Republic of Tajikistan

Nomination to the World Heritage list of

SARAZM

November 2008
**Executive summary**

**Country** ________________ Tajikistan (Republic of)

**State, Province or Region** __ Soghdian Province, Penjikent District

**Name of property** __________ Sarazm

**Geographical coordinates** __ North : 39° 30' 28,4" East : 67° 27' 31,4"

**Textual description of the boundaries of the proposed property**

The proposed limits encircle the portion of site which has been identified by the archaeologists as presenting high potential for archaeological findings.

The area of the proposed property is where the most important archaeological findings were made and where there is still high potential for further important archaeological findings. It is the zone that is used for site visits.

The buffer zone proposed for inscription includes three different sub-zones.
- sub-zone 1 can be used for access to the site itself and to the surrounding houses/properties.
- sub-zone 2 can only be used for superficial agriculture (continuation of existing practice).
- sub-zone 3 is inhabited but subject to a number of rules and regulations to protect the main area from any intrusive element or activity. There is also an agreement with the population so that any earth movement can be controlled by the archaeologists, ensuring possible record of incidental findings and the organisation of emergency archaeological investigations.

**Statement of outstanding universal value**

Development of Sarazm fully demonstrates historical conditions for close intercultural contacts and interactions between the groups with different cultural traditions within the Middle Asian Interaction Sphere of the Chalcolithic and Early-Middle Bronze Age period, and displays a rich cultural interface or gateway between two large groups of cultures, the settled agricultural proto-urban tradition on the one hand and the steppe agropastoralists of semi-nomadic tradition on the other hand.

Sarazm is located in a very strategic place, which has probably been the key to its unique development during the IV-III millennium BC in Central Asia. Sarazm was a natural meeting point between the nomadic shepherds of the mountains and the first agrarian populations of Transoxiane (region between the Syr Daria and Amou Daria) which practiced complementary activities.

Sarazm became a major centre of tin and bronze metallurgy in Central Asia and developed into a proto-urban centre supplying manufactured goods to its own population as well as those of a vast region.

The town also manufactured goods (ornaments and tools) from strictly local resources – copper, lead, tin, steatite, wools, coming from the regional context (up to a radius of 500 kms) including semiprecious stones like turquoise, agate and lapis lazuli, and also some gathered from great distances (over 1500 kms) like shells from the Arabian sea to the south.

Sarazm has been the first centre (probably from the beginning of the III millennium BC) in Central Asia which had trade relationships and a network of cultural exchanges with populations of such a large geographical area with limits as far as the Aral Sea and on the North-East the Eurasian Steppe zone up to Siberia, with Turkmenia and the Iranian Plateau up to Mesopotamia and probably Syro-Anatolia in the West, and the Baluchistan and the Indus valley in the south.

Sarazm became a prosperous and rich proto-urban settlement. It had a sophisticated culture with a complex organization and capacities for erecting monumental decorated buildings. Traders of Sarazm, or coming to Sarazm, facilitated exchange of goods, but also knowledge, skills and cultural assets, which contributed to further developments in the Central Asian region.

As a precious testimony to an innovative ancient culture, 5500 years old archaeological site of Sarazm represents unique scientific and cultural interest for archaeologist, visitors, and also the young Tajik generation, as being an important key for understanding the history of the region in a better balanced manner.
Criteria under which inscription is proposed (and justification for inscription under these criteria).

Criteria 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;

In the region of Central Asia, Sarazm was the extreme North-Eastern point of the settled system of the Proto-Urban Civilization of Eurasia (the Middle Asian Interaction Sphere – M.A.I.S.) of that time, between and related to the Syro-Anatolian, Mesopotamian and Indus worlds. The proto-urban settlement emerged relatively far from other oasis cultures of the M.A.I.S., as a result of the proto-Elamite Geoksyur and Baluchistan developments and of the induced social and economic changes taking place in the whole of the region. Subsequently, Sarazm developed into an original and unique center: (i) creating a distinctive cultural synthesis and a strategic basis within the system itself, and (ii) transmitting the settled culture to the neighboring regions. For instance the settlement played clearly the role of a unique interface between the Proto-Urban Civilization system and the system of the Steppe Cultures in Eurasia.

Attracted by the rich deposits of polymetallic ores (including tin and gold available in the river sand) peoples from the Iranian Plateau Proto-Elamite towns, from the Geoksur oasis and farmers of Baluchistan contributed to the development of a proto urban settlement at Sarazm.

Mastership of the fabrication of bronze tools and other useful crafts as well as trading activities had given to Sarazm specific capacities, which was reflected in sophisticated urban and architectural achievements as compared to other settlements of the same period. Sarazm was not just the meeting place of peoples coming to collect and process minerals; it was a hub of trade and exchange, a melting pot of civilization in the M.A.I.S.

Adoption of a new production processes and improvement of technologies allowed for new developments that entailed many social changes and most peculiarly the beginning of specialization in the production of goods (cattle breeding, agriculture, metal, jewellery, crafts), the formalization of trade, the associated appearance of social hierarchies and finally the urbanization and the creation of a complex settlement.

Sarazm was a strategic meeting point between the nomadic shepherds of the mountains and the agrarian populations of Transoxiane (region between the Syr Darya and Amou Daria). Through organizing the trade between these two groups and producing tools for them, Sarazm contributed to the improvement of their lives and became prosperous at a local and regional scale, but that is only a small part of the picture.

Sarazm further developed as a major trading centre in Central Asia (IV-III millennium BC) which had relationships with populations of an area stretched as far as the Eurasian steppe zones and the Aral Sea on the North, Turkmenia and the Iranian plateau in the West, and the Indus valley in the south. Trade and traders of Sarazm, or coming to Sarazm, facilitated exchange of goods, but also knowledge, skills and cultural assets.

Sarazm was the first large centre for tin and other metal production such as bronze in the northeastern part of Central Asia (IV-III millennium BC). One may underline that the Zeravshan tin was attracting peoples from various regions still in the 2nd millennium and that there is a strong probability that the Zeravshan tin was traded in Iran, Mesopotamia, Syria, and Anatolia, according to the tablets of the Mari palace (Syria) and of the Kültepe karum (Turkey) early in the 2nd millennium, before the Kestel deposit came to use. The 3rd millennium evidence is scantier, but we can suppose that this trade began there and that Sarazm was into the network as a major node, if not the main place.

In this regard, the findings in Sarazm of a proto-Elamite cylinder seal, Middle Eastern and Central Asian stone handled weights and Steppic stone staffs, for instance, are absolutely exceptional. And so the monumental architecture with the use of mud bricks, the plastered walls and wall paintings, all from Middle Eastern traditions, but in the same Sarazm, the Afanasevo steppe-type stone circle burial contains bodies and grave goods deposits of Central Asian agriculturists tradition; however, the thousands of tiny beads of the lady’s dress are found only in Kelteminar (Aral) or in Siberia. We notice also that the main elite person interred in this rich burial was a lady and that no parallels are known to such a complex of funerary practices. The same can be said of the early sophisticated terrace canal irrigation, which is unique since the only other example is at Shortughai (Afghanistan, Kokcha and Panj valleys) during the 3rd millennium Harrapan period. No other site, especially in a remote position in the M.A.I.S. (i.e. not geographically a “central place” but located on the edge) displays such evidence for a “dialogue of cultures”. In this respect, it was a unique centre. The search for tin (and perhaps gold) made the Zeravshan valley and Sarazm, a basin of attraction for the Proto-Urban towns of the M.A.I.S. The presence of almost all the major and prestige elite arts and crafts of the Proto-Urban phase of Eurasia is found there in an original form of culture synthesis.

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

Sarazm bear a unique testimony of the proto-Urban Civilization in the Middle Asian Interaction Sphere phase. This form of Civilization, better known as proto-urban phases in the great fluvial basins such as Egypt, Mesopotamia, Indus, existed but had its own specificities. The Iran-Baluchistan-Central Asia area developed some variants of the proto-Urban civilization in the form of regional cultures at various sites: Jiroft, Sialk, Tall-i Mallian, Tepe Yahya, Shah-i Sokhta, Bampur, Kili Gul Mohamad, Quetta, Mehrargarh, Mundigak, Tepe Hisar, Namazga III-IV, Geoksur,
etc. However, this sphere or complex has its consistency (M.A.I.S.). Sarazm, on its turn, is the only site displaying a great spectrum of, if not all many of the variants, at a high cultural level. Moreover, Sarazm is the unique preserved site at the interface of the Proto-Urban Civilization of Eurasia with the Steppe semi-nomadic agropastoralist culture of the great Eurasian steppe. The funerary circle of Afanasevo type, and some stone staffs and artefacts are unique evidence of this long range relation: the Afanasevo culture is spread in South Siberia (for instance Minusinsk basin) and in the Altay and the nearest Afanasevo tomb is located in central Kazakhstan. Sarazm is totally unique, as interface between Afanasevo (considered by some scholars as a result of an Indo-European migration from South Russia to Altay, by some as Tokharian speakers) and the Proto-Urban Southern Civilization of Proto-Elamite world; the Sarazm cylinder seal is the most northeastern occurrence of these administrative and prestige devices. In short, the remains of the Sarazm settlement are the fragile heritage of a complex civilization stage of Eurasia that happened one time in the world, and that had a very broad range of apparently peaceful interactions in a network that will never be seen again. The subsequent stage, the Bronze Age, will see the emergence of political Empires.

Official local institution/agency

State Level: Academic Rahim Masov, Director - Institute of History, Archaeology and Ethnography named after A.Donish of the Academy of Science of the Republic of Tajikistan, 33 Rudaki Street, Dushanbe, Tajikistan 734025. tel: +992 372 21 37 42.

Property Location level: Dr. Abdurauf Razzakov, Director - Penjikent Historical and Archaeological reserve Sarazm, 102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500, tel: +992 3475 5 21 25, 5 33 51, e-mail: raufrazzakov@mail.ru.
1. IDENTIFICATION OF THE PROPERTY

1.a. Country
Tajikistan (Republic of)

1.b. State, Province or Region
Soghdian Province, Penjikent District

1.c. Name of property
Sarazm

1.d. Geographical coordinates

Sarazm is situated in the valley of the Zarafshan river, at an average altitude of 910 m, 15 km to the west of Penjikent and 45 km to the east of Samarqand (Republic of Uzbekistan), 500 meters north of the main route connecting these two cities.

Geographical coordinates:
Measurement made at the centre of the site, in excavation P4, at the exact location where the burial of the "Lady of Sarazm" was found:

North : 39° 30' 28,4"
East : 67° 27' 31,4"
1.e. Maps and plans showing the boundaries of the nominated property and its buffer zone

For greater accuracy see maps in the Annex 2.

1.f. Area of property proposed for inscription (ha.) and proposed buffer zone (ha.)

The property as well as some parts (indicated on the map above) of the buffer zone are government properties. The official zoning for the site comprises 4 different sub-zones.

- Property: 15,93 ha
  - It is fully reserved for archaeological excavations and site visits
- Buffer zone: 141,90 ha
  - The buffer zone comprises 3 sub-zones (indicated on the map above)
  - Sub-zone 1: 6,45 ha
    - Entrance to this zone is authorized to the local population so that they can access to their homes. Villagers are also allowed to carry out harmless activities such as the drying of wheat or rice after the harvest
  - Sub-zone 2: 24,96 ha
    - On this zone, continuation of surface agricultural activities is allowed
  - Sub-zone 3: 110,49 ha
    - The larger zone that includes parts of the neighbouring villages of Sahibnaz and Avazali, is considered as potentially detaining remains of secondary parts of the Sarazm settlement and as such is subject to specific rules/restrictions

The overall site (property + buffer zone) is limited:
- South, by the main road Penjikent-Samarkand
- North, by the canal besides the river bed: Unchkakhraton canal
- East, by the road to Avazali
- West, by the river, affluent to the Zaravshan: Murchabo Sai

The area of the property proposed for inscription is 15,93 ha.
The buffer zone proposed for inscription comprises the sub zones 1, 2 and 3 with a total area of 141,90 ha.
The total area (property + buffer zone) covers 157.83 ha.
2. DESCRIPTION

2.a. Description of property

Sarazm is situated on the left bank of the Zerafshan river, at an average altitude of 910 m, 15 km to the west of city Penjikent and 45 km to the east of city Samarqand (Republic of Uzbekistan), 500 meters north of the main route connecting these two cities.

As the meaning of its name suggests, Sarazm, “the beginning of the earth” is located just between the end of the mountainous part of the riverbed, and the entrance of a much larger valley: a strategic place between mountains and flatlands.

It lies on an elevation stretching from west to east, about 1.5 kilometers in length and 400 to 900 meters in width. Apparently, the area of the settlement exceeded 50 hectares during its most developed period, when Sarazm had a settled population of about 3000 (IV – III millennium BC).

The settlement consists of ten small mounds of different heights and five depressions, corresponding to constructed zones, open spaces and water reservoirs that were used at the time of the Sarazm ancient settlement. From its topography, one can see that Sarazm does not have a clearly defined plan. The settlement which didn’t have any protective enclosure or fortification wall was apparently radiating in different directions with no bordering limits.

In its great majority, the site is covered by low steppe vegetation. Twelve areas, representing less than 4% of the restricted land have been excavated, leaving visible traces of the architectural structures found. In order to provide better protection of a selection of the most interesting excavated areas, five large roofs have been constructed (Excavations N° V, IX, XI, XII and XIII) (Figure 1). Those covered spaces are to be the main attractions for the visitors, where they can actually see the finds of the archaeologists, just as they are being freshly unearthed. Some of them will still be subject to archaeological researches, providing both a better knowledge of the site and an opportunity for more interesting visits.

Buffer zone surrounds the property. Sub-zone 1 clearly separates it from the village as well as the agricultural lands. Sub-zone 1 comprises one of the most ancient excavation zones (Excavation II). This choice was made as the excavation that had covered all layers of occupation was left unprotected for too long and does not represent a valuable potential for visits. The zone concerned is also very close to the residential areas and useful to the community (access, drying of crops). Sub-zone 1 also comprises the archaeological base and the site museum. Sub-zone 2 currently remains an agricultural land. It is also where the access road and parking lots have been implemented.

Today, the village of Sahibnazar lies on top of the northern and western parts of the settlement, and the village of Avazali, on its north-eastern section. A great portion of these two villages are in Sub-zone 3 which is also an area subject to restrictions and a collaboration agreement between the local population and the archaeological base.

Description of the remains and findings at Sarazm:

In the development of Sarazm four stages are distinguished, dated by the radiocarbon method from 3500 to 2000 BC. That is the Chalcolithic (also called Eneolithic) and Early to Middle Bronze Age periods. Approximate dates for the four periods are (see details in Table 1 of the Annex 4):

- Period I: 3500 - 3300 BC
- Period II: 3200 - 2900 BC
- Period III: 2900 - 2700 BC
- Period IV: 2700 - 2000 BC
Sarazm was an enormous settlement of more than 50ha, consisting of dwelling quarters, with temples, workshops, and in period III with palaces. Agriculture was based on irrigated and semi-irrigated farming and the cattle breeding; hunting played a minor role for the diet. In Periods I-III the ceramics of Sarazm were hand-made and painted; in Period IV the potter’s wheel appeared; pottery kilns were in use. The working of various stones including turquoise, lapis lazuli, carnelian and agates was developed. Metal mining and smelting was the main branch of the production economy throughout these periods, which is evidenced by the findings of furnaces, clay molds, crucibles, as well as numerous metal articles. Therefore Sarazm may be considered as the largest metallurgical center of Central Asia engaged in export.

**Architecture**

In IV-II millennium BC architects of Sarazm used a system of «architectural designing» with methods of geometrical harmonisation of building plans (and probably facades) in order to make construction monumental and presentable. It testifies how far architectural art penetrated into the remote mountain areas of the ancient East.

Already, at the earliest stages of construction of dwellings (middle of III millennium BC) a rectangular clay brick with a mix of straw was used (49-50 x 24-25 x 11-12 cm), which allowed flexibility in the architecture with a variety of uses, sizes and shapes. River stones were also used but only during the last period of occupation and mostly for the construction of the wall basis. Roofs were “flat” with wooden beams, covered by a network of branches and reeds supporting one or several layers of earth. There were doors and windows with sometimes quite complex systems, proving a mastership in the implementation of ventilation and lighting devices.

**Residential areas**

Multi-rooms complexes are very frequent for all periods of occupation. They comprise living areas with adjoining storerooms, workshops, kitchens, and outbuildings. Most of them possess a fenced courtyard in which crafts activities were undertaken. Several related families living together occupied those residential complexes. The placement of those dwelling complexes determined the layout of the residential areas and the overall population distribution. They were separated by squares and large or narrow streets, as well as un-built areas for the cattle. Water reservoirs were also present inside the settlements.

Inside the rooms, cult functions corresponding to the Period II were carried out in small domestic shrines with round hearths-altars in the middle. Starting from Period III the sanctuaries became larger and they began to contain square hearth-altars along with the round ones. N.B. according to the discovery of charred seeds in them, the hearth-altars probably had also a domestic function.

Pyrotechnology. Metallurgical and metalworking manufacture. In the excavations II, IV-VI fragments of walls of forges for fusion of copper ore were found. In the same places, plenty of waste of moulding and slag was traced. There are fragments of pottery classified as crucibles and moulds.

Existence of special workshops for stone (gypsum) processing was traced. In a courtyard I of the excavation VI the round hole (1,1 m in diameter, 27 cm depth) was found with more than 15 fragments of roundish gypsum preforms with preprocessing traces. Numerous splinters testify that after preliminary thermal processing stones were split. Fragments of primitive plaster vessels were found in one of the rooms of the same building horizon.
More than 10 pottery kilns of rectangular and round type are investigated. Single-deck, two-chamber rectangular kilns were common. A combustion chamber is separated by thin walls from baking chambers that allowed reaching high temperatures. Usually, baking chamber was built of mud brick and plastered on both sides with clay with admixture of fine straw. Some floors were covered with small river pebbles for retention of certain temperature after kilning.

Two round pottery kilns were excavated (excavations N° II and VI, period II, III). Round kiln with a basic column in the centre is most interesting (sizes 2,40 x 1,93 m, remained height of walls 0,30 m, diameter of a column - 0,56 m). Large quantity of grey puddle was revealed on the floor, inside of the baking chamber under ashes layer. Besides, more than 15 kg of crushed granite gravel was found, prepared as admixture for ceramics.

Two-deck pottery kiln (end of IV millennium BC, Figure 3 ) with the remains of vaulted ceiling of the baking chambers (3,32 m outer diameter) which had a complex system of heating and flue channels attests to the specific development of ceramic production in Sarazm, since nothing similar had existed in other parts of Central Asia before 2000 BC. From structural elements of this construction, it can be presumed, that builders of Sarazm were familiar and were able to erect relatively wide vaulted constructions, and that some of the buildings of Sarazm had vaulted and domed structures (for example, in a palatial cult complex, temples).

Monumental buildings

Three types of monumental structures, characteristic of the development of the proto-urban culture of the ancient East were discovered in Sarazm:

A communal granary (excavation III, Figure 4). This monumental building with an area of 15 x 15 meters was built on a platform 0,75 meters above external level and comprises twelve rooms. Three of them are long corridors, enclosed on all sides, which were probably used to store grains. The other rectangular rooms had residential functions. The presence of stone vessels may indicate the storage of prestige goods and thus the residence of members of the elite of the society.

Religious buildings. Starting from Period III the sanctuaries were built separately from the dwelling houses (e.g. excavations IV, V, IX, XI, XII). The walls of ceremonial buildings were often reinforced by buttresses (inside and outside) and generally plastered and decorated with red or polychrome paintings.

Excavation IV - is a 128 m² religious building consisting of four rooms, two of which are equipped with rectangular altars; wall paintings, stone alabaster vessels, testify of the elitarian status of this building.

Excavation V (Period 2) – remains of the circular construction of two rings of bricks, outer ring diameter is 7,7 m, inner ring diameter is 4,25m. The round corridor-shaped space (75 cm in width) is between two rings. It is considered that this building was devoted to the Sun. In the Period III (next construction horizon) - a palatial complex was built on top of the previous construction. The Palace is a complex measuring 16 x 16.5 meters overall (250 sq. m) and consisting of six rooms of different sizes and a rather
narrow entrance corridor. This complex (III millennium BC) represents the earliest development stage of architecture when builders already were able to mark the plan of a monumental construction with accurately developed planned composition on the prepared platform, using elementary geometric tools. Separated corridor leads to the rooms and auxiliary premises. To give monumental look, the palace was erected on a high rectangular brick podium. Pilasters of the outer walls give additional significance to the shape of the palace (they served also as buttresses); interior walls were decorated with mural paintings.

Excavation XI – a temple existed in Period II, has central room with ambulatory corridors. Bonfire in the center of the room with remains of burned animal bones and ashes could be a place for sacrificial offering.

Excavation XII – is a complex of temples existed in Periods II and III. The absence of any traces of occupation in this complex suggests that the structure with hearth-altars was used for ritual purposes. Fire worships could be regarded not specifically to Zoroastrian religion but rather to an early protohistoric, if one may say a “pre- Mazdeism substratum” on which Mazdeism in part was founded. However while reading the most ancient parts of the Avestic literature and poetic corpus, one can recognize that Sogdiana is mentioned and it reminds easily the natural setting and remains of Sarazm. It could also be stated that subsequent cultural and historical tradition of the Bronze and Iron Ages until the Penjikent Sogdian age (during which the Mazdeism and Zoroastrism emerged and evolved from the Indo-Iranian) could be recognized; as well as subsequent evolutions of the languages leading to Persian, Tajiki, after Bactrian, Sogdian, Yagnobi, etc. On the other hand, various ethnographic studies of traditions, especially dealing with Pamir, upper Zeravshan valley, Wakhan, Shughnan, Roshan and other regions mention specific rituals or customs related to fire and fire places within the dwellings;

Irrigation
The irrigation system of Sarazm is probably the most sophisticated of the Chalcolithic and Bronze Age in Central Asia since it combines the wide flood plain irrigation channels known from the Geoksyur Chalcolithic and the highly elaborated Bronze Age terrace river mountain irrigation known from the Shortughai canal.

The settlement of Sarazm emerged and developed in the delta of mountain small river Kiriarcha (along Darvozakam sai) on the terrace of a major mountain river, the Zeravshan.

Improvement of the irrigation system in Sarazm covers three stages (Figures 5 - 7):
- Use of estuary irrigation to cultivate narrow strips of land along a hollow, and at small river flood – southern side of the riverbed, consisting of soft fertile alluvial soil on lower terrace.
- A channel of more than 1 km was built to regulate water flow on a terrace, earth flows, and floods harmful to the cultivated fields along the channel. Thus the natural channel (6 km) was transformed to the main channel.
- An aryk (irrigation ditch) was laid out starting from a spillway bend to arrange water supply of the northern part of the terrace, which led to a considerable expansion of fields and positive changes in the

Figure 5. Excavation V. Palatial complex
Figure 6. First stage - estuary irrigation
Figure 7. Second stage - water flow regulation
development of the settlement.

Traces of channels, remained on the brink of the ravine, reflect stages of gradual transformation of the aryk into channel. The widest last channel was more than 200 m in length. 150-200 m to the west of water intake, discharge of superfluous water was arranged when it was difficult to close water from a headwater. Later it had developed into a regulator of the irrigator. The channel lasts from the East to the West and reaches the settlement. The archaeological trench revealed a channel of 16 m in width and 0.7 m in depth. Adjourment consisted of sand and ooze. Centuries-old ploughing of the bank reduced the depth of the channel, which was more than 1,5 m in the period of functioning.

Burials
No large necropolis has yet been found at Sarazm, but excavation IV led to the discovery of a funerary enclosure with a round plan (15 m in diameter) surrounded by a stone wall. (Figure 9). A burial site with a woman, accompanied by a man and an adolescent, was the central element.

On the woman's skeleton and around it several thousands of various beads were found (from burned steatite, lapis lazuli, cornelian, turquoise and silver) which were used for decoration of clothes or simply to cover her body, and her hair was decorated by 49 massive gold beads. Her hands were adorned with bracelets made of sea shells originating from the Indian Ocean or the Arabian Sea which proves direct or indirect relationships with populations of the Indus valley and/or Southern Iran.

The bracelets of the “great lady” are made from the shells of *Turbinella pyrum* L., the Sanskrit _anka_, the most important ritual shell in the Hindu religion, extensively worked for bracelets and trumpets in India since the 4th millennium BC. These mollusks live only in the tropical waters between the Arabian Sea and the Gulf of Bengal where they are still harvested today. However it is rather interesting to notice that the pair of bracelets from Sarazm is from an even earlier period than any of those so far found in India.

The accompanying artefacts also included a bronze mirror, bone awl, and two small schematic female figurines. The funerary enclosure comprises four other burials (individual and double). This necropolis has similarities with those corresponding to southern settled agricultural cultures, and the stone fence circle recalls associations with burial customs which are usual for steppe zone of Eurasia in the culture of Afanasevo.

All these findings reinforce the idea that since its first period, Sarazm had direct or indirect relationships with many other populations from the north, west and south (see 2.b. History and Development).

