Universal Value

Sarazm is an archaeological site which bears witness to the development of settlements in Central Asia from the 4th millennium BCE to the late 3rd millennium BCE. Sarazm illustrates the early rise of proto-urbanization in this region, reflected in the sophistication of the dwellings, infrastructures, and archaeological findings. It came into being as the result of the complementarity initially between pastoralism and early agrarianism, and subsequently between the exploitation of mineral resources in the Bronze Age and the development of handicrafts. Sarazm demonstrates the existence of inter-regional trade and cultural interchanges over long distances across Central Asia. This was a long-lasting and prosperous proto-urban metropolis, at the north-eastern extremity of a vast area stretching from Mesopotamia to the Indus and the Iranian plateau.

Criterion (ii): The proto-urban centre of Sarazm bears testimony, from the 4th millennium BCE, to trade and cultural interchanges between the pastoral nomads of the mountains of Central Asia and the agrarian peoples of Transoxiane. Later, particularly in the Bronze Age, Sarazm complemented and extended its activities with metallurgy and handicrafts, demonstrating the existence

of a network of a diversity of interchanges on a very large scale. Sarazm had connections with the steppes of Central Asia, and in addition with the Turkmenian, proto-Elamite, Mesopotamian, and Indus worlds.

Criterion (iii): Sarazm constitutes a remarkable human settlement, exceptional in its geographical situation, in Central Asia, in the 4th and 3rd millennia BCE, to which its proto-urban and architectural remains and its archaeological findings bear witness. The town played a regional role over a long period and on a very large scale in the working of metals, particularly tin and copper, and the associated development of handicrafts to produce tools, ceramics, and jewellery. Sarazm is one of the places that gave birth to and saw the development of the major trans-Eurasian trade routes.

Integrity and Authenticity

The integrity of the property is acceptable and under control, as a result of the current conservation works and programmes, but it is still ill-defined because of uncertainty about the precise boundaries of the proto-urban site. All the original elements are in their initial location, where they were left when the site was abandoned, and the only deterioration of these elements is the result of natural processes.

Management and protection requirements

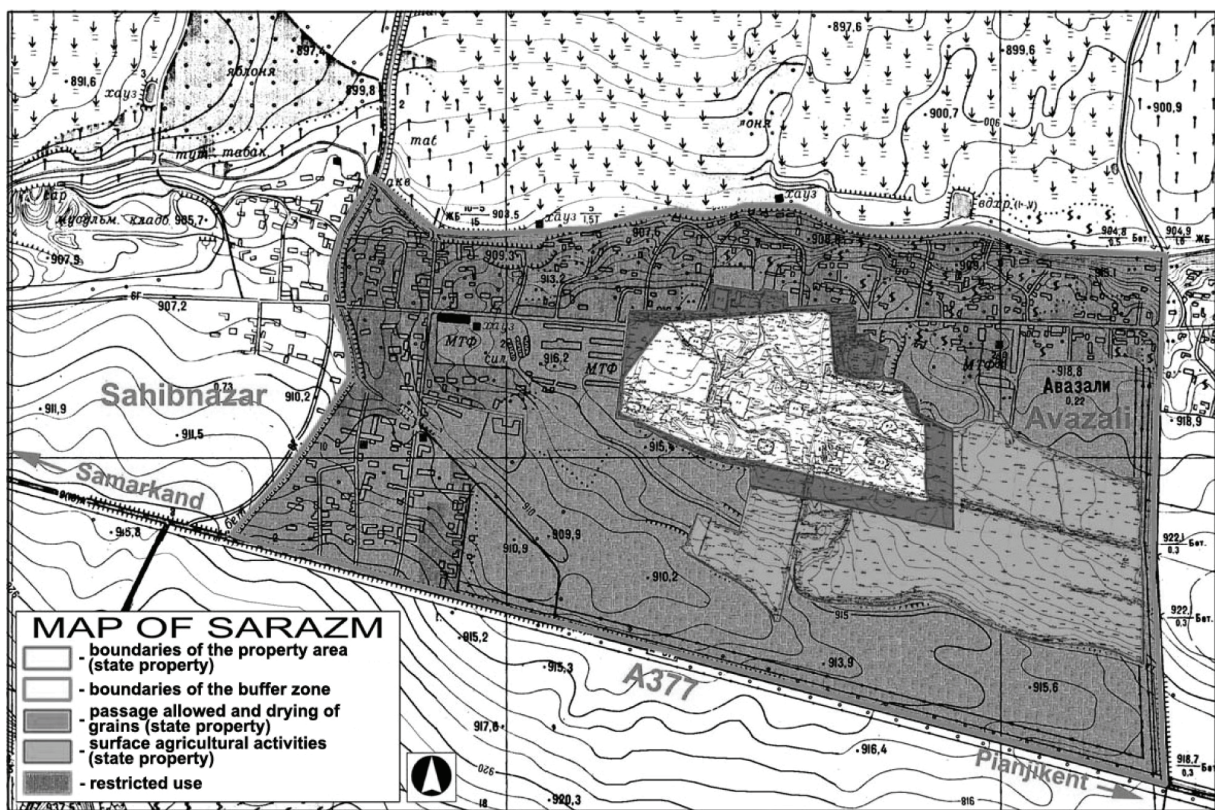
Sarazm has the legal status of a "Historical and Archaeological Reserve," as defined by the resolutions of the Government of the Republic of Tajikistan No 391 of 21 September 2000 and No 198 of 19 April 2001. It is managed by the Penjikent Archaeological Base under the supervision of the Institute of History, Archaeology and Ethnography of the Academy of Sciences. The protection of the property is satisfactory. The system for the management of the property is in place. It has begun to be expanded and to operate satisfactorily. A certain degree of fragility remains, however, as the presence of the management system on the site of the property itself is inadequate. The management authority must make sure that it produces a report on the initiatives carried out and strengthens the human resources of the Sarazm Archaeological Reserve, in terms of both the number of staff and the level of training. International cooperation for scientific research and for the conservation of the property remains crucial, and must proactively participate in the training of local personnel.

ICOMOS recommends that the State Party give consideration to the following:

- Consider changing the name of the property to make it more descriptive and better reflect the value of the property, such as "Proto-historic settlement site of Sarazm", "Proto-urban site of Sarazm", or another name.
- Continue and reinforce the upcoming archaeological programme in the context of the

international cooperation projects currently under way, in particular by the use of non-invasive geophysical techniques, to try to determine the boundaries of the proto-urban settlement of Sarazm and to confirm what are today the most hypothetical aspects of the value of the property (metallurgy and metal working, handicrafts other than ceramics).

- Continue and systematize the efforts being made to improve the conservation of the property (the CRATerre programme in particular), examine whether new protective shelters are necessary, and raise awareness of the annual conservation monitoring report.
- Draw up a report of actions completed or under way as the 2006-2010 management plan comes to an end, including initiatives carried out under international cooperation projects, and submit a new management plan, based on this report, for future years.
- Reinforce the Sarazm Archaeological Base with permanent staffing and open the property and the site museum to visitors, while ensuring that the values of the property are appropriately presented.
- Strengthen the training of the personnel employed by the Reserve, particularly in connection with international scientific and conservation cooperation projects.
- Extend the monitoring of the property to include control of agricultural and housing development inside the buffer zone and of the use of the roads that cross the property and the buffer zone.



Map showing the boundaries of the nominated property



View of the terrace of Sarazm from the south



Archaeological excavation IV – the funerary enclosure



Archaeological excavation V – the palatial complex



Archaeological excavation XI – the religious building