Artefacts
The numerous findings - ceramics, metallic, stone, bone and other wares of high quality for the period- are the evidence of the high level of the development of various specialized productions in Sarazm.

More than 150 metal artefacts are recorded. Bronze: axes, axes-adzes, arrow heads, knifes, spears, hair pins, needles; lead: lead blocs for export, lead stamps; silver and gold jewels.
Numerous artefacts made of stone were found: grinding stones, leather, wood, showcases, bow and arrows, tools, marble cups and goblets, ornamented staffs, handled weights.

Specific artefacts (spindle whorls, bone tools) testify that cloth weaving as well as leather works, including shoe making were practiced.

Tools for metal-processing, metal-fusing furnaces and crucibles, and ceramic casting forms that were found are evidences of craftwork with different metals: tin, copper, bronze, lead, and also silver and gold. All these minerals are available at 40 to 150 km around Sarazm.

Small pieces of quartz, Ferghana turquoise and Badakhshan lapis lazuli are also proofs that these minerals were processed in Sarazm.

A unique feature in the whole Central Asia and Iranian plateau is that, in Sarazm, painted ceramics have been found, which originates from many other areas of the region (see picture below). This is mainly the case for South Turkmenia and Baluchistan, but also for Southern Afghanistan, South-East Iran, Seistan and Kerman and moreover, small quantity of vessels, originates from North-East Iran (grey clay ceramics) and Khorezm (culture of Kelteurniar).

All those findings prove that Sarazm, following the first nucleation of the mid-to-late fourth millennium BC, developed into a large attractive proto-urban centre supplying not only desirable raw materials but probably also manufactured goods to its own population as well as those of a vast hinterland in a chalcolithic “World System” or in the “Middle Asian Interaction Sphere” of the Eurasian system of Cultures and Civilizations.

Most important is that the town manufactured not only goods (ornaments and tools) from strictly local resources – copper, lead, tin, steatite, wools, woods, and those coming for the regional context (up to a radius of 500 kms) including semiprecious stones like turquoise, agate and lapis lazuli, but also those gathered from great distances (over 1500 kms) such as the shells from the Arabian Sea to the South. The bracelets of the “great lady” may have been imported as finished objects from Gujarat or Kutch, or Makran or Kerman coastal areas, but the hundreds of broken waste pieces found by Isakov in the later periods of the sequence are really exceptional because they prove the centrality of Sarazm as a major goods processing centre during the early Bronze Age.

A major find is a cylinder-seal discovered in 1984 in the excavation IV, depicting a bull, that links clearly and definitely Sarazm to centers of the proto-Elamite expansion phenomenon, such as Shahr-i Sokhta, Sialk, Tepe-Yahya, Jiroft, Susa in Iran. Proto-Elamite cylinder seals are inspired by the Mesopotamian examples of the devices for economic and administrative rule. No equivalent is known from Indus Valley or in Central Asia, neither in Turkmenistan or in Afghanistan at the same period where the seals are stone or metal stamp seals of a different kind. Except one single Proto-Elamite chance find from Bactria (Afghanistan), the cylinder seals usually reach Central Asia and are adopted later, after about 2300 BC. In that respect also, Sarazm is an exceptional settlement.

2.b. History and Development

Development of Sarazm

The proto-urban settlement of Sarazm dates back from the early Eneolithic period to the Late Bronze Age, from around 3500 to probably about 2000 BC. The original Chalcolithic core town of the mid 4th millennium BC could have been established on an earlier late Neolithic village, still to be found.

From a geographic point of view, Sarazm is located in a very strategic place, just between a mountainous zone and a large valley area, one being favourable to cattle grazing, the other to agriculture and farming.
Rich fields of the top of the hills could also be used for cattle-breeding. The proximity of the "tugais" (jungles) in the flood-lands of Zaravshan also allowed harvesting, collecting and hunting activities. In addition, both south and north mountains sides of the Zaravshan valley possess natural geological resources, including those that allow stone, metal crafts including bronze processing.

These geographic conditions were suitable for an encounter of the nomadic shepherds of the mountains and the agrarian populations of Transoxiana (region between the Syr Daria and Amou Daria). Those populations, which practiced complementary activities, could interact in Sarazm where sophisticated metallurgical production started to develop, as well as other industries (pottery, stone processing, shoe making).

At the turn of the IV-III millennium BC, Sarazm started to be an important centre for interregional exchange on long distances (export of tin particularly). The settlement became a major crossroad, both on the major East-West axis made by the course of the Zaravshan, and on the North-South one. Most particularly, this last one made Sarazm become an important centre in Central Asia. All main river corridors that allow crossing the impervious westernmost extensions of the Pamir-Alaj massive, the parallel ridges of the Turkestan Mountains to the North and the Zaravshan to the South, merge at Sarazm, best than anywhere else.

The town occupies the most strategic location to combine all directions:

- To the south of Sarazm the main route opens directly following the gentle slope of the Murchab Say up to the town of Cep, now in Uzbekistan, and from here following the slightly more steep cime of the Akdarya back into Tajikistan territory and 20 km to the town of Farab on the Karadarya headwaters. From here the river opens an easy westward alleyway through Karshi and Merv into Iran, or southward across the Darbent Iron Gates into the Surkhandarya and hence to Bactria and southern Afghanistan on the way to the Indus. An alternative route to the South moves out of Sarazm to follow upstream the southern shore of the Zeravshan moving beyond Penjikent to follow the climber the left affluent towards Dushanbe to reach the upper course of the Amudarya from the headwaters of the Kafirnigan and Kyzyl Su.

- To the North two main alleyways merge in Sarazm. To the West the Ustrushana highway connects with the Syrdarya outflanking the Turkestan mountains around their western front, after crossing the Steppe of Famine and the Gates of Timurlane at Jizzak; to the East again along the Zeravshan upper course till the Ayni and from where it turns northwards to reach directly Ferghana through the Sharistan Pass, an important section of the Silk Road in historical times, the only possible way from Upper Central Asia to bypass Samarkand on the way to India.

Therefore Sarazm was at the origin of a major turn in the history of the region. It was a centre where people developed many complementary activities with plural economy, based on agriculture and cattle-breeding on one side, and processing of mineral resources of close-located regions from another. This allowed new developments that entailed many social

Figure 11. SARAZM LONG RANGE CONNECTIONS
with contemporary civilizations and cultures (IV-III millennia):
1. Kel’teminar steppe connection (pottery);
2. Badakhshan connection (lapis lazuli);
3. Baluchistan connection (pottery styles);
4. Mundigak, Sahr-i Sokhta connection (pottery styles);
5. Namazga II and III, Geoksyur (pottery styles) and Iran Gorgan Grey Ware connections (pottery);
6. Makran, Kerman connexion (pottery styles, pottery, sea shell, stone weights);
7. Iran(Elam), Mesopotamia connexion: Uruk and Proto-Elamite expansions (cylinder seal);
8. North Mesopotamian and Syro-Anatolian connexion ("tin road");
9. Afanasevo steppe connexion (funerary circle, pottery).
changes and most particularly the beginning of specialisation for the production of goods, the formalisation of trade, the association of social classes and finally, the proto-urbanization with the creation of a complex settlement with sophisticated architectural achievements for the period.

**Paleobotany**

Flotation was performed and charred grains collected, studied by G. Willcox. Remains of ears and caiouses of cereals were found in floors, plasters, and mud bricks. Results of the paleobotanic research confirm (see Table 2 of the Annex 4), that barley and soft wheat were cultivated in Sarazm. Quantitatively hull-less barley (*Hordeum nudum*) absolutely prevails though common barley (*Hordeum*) is presented, too. Samples 45 and 66 containing lots of hull-less barley grains were taken from the excavation VII, the granary, destroyed by fire.

Available samples: goatgrass (*Aegilops squarosa*), ryegrass (*Lolium*), brome grass (*Bromus*), borage (*Boraginaceae*), stoneseed *Amelia* (*Lithospermum*), possibly, weeds from cultivated fields and wild plants, gathered naturally for the cattle.

The analysis of charcoal revealed following kinds of trees: almond (*Amygdalus*), pistachios (*Pistacia*), willow (*Salicaceae*), oleaster (*Elaeagnus*), ash tree (*Fraxinus*), tamarisk (*Tamarix*), cane (*Phragmites*).

**Agriculture**

Cultivated cereals, large quantity and variety of grain processing tools remains of irrigation systems and large reserves of grain testify high efficiency of agriculture, which played a considerable role in the economy of Sarazm.

Grain processing was differentiated: crushing was used to produce groats, and grinding to make flour. Two-handled heavy grindstones were used for crushing and grinding of grains, stone (possibly, wooden) deep mortars and extended pestles of cylindrical form were used for making groats. Judging by distribution of tools, each dwelling complex was involved in grain processing.

**Cattle breeding**

Osteological finds are basic source of data on cattle breeding of Sarazm. Small cattle were domesticated at the turn of mesolith and neolith (not earlier than VIII-VII millennium BC).

The extensive osteological material of Sarazm (5684 bones and fragments in total, 1609 of which are identifiable) was investigated by Jean Desse and by A.K. Kasparov. Bones of the small cattle considerably prevail - more than 87 %. Obviously sheep dominate (20,19 %), and goats (12 %). Quantity of remains of cows is only 10,1 % and dogs 0,69 %.

Small amount of the remains of the wild sheep testifies presence of hollow-horned ruminants. Remains of wild bull and wild hog were found. Seldom finds (1,94 %) of the remains of wild animals (goitered gazelle, hare, fox, wild cat, small birds) at the settlement testify that hunting was a secondary activity. Thus, the cattle breeding was mainly practiced in Sarazm, and small cattle dominated in a herd.

Investigation at Sarazm significantly widens our conception of horizons of ancient chalcolithic proto-urban civilizations, and crossing of different trade links. The astonishing adaptation ability displayed by the chalcolithic proto-urban civilization of Eurasia can be seen only from Sarazm, its most North-Eastern outpost. Contacts between Sarazm and ancient agricultural centers of Mesopotamia, Iran, Baluchistan, and Afghanistan are clearly established, as are the contacts with the Kelteminar and Afanasevo steppe cultures. The main probable reason being Sarazm’s position as one of the major metallurgical centres of Central Asia.

As it appears so far, trades with distant regions in the Near East (Mesopotamia, Elam, Khorasan, Sistan and Baluchistan) were carried out either directly (imported potteries) or through intermediaries. The underlying local culture, the possible waves of migration from southern Turkenistan, and the close relations with many other regions, notably Kandahar province (site of Mundigak) but also the North-East of the Indian Subcontinent (see Rahman Dheri site in the NWFP of Pakistan and Taloqan site in the Takhar province of Afghanistan), all combined to form and develop the culture of Sarazm.

Between the middle and the end of the third millennium BC, it seems that Sarazm declined. No traces of occupation have been found on the site for the direct following periods, and it seems that shepherds once again inhabited the area. The reasons for the abandoning of Sarazm by its inhabitants so far have several
hypthesis. We may observe that the end of Sarazm is almost contemporary with the end of Mundigak, of Shahr-i Sokhta, of Jiroft (Konar Sandal South site), Tepe Yahya, etc. Some scholars propose the general collapse of the proto-urban system due either to internal causes or to external factors, including some changes in the climate (a more arid phase), but more paleoenvironmental investigations and laboratory analyses are necessary before to reach a firm scientific conclusion.

The rebirth of Sarazm

Abandoned for thousands years, the site was re-discovered in 1976 by Mr. Achurali Taïkonov, villager, who found some objects which appeared at the surface of a newly cultivated field, and more specifically an impressive bronze axe. He was so impressed that he immediately presented this find to professor A. Isakov who was the head of the Archaeological base of Penjikent.

Following that discovery, discussions were held with the representatives of the population and the expansion of agricultural activities in the zone was stopped to preserve the underground remains of Sarazm. This was the beginning of an interesting collaboration between archaeologists and the local population and the site was methodologically excavated since 1979.

The largest investigations were held in 1977-1994 under supervision of A. I. Isakov. 11 excavations were undertaken as well as 20 prospecting digs.

One of the excavations (VII) was investigated from 1984 till 1991 by a French Archaeological Mission (CNRS) under supervision of R. Besenval.

Since 2002 archaeological investigations at Sarazm have been conducted by the staff of Sarazm base, at a limited scale. A recent campaign in 2005 - 2007 has permitted to explore 11 and 12 archaeological trenches which were covered with shelters and also partially back-filled.

The first surface non invasive magnetometric survey of a part of Sarazm was performed in May 2008. It gave a better idea of the density of occupation of the site and of the localization of the remains. This can be extended to all the surface of the site and possibly completed (after testing) with other surface explorations, i.e. electric resistivity and ground penetrating radar.

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Caesium-Magnetometry

It must also be noticed that a significant quantity of accidental finds, collected on different parts of the settlement, primarily from private plots were given to the archaeological base by the local inhabitants. Till today, villagers are naturally bringing their finds to the Sarazm archaeological base.
Reconstruction of production activities

Functional study (micro-ware studies, traceology) of tools along with paleogeographic, paleobotanic and paleozoologic data allows reconstructing a picture of palaeoeconomic and craft production activities in Sarazm during eneolithic and early bronze ages.

Metallurgy. A series of radiocarbon dates as well as the analysis of metallurgical samples were carried out at the laboratories of Peabody Museum, Harvard University. Elemental analysis of the objects from different periods of existence of the settlement shows that they are made of metal of different melts of the ore mined from one deposit.

Rough breaking of ores was done by heavy two-handed hammers, then small pieces were pounded for ore dressing. Variety of metal items, more than 300 finds, is rather important for reconstruction of economic and production activities of Sarazm. Copper and bronze are presented in more than 10 categories: axes, adzes, knives, daggers, spearheads, awls, punches, fishing hooks, sickle-shaped items, mirrors, beads, pins, razors, etc. Also more than ten silver and gold adornments were found.

Study of tools from Sarazm testifies presence of wide range of metal-working stone tools and a variety of technological operations. Tools for manufacturing and treatment of metal articles make 15,63 % from total of tools (see Table 4 of the Annex 4), tools for sharpening (abrasives) prevail among them. The following groups were differentiated within this class of tools: a considerable number of planishing hammers for expansion of metal sheets and foil - 9,30 %, different sorts of hammers for light and mean flattening operations - 7,97 %, master forms for manufacturing of metal ornaments by cold hammering in moulds-9,30 %. Platform anvils for cold hammering of metal items make 13,95 % from a class.

Masters of Sarazm applied cold and hot forging, planishing, flattening of foil, removal of rough edges on abrasives, sharpening and correction of blades and other operations. Manufacturing of small jewels had special place. Master forms, platform anvils, hammers for light operations, smoothing hammers, and active abrasives were applied in this manufacture.

Thus, large scale production and a large variety of metal articles and tools for metal working demonstrate a high technical and technological level of metal working in Sarazm and its highly specialized, probably, craft character.

House manufactures

Existence of the variety of house manufactures is specified according to the tools. Class of tools of house manufactures, is the most representative: 1203 items, or 63,12 % (see Table 5 of the Annex 3). Secondary products of the cattle breeding promoted wide development of tanning craft, bone carving and weaving.

Tanning. Probably, initial processing of skins was made in each family as scraper tools were found almost in all dwellings. Currying of skin demanded a various scraping tools: split pebbles, flint tips, trapezoids, triangle and high scrapers. Polishers for skins, chisel-scraper were found.

Manufacturing of clothes, footwear and household items. Different technologies were used for manufacturing of clothes, footwear and other household items. The curryed skins and fells were shaped using tanning knives, then sewed using bronze or bone awls and flint punches, and needles. Besides clothes and footwear, probably, big leather bags, belts, bags for transportation of liquids, different boxes and cases, vessels for storage of meat and milk products were produced. Threads, probably, were made of wool by means of spindle. Two different shoe lasts were found: with higher heel part, probably, used for tailoring of low footwear with a high top, and with lower heel part - for manufacturing of footwear without a top, short boots or shoes.

Bone carving. A set of tools for bone and horn processing is represented by single-handled and two-handled hacking tools, cutters, abrasives, planishing knives, saws, drawing knives, drills etc. The variety of stone tools for bone processing and a set of bone items shows, that bone carving was focused on manufacturing of tools - awls, needles, palette knives, polishers, which were used in several branches of house production: clothes sewing, weaving, ceramics, etc.

Stone tools. Stone tools played important role in the system of production. Quantitatively this group among tools of house manufactures took a leading place. Sources for raw materials were various pebbles of Zerafshan’s water bed and stone from foothills.
The tools directly connected with this branch, make 13.17 % from total number of tools. Spherical forms and two-handed heavy hammer stones of various weight prevail. The abrasive techniques were widely developed in Sarazm, as well as in other eneolithic and bronze age sites. Anvils, drills, retouchers were also in use. Nucleuses made 3.58 %. Prevalence of trimming and grinding tools shows, that mainly limestone and sandstone were worked.

Woodworking. By means of wide range of tools (adzes, chisels, draw knives, cutters, drills, saws) masters of Sarazm could produce various household items: vessels, cups, bowls, mortars for grinding of grain and mineral paints, frames for compound tools, handles for digger sticks, handles for knifes, staffs for arrows and spears, boxes of different size and form, tools, structures for machine tools etc.

Manufacturing of paints played an essential role in economic-household activity of population of Sarazm. Except for fragments of ready-made paints and raw materials, mineral paints were traced on tools and on the internal surfaces of containers, and as mentioned already ceramics and some walls were painted. Strictly limited scale of traditional colours was used for ceramics: yellow, brown, pink, red (all with tints) and black.

Paint manufacture obviously had mass character and demanded large scale of series of tools: paint grinders, mortars and pestles, and also drawing knives. These tools often had considerable working surfaces and weight, which make them more effective for crushing and grinding of raw materials for manufacturing of paints.

In 2001, the site was inscribed as a national monument and became a national concern, a mark of the Tajik national identity. Since then the conservation of the site and its promotion as a national concern, major efforts continue to be done to ensure that the site is properly used for educational and tourism purposes.
3. JUSTIFICATION FOR INSCRIPTION

3.a. Criteria under which inscription is proposed (and justification for inscription under these criteria).

Criteria 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;

In the region of Central Asia, Sarazm was the extreme North-Eastern point of the settled system of the Proto-Urban Civilization of Eurasia (the Middle Asian Interaction Sphere – M.A.I.S.) of that time, between and related to the Syro-Anatolian, Mesopotamian and Indus worlds. The proto-urban settlement emerged relatively far from other oasis cultures of the M.A.I.S., as a result of the proto-Elamite Geoksyur and Baluchistan developments and of the induced social and economic changes taking place in the whole of the region. Subsequently, Sarazm developed into an original and unique center: (i) creating a distinctive cultural synthesis and a strategic basis within the system itself, and (ii) transmitting the settled culture to the neighboring regions. For instance the settlement played clearly the role of a unique interface between the Proto-Urban Civilization system and the system of the Steppe Cultures in Eurasia.

Attracted by the rich deposits of polymetallic ores (including tin and gold available in the river sand) peoples from the Iranian Plateau Proto-Elamite towns, from the Geoksur oasis and farmers of Baluchistan contributed to the development of a proto urban settlement at Sarazm.

Mastership of the fabrication of bronze tools and other useful crafts as well as trading activities had given to Sarazm specific capacities, which was reflected in sophisticated urban and architectural achievements as compared to other settlements of the same period. Sarazm was not just the meeting place of peoples coming to collect and process minerals; it was a hub of trade and exchange, a melting pot of civilization in the M.A.I.S.

Adoption of a new production processes and improvement of technologies allowed for new developments that entailed many social changes and most peculiarly the beginning of specialization in the production of goods (cattle breeding, agriculture, metal, jewellery, crafts), the formalization of trade, the associated appearance of social hierarchies and finally the urbanization and the creation of a complex settlement.

Sarazm was a strategic meeting point between the nomadic shepherds of the mountains and the agrarian populations of Transoxiane (region between the Syr Daria and Amou Daria). Through organizing the trade between these two groups and producing tools for them, Sarazm contributed to the improvement of their lives and became prosperous at a local and regional scale, but that is only a small part of the picture.

Sarazm further developed as a major trading centre in Central Asia (IV-III millennium BC) which had relationships with populations of an area stretched as far as the Eurasian steppe zones and the Aral Sea on the North, Turkmenia and the Iranian plateau in the West, and the Indus valley in the south. Trade and traders of Sarazm, or coming to Sarazm, facilitated exchange of goods, but also knowledge, skills and cultural assets.

Sarazm was the first large centre for tin and other metal production such as bronze in the northeastern part of Central Asia (IV-III millennium BC). One may underline that the Zeravshan tin was attracting peoples from various regions still in the 2nd millennium and that there is a strong probability that the Zeravshan tin was traded in Iran, Mesopotamia, Syria, and Anatolia, according to the tablets of the Mari palace (Syria) and of the Kültepe karum (Turkey) early in the 2nd millennium, before the Kestel deposit came to use. The 3rd millennium evidence is scantier, but we can suppose that this trade began there and that Sarazm was into the network as a major node, if not the main place.

In this regard, the findings in Sarazm of a proto-Elamite cylinder seal, Middle Eastern and Central Asian stone handled weights and Steppe stone staffs, for instance, are absolutely exceptional. And so the monumental architecture with the use of mud bricks, the plastered walls and wall paintings, all from Middle Eastern traditions, but in the same Sarazm, the Afanasevo steppe-type stone circle burial contains bodies and grave goods deposits of Central Asian agriculturalists tradition; however, the thousands of tiny beads of the lady’s dress are found only in Kelteminar (Aral) or in Siberia. We notice also that the main elite person interred in this rich burial was a lady and that no parallels are known to such a complex of funerary practices. The same can be said of the early sophisticated terrace canal irrigation, which is unique since the only other example is at Shortughai (Afghanistan, Kokcha and Panj valleys) during the 3rd millennium Harrapan period. No other site, especially in a remote position in the M.A.I.S. (i.e. not
geographically a “central place” but located on the edge) displays such evidence for a “dialogue of cultures”. In this respect, it was a unique centre. The search for tin (and perhaps gold) made the Zeravshan valley and Sarazm, a basin of attraction for the Proto-Urban towns of the M.A.I.S. The presence of almost all the major and prestige elite arts and crafts of the Proto-Urban phase of Eurasia is found there in an original form of culture synthesis.

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

Sarazm bear a unique testimony of the proto-Urban Civilization in the Middle Asian Interaction Sphere phase. This form of Civilization, better known as proto-urban phases in the great fluvial basins such as Egypt, Mesopotamia, Indus, existed but had its own specificities. The Iran-Baluchistan-Central Asia area developed some variants of the proto-Urban civilization in the form of regional cultures at various sites: Jiroft, Siialk, Tall-I Maliyan, Tepe Yahya, Shahri Sokhta, Bampur, Kili Gul Momad, Quetta, Mehrgarh, Mundigak, Tepe Hissar, Namazga III-IV, Geookyur, etc. However, this sphere or complex has its consistency (M.A.I.S.). Sarazm, on its turn, is the only site displaying a great spectrum of, if not all many of the variants, at a high cultural level. Moreover, Sarazm is the unique preserved site at the interface of the Proto-Urban Civilization of Eurasia with the Steppe semi-nomadic agropastoralist culture of the great Eurasian steppe. The funerary circle of Afanasevo type, and some stone staffs and artefacts are unique evidence of this long range relation: the Afanasevo culture is spread in South Siberia (for instance Minusinsk basin) and in the Altay and the nearest Afanasevo tomb is located in central Kazakhstan. Sarazm is totally unique, as interface between Afanasevo (considered by some scholars as a result of an Indo-European migration from South Russia to Altay, by some as Tokharian speakers) and the Proto-Urban Southern Civilization of Proto-Elamite world; the Sarazm cylinder seal is the most northeastern occurrence of these administrative and prestige devices. In short, the remains of the Sarazm settlement are the fragile heritage of a complex civilization stage of Eurasia that happened one time in the world, and that had a very broad range of apparently peaceful interactions in a network that will never be seen again. The subsequent stage, the Bronze Age, will see the emergence of political Empires.

Statement of outstanding universal value

Development of Sarazm fully demonstrates historical conditions for close intercultural contacts and interactions between the groups with different cultural traditions within the Middle Asian Interaction Sphere of the Chalcolithic and Early-Middle Bronze Age period, and displays a rich cultural interface or gateway between two large groups of cultures, the settled agricultural proto-urban tradition on the one hand and the steppe agropastoralists of semi-nomadic tradition on the other hand. Sarazm is located in a very strategic place, which has probably been the key to its unique development during the IV-III millennium BC in Central Asia. Sarazm was a natural meeting point between the nomadic shepherds of the mountains and the first agrarian populations of Transoxiane (region between the Syr Daria and Amou Daria) which practiced complementary activities.

Sarazm became a major centre of tin and bronze metallurgy in Central Asia and developed into a proto-urban centre supplying manufactured goods to its own population as well as those of a vast region. The town also manufactured goods (ornaments and tools) from strictly local resources – copper, lead, tin, steatite, wools, coming from the regional context (up to a radius of 500 kms) including semiprecious stones like turquoise, agate and lapis lazuli, and also some gathered from great distances (over 1500 kms) like shells from the Arabian sea to the south.

Sarazm has been the first centre (probably from the beginning of the III millennium BC) in Central Asia which had trade relationships and a network of cultural exchanges with populations of such a large geographical area with limits as far as the Aral Sea and on the North-East the Eurasian Steppe zone up to Siberia, with Turkmenia and the Iranian Plateau up to Mesopotamia and probably Syro-Anatolia in the West, and the Baluchistan and the Indus valley in the south.

Sarazm became a prosperous and rich proto-urban settlement. It had a sophisticated culture with a complex organization and capacities for erecting monumental decorated buildings. Traders of Sarazm, or coming to Sarazm, facilitated exchange of goods, but also knowledge, skills and cultural assets, which contributed to further developments in the Central Asian region.

As a precious testimony to an innovative ancient culture, 5500 years old archaeological site of Sarazm represents unique scientific and cultural interest for archaeologist, visitors, and also the young Tajik generation, as being an important key for understanding the history of the region in a better balanced manner.
3.c. Comparative analysis

The following comparative analysis gives the outlines of the relevant comparisons but does not go into all scientific details that are relevant in scholarly publications: here the main references are quoted. However, all the relevant bibliography is given in annex. This bibliography is in two parts: the first give all the relevant publications for Sarazm itself and the second part list the main publications regarding the broader context of the Proto-Urban phase and Middle Asian Interaction Sphere system of civilizations in relations with the Mesopotamian, Indus and Steppe related systems.

Other sites from the same periods

Other Middle Asian Chalcolithic-Bronze Age settlement has been compared to Sarazm by archaeologists in order to understand the origins of the culture of Sarazm and its spread in the subregions. Some analogies were detected with the monumental buildings discovered in several sites dating from the same period such as Altyn Depe (Masson, 1981), Geoksyur (Sarianidi, 1961; 1965), Tepe Hissar (Schmidt, 1937), Mundigak (Casal, 1961), Shahr-i Sokhta (Tosi, 1983; Salvatori and Vidale, 1997), which are typical of the development of the proto-urban culture of the ancient East (Hiebert, 2002; Hiebert and Kurbansakhatov, 2003). Comparison was established for example between:

- The religious monumental building of Sarazm and the one found at Geoksyur. (rooms 28-31, V.I. Sarianidi);
- The communal granary of Sarazm and the public storage buildings in the “noble quarter” at Altyn-Depe.(V.M. Masson);
- The system of rooms and hearth-altars is to be compared with the Mundigak III-IV architecture (Casal).

Special mention has to be made for the comparison of the large monumental funerary stone circle of Sarazm, with three individuals buried, can be made with the steppe Afanasevo of the Minusinsk basin and South Siberia and Altay burial monuments (Mallory, 1989; Francfort, 2001). Some stone staff is also close to the steppe artefacts of the Afanasevo and similar cultures (Boroffka and Sava, 1998). The Sarazm steppe connection is also confirmed and documented by a small Afanasevo site Zhukov, but with typical potteries, excavated between Sarazm and Samarkand by Nona Avanessova;

For the steppe world at the same period as the proto-urban phase in Central Asia, and the possible links between the two worlds, see: Anthony, 2007; Zych, 2006; Kohl, 2007.

Another special mention must be made for the Sarazm cylinder seal that can be compared with similar cylinders from Sahr-i Sokhta (Amiet in: Tosi, op. cit.), Tepe Yahya (Lamberg-Karlovsky and Tosi, 1973; 1989), Sialk (Ghirshman, 1938) and other Proto-Elamite sites/sites with Proto-Elamite tablets inscribed are: Shahr-i Sokhta, Shahdad, Tepe Yahya, Tall-i Malyian, Sialk, Susa: see Vallat, 2003). This cylinder is a direct evidence for links between Sarazm and these Proto-Elamite “system”. The Proto-Elamite expansion is linked to the Uruk expansion from Mesopotamia (Alden, 1982; Algaze, 1993; Butterlin, 2003; Abdi, 2003); its manifestations with typical “beveled rim bowls” are seen as far away from Mesopotamia as the Makran sites, at Miri Qalat (Besenval, 1997). Such Proto-Elamite connections are not attested in Mundigak, Said-Qala Tepe or in the Turkmenistan sites that seem, in this respect, to lay aside of the main exchange roads. On the contrary, for reasons explained above, Sarazm was a complete part of this very large network of interrelations (see: Amiet, 1986; 2004; 2007).

The Sarazm thin gold rosette with 12 petals (and central turquoise inlay) found in Excavation IV, room 9 finds its best parallels in the jewels of the royals tombs of Ur in lower Mesopotamia, dated from Early Dynastic IIIA period (2550-2400 BC) where they are found, especially (but not only) in burial of princess Pu-Abi (ot Pu-Abum). The Ur rosettes jewels have 8, 10 or 12 petals; they are in thin gold also and some are inlaid with lapis lazuli or other precious or coloured stones.

More similarities between Sarazm and the cultural complex of southern Turkmenistan (Geoksyur) and of Mundigak can be observed clearly in the disk-shape hearth-altars and the general layout of the housing. Other evident analogies with those sites were found by comparison with the artefacts discovered at Sarazm, such as the painted pottery (of Namazga II, III, IV types principally: see below), the disc-shaped handled stone weights. In alabaster or marble stone, they are spread from Mundigak to Afghan Seistan, NE Afghanistan, Southern Turkmenistan (Francfort et al., 1989) and variants ornamented in steatite or chlorite from Jiroft (Madjidzadeh, 2003), Tepe Yahya and other places, the lead bobs (at Gonur Depe in Margiana, in Bactrian burials of the Bronze age), the carnelian and lapis lazuli beads as well as the gold and silver artefacts have parallels in the Middle Eastern archaeological assemblages.
The metallurgy is a very important part of the Sarazm site activities, as in many other contemporary sites (see Helwing, 2005) but Sarazm controlled the rare and much desired tin (see: Alimov et al. 1998; Besenval, 1998; Parzinger, 2003). The bronze artefacts, such as the axe-adze, are present in Central Asia but have parallels in the Caucasus metallurgy (Isakov et al., 1987). The lapis lazuli (Casanova, 1994; 1999) came from the Badakhshan Sar-i Sang region or from the Kokcha valley river pebbles (Shortughai); the unexcavated Taluqan Chalcolithic site (Takhar province, Afghanistan), also with Baluchistan-related potteries, give a good relay on the presumed road (Lyonnet, 1981).

The comparative study of the pottery carried out (A. Isakov, in bibliography; B. Lyonnet, 1996. See for instance also: Besenval, 1987; Isakov, 1991) evidenced comparisons with the following sites and periods and therefore all the long distance relations described above: Geoksyur (Jalangach, Chong Depe), Namazga (II, III, IV) Anjira (III, IV) (Baluchistan), Mundigak (III, IV), Ilgyndy III, Tepe Hissar (IA, IIA, IIB, IIIA, IIIB) Tureng Tepe (IIIB, IIIIC), Shah Tepe (II, III), Sialk (II, III), Amri (IC, ID), Quetta, Togau, Kechi Beg, Dur Jangal, Kili Ghul Mohammad, Nundara, Kara Depe, Ak Depe, Taluqan, Keletiminar, Mehrgarh (VI, VII). The conclusion after the pottery study about the end of Sarazm around 2600 BC is not in agreement with the radiocarbon dates which give a date around 2000 B.C. Further research will certainly reach a firm conclusion.

More recently, new hypothesis are suggested by scholars who find similarities for Sarazm material with sites that are now better known in the Jiroft valley (Konar Sandal South: painted potteries, stone vases, seals, architecture); or the Sistan basin in Iran (Shahr-i Sokhta: alabaster vases for instance (Casanova), shell manufacturing (Durante, 1979)); and even sites such as Mundigak in Afghanistan: bead making (Casal); Mini-Qalat and Shahi-Tump in Pakistani Makran: painted pottery, handled weight (Besenval, passim).

A unique site

Sarazm present many particularities which really distinguish it from the other sites:
- Sarazm is the largest Chalcolithic and early Bronze Age town in northern Middle Asia so far discovered.
- Sarazm is a unique example of proto-historic settlement (IV-III millennium BC) with plural economy, based on agriculture and cattle-breeding from one side, and processing of mineral resources of close-located regions from another.
The specificity of Sarazm probably lies in the peculiarly rich geological resources of the upper Zaravshan valley. Its chequered relief possesses veins of copper, lead, gold, silver, mercury, tin, turquoise etc.. Sarazm was not only a large centre of metallurgy; it was also a very important centre for production of different stoneware and jewellery art, as well as many different craft products (weaving, leather, pottery, etc).

Sarazm possesses a unique variety of components or imports from distant and very different culture of the overall region, including South Turkmenia, North-East Iran, Seistan, Baluchistan, Pre-Ural region. Sarazm provides evidence about large trade-ways that crossed the territory of Central Asia, starting with oldest ancient periods of existence of agrarian societies, very long before the start of the Silk Road.

Sarazm is unique as a gateway to the steppe world, up to Southern Siberia, during the Chalcolithic period (Afanasevo) long before the spread of the Andronovo steppe culture in South Central Asia in the 2nd millennium BC.

If cylinder seal and marine shells were the key import artefact and resource to establish the long range trading capacity of Sarazm as a manufacturing centre, tin is the corresponding export one. The Zaravshan Valley was the main supply region for tin in the ancient world. So far archaeological investigations have proven its continuous exploitation at mining sites both in Uzbekistan and Tajikistan since the second millennium BC. But it is quite likely that the exploitation started at least a millennium earlier as evidenced by tin-bronze metallurgy at Sarazm and the contemporary use of tin in the leading cities of Mesopotamia, like Ur. In the Royal Graves the abundance of lapis lazuli and tin point in the same direction, to the north-eastern limits of the oikumene. The same can be said of North Mesopotamian and Syrian cities during the Early Dynastic II-III periods (Mari, Ebla etc.). Sites like Sarazm on the Zaravshan and Taloqan (Chalcolithic) Shortughai (Bronze Age) on the Kokcha-Amudarya intersection occupy corresponding strategic locations to channel tin and lapis lazuli respectively, to the urban centers across the Middle East and South Asia alike.

In terms of architecture, if Sarazm presents some analogies with what was produced in other regions of Central Asia during the same period, as a general consideration, the buildings present more complexity and sophistication, with more rooms, complex plans, monumental realisations and decorated surfaces.

**3.d. Authenticity / Integrity.**

As an archaeological site, Sarazm can be considered as fully authentic. All original materials are kept in their original location and found as they were left at the time the site was abandoned, and show how natural decay occurred.

If the upper layer of the remains has been partially disturbed when agricultural activities were carried out, the thickness concerned is rather limited and it still contains very interesting evidences of the later period of occupation. In addition, there is no treasure hunting at Sarzam and the local population has always been very cooperative with the team of archaeologists, in line with the discovery of the site, made by a local farmer, Achurali Taïkonov.

Since the 1970s, excavation works where conducted in 12 locations. Those cover an area of about 2.5 ha out of the 47 ha of the reserved land. An agreement with the surrounding villages has been established so that incidental or random findings at proximity of the main site can be recorded. Archaeological researches can still be carried out outside the reserved zone if felt necessary.

The excavated zones have been covered with soil in order to preserve them from destruction. This solution has proved not to be fully satisfactory, with visible degradations of the revealed structures. For that reason, five zones, including the most interesting excavations or those which were better preserved, were covered with tri-dimensional metallic constructions. Those are visible, but actually they are very different from the remains so that no confusion is possible. These protections also render possible a visit of the site "as it was when it was just excavated". Opportunities exist for further excavations of the under layers (there are 4 levels of occupation at Sarazm) where the remains have been affected when left insufficiently protected after the first excavations were carried out.

The usual unshaped spoil heaps from excavation, which can easily be confused with original remains in archaeological sites, are very few at Sarazm. The reason is that the soils from excavation was given to the villagers after sieving so that they could be used as building material (mud-bricks and renders) for the nearby earthen houses.
4. STATE OF CONSERVATION AND FACTORS AFFECTING THE PROPERTY

4.a. Present state of conservation

As long as a major part of the surface of the site remains non-excavated, and that the most important parts have been protected, the site can be considered as being in a rather good state of conservation. Artefacts are stored at the Archaeological Base or at Penjikent and Dushanbe Museums.

Some of the earlier excavations were insufficiently backfilled so that the unearthed remains (architecture) have been affected. However, in most cases, these are now an opportunity to research the most ancient layers of occupation. It is to be raised here that proper documentation has always been done on very regular basis so that most of the information that could be provided by the remains is available and can be used for further research, interpretation, as well as for educational activities.

4.b. Factors affecting the Property

i) Development Pressures

With a gradual increase of the population in the Zaravshan valley, people have looked for more and more land for agriculture. Sarazm was on a hilltop and remained non-cultivated for long. But in the 50s, some irrigation canals were made and the land was occupied for agriculture.

The territory of the Buffer Zones is crossed by natural and asphalt roads that lead to Sahibnazar and Avazali villages, which occupy the northern border of the territory of the ancient settlement of Sarazm. From 2001, no new development is authorized on the 47 ha reserve and there are strict rules for the use of the larger buffer zone that comprises a great part of the two concerned villages.

ii) Environmental pressures

The site is subject to the harmful local climate (continental) with rapid changes in temperature and moreover a long yearly period when there is frost during night. Frost combined with possible presence of humidity in the remains, after snowing or raining, is the most important factor of degradation.

iii) Natural disasters and preparedness

Natural disaster in the area is only related to earthquakes. The probability for the site to be affected is however almost null as most of the remains are structures of very limited height. The site does not feature very stiff slopes, thus the risks of associated landslip is also probably null. A fault would also rather follow the axis of the valley and develop in the river bed.

iv) Visitors/tourism pressures

As for now, the number of visitors/tourists is limited and there is no record of adventurous visitors that could have damaged the remains. The plan to increase the number of visitors has taken that issue into account. There will not be any visits without a guide, and moreover of a trained guide, featuring a guided tour in which the specific facets of site preservation are presented and explained. Visitors’ access will be limited to a distance of 1m from the excavation pits. Also, the edges of the visited excavation pits will be maintained and, if necessary, repaired or reinforced.

v) Number of inhabitants within property, buffer zone.

At the moment, nobody lives in the “Archaeological reserve of Sarazm”. The buffer zones (part 1 and 2) are accessible to the population but activities there are restricted. The archaeological base is located in the buffer zone. Archaeologists and their assistants live there on a temporary basis.

Finally, about 300 families live in the “larger restricted zone” (buffer zone 3). They started to settle there in the early 1940s.
5. PROTECTION AND MANAGEMENT

5.a. Ownership.
By resolution of the Government of the Republic of Tajikistan N° 198 and land certificate N° 006981 issued on April 19, 2001, the piece of land of 47, 34 hectares (core and buffer zones 1 and 2) of Sarazm, is a property of the Republic.

5.b. Protective designation
Historical and cultural monuments are protected at the Constitution level and regulated by laws and normative acts of the Republic of Tajikistan

i. Constitution level
The constitution of the Republic of Tajikistan bounds all citizens to respect and protect historical and cultural monuments.
Paragraph 44 : “Every person is obligated to protect natural, historic and cultural monuments”

ii. Law on culture
Protection, management, and monitoring of historical and cultural monuments are conducted according to the contents of the law “About Culture” of the Republic of Tajikistan ratified on 13.12.1997. Below are some extracts of this law:
Provision and protection of civic constitutional rights of the citizens in cultural issues.
Article 2. Spheres of operation of the present Law.
Promotion, preservation, restoration, utilization and monitoring of historical and cultural properties.
Article 4. Main principals of government politics on historical and cultural properties.
- availability of the cultural memorials to the public
- national, scientific, and social significance of culture
- establishment and development of cultural links between Tajikistan and foreign countries
Article 6. Types of historical and cultural properties.
According to Article 1 of the present Law are considered historical and cultural properties: archaeological sites, sites of ancient settlement, tumuli, remnants of ancient settlements, castles, industries, channels, roads, ancient burial places, stone sculptures, graven images, antiquity items, places of historical cultural layer of ancient settlements.
Article 8. Specially authorized government officials for preservation of the sites.
Specially authorized government officials for preservation of the memorials in the Republic of Tajikistan, are the authorities from the Ministry of Culture of the Republic of Tajikistan and from its local representative offices.
Article 10. Competency of specially authorized government authorities for preservation of the sites.
Ministry of Culture of the Republic of Tajikistan provides government protection of the historical and cultural memorials, and supervises processes of monitoring, preservation, restoration, utilization and promotion of historical and cultural assets in the Republic of Tajikistan.
Article 28. Provision of preservation of historical and cultural properties, situated on the national territories that were given to utilization.
Enterprises, organizations, establishments and citizens shall provide protection and preservation of historical and cultural assets, which are situated on the territories left to their utilization.
Article 39. Excavation and prospecting works of archaeological sites.
Excavation and prospecting works of archaeological sites is allowed only with the permission (open pages) provided and registered in affirmed order.
Organizations and citizens that conduct archaeological works, are required to take care of security matters on the site.

iii. Specific texts related to Sarazm
Juridical status of Sarazm reserve is defined by the Republic of Tajikistan government resolution N° 391 from 21.09.2000 - "About organization of historical and archaeological reserve Sarazm" and N°198 from 19.04.2001 - "About approval of resolution on historical and archaeological reserve Sarazm".

About organization of the “Historical and Archaeological reserve Sarazm".
In accordance with Law of Republic of Tajikistan dated December 13, 1997 "About culture" which aims at protection and promotion of cultural and historical assets, the Government of Tajikistan resolves:

1. To proclaim the 5500 year old archaeological site of Sarazm in Penjikent district, which is the centre of formation of agriculture, handicraft and urbanization of Tajiks to be a historical and archaeological reserve.

2. Academy of Science of the Republic of Tajikistan in accordance with Chairman of Penjikent district shall present for approval the statement of the Government of the Republic of Tajikistan the resolution about the site, timetable and estimate of necessary expenditures.

3. Academy of Science of Republic of Tajikistan, chairman of Leninabad (presently Sogd) province and Penjikent district shall implement funding of the historical and archaeological reserve of Sarazm from State budget resources, entitled for Culture and Science in the year 2001.

4. Chairman of Leninabad (presently Sogd) province and Penjikent district Committee on Land Resources and Arable Land of the Government of Tajikistan shall define the area of Sarazm archaeological reserve and solve the question of the land distribution.

Define that any construction works of buildings, structures, conduction of any kind of works that could harm the memorial on the territory of above-mentioned reserve are strictly forbidden. Signed by : The Chairman of the Government of the Republic of Tajikistan, E. Rakhmonov.

On the approval of the resolution about the Sarazm historical-archaeological reserve.

1. Sarazm historical-archaeological reserve is operated under Penjikent Archaeological Base and is subordinated by the Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan. Sarazm historical-archaeological reserve has been established on the basis of ancient agricultural settlement of Sarazm.

2. The main tasks of the Sarazm historical-archaeological reserve are the preservation, renovation, investigation, archaeological excavations, conservation and reconstruction of the unearthed assets, museums and popularization of the ancient Tajik history, dispersal of knowledge about history and ancient culture of Tajik people, promotion of scientific and cultural achievements.

3. Direct administrative and scientific coordination of the activities of the reserve is implemented by Head of Penjikent Archaeological Base of the Institute of History, Archaeology and Ethnography named after A. Donish.

On 21.09.2001 by the government resolution Sarazm Settlement was proclaimed historical and archaeological reserve, located in the Penjikent District, Sogd Region, under Penjikent archaeological base of Institute of History, Archaeology and Ethnography of the Academy of Sciences of the Republic of Tajikistan.

Agreement between the Hukumat of Penjikent, the Jamoat of Sarazm and the Sarazm historical and Archaeological reserve. From October 31. 2005. Penjikent (See appendix 1)

An official agreement exists between the local population and the Archaeological base. It is ratified by the Hukumat of Penjikent, represented by Samadov Sh. D., chairman of Hukumat, - Sarazm Jamoat, represented by Sultonova D., chairwoman of Jamoat and - The Sarazm Historical and Archaeological reserve, represented by Razzokov A., director. This agreement specifies the following:

1. Due to their importance in continuing to better determine the history, daily life and culture of the inhabitants of ancient Sarazm, villagers of Avazali and Sharibnazar agree that all random findings when practising agriculture or superficial works will be given to the archaeological reserve of Sarazm. The location of the find should be precisely indicated.

2. When the villagers will proceed with diggings for whatever reason (house foundations, toilet pits, ...) they will inform the archaeological base (at least two weeks before operating) so that the archaeologists can be present when the digging is done. If the presence of the archaeologist could not be possible during the digging, the owner must wait until a visit of an archaeologist be undertaken before closing the ditch so that the stratigraphy can be documented.

3. The overall zone also needs to be controlled in terms of urban development. In order to avoid any intrusive construction, the agreement comprises a paragraph stating:
   - The delimited zone is subject to urban development control by the archaeological base in partnership with the village representatives and the authority of Penjikent region.
   - Houses in the zone cannot exceed one level (one storey) with a maximum height of 6m at the top of the roof so that they remain discreet and are not harmful to the landscape, and more specifically to the views from the site.
- The zone is reserved for agricultural activities and normal village activities. The implementation of other activities in the area is subject to preliminary impact studies and authorisation from a committee gathering the three above-mentioned authorities who will check the compatibility with the cultural characteristics of the site.

5.c. Means of implementing protective measures.

State organisation for protection of the monuments:

Management of protecting historical and cultural monuments is carried out by the Ministry of Culture of the Republic of Tajikistan in close cooperation with the Academy of Science of the Republic of Tajikistan. The Ministry of Culture records, controls and drafts legislations regarding historical and cultural monuments, creates and manages state research programmes, conservation and restoration of cultural monuments, coordinates joint activities with other state bodies on research, protection and utilisation of historical and cultural monuments. It prepares conservation projects to be submitted to Government and manages funds of the conservation projects.

The Academy of Science, Institute of History, Archaeology and Ethnography, carries out scientific expertise on historical and cultural monuments, and determines the criteria for nominating monument to be considered as a historical or cultural monument. It allocates budgets for regular functioning of archaeological bases, as well as for archaeological research and conservation projects at archaeological sites.

Inspections for protection of cultural monuments by the Ministry of Culture and local authorities (Municipality, district branches of historical and cultural monuments protection) are carried out as field operations. These organs monitor and protect historical and cultural monuments, and prepare biannual and annual reports for higher level authorities.

The Historical and Archaeological Reserve of Sarazm has the following facilities and equipment:

1. Archeological base of Sarazm – since 1994 - 5 rooms, Kitchen, Shower, toilets; courtyard and garden
2. Site museum (70 m²)
3. Archive room at Penjikent
4. Office at Penjikent in the governmental building with two computers and easy access to internet on the second floor of the building (separate office)
5. One car (Volga 3110) and one mini-bus
6. One computer, scanner and printer
7. Two digital photo cameras, one analogue
8. One GPS, level. theodolite
9. TV set

5.d. Existing plans related to the municipality or the region in which the property is located

Sarazm receives a very specific attention from the Government, which is well followed at a local authority level.

With its resolution N° 429 from 07.09.2001, the Government of the Republic of Tajikistan has approved the timetable of works and breakdown of expenditures required for the historical and archaeological reserve of Sarazm and identified the implementing bodies. Part of these has already been completed:

1) The enclosure of the territory of the reserve (Penjikent district government) - completed
2) The reconstruction of the tourism roads (Sogd province government) - ongoing
3) The construction of the administrative building and storage for archaeological findings (Academy of Science of the Republic of Tajikistan)
4) The construction of the overhead cover for the most important archaeological memorials (Penjikent district government)
5) The construction of the building with subsidiary functions: entrance lodge, parking lot, kitchen for tourists (Penjikent district government) - completed
6) The construction of the external water-supply system (Penjikent district government) - completed
7) The construction of radiotelephone line (Penjikent district government) - completed
8) Planting the territory with trees and gardens (archaeological base, not reserve) (Penjikent district government) - completed
9) The construction of advertisement boards (Penjikent district government) – first stage completed
10) The conduction of archaeological excavations (Academy of Science of the Republic of
Tajikistan) and the financing of the fellow workers of the park of the reserve – ongoing in a very limited scale
The Academy of Science of the Republic of Tajikistan provided resources for the renovation of the Archaeological base in Sarazm, which have been conducted.

**Penjikent Hukumat priority projects for the period 2004-10 (see Annex 1)**

The list of priority projects for that period includes a number of projects that directly or indirectly concern Sarazm archaeological site. Those include:

priority projects in 2004 - 2005:
- Construction of 5 protective shelters at Sarazm Archaeological site – completed (funded from President’s fund)
- Construction of a Hotel in Panjrout village - completed
- Construction of a restaurant to address tourists needs in Penjikent - completed

Out of 10 priority projects from the period 2006-2010
Point 1: Tunnel under Ansop mountain - completed
Point 2: Repair of Dushanbe-Penjikent road - ongoing
Point 7: Erection of a fence around Sarazm archaeological site – completed (funded from President’s fund)
Point 8: Renovation of the Roudakhi museum - completed
Point 10: Coordination with the local tour operators and tourism related businesses to improve their Products - permanently

**5.e. Property management plan or other management system**

The nomination of the property to the World Heritage has been the opportunity to make an overall evaluation of the progress made, but also to evaluate/anticipate the efficiency of usual practices on the site as well as the recent measures taken. This led to the establishment of a Management plan in 2005 that set up objectives and activities for 2006 – 2010 (separately attached to the nomination file). Implementation of this Management plan was evaluated in 2008 by the Scientific Council of the Academy of Sciences. Results achieved:

**On site preservation activities and improvement of the Historical and Archaeological Reserve of Sarazm (Objectives 1, 5):**

- Installation of the fence around the property area and permanent guarding, as well as establishment of a regular monitoring process for the archaeological remains increased protection of the site.
- Backfilling of uncovered structures is ongoing
- removal of electricity lines is partly completed; planting trees in front of houses around the site is ongoing
- Testing of conservation techniques for earthen structures is planned
- Training on different subjects to the base staff (archaeologists, including a person responsible for the inventory and documentation) is being provided in Dushanbe few times a year.
- Agreement established with the Roudaki museum for the provision of special guided tours
- Partnership with the University of Bologna on study of Geomorphology, Geology, Hydrogeology of Sarazm and its environs started in 2006
- Agreement with CRATerre – EAG is being established on launching conservation activities at the site including establishment of a field conservation laboratory. Onsite training for the staff of the archaeological base is also envisaged.

**Promotion of the site (Objective 2):**

- 4 popular science films (20-30 min) about Sarazm and its development were produced and are broadcasted by the national and local TV channels.
- Album on Sarazm in 3 languages was published.
- Information sessions with the tour operators are being organized every season
- Web site is under revision
- Training of guides is held every season; presentation panels, site maps are being revised

**Revenue generation (Objective 3):**

- Entry fee rate is established (entry fee, photo, video permits) 1 – 3 $
- New booklet and postcards are being designed

Documentation (Objective 4)

Work on the finalization of passportization of the artefacts (inventory) planned for 2009-2010 is ongoing all archival documentation and archaeological reports are being reviewed.

Management plan for 2010-2015

A new revision of this Management plan for 2010-2015 is under preparation, to be finalized by the end of 2009. The following activities are foreseen to complement and reinforce the existing Management Plan:

Scientific documentation and research, Geophysical and Aerial Survey:

The basis for all further actions, be they conservation, geophysical survey, aerial survey or surface survey, is the recording of the site. An aim of these activities is to develop “non-destructive” archaeological methods further, and to identify potential future archaeological activities. Detailed documentation will be carried out for all the excavated sites.

Geophysical Survey:

The total excavated areas at Sarazm so far cover not more than 4% of the restricted land. Using minimal intervention, all the areas of the site, will be explored with non-destructive methods, such as geo-physical surveys. These will be supported by surface surveys and aerial surveys. After a first calibration of physical readings close to the excavated structures, other areas of the site could be surveyed.

Aerial Survey:

As already noted, the site covers a largely unexplored area. Though it is important to gain a first understanding of the maximum size of the site, and eventually of its structure, e.g. regarding “administrative” (or elite) and residential areas.

Documentation:

A detailed brick-by-brick survey is envisaged for unearthed structures to obtain more information about brick-laying techniques. The new topographic recording of the site should be carried out. In addition, historic sources (plans, photographs, etc.) will be traced and integrated into the documentation data bank. Archaeological profiles should be drawn, if they do not exist. A computer-assisted scientific documentation system will be set up.

Historic Photos and Plans:

Standard in UNESCO international conservation projects, research into historic records forms the basis for all conservation work. Historic photos and documents will be integrated into the newly developed data bank.

Climatic Data:

Historic weather data consisting of temperature, humidity, rain and wind velocity readings will be collected. A weather station could also be established at the site for recordings (temperature, precipitation, humidity, wind velocity and air pressure), necessary for decisions on conservation activities.

A Conservation program will be developed based on documentation and monitoring results.

Archaeological studies and excavations

Archaeological excavations will remain on a very low scale. Studies will continue on paleobotany, paleozoology, paleogeology, geomorphology. Irrigation system of Sarazm should be studied in details. New laboratory analyses will be carried out to compliment previous studies.

Strategy for archaeological research focused on the following issues will be developed:
5.f. Sources and levels of finance.

Financing of the conservation and restoration works at Sarazm historical and cultural reserve is provided by the Academy of Science of the Republic of Tajikistan and the Hukumat (government) of the Sogd province, Penjikent district, from budget resources dedicated to science and culture (resolution of the Government of the republic of Tajikistan from September 21, 2000 N°391).

The Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Sciences of the Republic of Tajikistan is providing a yearly budget that currently amounts about $ US 10,000.00 (yearly state funding).

<table>
<thead>
<tr>
<th>Year</th>
<th>Somoni</th>
<th>US $</th>
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<tbody>
<tr>
<td>2001</td>
<td>5 377</td>
<td>1 600</td>
</tr>
<tr>
<td>2002</td>
<td>21 777</td>
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<td>20 294</td>
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<td>2008</td>
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<td>2009</td>
<td>125 600</td>
<td>36 405</td>
</tr>
<tr>
<td>Total</td>
<td>494 604</td>
<td>151 660</td>
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</table>

The Soghdian province provides a modest yearly budget which is mainly expended for maintenance of roads, electric lines and other facilities.

In 2003, the president of the Republic of Tajikistan allocated US $ 381 003 from the presidential reserve fund. This fund was used to construct the protective roofs over 5 excavated areas (Excavations III, IX,XI,XII, XIII), each with an area of 30m x 30m, to protect them from weathering.

A US $ 86 956 budget was allocated from the presidential reserve fund for the installation of the fence around the property with two entry gates.

5.g. Sources of expertise and training in conservation and management techniques.

The Ministry of Culture and the Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan has scientific potential and qualified personal capable of providing necessary training and consultations. But this is not sufficient for preparing high qualified specialists for restoration, conservation and laboratory analysis of historical monuments. Most of the support staff working on the Sarazm settlement has only traditional knowledge and field experience.

The personnel of Sarazm has the opportunity to benefit from regional courses organised by UNESCO and other specialized institutions and universities. But this is remained limited and could not cover the actual needs. It is hoped that the gaps will be filled in the near future, within the implementation of the specific bilateral and regional programmes on conservation and management of archaeological sites (e.g. Central Asian Earth programme).

The department of History of the Dushanbe university has got a special course on archaeology and organizes one year of field practices for the students.
5.h. Visitor facilities and statistics.

Sarazm is visited by tourists. Before the breakdown of Soviet Union, the number of tourist per year was about 2000. Later this number decreased to about 500. But during the last years, the situation was reversed thanks to the organisation of special tours by Penjikent Tourist Bureau to Penjikent and Sarazm, as well as to other neighbouring historical sites and picturesque places of the upper Zaravshan (see Tourist map in the Annex 2).

The information on the number of visitors concern the whole region of Penjikent as no information specific to Sarazm is currently available. But according to the Tourism organizations, most of the visitors coming to Penjikent are visiting Sarazm. It is one of the highlights of their visit.

Number of visitors in Penjikent (source: Penjikent tours manager: Sharifbadalov M.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of foreign visitors/Иностранные туристы</th>
<th>Local visitors/Местные туристы</th>
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<tbody>
<tr>
<td>2001</td>
<td>560</td>
<td>940</td>
</tr>
<tr>
<td>2002</td>
<td>685</td>
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<td>2003</td>
<td>1 340</td>
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<td>5 150</td>
</tr>
<tr>
<td>2007</td>
<td>4 500</td>
<td>5 804</td>
</tr>
<tr>
<td>2008</td>
<td>4 870</td>
<td>6 120</td>
</tr>
</tbody>
</table>

There are no hotels in Sarazm, B&B can be provided in the neighboring villages, but in Penjikent city (15 kilometers) there are number of hotels and guest houses, which can accommodate up to 300 persons.

The City of Penjikent is making numerous efforts so as to increase the number of tourist per year to 5000.

5.i. Policies and programmes related to the presentation and promotion of the property.

Management plan
A number of activities have been planned within the management plan prepared for the site. They comprise the installation of a souvenir shop and national kitchen/restaurant. To improve site visits, it is programmed to provide guides, set up information panels and develop the site as a living archaeological place. It is also foreseen to publish books, booklets, postcards, CDroms that will provide information and will also increase the revenues of the archaeological base.

In addition, the existing web site is to be developed in the near future. One of the rooms of the archaeological base has been renewed and widely enlightened with large glass panels that now allow for the presentation of numerous artefacts found on the site, thus completing the site visit. It is foreseen that this museum will be gradually improved, when in the mean time, the construction of a larger museum near the site will be studied.

National Tourism Policy
Recently, many tourism agencies were created in Tajikistan to address the very interesting tourism potential. The law on Tourism (1999) of the Republic of Tajikistan sets legal, economic, social and organizational rules for tourism. Since 2000 the statistics on international tourism and international business trips is maintained. The government pays special attention to tourism development. Organisation of the tourism sector with the definition of national policies is in the process, as well as a general opening of the country to tourism. The first State Program on the Development of Tourism Sector for 2004-2009 has been launched. The number of foreign tourists coming to Tajikistan is now gradually increasing.

Within tourism development program “Tourist fair” is organised in Dushanbe on a yearly basis since 2004. There are also representatives of Tajikistan at the tourism fair organised also every year in Tashkent, Uzbekistan.

Education policy
The site already receives school kids from Penjikent in the frame of their annual excursion, but also during field visits. It is foreseen that there will have more visits now as the archaeological base is better prepared to receive such large groups.
Promotion in the National Museum at Dushanbe
Sarazm is very well represented at the Dushanbe National Museum with ¾ of a large room devoted to showcases presenting a very interesting selection of artefacts originating from Sarazm. There are also panels showing plans of a selection of the revealed architectural structures. The Museum catalogue is having a substantial presentation of Sarazm with 8 pages including texts in 4 languages and numerous illustrations.

Promotion in Penjikent Museum (Roudaki)
Sarazm is also very well represented at the Penjikent museum with about ½ of a 60m² room devoted to numerous artefacts originated from the site, including a very interesting collection of those found on the “Lady of Sarazm” site. The guides at Penjikent museum are also guides at the site.

Exhibitions and conferences
Ceramics and metal wares from Sarazm were exposed on the exhibition "Antiques of Tajikistan", held in 1985 in Hermitage Museum (Russia) and were included in the catalogue of this exhibition. During the 80-90’s, republican and regional television has showed several times the episodes about the excavations of Sarazm in Tajik and Russian languages. The last film on this matter was made in 2002.

The republican and district newspapers published more than 50 scientific articles about works conducted in Sarazm. All reports on excavations were published in annuails "Archaeological works in Tajikistan". Reports and presentations about Sarazm were presented on many international and regional symposiums and conferences. Among those, we can quote:
- 2ème colloque Franco-soviétique sur l’archéologie de l’Asie Centrale des origines à l’âge du fer, CNRS, paris, 16-26 November 1985
- Third USA-USSR Archaeological symposium, Washington D.C., Smithsonian Institution, May, 7-9, 1986
- In 1994, in Penjikent international symposium was organised, solely devoted to Sarazm and the 5500 anniversary of agricultural culture of the upper Zaravshan. This symposium was reported by Penjikent television and a special film was made.

The President of the Republic of Tajikistan, Mr. Rakhmon came two times with official delegations to visit the site, in August 2003, and in September 2005.

Historical wall in Dushanbe
The long wall of the cement factory in Dushanbe, along one of the most important national roads (to the north) has been used to display panels representing some of the most important periods or events of the country. The first 3 panels of this impressive series (total of 100 panels) are devoted to Sarazm.

5.j. Staffing levels (professional, technical, maintenance).
Sarazm reserve, at the moment has the following staffing:
- 1 director,
- 1 scientific consultant
- 2 researchers
- 1 person responsible for the promotion
- 2 curators for exhibits
- 1 methodologist
- 2 museum controllers
- 2 guards
- 1 chief accountant
- 1 accountant cashier
- 1 supervisor
- 1 technician
- 1 typist
- 1 electrician
6. MONITORING


Overall site:

• % of surface of excavations pits properly backfilled
• % or surface of excavations pits protected by a roof
• total % of protected areas / excavated areas

Structures under roofs
• Visual observation with photographic comparison (yearly, at selected places)
• Loss of fabric at the bases of the walls (at selected places)
• Loss of fabric at the top of the walls (at selected places)
• Presence of vegetation

Monitoring of the efficiency of the roof protections
• Visual observation during heavy rains
• Visual observations when snowing
• Visual observation when weather windy, specifically after snowing
• Presence of humidity in the visible structures (% of humid zones after rains)

6.b. Administrative arrangements for monitoring property.

Penjikent Archaeological base of the Institute of History, Archaeology and Ethnography of the Academy of Science of the Republic of Tajikistan is in charge of the monitoring of the property. The team is employed on a permanent basis and provides annual reports.

6.c. Results of previous reporting exercises.

All related documentation and reports are kept in archive in the Penjikent Archaeological base, of the Institute of History, Archaeology and Ethnography of the Academy of Science of the Republic of Tajikistan.
7. DOCUMENTATION

7.a. Photographs, slides, and others

Site map as well as excavation plans are provided in the Annex 2.
All tables are provided in the Annex 3.
All the images attached to the present nomination file are compiled in the Annex 4 (digital photographs, jpeg format). Two video films on Sarazm in Tajik language are available on DVD.

Hereunder is the list of pictures and captions. The non exclusive cession of rights to diffuse, to communicate to the public, to reproduce, to exploit, in any form and on any support, including digital, all or part of the images provides in this nomination file is granted to UNESCO.

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<td>Fencing of the nominated area</td>
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<td>View from the south of the terrace of Sarazm with cultivated land on</td>
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<td>David Gandreau</td>
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<td>the foreground and the Zaravshan mountains on the background</td>
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<td>View of the excavation III covered with a shelter</td>
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<td>Environment : General view of the Zaravshan valley</td>
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<td>Collection of stone tools and objects</td>
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<td>Excavation IV. Necropolis – Bangle made of shell</td>
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<td>Two video films on Sarazm in Tajik language</td>
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<td>Simo TV</td>
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Contact details of copyright owner (Name, address, tel/fax, and e-mail)

CRATerre - ENSAG
Address: Ecole Nationale Supérieure d’Architecture de Grenoble
BP 2636,
60, avenue de Constantine
38036, Grenoble cedex 2, France
Phone: 00 33 (0)4 76 69 83 41 / 4 76 40 66 25 Fax: 00 33 (0)4 76 22 72 56
e-mail: thierry.joffroy@grenoble.archi.fr / gandreau.david@hotmail.com

Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan,
33 Rudaki Street, Dushanbe, Tajikistan 734025. tel: +992 372 21 37 42

Roland Besenval
Phone: 00 33 (0)1.40.73.88.12
e-mail: rolandbesenval@hotmail.com

Ainura Tentieva
Address: 134 Moskovskaya str, 11
720000 Bishkek, Kyrgyzstan
Phone: +996 772 570378
e-mail: a.tentieva@mail.ru

7.b. Text related to the protection and management of the property.

See Annex 1 (legal texts) and separately attached Management Plan 2006 – 2010
7.c. Form and date of most recent records of property.

The last inventory at Sarazm has been made in 1998. A booklet showing the findings, which is kept at the depot of the archaeological base of Penjikent, was also prepared.

7.d. Address where inventory, records and archives are held.

Archaeological Office
Hukumat of city of Penjikent
102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500

7.e. Selected bibliography

Web sites:  www.ozodi.org
www.varorud.org
www.sarazm.farhang.tj
www2.unibo.it/Archeologia/Uzbekistan/progetto_archeo_sub6.htm

BIBLIOGRAPHY part 1: on Sarazm


Casanova, M., 1999, "Le lapis-lazuli dans l'Orient ancien", in: Cornaline et pierres précieuses. La Méditerranée, de l'Antiquité à l'Islam, A. Caubet (Ed.), Paris, La Documentation française, p. 189-211.


**BIBLIOGRAPHY part 2: selected publications relevant for understanding Sarazm (about the proto-urban period in theory and about the Uruk and proto-Elamite phase in the steppes and oasis of Eurasia)**


8. CONTACT INFORMATION OF RESPONSIBLE AUTHORITIES

8.a. Preparer

Dr. Abdurauf Razzokov
Penjikent Historical and Archaeological reserve Sarazm
Address: 102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500
Phone: +992 3475 5 21 25, 5 33 51,
e-mail: rauf_razzokov@mail.ru

Dr. Henri-Paul Francfort
CNRS, directeur de recherches
+33 1 46 69 25 00 (office)
henri-paul.francfort@mae.u-paris10.fr

Ainura Tentieva
ICOMOS Kyrgyzstan
Address: 134 Moskovskaya str, 11
720000 Bishkek, Kyrgyzstan
Phone: +996 772 570378
e-mail: a.tentieva@mail.ru

Thierry Joffroy
CRATerre - EAG
Address: International Centre for Earth Construction- School of Architecture of Grenoble
BP 2636,
60, avenue de Constantine
38036, Grenoble cedex 2, France
Phone: 00 33 (0)4 76 69 83 41 / 4 76 40 66 25 Fax: 00 33 (0)4 76 22 72 56
e-mail: thierry.joffroy@grenoble.archi.fr

8.b. Official local institution/agency

State Level: Academic Rahim Masov, Director - Institute of History, Archaeology and
Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan, 33
Rudaki Street, Dushanbe, Tajikistan 734025. tel: +992 372 21 37 42

Property Location level: Dr. Abdurauf Razzokov, Director - Penjikent Historical and
Archaeological reserve Sarazm
102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500, tel: +992 3475 5 21 25, 5 33 51,
e-mail: rauf_razzokov@mail.ru

8.c. Other local institutions

Management of the Sarazm Settlement is shared between the following institutions:
Government of the Republic of Tajikistan
Ministry of Culture of the Republic of Tajikistan
Academy of Science of the Republic of Tajikistan
Institute of History, Archaeology and Ethnography named after A. Donish
33 Rudaki Street, Dushanbe, Tajikistan 734025.
Hukumat (government) of Penjikent district
102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500
Penjikent Historical and Archaeological reserve Sarazm
102 Rudaki Street, Penjikent, Sugd region, Tajikistan 735500

8.d. Official Web address
Web sites: www.sarazm.farhang.tj
Email: rauf_razzokov@mail.ru
9. SIGNATURE ON BEHALF OF THE STATE PARTY:

Name: Mr. Asrori Mirzoshokhrukh
Position: Minister of Culture of the Republic of Tajikistan

Signature

Stamp
AGREEMENT

October 31, 2005

Panjakeh

We, - Executive Committee of Hukumat of Panjakeh, represented by Samadov Sh. D., chairman of hukumat, - Sarazm Jamoat, represented by Sultonova D., chairwoman of Jamoat and - The Sarazm Historical and Archaeological reserve, represented by Razzakov A., director, have conclude this agreement:

RESPONSIBILITY OF THE SIDES:

JAMOAT OF SARAZM:

- Together with the staff of the Sarazm Historical and Archaeological Reserve we are responsible to promote the significance of the Sarazm Reserve, created by resolution of the government of Republic of Tajikistan, by means of discussions, meetings, sightseeing in the place.
- Together with the staff of the Sarazm Historical and Archaeological Reserve, we should provide the Hukumat of Panjakeh with periodic reports on the activities undertaken within the Sarazm reserve. At least two in a year.
- For all kind of works in the neighboring villages Avazali and Sohibnazar, as houses building, agricultural works, digging of trenches, toilets ditches, and so on, the Jamoat of Sarazm should warm the Sarazm reserve at least 2 weeks before the beginning of the work and the Sarazm Reserve Staff should attend.
- Inhabitants of neighboring villages of Avazali and Sohibnazar should give all their finds made in the territory of the reserve: Core zone, and buffer zones 1, 2 and 3.
- Inhabitants of neighboring villages of Avazali and Sohibnazar should contribute to the protection and the preservation of the monument.

SARAZM HISTORICAL AND ARCHAEOLOGICAL RESERVE

- The Sarazm Historical and Archaeological Reserve should organize promotion activities among the population of Panjakeh district and its villages about the significance of the Sarazm Historical and Archaeological Reserve by means of discussion and meetings, by
producing cards, publishing articles, making TV shows and radio broadcasts, and all other mediums of communication.

- The Sarazm Historical and Archaeological Reserve should make available the necessary qualified staff to provide archaeological survey during all agricultural and building works undertaken inside the territories of the reserve.

- All archaeological finds found by inhabitants of neighboring villages during agricultural and building works should be received

EXECUTIVE COMMITTEE OF HUKUMAT OF PANJAKENT:

- All points of the agreement should be taken under consideration and ensured by the executive committee of Hukumat of Panjikent.

- For solving any questions concerning the protection and the safeguarding of the Sarazm monuments, relation and cooperation between the Sarazm Reserve’s staff and neighboring villages should be strengthened.

- With the aim of preserving the original cultural landscape of the Sarazm reserve, construction of high storey buildings higher than 6 m must be prohibited within the reserve area and the territory of villages of Avasali and Sohibnazar.

- To ensure the implementation of the above point, and any other relevant land use restriction, a specific agreement should be concluded between the committee for urbanism and architecture of the Hukumat of Panjikent, and the Sarazm Archaeological and Historical reserve.

The Agreement is issued in 4 copies in Tajik and English with correct translation. In case of contestation on the implementation of this agreement, it can be solved according to the laws of the Republic of Tajikistan.

THE CONCERN SIDES

Hukumat of Panjikent

Samadov Sh.D.

Jamoat of Sarazm

Sultonova D.
Шартнoma

31 октябри соли 2005 ш.Панчакент

 Мо - Макомоти ичрияни ҳокимияти давлатии шахри Панчакент дар симои райсӣ шахр Самадов Ш.Д., Чамоати дехоти Саразм дар симои райсӣ чамоати дехот Сухтонова Д. ва мамнўгоҳи таврия — бостоншиносии Саразм дар шахси сарвари пойгоҳ Расазов А. бо максади ҳифзии мамнўгоҳи таврия бостоншиносии Саразм, ҳамкори бо аҳолии дехаҳои атрофи мамнўгоҳо, аз ҷумла Сохибназар ва Авазалӣ ба тарики зайд шартнома бастем:

Ўхдороийи тарафҳо:

Чамоати дехоти Саразм:
- якчо бо кормандонии мамнўгоҳи таврия — бостоншиносӣ дар байни сокинони дехаҳои Авазалӣ ва Сохибназар оид, ба ҳамкорий қимати таврияҳои ёдгории бостонии Саразм, кунунгузории Чумхурӣ Тоҷикистон дар бораи ҳифзии ёдгории таврия аз тарики суҳбат, воҳир, ташкили бошди аз мамнўгоҳои корҳои фаҳмондадиҳӣ барад;
- ҳамагуна корҳои заминканиро дар дехаҳои хамшафати мамнўгоҳо, масусан дехаҳои Авазалӣ ва Сохибназар аз ҷумла, қандани ҷои тахкурсӣ, ҳочатхона, чўй ва ғайрар бо мамнўгоҳи таврия-бостоншиносии Саразм камаш ду хафта пеш муъофика намуда, бо иштироки бостоншиносии ип корҳоро анчо маҳёнд;
- сокинони дехаҳои хамшафати мамнўгоҳо, аз ҷумла Авазалӣ ва Сохибназар ҳамагуна боёфтоҳои таврияҳо пайдонамудаашоноҳои ҳангоми соҳтмон, киштукор ва ғайра ба мамнўгоҳи таврия—бостоншиносии Саразм супорянд;
- сокинони дехаҳо хамшафат ба ҳифзии ёдгории бостонии Саразм мусоидат намоянд.
Мамнўгохи таърихи-бостоншиносни Саразм:
- ба сокинони дехахои ҳамшафати мамнўгоҳ, аҳли ҷомеан шахру дехоти Панчакент аз тарики суҳбату воҳуриҳо, таҳия ва пахн намудани варагаҳо, нашри маколаҳо, барномаҳо дар васоити ахбори умум дар боран маком ва аҳамияти ёдгории бостонии Саразм корҳои таргіботи барад;
- ҳангоми гузаронидани ҳамагуна корҳои заминкани дар худули дехахои ҳамшафати мамнўгоҳ, аз чумла, Авазалӣ ва Соҳибназар иштироки бостоншиносонро таъмин намояд;
- ҳамагуна бозёфтоҳи археологиро, ки сокинони дехахон ҳамшафати мамнўгоҳ ҳангоми корҳои заминкани, ки ниту кор ва гайра пайдо менамоянд, қабул карда, таҳкик намуда, баҳо дихад.

Макомоти ичроиин ҳокимияти давлатии шахри Панчакент:
- ичрои талаботҳои шартномаи маъкурро аз ҷомиби Ҷамоати дехоти Саразм, сокинои дехахои Авазалӣ ва Соҳибназар, мамнўгоҳи таърихи-бостоншиносни Саразм зери назорат гирифта, ба амалӣ намудани он мусоидат намояд;
- барои ҳалли ҳамагуна масъалаҳои марбут ба хифзи ёдгории бостонии Саразм, робитао ҳамкории мамнўгоҳи таърихи-бостоншиносии Саразм, бостоншиносон бо сокинои дехахон атрофи мамнўгоҳ мусоидат намояд;
- шўъбанд меъмори ва шарқосозии макомоти ичроиин ҳокимияти давлатии шахр ва қумитаи заминсоҳӣ ҳангоми соҳтмони иншоотҳои нав ба таксимоти замин дар худули шахр ва дехот хушчатгузориро бо пойгоҳи бостоншиносии шахр мувафий намояд;
- дар худуди дехахои Авазалӣ ва Соҳибназар ба хотиринигҳо доситани намуди асли мамнўгоҳи таърихи-бостоншиносии Саразм соҳтмони ҳонаҳои баландошёнароя (беш аз 6 метр) манъ намояд.
Шартнома дар 4 нусха ба забонхои точикъ ва англисий тахия щуда, курби баробар дорад.
Дар сурати аз чониби яке аз тарафҳо ичро нашудани шартнома он тибки конунгои чории Чумхурни Тоҷикистон баррасӣ карда мешавад.

Имаои тарафҳо:
Мақомоти ичроиян хокимияти давлатий шаҳр
Ш. Самадов

Чамоати деҳоти Саразм
Д. Султонова

Мамнӯъгоҳи таврийӣ — бостончиносии Саразм
А. Раззоқов
Ба Маркази байналмиллатин мероси башариё ЙОНЭСКО

Накшандурнамои рушди ичтимон ва фархангии шаҳри Панчакент дар солҳон 2004-2010

Макомоти ичроиён хокимиёти давлатии шаҳри Панчакент дурнамои рушди иктисидию ичтимон ва фархангии Панчакентро барои солҳон 2004-2010 чунин муайян кардааст:
Соли 2004
1. Навбати дуюми мактабҳои тахсилоти умумии Но 71 дар шаҳр ва № 31 дар дехан Гарбак бунёд шуд.
2. Хамчунин 14 муассисаи тиби ва 8 мактабҳои тахсилоти умуми таъмир ва тармим карда шуданд.
3. Дар шаҳр пойгоҳи нави замонавии аложаи телефони насб карда, якчанд нуктҳои шабакаи чахонии интернет ва почтаи электрони ва аложаи ҷони (сотовый) кушода шуданд.
4. Ба 34 деха хати оби нушоқи ғузоронида шуд.
5. Дар шаҳр ва чамоатаҳои дехот 3 купруки нав сохта шуд.
6. Шабакаи бо оби нушоқи таъмир намудани шаҳр таъмир карда шуд.
7. Ичрои накшанд компьютеркунонини мактабҳои тахсилоти умуми, ки соли 2003-ном огоз шуда буд, идома ёфт (то соли 2007 хамаи мактабҳои тахсилоти умуми бо компьютер таъмин карда мешаванд.)
8. Бо максади хифзи ёдгорихои мамнўгоҳи бостони-таърихи Саразм дар 4 нуктаи хафриёт болопуши сохта ёф.
9. Дар эдолгоҳи сардафтари адабиёти классики форсу точик Абуабдулло Рудаки — дехаи Панчруд мехмонхонаи нав сохта ёф.

Соли 2005

1. Сохтмони касри фарханг огоэн ёфт.
2. Ба хотире бузургдошти шаҳидони Чанги Бузурги Ватани ба ифтихори 60 солаги Галаба мучассамаи Ойгул Мухаммадчонова гузошта ёф.
3. Барои бо манзил таъмин намудани ахолии аз офати табии зиёндида се маҳаллани нави истикомати бунёд карда ёф. Аз чумла 3 км дуртар аз мамнўгоҳи таърихи-бостоншиносии Саразм барои 500 оила, ки аз офати табии зиён диданда, бо номи Саразм шахраки нав бунёд гардида, холо он чо барои 160 оила хона бунёд карда ёф. Дар шахрак барои 320 хона навда мактаби нав, бунгоҳи тибби сохта ёф.
4. Мактаби тахсилоти умумии № 30 дар шахр тармим карда ёф.
5. Болопуши 5-ум барои хафриёт мавзулмоги таърихи-бостоншиносии Саразм гузошта ёф.
6. Бо бунёдии мавжирхони телевизияни дар хама худуди шахр ва деҳот имконии кабули барномахони телевизияни Тоҷикистон фарохам оварда ёф.
7. Дар шахр тарохонаи замонави барои кабули мехмонони хориҷио ватани тармим карда ёф.

Солҳони 2006-2010 пешбини шудааст:
1. Тунели агбаи Анзоб ба истифода доида, тунели агбаи Шахристон ва тармими роҳи Душанбе-Панчакент огоэ мебад.
2. Ба ин васила ҳалби саъёҳон аз тарики шахрхони Душанбе ва Хўчанд бештар карда мешавад.
3. Барномаи компьютеркунони мактабҳои тахсилоти умуми ба ичро расонида мешавад.
4. Таъмир тармими мактабҳо ва муассисахони тибби, гузарониданиси хоти оби нушқои, гази табии, сохтмони
нуктахон савдо ва хуроки умуми, аз чумла магозахони китоб идома мешавад.
5. Атрофи мамнуъгохи таърихи-бостоншиносии Саразм бо панчара ихота карда мешавад.
6. Барои кабули мехмонони дохили ва хоричи мехмонхонаи Панчакент, осорхонаи чумхурияви таърихи-кишваршиносии ба номи А.Рудаки тармим карда мешавад.
7. Матбааи шаҳри бо дастгоҳои заманавии чоп таъхизонида, нашру осори адаби, илми, аз чумла таърихи знёд карда мешавад.
8. Барои чалби сайёҳони хоричи аз чониби 5 ширкати сайёҳи, ки даршахр амал мекунанд, маршрутҳои нави сайёҳи кушода, буклет, китобчахо, нишонҳо пахн карда мешаванд.

Раиси шаҳр

Ш. Самадов
Постановление

Правительство Республики Таджикистан

от 21 сентября 2000 года

№ 391

Мухаммед Душанбе

Дар барои таъкид намудани маъмуратои

tаъмиралари бостоншоносии Сараб

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Sarazm location
Protected area and Buffer zone
Additional location map
Sites archéologiques de la région de Pendjikent

**Légende**

1. Sarazm (IV-VIIe millénaires av. J.-C.; 2. Pendjikent (VIII s. A.D.);
3. Tapal (seconde partie du VIII s. A.D.); 4. Buhalatpe (VIII s. A.D.); 5.

**Location of Archeological sites of Penjikent Region**
ГЕОЛОГИЧЕСКАЯ КАРТА ТАДЖИКСКОЙ ССР

Редактор А.П. МАРКОВСКИЙ
Совреж. Ю.А. БИХАЧЕВ

В составление карты принимали участие Б.П. Бирнвальд, И.И. Бобков, В.Д. Волоцкий, А.В. Григорьева, Е.Д. Карпова, Ю.А. Лемачев, А.И. Марковский, В.Г. Мартыненко, Н.К. Морозов, А.П. Недеев, С.К. Овчинников, В.И. Солен

Масштаб 1:1000 000

1966 г.

Геологическая карта Таджикской ССР.
Map of mineral resources of Zeravshan valley
Excavation II. Dwelling quarter
Excavation III. Granary

Excavation IV. Temple complex (by Isakov)
- horizon I  - horizon IV
- horizon II  - horizon V
- horizon III

Excavation V. Palatial Complex
Excavation IX

- two-deck pottery kiln
- hearth-altar
- river pebble
Excavation 11. Religious building
Excavation XII. Temple complex
SARAZM LONG RANGE CONNECTIONS
with contemporary civilizations and cultures (IV-III millennia)

1. Kele’teminar steppe connection (pottery);
2. Badakhshan connection (lapis lazuli);
3. Baluchistan connection (pottery styles);
4. Mundigak, Sahr-i Sokhta connection (pottery styles);
5. Namazga II and III, Geoksyur (pottery styles) and Iran Gorgan Grey Ware connections (pottery);
6. Makran, Kerman connexion (pottery styles, pottery, sea shell, stone weights);
7. Iran (Elam), Mesopotamia connexion: Uruk and Proto-Elamite expansions (cylinder seal);
8. North Mesopotamian and Syro-Anatolian connexion ("tin road");
9. Afanasevo steppe connexion (funerary circle, pottery).

“International” relations

“Regional” relations
Annex 3. Comparative analysis

Fig. 1 – Situation géographique de Sarazm et des sites contemporains
ENEOLITHIC AND BRONZE AGE SITES OFTAJIKISTAN

1. Sites of Garmirin culture
2. Rock shelter J sola
3. Sarni settlement
4. Dostkhoi cemetery
5. Zaribek Khali cemetery
6. Zaribek cemetery
7. Tanderi cemetery
8. Gurma cemetery
9. Dinar settlement
10. Negiak settlement
11. Kangi settlement
12. Kurb Kuri settlement
13. Sites in Khujor's wheat
14. Behestan I-III cemeteries
15. Early Talish cemetery
16. Early Arkanz cemetery
17. Talish cemetery
18. Tigai's Balak cemetery
19. Chichik cemetery
20. Balak cemetery
21. Arts Gauz cemetery
22. Balikchirin cemetery
23. Tschugum (Yuzhok) cemetery
24. Funerary complex Nanylin
25. Tschugum (Yuzhok) cemetery
26. Kholbol cemetery
27. Rock shelter Kurelema
28. Cave Mashala
Archaeological complexes of cultures of Harappa and Sarazm

Archaeological complexes of Iran and Sarazm, III millennium BC

Bronze articles: knives, daggers, spearheads
Archaeological complexes of Sjuth Turkmenistan and Sarazm, III millennium BC

Archaeological complexes of Baluchistan and Sarazm, III millennium BC

MUNDIGAK

SARAZM

Fig. 8 - Cultures matérielles de Mundigak et de Sarazm. Mundigak : 1-3, céramique Mundigak IV : 4, céramique Mundigak II : 5, 6, céramique Mundigak IV : 7, pierre, poids discoidal ; 8, peson en pierre. Sarazm : 1-6, céramique Sarazm III : 7, pierre, poids discoidal : 8, peson en pierre.
Fragment of ceramic figures

Fragment of stone sculpture

Cylindrical seal-stone with depiction of a cow
Table 1. Results of radiocarbon dating of the settlement of Sarazm, Tajikistan.

<table>
<thead>
<tr>
<th>Sample number</th>
<th>Object of dating (sampling place)</th>
<th>Dating by archaeologists</th>
<th>(^{14}\text{C} \text{ date (BP)})</th>
<th>Date according to Groningen 1.20 (1995); 16, calBC</th>
<th>Date according to Kohl 1984; 1992; 16, calBC</th>
<th>Date according to Besenval, Isakov 1989; Isakov 1991a; 16, calBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jle-2172</td>
<td>P.IV, layer A1, Period I (Period I, pit, lower layer)</td>
<td>end of IV millennium BC</td>
<td>5050 ±60</td>
<td>3946-3842, 3824-3786</td>
<td>3905-3775</td>
<td></td>
</tr>
<tr>
<td>Jle-2173</td>
<td>P.IV, layer A1, Period I (Period I, pit)</td>
<td>end of IV millennium BC</td>
<td>4880 ±90</td>
<td>3778-3624, 3576-3536</td>
<td>3790-3645</td>
<td></td>
</tr>
<tr>
<td>Jle-2174</td>
<td>P.II, layer 1, Period I (Period B, above fastland)</td>
<td>end of IV millennium BC</td>
<td>4940 ±50</td>
<td>3774-3692, 3678-3662</td>
<td>3870-3660</td>
<td></td>
</tr>
<tr>
<td>Jle-1806</td>
<td>P.III, layer 1, Period II (2, upper habitation horizon)</td>
<td>end of III — beginning of II millennium BC</td>
<td>4460 ±50</td>
<td>3306-3232, 3184-23162, 3114-3030, 2970-2932</td>
<td>3365-3020</td>
<td></td>
</tr>
<tr>
<td>Jle-1808</td>
<td>P.III, layer 2, Period II (hearth, upper horizon)</td>
<td>III — beginning of II millennium BC</td>
<td>4230 ±40</td>
<td>2892-2868, 2808-2768, 2722-2700</td>
<td>2970-2795</td>
<td></td>
</tr>
<tr>
<td>Jle-1807</td>
<td>P.III, layer 3, Period III (excav. 3, courtyard 3, layer 4, debris)</td>
<td>III — beginning of II millennium BC</td>
<td>3840 ±40</td>
<td>2394-2384, 2336-2266, 2264-2200</td>
<td>2415-2185</td>
<td></td>
</tr>
<tr>
<td>Jle-1420</td>
<td>P.III, layer 2, Period III (room 2, floor)</td>
<td>III — beginning of II millennium BC</td>
<td>3790 ±80</td>
<td>2390-2386, 2334-2128, 2082-2044</td>
<td>2410-2115</td>
<td></td>
</tr>
<tr>
<td>Jle-2475</td>
<td>P.V, layer 3 (upper)</td>
<td>II millennium BC</td>
<td>3120 ±40</td>
<td>1424-1376, 1350-1316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jle-2476</td>
<td>P.VI, layer 4 (layer 2, upper)</td>
<td>II millennium BC</td>
<td>3120±40</td>
<td>1424-1376, 1350-1316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jle-2477</td>
<td>P.VI, layer 2 (exc. 1, early)</td>
<td>II millennium BC</td>
<td>3670 ±40</td>
<td>2126-2082, 2042-1974</td>
<td></td>
<td></td>
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<tr>
<td>Jle-2478</td>
<td>P.VI, layer 4 (on the first floor)</td>
<td>II millennium BC</td>
<td>3190 ±40</td>
<td>1508-1476, 1460-1418</td>
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<tr>
<td>Jle-3262</td>
<td>P.VI, room 6, dust pit</td>
<td>II millennium BC</td>
<td>4120±100</td>
<td>2870-2800, 2780-2720, 2710-2570, 2520-2510</td>
<td></td>
<td></td>
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<tr>
<td>Jle-3124</td>
<td>P.VII (E72)</td>
<td>II millennium BC</td>
<td>3290-3280, 3270-3240, 3100-2860, 2820-2690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-7560</td>
<td>P.VII, layer 1/1 (beginning)</td>
<td>4450 ±60</td>
<td>3350-1937 (3360-2895)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-7561 (?)</td>
<td>P.VII, layer 1/1 (end)</td>
<td>4380 ±70</td>
<td>3330-2890 (3370-2925)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>P-7202</td>
<td>P.VII, layer 2/1</td>
<td>4130±70</td>
<td>2910-2494 (2910-2435)</td>
<td></td>
<td></td>
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<tr>
<td>P-7201</td>
<td>P.VII, layer 3/3</td>
<td>3990 ±70</td>
<td>2863-2330 (2780-2325)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-7397 (?)</td>
<td>P.VII, layer 4/1 (room 402)</td>
<td>3850 ±90</td>
<td>2580-2044 (2620-2165)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>P-7398 (?)</td>
<td>P.VII, layer 4/1 (room. 404)</td>
<td>3800 ±70</td>
<td>2470-2040 (2525-2105)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>P-7203</td>
<td>P.VII, layer 1/7</td>
<td>3800 ±70</td>
<td>(3155-2670)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unfortunately, in publications and in primary laboratory records there are divergences about a place of gathering of samples from Sarazm. The published data is cited first, and in brackets - data of the laboratory account.

Results of radio carbon analyses of samples from Sarazm, executed in Paris, are published in: Besenval, Isakov 1989 without laboratory numbers and without name of the calibration program; in the dissertation author's abstract of A.I.Isakova's (1991a: 21-22) the same results are given with numbers, but the calibrated values, also without name of the calibration program; these results slightly differ (are given in brackets).
Table 2. Results of the paleobotanic research

<table>
<thead>
<tr>
<th>Family</th>
<th>Genus</th>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
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**Résultats des déterminations botaniques de Sarazm**
Chart 1. Results of the paleobotanic research

- Amygdalus: 24.74%
- Erable: 14.43%
- Pistacia: 13.40%
- Peuplier/saule: 15.46%
- Frêne: 10.31%
- Elaeagnus: 7.22%
- Argousier: 6.19%
- Tamaris: 2.06%
- Juniperus: 30.9%
- Micocoulier: 30.9%
Table 3. Results of quantitative spectral analysis

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**TOTAL:** 1906 100
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39. Vessel
Republic of Tajikistan

Academy of Sciences of Tajikistan
A. Donish History, Archaeology and Ethnographic Institute

Penjikent Archaeological Base
Historical and Archaeological Reserve of Sarazm

SARAZHM

MANAGEMENT PLAN
(2006 – 2010)
November, 2005
Republic of Tajikistan

Academy of Sciences of Tajikistan
A. Donish History, Archaeology and Ethnographic Institute

Penjikent Archaeological Base
Historical and Archaeological Reserve of Sarazm

MANAGEMENT PLAN
(2006 – 2010)

November, 2005

This management plan was prepared by:

Penjikent Historical and Archaeological reserve of Sarazm
   Dr. Abdurauf Razzokov, Head of the reserve
   Scharafidin Kurbanov, Archaeologist

With preparatory assistance provided by the World Heritage Committee, organized by the World Heritage Centre of UNESCO and carried out by:

CRATerre-ENSAG,
   Thierry Joffroy, Architect
   David Gandreau, Archaeologist-Conservator

With the involvement of:
(See list page 4)
Main local stakeholders

Samadov Shakarbeg, Mayor of Penjikent
Rofieva Fotima, Head of department for culture, Hukuomat of Penjikent
Solechzoda Tourdiev, Penjikent administration, responsible for Culture
Sultanova Dilnavoza, Chief of Jamoat (commune) for Sarazm
Mahmoudov Ruziboi, Architect of Penjikent city
Rhoursandmourdodov Abdulla, Representative of the department for urbanism of Penjikent district
Amzaev Azam, Chief of Sharibnazar village,
Bektemirov Mouhidin, Chief of Avazali village
Rhoudajorov F., Chief of Tshoubot village – director of the school n°12
Yarova M., Chief of Tojikiishlok village
Sodikov R., Chief of Taghirmon village
Otchilov H., Director of the school n°22
Koutchkorov A., Director of the school n°48

Kudjov Rholmarmat, Director of In Tourist Penjikent (Tourism Agency)
Sharifbadalov Abdulrasul, Director of Sayrou Sayoat (Tourism Agency)
Nematov Niyozkul, Manager of Pamir travel (Tourism agency)

Abdumain Juraev, Director of Television channel “Simo” Penjikent
Ovlokoulov Shoin, Journalist, Varorout newspaper
Gourbanov Lougmon, Redactor, Zarafchan newspaper

Resource persons

Masov Rahim, Director of the department of History and Archaeology and Ethnology, Academy of Sciences.
Bobomulloev Saidmurod, Director of the museum of Antiquities of Tajikistan
Muzaffar Azizov, Head of Inspection, Protection and Restoration of Historical and Cultural Monuments.
Babadjanova Munzifa M., Secretary General, National Commission for UNESCO in Tajikistan
Mukimov Rustam S., Tajik University of Technology, Department of Architecture and Building. Director of ICOMOS Tajikistan
Nizomov F., Director of Penjikent Museum “Roudaki”
Rukhulova Firouza, Penjikent Museum, Guide
Hamrokul Mirzoev, English Teacher, Translations
Besenval Roland, Archaeologist, CNRS, France
Tosi Maurizio, Archaeologist, Dipartimento di Archaeologia di Ravenna, Italy
Cleuziou Serge, Archaeologist, CNRS, France
Casanova Michèle, Archaeologist, Rennes II University, France
Acknowledgements

The overall team wishes to acknowledge the contribution of all those who have been involved in this work or have facilitated it. Our gratitude goes to many but most peculiarly to:

The president of the Republic of Tajikistan, Mr. Emomali Rakhmonov, for his full and constant support to give Sarazm better recognition and enhancement, so as to make Sarazm a national pride.

The World Heritage Committee who responded positively to the Tajik request for getting assistance to undertake the present work, as well as the preparation of the nomination file.

The government of the Republic of Tajikistan, and more specifically Mr. Amirov Radjabmad, Minister of Culture who has always been helpful in carrying out this management planning exercise and

Mr Francesco Bandarin, Director of the World Heritage Centre, Mr. Giovanni Boccardi and Mr. Ito Takashi of the Asian desk of the World Heritage Centre whose role has been paramount for undertaking this work.

Mrs. Babadjanova Munzifa, Secretary General, Tajikistan National Commission for UNESCO who has facilitated relations between UNESCO Headquarters, the national authorities, Sarazm Staff and the international experts

Mr. Samadov Shakarbeg, Mayor of Penjikent, who has facilitated relations with all stakeholders at the local level

Mr. Achurali Taïkonov, villager, who made the discovery of the site possible when in 1997, he discovered a bronze pick in his field and let Dr. Isakov know about it.

Late Dr. A.I. Isakov (late), Archaeologist, who undertook the first archaeological researches at Sarazm.

And finally all those who have directly or indirectly contributed to the elaboration of this plan, mainly those who are listed on the opposite page, and also the general population of Avazali and Shahibnazar.
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Objective 1 : Launch a process that will gradually lead to the precise definition of the conservation techniques that suits the requirements of the site and its environment

Objective 2 : Ensure that the site is well known and frequently visited

Objective 3 : Ensure revenue generation at the site so that conservation costs can be covered and gradual improvements of the site can be made

Objective 4 : Finalize the organization of the documentation and start enriching the existing data

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PART I

CURRENT SITUATION
1 - HISTORY OF SARAZM

1.1. Development of Sarazm

The proto-urban settlement of Sarazm dates back from the early Neolithic period to the Late Bronze Age, from around 3500 to probably about 2000 BC. The original Chalcolithic core town of the mid 4th millennium BC could have been established on an earlier late Neolithic village, still to be found.

From a geographic point of view, Sarazm is located in a very strategic place, just between a mountainous zone and a large valley area, one being favourable to cattle grazing, the other to agriculture and farming. Rich fields of the top of the hills could also be used for cattle-breeding. The proximity of the "tugais" (jungles) in the flood-lands of Zaravshan also allowed harvesting and hunting activities. In addition, both south and north mountains sides of the Zaravshan valley possess natural geological resources, including those that allow bronze processing.

These geographic conditions were suitable for an encounter of the nomadic shepherds of the mountains and the agrarian populations of Transoxiane (region between the Syr Daria and Amou Daria). Those populations, which practised complementary activities, could interact in Sarazm where sophisticated metallurgical production started to develop, as well as other industries (pottery, stone processing, shoe making,...).

At the turn of the IV-III millennium BC, Sarazm started to be an important centre for interregional exchange on long distances (export tin particularly). The settlement became a major crossroad, both on the major East-West axis made by the course of the Zaravshan, and on the North-South one.
Most particularly, this last one made Sarazm become an important centre in Central Asia. All main river corridors that allow crossing the impervious westernmost extensions of the Pamir-Alaj massive, the parallel ridges of the Turkestan mountains to the North and the Zeravshan to the South, merge at Sarazm best that anywhere else. The town occupies the most strategic location to combine all directions:

- To the south of Sarazm the main route opens directly following the gentle slope of the Murchab Say up to the town of Cep, now in Uzbekistan, and from here following the slightly more steep cline of the Akdarya back into Tajikistan territory and 20 km down to the town of Farab on the Karadarya headwaters. From here the river opens an easy westward alleyway through Karshi and Merv into Iran, or southward across the Darbent Iron Gates into the Surkhandarya and hence to Bactria and southern Afghanistan on the way to the Indus. An alternative route to the South moves out of Sarazm to follow upstream the southern shore of the Zeravshan moving beyond Penjikent to follow the climber the left affluent towards Dushanbe to reach the upper course of the Amudarya from the headwaters of the Kafirnigan and Kyzyl Su.

- To the North two main alleyways merge in Sarazm. To the West the Ustrushana highway connects with the Syrdarya outflanking the Turkestan mountains around their western front, after crossing the Steppe of Famine and the Gates of Timurlane at Jizzak; to the East again along the Zeravshan upper course till the Ayni and from where it turns northwards to reach directly Ferghana through the Sharistan Pass, an important section of the Silk Road in historical times, the only possible way from Upper Central Asia to bypass Samarqand on the way to India.

Therefore Sarazm was at the origin of a major turn in the history of the region. It was a centre where people developed many complementary activities with plural economy, based on agriculture and cattle-breeding on one side, and processing of mineral resources of close-located regions from another. This allowed new developments that entailed many social changes and most particularly the beginning of specialisation for the production of goods, the formalisation of trade, the association of social classes and finally, the urbanization with the creation of a complex settlement with sophisticated architectural achievements for the period.

Investigation at Sarazm significantly widens our conception of horizons of ancient civilizations, and crossing of different trade links. Contact between Sarazm and ancient agricultural centres of Mesopotamia, Iran, Baluchistan, and Afghanistan are clearly established, the main probable reason being Sarazm's position as one of the major metallurgical centres of Central Asia. As it appears so far, trades with distant regions in the Near East (Mesopotamia, Elam, Khorasan, Sistan and Baluchistan) were carried out through intermediaries. The underlying local culture, the waves of migration from southern Turkmenistan, and the close relations with many other regions, all combined to form and develop the culture of Sarazm.

Between the middle and the end of the third millennium BC, it seems that Sarazm declined. No traces of occupation have been found on the site for the direct following periods, and it seems that shepherds once again inhabited the area. The reasons for the abandon of Sarazm by its inhabitants have not yet been identified. Hypothesis include migration of the population, epidemic disease, attack of this prosperous settlement which wasn’t fortified, …, but none could really be verified.
1.2. The rebirth of Sarazm

Abandoned for thousand years, the site was re-discovered in 1976 by Mr. Achurali Taïkonov, villager, who found some objects, which appeared at the surface of a newly cultivated field, and more specifically an impressive bronze axe. He was so impressed that he immediately presented this find to professor A. Isakov who was the head of the Archaeological base of Penjikent.

Following that discovery, discussions were held with the representatives of the population and the expansion of agricultural activities in the zone was stopped to preserve the underground remains of Sarazm. This was the beginning of an interesting collaboration between archaeologists and the local population and the site was methodologically excavated since 1979.

In that regard, it must be noticed that a significant quantity of accidental finds, collected on different parts of the settlement, primarily from private plots were given to the archaeological base by the local inhabitants. Till today, villagers are naturally bringing their finds to the Sarazm archaeological base.

In 2001, the site was inscribed as a national monument and was established as a mark of the Tajik national identity. Since then the conservation of the site and its promotion as a national concern, major efforts continue to be done to ensure that the site is properly used for educational and tourism purposes.
2 - ARCHAEOLOGICAL RESEARCH AT SARAZM

2.1. the successive campaigns

1. The largest investigations were held in 1977-1994 under supervision of A. I. Isakov. 11 excavations were undertaken as well as 20 prospecting digs. (Penjikent Archeological Base of the History, Archeology and Ethnographic Institute, A. Donish, Academy of Science of Republic of Tajikistan.)

2. One of the excavations (VII) was investigated from 1984 till 1991 by a French Archaeological Mission (CNRS) under supervision of R. Besenval. The expedition was composed of the following persons: Henry-Paul Franckfort, Anne B. Lyonnet and Michèle Cazanova - archaeologists, Fabien Cespron – Geologist/mineralogist, John Dess - paleo-zoologist, J. Vilkoks - paleo-botanist. In 1985, this team was joined by K.K. Lamberg–karlovski, professor of Harvard university, and professor Philippe. Kohl.

3. In 2000, the Historical and Archaeological Reserve of Sarazm was created according to the resolution of the government of the Republic of Tajikistan of September, 21 2000, N° 391

4. Since 2002 archaeological investigations at Sarazm are conducted by the staff of Sarazm base, at a limited scale. A recent campaign in 2005 has permitted to explore a 12th archaeological trench (8 x 8m) which was covered with shelters and partially back-filled.
2.2. Overall view of the findings

**Stratigraphy**

Four stratigraphic horizons have been found at Sarazm, corresponding to at least four successive periods of occupation on continuous occupation, spreading from the mid fourth to the late third millennium BC. Those are more or less known and understood, depending on their level of erosion and the material found.

The less investigated are the one corresponding to period I - (on some excavations it is not represented, and on others to a very limited extent, due to the necessity to save upper structures), and period IV, partially destroyed by agricultural works. Periods II and III, are best represented in remains that are visible today. Approximate dates for the four periods are:

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

*Plan and photograph of Excavation N°V showing the different stratigraphic horizons*
Architecture
Buildings remains are numerous at Sarazm. They comprise housing, workshops for craftsmen, storage (granaries), as well as palatial and cult buildings. All are mainly built with earth-brick (adobe) that allowed flexibility in the architecture with a variety of uses, sizes and shapes. River stones were also used but only during the last period of occupation and mostly for the construction of the wall bases.
Roofs were “flat” with wooden beams, covered by a network of branches and reeds supporting one or several layers of earth. There were doors and windows with sometimes clear complex systems, proving a mastership in the implementation of ventilation and lighting devices.

Views of the mud-bricks structures
Residential areas
Multi-rooms complexes are very frequent for all periods of occupation. They comprise living areas with adjoining storerooms, workshops, kitchens, and outbuildings. Most of them possess a fenced courtyard in which crafts activities were undertaken. Several related families living together occupied those residential complexes. The placement of those dwelling complexes determined the layout of the residential tracts and the overall population distribution. They were separated by squares and large or narrow streets, as well as un-built areas for the cattle. Water reservoirs were also present inside the settlements.

Inside the rooms, cult functions corresponding to the period II were carried out in small domestic sanctuaries with hearths-altars in the middle. Starting from period III the sanctuaries became larger and they began to contain square altars along with the round ones. In some cases the sanctuaries were built separately from the dwelling houses (e.g. excavations IV and IX). The walls of cult buildings were often reinforced by buttresses (inside and outside) and generally covered with red or polychrome paintings.

Different types of domestic altars

Plan of excavated area II, with complex superposition of structures.
**Monumental buildings**

Three types of monumental structures, characteristic of the development of the proto-urban culture of the ancient East were discovered in Sarazm:

A **religious building** (excavation IV). A 128 m² religious building consisting of four rooms, two of those which are equipped with rectangular altars.

A **palatial complex** (excavation V). The Palace is a complex measuring 16 x 16.5 meters overall and consisting of six rooms of different sizes and a rather narrow entrance corridor.

A **communal granary** (excavation III). This monumental building with an area of 15 x 15 meters was built on a platform 0.75 meters above the external level and comprises twelve rooms. Three of them are long corridors, enclosed on all sides, which were probably used to store grains. The other rectangular rooms had residential functions.
Burials
No large necropolis has yet been found at Sarazm, but excavation IV led to the
discovery of a funerary enclosure with a round plan (15 m in diameter) surrounded by a
stone wall. (see general plan of the excavation IV).

A burial site with a woman, a man and an adolescent was the
central element. On the woman's skeleton and around it,
several thousands of various beads were found (from burned
steatite, lapis lazuli, cornelian, turquoise and silver), which
were used for decoration of clothes or simply to cover her
body, and her hair was decorated by 49 massive gold beads.
Her hands were adorned with bracelets made of seashells
originated from the Indian Ocean which proves direct or
indirect relationships with populations of the Hindus valley.
The bracelets of the “great lady” are made from the shells of
Turbinella pyrum L., the Sanskrit _anka_, the most important
ritual shell in the Hindu religion, extensively worked for
bracelets and trumpets in India since the 4th millennium BC.
These mollusks live only in the tropical waters between the
Arabian Sea and the Gulf of Bengal where they are still
harvested today. However it is rather interesting to notice that the pair of bracelets from
Sarazm is from an even earlier period than any of those so far found in India.
The accompanying artefacts also included a bronze mirror, bone awl, and two small
schematic women's figures. The necropolis comprises four other burials (individual and
double).

This necropolis has similarities with those corresponding to the southern settled
agricultural cultures, and the stone fence recalls associations with burial customs
对应 the steppe zones of Eurasia.

All these findings reinforce the idea that since its first period, Sarazm had direct or
indirect relationships with many other populations from the north, west and south.
Excavation IV, central burial with the "lady of Sarzam"
Artefacts / Workshops for production

The numerous findings - ceramics, metallic, stone, bone and other wares of high quality for the period- are the evidence of the high level of the development of various specialized productions in Sarazm.

More than 150 metal artefacts (bronze: axes, arrow heads, knifes, spare, hair pins, needles, lead blocs for export, lead stamps; silver and gold jewels) and numerous artefacts made of stone (grinding grains, leather, wood, showcases, bow and arrows, tools, marble cups and goblets) were found. Specific artefacts testify that cloth weaving as well as leather works, including shoe making were practised.

Tools for metal-processing, metal-fusing furnaces and crucibles, and ceramic casting forms that were found are evidences of craftwork with different metals: tin, copper, bronze lead, and also silver and gold.

Small pieces of quartz, Ferghana turquoise and Badakhshan lapis lazuli are also proofs that these minerals were processed in Sarazm.

A unique feature in the whole Central Asia and Iranian plateau is that, in Sarazm, painted ceramics have been found which originates from many other areas of the region (see picture below). This is mainly the case for South Turkmenia and Baluchistan, but small quantity of vessels, originates from North-East Iran (grey clay ceramics) and Khoresmia (culture of Kelteminar).

A two-layers potters’ kiln from the beginning of the 3rd millennium B.C. attests to the specific development of ceramic production in Sarazm, since nothing similar had existed in other parts of Central Asia before 2000 BC.

All those findings prove that Sarazm, following the first nucleation of the mid-to-late fourth millennium BC, developed into a proto-urban centre supplying manufactured goods to its own population as well as those of a vast hinterland. Most important is that the town manufactured not only goods (ornaments and tools) from strictly local resources – copper, lead, tin, steatite, wools, woods, and those coming for the regional context (up to a radius of 500 kms) including semiprecious stones like turquoise, agate and lapis lazuli, but also those gathered from great distances (over 1500 kms) such as shells from the Arabian Sea to the south.

The bracelets of the “great lady” may have been imported as finished objects from Gujarat or Kutch, but the hundreds of broken waste pieces found by Issakov in the later periods of the sequence are really exceptional because they prove the centrality of Sarazm as a major goods processing centre during the early Bronze Age.
Excavation IV-Necropolis: Bangle made of shell


Lead ingots
Fig. 8 - Cultures matérielles de Mundigak et de Sarazm. Mundigak : 1-3, céramique Mundigak IV ; 4, céramique Mundigak III ; 5, 6, céramique Mundigak IV ; 7, pierre, poids discoïdal ; 8, peson en pierre. Sarazm : 1-6, céramique Sarazm III ; 7, pierre, poids discoïdal ; 8, peson en pierre.
2.3. Current situation and perspectives

The last archaeological excavation was carried out in 2005. It was rather limited in size but moreover, was done in a very different way than has usually been done. Actually, this was the first time that excavations were made after having provided a protective roof and somehow this fact inaugurates a new era at Sarazm.

After intensive archaeological researches during the times when the excavations were left with a limited protection, the team in charge could just take stock of the regular decay of the revealed remains, knowing that this would probably become totally irreversible situation. Sarazm being a very important witness of a paramount period of the history in the region, the perspective of such a loss became intolerable to the team in charge of the site. Sarazm was also to be presented to the people of Tajikistan and to the people of the World. In that respect, it was decided that no archaeological research could be done at Sarazm if protection of the remains could not be ensured.

Another aspect is that recent researches did not necessarily brought in paramount new information and that, in these conditions, it would probably have been better to focus on the quality of the excavations undertaken and the deepening of the existing excavation pits in the view to continue the exploration down, towards a better knowledge of the earlier strata of occupation.

At the occasion of a visit of Dr. Mahmoud Bendakir, CRATerre-ENSAG, discussions were held on possibilities to take actions regarding the protection of the excavated zones and to ensuring that they could be presented to visitors. Several examples were shown and advantages-disadvantages of each of them were debated. As a result the team in charge of the site was convinced that large protective roofs would be the best suited solution. That resulted in a proposal made to cover 5 of the most interesting areas that had been excavated (4) or were to be excavated (1).

The idea was presented to the President of Tajikistan at the occasion of a visit paid to Sarazm. Convinced by the pertinence of this idea, he decided to allocate some of his “special funds” for the project. In addition to the protective roofs, the overall project includes fencing, entry gates, and two small guard houses. This project is now about half way and should be completed in 2006-2007.

In the mean time, the site will start to be formally open to the public. It is foreseen that the revenue gathered will be used to gradually improve the offer to the various possible publics : school kids, students, national and international visitors.

Another will is to give priority to conservation activities, both for the in-situ ruins and the artefacts, as some of them, even though kept protected, appear to face conservation problems. There are also some needs in terms of storage, more specifically for the large stone and pottery artefacts which are nowadays kept outside. It is felt that there is a need for establishing a small conservation laboratory on the site and also to start launching a campaign of experimentation that would permit to define adapted conservation techniques as well as proper monitoring schedules and procedures.

This experimental period should also be used to provide training so that the existing competences can be complemented.

In terms of archaeology, researches would be carried out at a very low pace, mostly under the protective roofs. It is foreseen that those can be used for training of young Tajik archaeologists, but also as part of the attractiveness of the site for visitors who could, almost at any time, see archaeologists at work. A series of archaeological
borings of the superficial layer could also be carried out, with proper backfilling being provided after realisation. Other archaeological activities could be undertaken outside the reserved land, at occasions, when the inhabitants of the villages (buffer zone 3) will carry out works which involve serious diggings and movements of earth.

Protection of one of the 13 excavated areas with shelter

Recent excavation at Sarazm
3 - DESCRIPTION OF THE SITE

3.1. Location

Sarazm is situated on the left bank of the Zaravshan river, at an average altitude of 910 m, 15 km to the west of city Penjikent and 45 km to the east of city Samarqand (Republic of Uzbekistan), 500 meters north of the main route connecting these two cities.

As the meaning of its name suggests, Sarazm “the beginning of the earth” is located just between the end of the mountainous part of the riverbed, and the entrance of a much larger valley: a strategic place between mountains and flatlands. It lies on an elevation stretching from west to east, about 1,5 kilometers in length and 400 to 900 meters in width. Apparently, the area of the settlement exceeded 50 hectares during its most developed period, when Sarazm had a settled population of about 3000 (IV – III millennium BC).

3.2. The remains

The settlement consists of ten small mounds of different heights and five depressions, corresponding to constructed zones, open spaces and water reservoirs that were used at the time of Sarazm ancient settlement. From its topography, one can see that the settlement of Sarazm does not have a clearly defined plan. The settlement which didn’t have any protective enclosure was apparently radiating in different directions with no bordering limits.

In its great majority, the core zone of the site is covered by low steppe vegetation. Twelve areas, representing less than 4% of the restricted land have been excavated and backfilled, leaving visible traces of the structures found.

3.3. Protective structures

In order to provide better protection of a selection of the most interesting excavated areas, five large roofs have been constructed (Excavations N° V, IX, XI, XII and XIII). Those covered spaces are to be the main attractions for the visitors, where they can actually see the finds of the archaeologists, just as they are being freshly unearthed. Some of them will still be subject to archaeological researches, providing both a better knowledge of the site and an opportunity for more interesting visits.

3.4. Buffer zones

Buffer zone 1 surrounds the core zone. It clearly separates it from the village as well as the agricultural lands. Buffer zone 1 comprises one of the most ancient excavation zones (P2). This choice was made as the excavation that had covered all layers of occupation was left unprotected for too long and does not represent a valuable
potential for visits. The zone concerned is also very close to the residential areas and useful to the local communities (access, drying of crops). Buffer zone 1 also comprises the archaeological base and the site museum.
Buffer zone 2 currently remains an agricultural land. It is also where the access road and parking lots have been implemented.

Today, the village of Sahibnazar lies on top of the northern and western parts of the settlement, and the village of Avazali, on its north-eastern section. A great portion of these two villages are in buffer zone 3 which is also an area subject to restrictions and a collaboration agreement between the local population and the archaeological base.

![Map showing the boundaries of the nominated property and its buffer zone](image)

### 3.5. Farming activities and assets

Since the fifties, the overall land where Sarazm remains are located was cultivated. For rendering that possible, a network of canals was installed. Those are the only assets that actually disturbed the archaeological remains as for the overall land, only about 20 cm of earth was turned over when preparing for sowing. This has been far less destructive, and one has to recognize it today, led to the discovery of the site.

Today agriculture has been abandoned in the core restricted zone as well as in the first buffer zone. However, one of the canals is still functioning. This is seen as a necessary measure as it drives water towards some houses and gardens of Avazali village, and no alternative either exist or is already planned.

Agriculture is still practiced in buffer zone 2. It mainly concerns wheat and rice.
4 - CONSERVATION OF THE SITE

4.1. A progressive concern

As was the case in most of the archaeological sites in Central Asia, conservation of the excavations has always been very minimal. The practice was to make a backfilling of the revealed structures with soil that had been removed from the zones excavated. The practice is to fill the pits with dry soil, up to the level of the higher walls, or just above. Special attention was given to places where “precious” assets were found (altars, furnaces,….) with a thicker layer being provided.

In fact, this practice was mostly adapted to excavations that had to be left for a year and reopened for the following research season. It appears that results were considered as good or at least sufficient. When very fragile remains were found, they were generally taken off the structures (mural paintings).

But after several years of exposure, with at times higher rainfalls, a simple observation of the remains shows that degradation is progressing, even if it is at a very slow pace. It is from that assessment that gradually the team in charge of the site understood that, if nothing was done to conserve the revealed structures, they would, sooner or later, completely disappear.

So when the importance of this site as a precious witness of the history of the region was finally recognised, it appeared important that it would not only be presented through articles and books, but that the site itself was to be valorised. To do so, there was a need to find ways of protecting the overall site and more specifically the excavated zones, and to launch a process that would ensure proper conservation of the remains for the long term, and together to organise visits in the view of providing a proper experience and understanding to the visitors.

4.2. Threats

4.2.1. Development Pressures

With a gradual increase of the population in the Zarafshan valley, people have looked for more and more land for agriculture. Sarazm was on a hilltop and remained non-cultivated for long. But in the 50°, some irrigation canals were made and the land was occupied for agriculture.

The territory of the Buffer Zones is crossed by ground and asphalt roads, which go to Sahibnazar and Avazali villages, which occupy the northern boarder of the territory of the ancient settlement of Sarazm.

Fortunately, the ancient village zone which was higher and therefore more difficult to irrigate was left almost untouched by these new settlements and the agricultural activities.

From 2001 no new development is authorized on the 47 ha reserve and there are strict rules for the use of the larger buffer zone that comprises a great part of the two concerned villages.
4.2.2. Environmental Pressures

The site is subject to the harmful local climate (continental) with rapid changes in temperature and moreover a long yearly period when there is frost during the night. Frost combined with possible presence of humidity in the remains after snowing or raining is the most important factor of degradation.

4.2.3. Natural disasters and risk preparedness

Natural disaster in the area is only related to earthquakes. The probability for the site to be affected is however almost null as most of the remains are structures of very limited height. The site does not feature very stiff slopes, thus the risks of associated landslip is also probably null. A fault would also rather follow the axis of the valley and develop in the river bed.

4.2.4. Visitor/Tourism Pressures

As for now, the number of visitors/tourists is limited and there is no record of adventurous visitors that could have damaged the remains.

The plan to increase the number of visitors has taken that issue into account. There will not be any visits without a guide, and moreover of a trained guide, featuring a guided tour in which the specific facets of site preservation are presented and explained. Visitors’ access will be limited to a distance of 1m from the excavation pits. Also, the edges of the visited excavation pits will be maintained and if necessary repaired or reinforced.

4.2.5. Number of Inhabitants within Property, Buffer Zone

At the moment, nobody lives in the “Archaeological reserve of Sarazm”. The buffer zone (part 1 and 2) is accessible to the population but activities there are restricted. The archaeological base is located in the buffer zone. Archaeologists live there on a temporary basis.

Finally, about 300 families live in the "Larger Restricted Zone". They started to settle there in the early 1940s.

4.3. Conservation history

From the 70’s excavation works where conducted in 12 locations. Those cover an area of about 2,5 out of the 47 ha of the reserved land. An agreement with the surrounding villages has been established so that incidental or random findings at proximity of the main site can be recorded. Archaeological researches can still be carried out of the reserved zone if felt necessary.

The excavated zones have been covered with soil in order to preserve them from destruction. This solution has proved not to be fully satisfactory, with visible degradations of the revealed structures. For that reason, five zones, including the most interesting excavations or those which were better preserved were covered with tri-dimensional metallic constructions. Those are visible, but actually they are very different from the remains so that no confusion is possible. These protections also render possible a visit of the site “as it was when it was just excavated”. Opportunities exists for further excavations of the under layers (there are 4 levels of occupation at Sarazm) where the remains have been affected when left insufficiently protected after the first excavations were carried out.
4.4 Current state of conservation and new perspectives

As long as a major part of the surface of the site remains non-excavated, and the most important parts have been protected the site can be considered as being in a rather good state of conservation. Artefacts are stored at the archaeological base or at Penjikent and Dushanbe Museums.

Still, one has to recognise that some of the earlier excavations were insufficiently backfilled, causing the unearthed remains (architecture) to become affected. However, in most of the cases, these have brought new opportunities to research the most ancient layers of occupation. It is to be raised here that proper documentation has always been done on very regular basis so that most of the information that could be provided by the remains is available and can be used for further research, interpretation as well as for educational activities.

Buffer zone 1 is surrounds the core zone. It clearly separates it from the village zone as well as the agricultural lands. Buffer zone 1 comprises one of the most ancient excavation zones (P2). This choice was made as the excavation that had covered all layers of occupation was left unprotected for too long and does not represent a valuable potential for visits. The zone concerned is also very close to the residential areas and useful to the communities (access, drying of crops). The buffer zone one also houses the archaeological base and the site museum.

Buffer zone 2 currently remains an agricultural land. It is also where the access road and parking plots have been implemented.

Finally, the buffer zone 3 is the larger zone that includes a great part of the neighbouring villages of Sharibnazar and Azavali which is considered as potentially detaining remains of secondary parts of Sarazm settlement.
5 - VISITORS MANAGEMENT AND SITE PRESENTATION

5.1. Access and facilities

For international visitors, access to Sarazm is either through Dushanbe, the capital of Tajikistan, either through Samarqand in Uzbekistan. In fact, access from Uzbekistan through Samarqand is quite easier as the road is very good. Samarqand is just 50 km far from the site, and is about a 4 hours drive from Tashkent, the capital of Uzbekistan. This situation is going to improve as a tunnel is currently under construction. It will reduce considerably the duration of the road Dushanbe-Penjikent, which today goes through a passage above 3000 m, and is not completely asphalted. Also, it is not opened throughout the year (snow).

There are no hotels in Sarazm, but in Penjikent city (15 kilometres away) there is a number of hotels and guest houses, which accommodate about 300 persons, and a number of family houses.

The site itself is some 500 metres far from the main road (Penjikent-Samarqand). Access is through a gravel road which is in a good state. A parking area has been installed just before the proposed location of the future entry gate. This parking lot is not used today as vehicles are allowed to enter inside the site and can reach the archaeological base. Most of the visitors’ vehicles stop just very close to the protective roof which is just beside the gravel road. This situation is to be changed. Before the parking place is actually used, it will be possible to organise a smaller parking place just in front of the archaeological base.

Today, visitors’ facilities are quite limited. However, the base is there and its toilets can be used. Only special visitors can access the few rooms that are available for accommodation. There is also a kitchen and meals can be prepared there. The base is quite nicely looking from inside its courtyard. But no efforts have been made to render it friendly when looking at it from the site itself. That situation could easily be improved.

5.2. Cultural experience

The site is not yet well equipped to receive visitors. In general, groups come with their guides who take them around the two structures which are immediately accessible. The knowledge of the guides is generally a bit limited for them to actually be able to transmit all the values of Sarazm. They also have difficulties to make actual use of the different areas covered and explain what their specificities are. So today it is only if you have the chance to be guided by the archaeologists that you would actually be able to take stock of all the values and be able to fully experience the site through so many anecdotes that can be quoted at the various places.

The must for visitors is always when they have the chance to come a day when archaeologists are at work. Such rare opportunities could easily be multiplied so that all visitors would then experience an unforgettable visit.

In terms of the overall environment, the conditions of the visit are rather good. The place is very quiet and there are no disturbances.
Visually, the site benefits from a large view on the hills and mountains in the south. The hills are rather an arid area and the mountains have a modest height, so that the eye is not disturbed. On the north, the village and the base are visible. At places, they are partially hidden by trees. That could systematically be done and so, would reinforce the concentration of the visitors on to the site itself.

Finally, the covering structures, though being quite impressive have the advantage of being very transparent and it is easy to forget about them. As they are very different in nature, they cannot confuse the visitors. It is easy to distinguish what is the ancient and what is the contemporary. One interesting aspect is that their impressive size somehow reinforces the importance of what they protect!

### 5.3. The site museum

One of the rooms of the archaeological base has been renewed, equipped with air conditioning system and widely enlightened with large glass panels that now allow the base to present numerous artefacts found at the site, so as to complete the site visit. This site museum is about 70 m² (11 x 6 m) and equipped with 11 new showcases and numerous panels with ancient photography, historical information, analogical tables etc., exposed on the walls.

![Site museum](image)

### 5.4. Promotion

**National Tourism Policy**

Recently, many tourism agencies were created in Tajikistan to address the very interesting tourism potential. Those agencies are not yet very well coordinated at the national level, but this is a strong will of the president, Mr. Rakhmonov. This organisation of the tourism sector with the definition of national policies is in the process of being undertaken, as well as a general opening of the country to tourism. In that regard, a “tourist fair” is organised in Dushanbe on a yearly basis since 2004. There are also representatives of Tajikistan at the tourism fair organised also every year in Tashkent, Uzbekistan.
**Education policy**
The site already receives school kids from Penjikent in the frame of their annual excursion, but also during field visits. It is foreseen that there will have more visits now as the archaeological base is better prepared to receive such large groups.

**Promotion in the National Museum at Dushanbe**
Sarazm is very well represented at the Dushanbe National Museum with ¾ of a 60m2 room devoted to showcases presenting a very interesting selection of artefacts originating from Sarazm. There are also panels showing plans of a selection of the revealed architectural structures. The Museum catalogue is having a substantial presentation of Sarazm with 8 pages including texts in 4 languages and numerous illustrations.

**Promotion in Pendjikent Museum (Roudaki)**
Sarazm is also very well represented at the Penjikent museum with about ½ of a very large room devoted to numerous artefacts originated from the site, including a very interesting collection of those found on the “Lady of Sarazm” site. The guides at Penjikent museum are also guides at the site.

**Exhibitions and conferences**
Ceramics and metal wares from Sarazm were exposed on the exhibition "Antiques of Tajikistan", held in 1985 in the Hermitage Museum (Russia) and were included in the catalogue of this exhibition.

During the 80-90's, republican and regional television has showed several times the episodes about the excavations of Sarazm in Tajik and Russian languages. The last film on this matter was made in 2002.

The republican and district newspapers published more than 50 scientific articles about works conducted in Sarazm. All reports on excavations were published in annuals "Archaeological works in Tajikistan".

Reports and presentations about Sarazm were presented on many international and regional symposiums and conferences. Among those, we can quote :

- 2ème colloque Franco-soviétique sur l’archéologie de l’Asie Centrale des origines à l’âge du fer, CNRS, paris, 16-26 Novembre 1985
- Third USA-USSR Archaeological symposium, Washington D.C., Smithsonian Institution, May, 7-9, 1986
- In 1994, in Penjikent international symposium was organised, solely devoted to Sarazm and the 5500 anniversary of agricultural culture of the upper Zaravshan. This symposium was reported by Penjikent television and a special film was made.
Historical wall in Dushanbe
The long wall of the cement factory in Dushanbe, along one of the most important national roads (to the north) has been used to display panels representing some of the most important periods or events of the country. The first 4 panels of this impressive series (total of 100 panels) are devoted to Sarazm.

5.5. Ideas and plans for the future
With the progressive concern and wish to have the site be used as a teaching and learning tool, as well as a centre to receive tourists, several ideas have come about. They comprise the installation of a souvenir shop and national kitchen/restaurant. To improve site visits, it is programmed to provide guides, set up information panels and develop the site as a living archaeological place. It is also foreseen to publish books, booklets, postcards, CDroms that will provide information and will also increase the revenues of the archaeological base.
In addition, the existing web site is to be developed in a very near future.

One of the rooms of the archaeological base has been renewed and widely enlightened with large glass panels that now allow the base to present numerous artefacts found at the site and so complete the site visit. It is foreseen that this museum will be regularly improved, when in the mean time, the construction of a larger museum near the site will be studied.

5.6. Statistics
Sarazm is visited by tourists. Before breakdown of Soviet Union, the number of tourist per year was about 2000. Later this number decreased to about 500 persons. But during last years, the situation was reversed with the organisation of special tours by Penjikent Tourist Bureau to Penjikent and Sarazm, as well as to other neighbouring historical sites and picturesque places of the upper Zaravshan.

The information on tourism concern the whole region of Penjikent as no registration specific to Sarazm are done already. But according to the Tourism organizations, most
of the visitors coming to Penjikent are visiting Sarazm. It is one of the highlights of their visit.

*Number of visitors in Penjikent* *(source: Penjikent tours manager: Sharifbadalov M.)*

<table>
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<tr>
<td>2005</td>
<td>3,560</td>
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</tr>
</tbody>
</table>

There are no hotels in Sarazm, but in Penjikent city (15 kilometers) there are number of hotels and personal guest houses, which can accommodate up to 300 persons.

The City of Penjikent is making numerous efforts so as to increase the number of tourist per year to 5000.

*ic of Tajikistan, Mr. Rakhmonov came two times with official delegations to visit the site, in August 2003, and in September 2005.*
6 - PRESENT MANAGEMENT

6.1. Ownership and protection

By resolution of the Government of the Republic of Tajikistan N°198 and land certificate N°006981 issued on April 19, 2001, the piece of land of 47, 34 hectares (core and buffer zones) of Sarazm, is a property of the Republic.

Historical and cultural monuments are protected at the Constitution level and regulated by laws and normative acts of the Republic of Tajikistan

i. Constitution level.

The constitution of the Republic of Tajikistan bounds all citizens to respect and protect historical and cultural monuments.
Paragraph 44 : “Every person is obligated to protect natural, historic and cultural monuments”

ii. Law on culture

Protection, management, and monitoring of historical and cultural monuments are conducted according to the contents of the law “About Culture” of the Republic of Tajikistan ratified on 13.12.1997. Bellow are some extracts of this law :

Provision and protection of civic constitutional rights of the citizens in cultural issues.

Article 2. Spheres of operation of the present Law.
Promotion, preservation, restoration, utilization and monitoring of historical and cultural properties.

Article 4. Main principals of government politics on historical and cultural properties.
- availability of the cultural memorials to the public
- national, scientific, and social significance of culture
- establishment and development of cultural links between Tajikistan and foreign countries

Article 6. Types of historical and cultural properties.
According to Article 1 of the present Law are considered historical and cultural properties:
archaeological sites, sites of ancient settlement, tumuli, remnants of ancient settlements, castles, industries, channels, roads, ancient burial places, stone sculptures, graven images, antiquity items, places of historical cultural layer of ancient settlements.

Article 8. Specially authorized government officials for preservation of the sites.
Specially authorized government officials for preservation of the memorials in the Republic of Tajikistan, are the authorities from the Ministry of Culture of the Republic of Tajikistan and from its local representative offices.
Article 10. Competency of specially authorized government authorities for preservation of the sites. Ministry of Culture of the Republic of Tajikistan provides government protection of the historical and cultural memorials, and supervises processes of monitoring, preservation, restoration, utilization and promotion of historical and cultural assets in the Republic of Tajikistan.

Article 28. Provision of preservation of historical and cultural properties, situated on the national territories that were given to utilization. Enterprises, organizations, establishments and citizens shall provide protection and preservation of historical and cultural assets, which are situated on the territories left to their utilization.

Article 39. Excavation and prospecting works of archaeological sites. Excavation and prospecting works of archaeological sites is allowed only with the permission (open pages) provided and registered in affirmed order. Organizations and citizens that conduct archaeological works, are required to take care of security matters on the site.

iii. Specific texts related to Sarazm

Juridical status of Sarazm reserve is defined by the Republic of Tajikistan government resolution N° 391 from 21.09.2000 - "About organization of historical and archaeological reserve Sarazm" and N°198 from 19.04.2001 - "About approval of resolution on historical and archaeological reserve Sarazm".


About organization of the "Historical and Archaeological reserve Sarazm".

In accordance with Law of Republic of Tajikistan dated December 13, 1997 "About culture" which aims at protection and promotion of cultural and historical assets, the Government of Tajikistan resolves:

1. To proclaim the 5500 year old archaeological site of Sarazm in Pendjikent district, which is the centre of formation of agriculture, handicraft and urbanization of Tajiks to be a historical and archaeological reserve.

2. Academy of Science of the Republic of Tajikistan in accordance with Chairman of Penjikent district shall present for approval the statement of the Government of the Republic of Tajikistan the resolution about the site, timetable and estimate of necessary expenditures.

3. Academy of Science of Republic of Tajikistan, chairman of Leninabad (presently Sogd) province and Pendjikent district shall implement funding of the historical and archaeological reserve of Sarazm from State budget resources, entitled for Culture and Science in the year 2001.

4. Chairman of Leninabad (presently Sogd) province and Pendjikent district Committee on Land Resources and Arable Land of the Government of Tajikistan shall define the area of Sarazm archaeological reserve and solve the question of the land distribution. Define that any construction works of buildings, structures, conduction of any kind of works that could harm the memorial on the territory of the above-mentioned reserve are strictly forbidden.


On the approval of the resolution about the Sarazm historical-archaeological reserve.

1. Sarazm historical-archaeological reserve is operated under Penjikent Archaeological Base and is subordinated by the Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan. Sarazm historical-archaeological reserve has been established on the basis of ancient agricultural settlement of Sarazm.
2. The main tasks of the Sarazm historical-archaeological reserve are the preservation, renovation, investigation, archaeological excavations, conservation and reconstruction of the unearthed assets, museums and popularization of the ancient Tajik history, dispersal of knowledge about history and ancient culture of Tajik people, promotion of scientific and cultural achievements.
3. Direct administrative and scientific coordination of the activities of the reserve is implemented by Head of Penjikent Archaeological Base of the Institute of History, Archaeology and Ethnography named after A. Donish.

On 21.09.2001 by government resolution Sarazm Settlement was proclaimed historical and archaeological reserve, located in the Pendjikent District, Sogd Region, under Pendjikent archaeological base of Institute of History, Archaeology and Ethnography of Academy of Science of the Republic of Tajikistan.

Agreement between the Hukumat of Panjakent, the Jamoat of Sarazm and the Sarazm historical and Archaeological reserve. From October 31. 2005. Pendjikent (See annexe)

An official agreement exists between the local population and the Archaeological base. It is ratified by the Hukumat of Penjikent, represented by Samadov Sh. D., chairman of Hukumat, - Sarazm Jamoat, represented by Sultanova D., chairwoman of Jamoat and - The Sarazm Historical and Archaeological reserve, represented by Razzokov A., director. This agreement specifies the following:

1. Due to their importance in continuing to better determine the history, daily life and culture of the inhabitants of ancient Sarazm, villagers of Avazali and Sharibnazar agree that all random findings when practising agriculture or superficial works will be given to the archaeological reserve of Sarazm. The location of the find should be precisely indicated.
2. When the villagers will proceed with diggings for whatever reason (house foundations, toilet pits, ..) they will inform the archaeological base (at least two weeks before operating) so that the archaeologists can be present when the digging is done. If the presence of the archaeologist could not be possible during the digging, the owner must wait until a visit of an archaeologist be undertaken before closing the ditch so that the stratigraphy can be documented.
3. The overall zone also needs to be controlled in terms of urban development. In order to avoid any intrusive construction, the agreement comprises a paragraph stating: - The delimited zone is subject to urban development control by the archaeological base in partnership with the village representatives and the authority of Pendjikent region.
- Houses in the zone cannot exceed one level (one storey) with a maximum height of 6m at the top of the roof so that they remain discreet and are not harmful to the landscape, and more specifically to the views from the site.
- The zone is reserved for agricultural activities and normal village activities. The implementation of other activities in the area are subject to preliminary impact studies and authorisation from a committee gathering the three above quoted authorities who will check the compatibility with the cultural characteristics of the site.


**State organisation for protection of the monuments:**
Management of protecting historical and cultural monuments is carried out by the Ministry of Culture of the Republic of Tajikistan in close cooperation with the Academy of Science of the Republic of Tajikistan.

The Ministry of Culture records, controls and drafts legislations regarding historical and cultural monuments, creates and manages state research programmes, conservation and restoration of cultural monuments, coordinates joint activities with other state bodies on research, protection and utilisation of historical and cultural monuments. It prepares conservation projects to be submitted to Government and manages funds of the conservation projects.

The Academy of Science, Institute of History, Archaeology and Ethnography, carries out scientific expertise on historical and cultural monuments, and determines the criteria for nominating monument to be considered as historical or cultural monument. It allocates budgets for regular functioning of archaeological bases, as well as for archaeological research and conservation projects at archaeological sites.

Inspections for protection of cultural monuments of the Ministry of Culture and local authorities (Municipality, district branches of historical and cultural monuments protection) are carried out as field operations. These organs monitor and protect historical and cultural monuments, and prepare biannual and annual reports for higher level authorities.

6.3 Main local stakeholders

Samadov Shakarbeg, Mayor of Penjikent  
Rofieva Fotima, Head of department for culture, Hukuomat of Penjikent  
Solechzoda Tourdiev, Penjikent administration, responsible for Culture  
Sultanova Dilnavoza, Chief of Jamoat (commune) for Sarazm  
Mahmoudov Ruziboi, Architect of the city Penjikent  
Rhhoursandmourodov Abdulla, Representative of the department for urbanism of Penjikent district  
Amzaev Azam, Chief of Sharibnazar village,  
Bektemirov Mouhidin, Chief of Avazali village  
Rhoudajorov F., Chief of Tshoubot village – director of the school n°12  
Yarova M., Chief of Tojikiishlok village  
Sodikov R., Chief of Taghirmon village  
Otchilov H., Director of the school n°22  
Koutchkorov A., Director of the school n°48
Kudjov Rholmarmat, Director of In Tourist Penjikent (Tourism Agency)
Sharifbadalov Abdulrasul, Director of Sayrou Sayoat (Tourism Agency)
Nematov Niyozkul, Manager of Pamir travel (Tourism agency)
Abdumain Juraev Director of Television channel “Simo” Penjikent
Ovlokoulov Shoin, Journalist, Varorout newspaper
Gourbanov Lougmon, Redactor, Zarafchan newspaper

6.4. Staff

Sarazm reserve, at the moment has the following staffing:

- 1 director,
- 1 scientific consultant
- 2 researchers
- 1 person responsible for the promotion
- 1 curator for exhibits
- 3 guards
- 1 chief accountant
- 1 accountant cashier
- 1 supervisor
- 1 technician
- 1 typist
- 1 electrician

6.5. Financial situation

Financing of the conservation and restoration works at Sarazm historical and cultural reserve is provided by the Academy of Science of the Republic of Tajikistan and the Hukumat (government) of the Sogd province, Penjikent district, from budget resources dedicated to science and culture (resolution of the Government of the republic of Tajikistan from September 21, 2000 N°391).

The Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan is providing a yearly budget that currently amounts about $ US 10,000.00 (yearly state funding).


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</tr>
<tr>
<td>2005</td>
<td>39 941</td>
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<td><strong>Total</strong></td>
<td><strong>158 775</strong></td>
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The Soghdian province has provided a yearly budget (2001 – 2002) which is now covered by the Institute of History, Archaeology and Ethnography named after A. Donish of the Academy of Science of the Republic of Tajikistan).

**Budget allocated (2001 – 2002)**

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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25 958</strong></td>
<td><strong>7 870</strong></td>
</tr>
</tbody>
</table>

In 2003, the president of the Republic of Tajikistan allocated **US $ 381 003** from the presidential reserve fund. This fund was used to construct the protected roofs over 5 excavated areas, each with an area of 30m x 30m, to protect them from weathering. Those correspond to archaeological excavations III, IX, XI, XII, XIII.

Next year (2006), a special fund is to be allocated on the celebration of the 15th anniversary of Independence Day of Tajikistan. For a amount of **US $ 92 272**

A **US $ 14 900** budget is on the point to be allocated for the erection of the fence around the core zone of the two entry gates, as well as two small guards houses.

**6.6. Facilities and equipment**

The Historical and Archaeological Reserve of Sarazm has the following facilities and equipment:

1. Archeological base of Sarazm – since 1994 - 5 rooms Kitchen, Shower, toilets
2. Site museum (70 m2)
3. Archive room at Penjikent
4. Office at Penjikent in the governmental building with two computers and easy access to the internet on the second floor of the building (separate office)
5. One Car (Volga – 3110) and one very old mini-bus
6. One Computer, a scanner and a printer
7. One Camera Pentax
PART II

MANAGEMENT PLAN

2006-2010
1- SIGNIFICANCE AND VALUES

1.1. Statement of significance

Sarazm is located in a very strategic place which has probably been the key to its unique development during the IV-III millennium BC in Central Asia. It is located on the bank of the Zaravshan river, just between a mountainous zone and a large valley area, one being favourable to cattle grazing, the other to agriculture and farming. Sarazm was a natural meeting point between the nomadic shepherds of the mountains and the first agrarian populations of Transoxiane (region between the Sy Daria and Amou Daria) which practised complementary activities.

In addition, both south and north mountains sides of the Zaravshan valley possess natural geological resources, including those that allow for bronze processing. Sarazm became a major centre of tin and bronze metallurgy in Central Asia and developed into a proto-urban centre supplying manufactured goods to its own population as well as those of a vast region. The town also manufactured goods (ornaments and tools) from strictly local resources – copper, lead, tin, steatite, wools, coming from the regional context (up to a radius of 500 kms) including semiprecious stones like turquoise, agate and lapis lazuli, and also some gathered from great distances (over 1500 kms) like shells from the Arabian sea to the south.

This allowed new developments that entailed many social changes and most peculiarly the beginning of specialisation for production of goods (cattle breeding, agriculture, crafts), the formalisation of trade, the associated appearance of social classes, and finally the urbanization with the creation of a complex settlement with sophisticated architectural achievements for the period.

Through organising the trade of different kinds of food, but also that of various useful products and tools, Sarazm contributed to the improvement of people’s lives in the area and further in the whole region.

Sarazm has been the first centre (probably from the beginning of the III millennium BC) in Central Asia which had trade relationships with populations of a large geographical area with limits as far as the Eurasian Steppe zones and Aral Sea on the North, Turkmenia and the Iranian Plateau in the West, and the Hindus valley in the south.

Sarazm became a prosperous and rich city. It had a sophisticated culture with a complex organisation and capacities for erecting monumental buildings. Traders of Sarazm, or coming to Sarazm, facilitated exchange of goods, but also knowledge, skills and cultural assets, which contributed to further developments of the Central Asian region.

As being the first sophisticatedly organised society in the sub-region which had such an impact, most Central Asian people and more specifically all Tajik people today consider Sarazm as the starting point of the genesis of their culture.

As a precious testimony to an innovative ancient culture, Sarazm represents a pedagogical interest for archaeologist, visitors, and also the young Tajik generation, as being an important key to understand the history of the region in a better balanced manner.
1.2. Comparative analysis

Other sites from the same periods
Other Middle Asian Chalcolithic-Bronze Age settlement have been compared to Sarazm by the archaeologists in order to understand the origins of the culture of Sarazm and its spread in the sub-regions.

Some analogies were detected with the monumental buildings discovered in several sites dating from the same period such as Altyn Tepe, Göksür, Tepe Hissar, Mundigak, Shahr-e Sukhte, which are typical of the development of the proto-urban culture of the ancient East. Comparison were established for example between:
- The religious monumental building of Sarazm and the one found at Göksür. (rooms 28-31, V.I. Sarianidi)
- The communal granary of Sarazm and the public storage buildings in the “noble quarter” at Altynd Depe.(V.M.Masson)
- The palace complex of Sarazm and comparable structures of the third millennium B.C. at Sumer.

More similarities between Sarazm and the cultural complex of southern Turkmenistan can be observed clearly in the disk-shape altars and the general layout of the housing.

Other evident analogies with those sites were found by comparison with the artefacts discovered at Sarazm, such as the painted pottery, the disc-shaped stone weights, the plumb bobs etc..

More recently, new hypothesis are suggested by scholars who find similarities for Sarazm with sites that are now better known in the Jiroft valley or the Sistan basin in Iran, and even sites such as Mundigak in Afghanistan, Ra’s al-Jinz in Oman or Lothal in India.

A unique site
However, Sarazm presents many particularities which really distinguish it from the other sites:

- Sarazm is the largest early Bronze Age town in northern Middle Asia so far discovered.

- Sarazm is a unique example of proto-historic settlement (IV-III millennium BC) with plural economy, based on agriculture and cattle-breeding from one side, and processing of mineral resources of close-located regions from another.

- The specificity of Sarazm probably lies in the peculiarly rich geological resources of the upper Zarafshan valley. Its chequered relief possesses veins of copper, lead, gold, silver, mercury, tin, turquoise etc.. Sarazm was not only a large centre of metallurgy, it was also a very important centre for production of different stonewares and jewellery art, as well as many different craft products (weaving, leather, pottery,…).

- Sarazm possesses a unique variety of components or imports from distant and very different culture of the overall region, including South Turkmenia, North-East Iran, Seistan, Baluchistan, Pre-Ural region. Sarazm provides evidence about large trade-ways, that crossed the territory of Central Asia, starting with oldest ancient periods of existence of agrarian societies, very long before the start of the Silk Road.

- If marine shells were the key import resource to establish the long range trading capacity of Sarazm as a manufacturing centre, tin is the corresponding export one. The
Zeravshan Valley was the main supply region for tin in the ancient world. So far archaeological investigations have proven its continuous exploitation at mining sites both in Uzbekistan and Tajikistan since the second millennium BC. But it is quite likely that the exploitation started at least a millennium earlier as evidenced by tin-bronze metallurgy at Sarazm and the contemporary use of tin in the leading cities of Mesopotamia, like Ur. In the Royal Graves the abundance of lapis lazuli and tin point in the same direction, to the north-eastern limits of the oikumene. Sites like Sarazm on the Zaravshan and Shortugai on the Kokcha-Amudarya intersection occupy corresponding strategic locations to channel tin and lapis lazuli respectively, to the urban centers across the Middle East and South Asia alike.

- In terms of architecture, if Sarazm presents some analogies with what was produced in other regions of Central Asia during the same period, as a general consideration, the buildings present more complexity and sophistication, with more rooms, complex plans, monumental realisations and decorated surfaces. In addition, Sarazm has no evidence for any protective enclosure while many protohistoric settlements of this time were surrounded by earth enclosures, moats, canals or embankments; or defined in their eminence by raised platforms or high terraces.
1.3. Values

The Statements above makes it clear that Sarazm has outstanding universal values, that will probably be recognized by the international community with its inscription on the World Heritage List.

Because of its intrinsic significance, Sarazm has very strong values:
- first of all to the people of Tajikistan and the overall sub-region, as being recognised as a native place for their culture.
- scientific and historical values; probably much can still be learnt at Sarazm.
- informative and educational values; those are already present but can still be enhanced through gradual improvements.

However, besides its intrinsic values, one has to recognise and take into account the fact that the site and some of its assets are very useful to the population leaving around. This includes the presence of canals but also simply of land that is used for playing (children), moving around (roads and paths) and also for agricultural activities (drying of crops,…).
2. A VISION FOR SARAZM

SARAZM IN 2020

Sarazm is recognized as the place where modern Tajikistan has its roots. As such, the site receives a very special attention by the national, regional and local authorities and is properly managed so that it can play its very important commemorative and educational roles.

In that respect, the site continues to be subject to archaeological research undertaken by both Tadjik and international experts. The researches allow better knowledge and understanding of Sarazm at its different periods and are carried out in such a way that the findings are well preserved so that visitors can actually have a good vision, perception and understanding of the remains. Regular monitoring of the remains is in place so that they can be well preserved to the benefit of present and future generations.

In continuation with the initial discovery made by Achurali Tailonov, the populations of the nearby villages, Sahribnazar and Avazali, make a substantial contribution to the researches through a very positive collaboration with the archaeologists. They are proud of their contribution as well as of the important sacrifice that they have made through stopping agricultural activities on the site.

With its inscription on the World Heritage List, the site is now known to the overall international community. With the newly built tunnel, access from Dushanbe is also easier. In these conditions, the number of visitors per year has substantially progressed and is constantly increasing. New facilities have been established to receive them in the best way and make sure that their huge number does not become a threat to the remains.

There are several covered spaces where remains are visible, just as the archeologists discovered them, each of them presenting more specifically a period of occupation and/or a specific aspect of the site. In order to help visitors understand the site, a museum has been built. It present collections of artifacts found at the site. It also presents the lifestyles and full-size restitutions of the habitat at the time of the people at the different periods of occupation of the site.

Sarazm has become a model of integrated conservation of an archaeological site located in a living landscape. Its conservation and management takes into account all concerns and interests of the various stakeholders, including decision-makers, archaeologists, conservators, visitors and the local population.

The 15 other archaeological sites which are located nearby Sarazm have been declared “national monuments”. They are now protected by a clearly defined buffer zone and no harmful activity is being carried out at their proximity. These sites can now be gradually taken care of with the simultaneous implementation of archaeological researches, conservation and presentation activities, making the area even more interesting for visitors as they can find there a complete Archaeological complex that illustrates the evolution of the people in the area over an extended period of time.

Archaeological researches are undertaken continuously, but at a very low pace and they have become part of the attractiveness of the site.
3. SWOT ANALYSIS AND KEY ISSUES

3.1. Strengths

- Unique site
- Strong government support
- Regular funding
- Skilled archeologists (3)
- Delimitated area
- Partnership with local population
- Existing base
- Small museum
- Inventory system

3.2. Weaknesses

- No laboratory for material analysis and conservation of artifacts
- No precise monitoring procedures and schedule
- No professional / trained restorator (objects and architecture)
- Inventory system is not fully operational (passportization)
- No computer
- Limited promotion
- No booklets available
- Limited infrastructure for receiving tourists
- Electricity lines
- Canal
- Lack of documentation published

3.3. Threats

- Presence of cattle
- Climatic conditions (rain, snow, frost)
- Regular deterioration of artifacts even when they are stored properly
- Growing of grass on the remains
- Birds nests
- Belletes, rats, snakes, lizards
- Canals

3.4. Opportunities

- Continuous support of government
- Close contact with population
- Funding for fence is on the point to be given
- Small guards houses at two locations ‘Entry and North West corner)
- Promotion
- Sensitization programmes (radio, television, press, educational programmes, …)
- Official opening to tourism
- Web site
- Constant contacts with tourism operators
. Generation of revenue by providing services to tourists (Booklets postcards, souvenirs, copies of artifacts, Catalogues,…)
. Tunnel on Dushanbe road
. Inscription to World Heritage
. Possible technical support from UNESCO and other international sources
. Many other sites are around, archaeology, historical monuments, museums landscapes,..., picturesque places
. Improvement of visitors’ experience
. Removal of electricity lines
. Planting few trees around
. International cooperation

3.5. Key areas and priorities

3.5.1. Conservation of structures and artifacts

There is a need to better take stock and understand the threats, processes of decay, and possible restoration techniques of both the remains of structures and artifacts. This requires:
. the definition and setting up of monitoring procedures and
. to have at disposal (on permanent or temporary basis) the equipment and skills for undertaking the monitoring activities
. to identify and to test the validity of possible conservation techniques

3.5.2. Promotion

It is wished that the site would be well visited both for making it useful (information, education) and generating revenue that can in turn be used to gradually improve its state of conservation.
Towards that end, it is hoped that the nomination to the World Heritage will be successful, but numerous activities needs to be launched, including:
. Sensitization programmes (radio, television, press, educational programmes,...)
. Official opening to tourism and Constant contacts with tourism operators
. Creation of a Web site
. Preparation of booklets, postcards, souvenirs, copies of artifacts, Catalogues,...
It would also be good to better use the potential that the upper Zaravshan valley presents with its many other possible attractions including: archaeological sites, historical monuments, museums, mountainous landscapes, and picturesque places.

3.5.3. Documentation

A special focus needs to be made on rendering operational the inventory “passportization” system.
All archaeological sites which are located around Sarzam have to be clearly mapped.
All activities (archaeology, conservation,...) on the site will be documented in detail

3.5.4. Site protection

The proposed zoning system and its attached rules for the uses of the different zones needs to be finalized and established. When this done, the site will be fenced.
Based on the map of archaeological sites, zones where agricultural / construction / public works assets should not be implemented need to be clearly identified on the land use map, and also on the ground with boundary stones.

3.5.5. Visitor’s experience

The site is already providing a good level of experience but that can probably be easily improved through training of guides, presentation panels, and on-going excavations. Other possible improvements are with the cleanliness of the site and making sure that foreign elements don’t perturb the view of the site and the view from the site so as to keep the visitors’ concentration. (electricity lines, Planting few trees around)

3.5.6. Cooperation

If the Government of Tajikistan is ready to continue to support the archaeological base of Sarazm, the team in charge whishes to get technical support from UNESCO and other international sources.
Objective 1: Launch a process that will gradually lead to the precise definition of the conservation techniques that suits the requirements of the site and its environment

Objective 2: Ensure that the site is well known and frequently visited

Objective 3: Ensure revenue generation on the site so that conservation costs can be covered and gradual improvements of the site can be made

Objective 4: Finalize the organization of the documentation and start enriching the existing data

Objective 5: Reinforce the capacities of the Historical and Archaeological Reserve of Sarazm
5 - STRATEGIES AND INDICATORS OF SUCCESS

Objective 1: Launch a process that will gradually lead to the precise definition of the conservation techniques that suits the requirements of the site and its environment.

1.1. Erect fence around core zone and engage guards (2)
1.2. Finalize the protection of the archeological remains, (gradual complete backfilling of uncovered structures)
1.3. Establish a regular monitoring process for the archaeological remains
1.4. Implement a first set of sample conservation techniques (structures)
1.5. Establish a basic laboratory
1.6. Implement a first set of sample conservation techniques (artifacts)

Indicators of success:
- % of non-roofed excavations backfilled
- Fence erected
- Monitoring (schedule, frequency)
- Operational laboratory equipment
- Number of samples of conservation techniques

Objective 2: Ensure that the site is well known and frequently visited

2.1. Organize an official opening of the site
2.2. Ensure that sensitization/information programme are delivered by the media (radio, television, press)
2.3. Organize information sessions with the tour operators
2.4. Explore potential of the site within a possible cluster of other cultural and natural sites within the Zaravshan valley
2.5. Creation of a web site
2.6. Information sent to visitor’s guide editors.
2.7. Organize a huge event for both the 5,000 years jubilee and inscription to the World heritage List
2.8. Gradually improve site aspect (cleanliness, removal of electricity lines, planting trees in front of houses around the site, …)
2.9. Gradually improve visitors’ experience (training of guides, presentation panels, site maps, …)
2.10. Study the possibility to construct a larger site museum

Indicators of success:
- Activities organized
- Number of tour operators bringing visitors to the site
- Number of registered visitors (entry fees collected)
- Site aspect (activities undertaken / visitors satisfaction)
- Visitors satisfaction (questionnaires distributed by the end of the visit)
- A project for a larger site museum has been prepared and approved

Objective 3: Ensure revenue generation on the site so that conservation costs can be covered and gradual improvements of the site can be made

3.1. Set-up entry fee and collection mechanism (entry fee, photo, video permits)
3.2. Organize specific visits (high level) with archaeologists
3.3. Preparation of booklets, postcards, catalogues
3.4. Organize a souvenir shop with local crafts
3.5. Offer new services to the visitors (Tea house, traditional dinners, …)
3.6. Explore the possibility to prepare copies of artifacts for sale

**Indicators of success**:
- Revenue collecting organized
- Number of specialized visits available; number of clients per activity
- Number of derived products available (types), quantities sold
- Revenues at the souvenir shop
- Perspectives for selling copies of artifacts

**Objective 4: Finalize the organization of the documentation and start enriching the existing data**

4.1. Finalize the work already done on the passportization of artifacts (inventory)
4.2. Organize the photographic documentation, and prepare for its enrichment
4.3. Carry out archaeological research at very specific locations (under protective roofs, partnerships with the local population, or provided there is immediate backfilling)
4.4. Ensure proper documentation of all conservation works made at the site
4.5. Map and document all archaeological sites around Sarazm.

**Indicators of success**:
- Progress made to establish passports for artifacts,
- Progress made to have passports in electronic form
- Number of pictures identified, numbered and properly stored
- Archaeological reports, excavations backfilled, nb of researches carried out in partnership with the population
- Reports on works done including before, during and after works
- Number of sites identified, nb of sites mapped, nb of sites delimited

**Objective 5: Reinforce the capacities of the Historical and Archaeological Reserve of Sarazm**

5.1. Employ a person with computer skills, mainly responsible for the inventory and documentation
5.2. Acquire computer equipment and install a documentation office at the archaeological base
5.3. Employ two guards and an “entry fee collector” - accountant
5.4. Provide training to base staff for the provision of special guided tours.
5.5. Provide training to local artisans (basic conservation techniques)
5.6. Explore possibilities to establish partnership at the national level
5.7. Explore possibilities to establish partnership at the international level

**Indicators of success**:
- New personnel employed,
- Documentation office in function
- Qualification of the new persons employed / needs
- Number of tourists guide trained / operational
- Number of artisans trained / quality of the achievements
- Partnerships established at the local and national levels
- Partnerships established at the international level
6 - MONITORING THE IMPLEMENTATION OF THE MANAGEMENT PLAN

Monitoring is an activity mainly aimed at regularly assessing the condition of sites and progress made or difficulties encountered to implement activities proposed. This allows for the record of changes and enables the understanding of processes of decay, threats, conflicts, successes and failures, as well as identifying opportunities. It also allows checking if activities are implemented following the specifications provided and according to international conservation standards.

Monitoring is to be done by the site manager as it facilitates the decision-making process and also allows the foreseeing of problems and bottlenecks. However, monitoring is also done on a yearly basis by the mother institution which will organize a visit to the site just before the yearly report is prepared by the site manager.

It is also pertinent to ensure proper integration of conservation and visitor-related activities in the socio-cultural environment. To that end, the regular complete inspection of the site and organization of stakeholders meetings on regular basis need to be implemented. Specific meetings could be organized rather on an ad-hoc basis so as to solve a new problem which is arising.

Meetings with tour operators and information to tour guides need to be done on a twice a year basis, one just after the tourism season so as to evaluate results, the second just before the tourism season.

**Monitoring activities**

**Staff**
- Overlook site and take care of possible intrusion by animals
- Carry out regular (weekly) physical inspection of site and report to site manager
- Undertake duties as specified by Site Manager
- Record properly the nb of visitors, sales at the craft shop,…

**Site manager**
- Prepare yearly action plans
- Inspect regularly the overall site by (quarterly)
- Distribute responsibilities and tasks and adapt to possible staff changes or movements
- Check that all data are properly recorded
- Take regularly stock of progress of activities to be implemented
- Evaluate first results and proceed with necessary adjustment
- Transmit information to the necessary stakeholders on Ad-Hoc basis
- Inform stakeholders of date and organize meetings long in advance
- Prepare minutes of meetings
- Prepare yearly activity reports taking into account the framework of the present management plan with making necessary adjustments according to progress made and first results obtained
7 - EVALUATION AND REVISION OF THE PLAN

7.1. Mid-term evaluation

The present plan has been developed to address key issues at the site. In the course of the implementation of the plan, it is most likely that changes will occur. Therefore, if this plan is to be considered as an important framework for decision making in the proposed time frame, there is also need for keeping avenue for adaptation and changes when the need arises.

To be able to do that, it is important that a mid-term evaluation be carried out.

This evaluation should consider the following:
- Changes that occurred on the site; in its environment.
- Changes that occurred in the overall environment.
- Changes within the organization in charge (staff, equipment,..)
- Evaluation through checking key indicators.
- New opportunities.

It is suggested that this evaluation be carried out just after the first two years of implementation of the plan, beginning of 2008, making possible, if needed, to propose some adjustments to be made to the plan for the last two years (2009-2010) of its implementation.

7.2. Final evaluation and elaboration of a new plan for 2011-2017

An other evaluation will be carried out just before the end of the foreseen period of completion. That should be done at the beginning of 2010, so that the rest of the year can be used to revise and prepare a new conservation and management plan for the next years. The period will coincide with the need for preparing a report to WHC within the regular periodic reporting exercise. That means that the evaluation carried out will directly be useful for reporting to WHC. In order to get the same in the future, it is recommended to then draw plans on a 7-year basis.

Therefore it is suggested that the forthcoming management plan be established for a 7 years period, and so become the Conservation and Management plan - 2011-2017.

Of course the new management plan can be done using the present management plan as a base or reference, more specifically for its first part. However, care will be taken to properly include all new information and of course new situation that will have been collected or developed between 2005 and 2010.
### Objective 1: Establish and Develop the Site

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>1.1. Erect fences around core zone and engage guards (2)</td>
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<td>1.2. Establish a regular monitoring process for the archaeological remains</td>
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<td>1.3. Establish basic laboratory</td>
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<td>1.4. Implement a first set of simple conservation techniques (structures)</td>
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<td>1.5. Implement a first set of simple conservation techniques (artefacts)</td>
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### Objective 2: Ensure that the site is well known and frequently visited

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<tr>
<td>2.1. Organize an official opening of the site</td>
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<td>2.3. Organize information sessions with the tour operators</td>
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<td>2.4. Explore the potential of the site within a possible cluster of other cultural and natural sites within the Zaravshan valley</td>
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<td>2.5. Creation of a web site</td>
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<td>2.8. Gradually improve site aspect (cleanliness, removal of electricity lines, planting trees in front of houses around the site)</td>
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<td>2.9. Gradually improve visitors' experience (training of guides, presentation panels, Visit tour, site maps, fac-simili...)</td>
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<td>2.10. Study the possibility to construct a larger site museum</td>
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### Objective 3: Ensure revenue generation on the site so that conservation costs can be covered and gradual improvements of the site can be made

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<tr>
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<td>3.4. Explore the possibility to prepare copies of artifacts for sale</td>
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### Objective 4: Reinforce the capacities of the Historical and Archaeological Reserve of Sarazm

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<th>Year 1</th>
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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tr>
<td>4.1. Finalize the organization of the documentation and start enriching the existing data</td>
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<td>4.2. Organize the photographic documentation, and prepare for its enrichment</td>
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<td>4.3. Carry out archaeological research at very specific locations (under protective roofs only)</td>
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<td>4.4. Ensure proper documentation of all conservation works made at the site</td>
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<tr>
<td>4.5. Map and document all archaeological sites around Sarazm</td>
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### Project management

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<tr>
<td>5.1. Employ a person with computer skills, mainly responsible for the inventory and documentation</td>
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<td>5.2. Employ two guards and an &quot;entry fee collector&quot; - accountant</td>
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<td>5.3. Acquire computer equipment and install a documentation office at the archaeological base</td>
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<td>5.4. Provide training to base staff for the provision of special guided tours.</td>
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<td>5.5. Provide training to local artisans (basic conservation techniques)</td>
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<td>5.6. Explore possibilities to establish partnership at the national level</td>
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<td>5.7. Explore possibilities to establish partnership at the international level</td>
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### Year 1 - Year 5:

- Year 1: January 2006
- Year 2: January 2007
- Year 3: January 2008
- Year 4: January 2009
- Year 5: January 2010
9 - SPECIFICATIONS AND GUIDELINES FOR ACTIVITIES TO BE IMPLEMENTED

Objective 1: Launch a process that will gradually lead to the precise definition of the conservation techniques that suits the requirements of the site and its environment.

1.1. Erect fence around core zone and engage guards (2)

Fence needs to be as transparent as possible and with a structure as light as possible, though being able to resist winds and children activities. Access gates need to be provided at several places so as to avoid the need to establish access roads within the restricted area.
Two guards should be sufficient.

For the following activities (1.2 to 1.6) it is recommended to the Historical and Archaeological Reserve of Sarazm to get technical assistance so that its professionals can benefit from proper expertise to start implementing these very important aspects of the plan

1.2. Finalize the protection of the archeological remains, (gradual complete backfilling of uncovered structures)

It is suggested to do a proper backfilling with first applying a geotextile on the surface of the excavations and than fill with soil (from the excavation pits). The filling should be slightly wet so that it can be compacted. The compaction is to be done in several courses, with a maximum thickness of 20 cm. Top of the filling needs to be slightly sloped and surface drainage taken into account. If interesting remains are present, the backfilling might have to be done after removal of the old backfilling material.
Backfilling is more technical than it looks like. It is therefore recommended to pay very attention to how it is done. A short technical assistance programme might be very useful to guarantee the quality of the work.
At a later stage, representation of the remains found at the surface (e.g. with stabilized bricks) could be envisaged. Therefore, means to locate the position of those need to be found.

1.3. Establish a regular monitoring process for the archaelogical remains

There is a need to define a monitoring process that will:
. in the first hand, allow to identify possible decay processes
. in a second phase, allow to measure speed of decay
An important aspect of that monitoring will be to check precisely the protection actually provided by the protective roofs.
That means that in the beginning, some of the monitoring exercise will have to be done in bad weather conditions:
. Driving rains
. Wind after snowing
1.4. Implement a first set of sample conservation techniques (structures)

Priority for conservation techniques is to be given to preventative measures. Therefore, it is clear that those can only be done when decay processes are well identified. Complementary protections, either permanent or temporary might be needed. If felt needed for presentation purposes, some first minor restoration works could be tried.

1.5. Establish a basic laboratory

Basic laboratory is mostly needed in view of the treatment of artifacts. A basic soil-testing laboratory could also become useful, but in the short term, simple tests will probably be sufficient.

1.6. Implement a first set of sample conservation techniques (artifacts)

Treatments of artifacts need to be tried. However, the question of improving storage conditions might be necessary first. A proper examination of conditions of decay is therefore a first priority. Specific attention is to be given to metal artifacts, but cloth and lever artifacts also need serious consideration.

Objective 2: Ensure that the site is well known and frequently visited

2.1. Organize an official opening of the site

This was never done and the opportunity of the finalization of the erection of the roofs could be used for creating such an event. It would be the occasion to invite tour operators from Uzbekistan (at least from Samarqand) so as to inform them on the new possibilities offered on the site.

2.2. Ensure that sensitization/information programmes are delivered by the media (radio, television, press)

This should be a constant effort, but of course would benefit from the organization of special events.

2.3. Organize information sessions with the tour operators

This needs to be set up as a bi-annual activity. In fact the rhythm of the tourism season has to be followed. One of these yearly meeting is to be organized just before the tourism season starts so that tour operators can be informed on the improvements made during winter. The second meeting is to be organized just after the tourism season so that an evaluation of the conditions of the visit can be made with the professionals. In order to guide proposals that could be raised at that meeting, forms could be distributed to tourist and gathered by the tour operators.
2.4. Explore potential of the site within a possible cluster of other cultural and natural sites within the Zaravshan valley

This work is to be undertaken in collaboration with the tour operators. The meetings organized for Sarazm could be the occasion to start that activity when improvement and lengthening of existing tours can be done with a smaller group of motivated tourism professionals. Of course, Penjikent reserve would also need to be involved.

2.5. Creation of a web site

That can gradually be improved. In addition to scientific material, the site should provide information on opening hours, fees,…. The web site is one of the best means to advertise specific high scientific-level visits that could be guided by the archaeologists; Priority for the Web site should be to have the basic info in as many languages as possible in Tajik, Russian, French, English and German.

2.6. Information sent to visitor’s guide editors.

The information package should comprise pictures, basic scientific material as well as information on visits. A CD with texts and pictures in electronic format could be useful to the editors.
After a first parcel, new information or activities launched can be transmitted by Email.

2.7. Organize a huge event for both the 5,000 years jubilee and inscription to the World heritage List

Date and program are to be determined with the concerned national and local authorities.

2.8. Gradually improve site aspect (cleanliness, removal of electricity lines, planting trees in front of houses around the site,)

The idea is to get the site as expressive as possible. To obtain that, it is suggested to remove from the site any intrusive element or elements in sight that could disturb the view of the visitors.
That of course concerns the general cleanliness (removal of garbage), but also:
. removal of painted stones
. renewal of the natural low vegetation
. the gradual shift of the electricity lines outside the restricted area
. the backfilling of non useful canals
. planting trees in front of the two toilet buildings close to the “secondary” entrance of the archaeological base, and the archaeological base itself, so as to hide them from the villages houses so as to render them less visible
. planting trees in front of the village houses visible from the site so as to render them less visible

2.9. Gradually improve visitors’ experience (training of guides, presentation panels, site maps,…) 

As it is at times difficult to interpret directly the visible remains, an effort needs to be done so that visitors can understand the site. That calls for:
• basic training of guides, with at least emphasizing the summary information contained in this management plan
• yearly training of guides (at least a day every year, so as to update their knowledge, provide them with new information, new findings, and provide them with update rules for the visit,
• display presentation panels (which should be discreet so as to avoid being intrusive)
• preparing and selling visitors guide with maps and plans of the remains as well as figures of the artifacts that were found at the various places
• prepare specific tours leaded by the archaeologists themselves
• organize slow archaeological works on going during the tourist period so as to allow visitors to feel like participating in the discoveries

2.10. Study the possibility to construct a larger site museum

That will comprise the identification of possible locations, selection of one of them, and to prepare a project for it. It is recommended to inform UNESCO WHC on the first intents so that a green light could be given for such a project, ensuring that it would not then be considered as an intrusive structure.
For the purpose, the remaining space behind the archaeological base could be used. However, there is a large space and numerous buildings that might be possible to re-use on the western side of the site (former Kolkhoz).

Objective 3: Ensure revenue generation at the site so that conservation costs can be covered and gradual improvements of the site can be made

3.1. Set-up entry fee and collection mechanism (entry fee, photo, video permits)

Possibilities to collect funds that can be used for the maintenance of the site and possibly making new investments need to be explored.
Of course an entry fee needs to be established.
Fees can also be required for taking pictures and video filming
Money needs to be transparently collected so that benefits made can be used by the archaeological base.
Efforts will be made to encourage all persons involved in the money collection exercise so as to get this activity as productive as possible. But for that, clear rules needs to be established so that everyone can feel satisfied, and moreover so that such activities would not entail tourists harassment.

3.2. Organize specific visits (high level) with archaeologists

Some visitors are more interested than others by archaeological sites and would be ready to pay higher fees for getting in-depth information during the visits, even though they would have to pay a much higher entry fee. Such a tour could last 2 to 3 hours (to be discussed with tour operators). Of course, that needs to be prepared. Some first experiments could be made and from the questions and observation, improvements be gradually made.

3.3. Preparation and sale of booklets, postcards, catalogues

The site being covered by the roofs is going to be difficult to photograph. Therefore, the sales of postcards made with good pictures should be a very good investment.
Site maps, excavation maps could also be sold as tools for the visitors. But moreover, booklets presenting the site (of various qualities/prices) could be sold, as well as posters, pins,…

3.4. Organize a souvenir shop with local crafts

To sell all above and below proposed items, there would probably have the need to construct a small shop.

Though, on the short term, the entry gate could solve the purpose. A portion of the archaeological base could also be allocated for that activity which could be related to the presence of the small museum.

3.5. Increase services for visitors ("tea house" - Traditional diners..)

As a first step, the veranda of the existing building will be used. On a longer term, a traditional tea house will be installed in the garden of the archaeological base for the visitors who could have rest their after the visit. Food for individuals could also be sold and special traditional diners could be organized in cooperation with the tour operators for groups.

3.6. Explore the possibility to prepare copies of artifacts for sale

Is it possible to prepare copies of bronze artifacts (e.g. the first bronze axe found by Achurali Taikonov, pearl necklace of the Lady of Sarazm,…)
The possibilities are many. They should be explored, both in terms of choice of some few elements, identification of artisans who could prepare the copies, and finally make attempts for the sale.

Objective 4: Finalize the organization of the documentation and start enriching the existing

4.1. Finalize the work already done on the passportization of artifacts (inventory)

This involves quite a lot of work, but is a real necessity as there is no complete inventory yet. A person is to be employed for the purposes or at least shared with Penjikent archaeological base which could also follow the same format. Digital information needs to be duplicated, and duplicates updated at regular intervals so as to avoid possible loss of information.

4.2. Organize the photographic documentation, and prepare for its enrichment

A huge photographic documentation is available. However, it is not very well identified and classified. It is recommended that this be done in such a manner that it can be gradually enriched. It is also recommended to launch a process of digitalizing the pictures (scanning) and to keep duplicates of the files in different places so as to avoid risks of possible loss.
4.3. Carry out archaeological research at very specific locations (under protective roofs, partnerships with the local population, or provided there is immediate backfilling)

Archaeological researches will be carried out in priority under the protective roofs where remains can be left visible for visitors. One of the possibilities is to take advantage of the remains that are now in a bad state to continue digging towards the earlier strata. That would allow for the diversifying of remains that could be presented, but also could lead to the discovery of even more ancient traces of settlement.

Archaeological researches could be carried out elsewhere, provided, that three are concrete plans and funds for ensuring the immediate and proper backfilling of the excavations.

As specified in the agreement between the archaeological base and the local population, archaeologists will also have numerous possibilities to examine excavations that will be made in the surroundings of the site. Some of those could lead to findings that could lead to the launch of "safeguard excavations" so as to benefit from works undertaken in the villages to gather interesting complementary information.

Documentation of the excavations should just be done in the same manner as it has always been done, very seriously. One important aspect is that today it would be incoherent not to use digital means. That would allow the team to prepare its reports by itself, and also prepare small booklets that could be sold and/or distributed to the guides.

4.4. Ensure proper documentation of all conservation works made at the site

When works are implemented, there is a need to collect all necessary data so as to make sure that the information can be available at a later stage, when time will have passed over the structure, so that all experiences can be properly used for the definition of sound and efficient technical solutions.

That includes photographic material taken before, during and after works, but that also involves recording properly the materials used, their origin, their properties, how they were applied,…, the conditions of application, season, climatic conditions,…

4.5. Map and document all archaeological sites around Sarazm.

There are many other archaeological sites around Sarazm. It seems that most of them are of a later period, but still more investigations may lead to discoveries that will help understand the site; more specifically its earlier periods. A map will be prepared. After a simple location map, progress will be made, with further investigation, with boundaries, of the sites, associated sites,…
Objective 5: Reinforce the capacities of the Historical and Archaeological Reserve of Sarazm

5.1. Employ a person with computer skills, mainly responsible for the inventory and documentation

The professional should master basic software: Word, Excel, but if possible, mastership of Access (data base) and of GIS (Geographic Information System) would be very useful. That however may need to be considered within the overall framework of needs of the overall Zaravshan river (including Penjikent archaeological base).

5.2. Acquire computer equipments and install a documentation office at the archaeological base

Basic equipment (at least one set) is needed on the site. It is to be considered that photographic material requires huge memory capacities. There is also a need to get a double memory: an external hard disk with a capacity similar to that of the computer itself should be acquired. More equipment could be made available on the site, but this needs to be considered together with decision that will be taken on point 5.1. GIS requires more sophisticated, and more powerful equipment.

5.3. Employ two guards and an “entry fee collector” – accountant

The two guards can be recruited from the village, though discussions could be held on that aspect with the local population representatives. Three could also have a rotating system so that the attribution of the post would not be seen as favoring an individual. The possibility to employ disabled persons could be envisaged, though their handicap should not keep them fulfilling their duty.

5.4. Provide training to base staff for the provision of special guided tours.

At a certain point of frequentation, the site will probably require to have a permanent guide, but as a beginning, it is most likely that the existing staff could cope with the demand, more specifically when taking into account the fact that most visitors come in groups and so with a guide which in principle would be able to handle the visit on his own. However, the person (s) who could take care of individual visitors needs to be trained. That is also the case for the archaeologists as, in addition to their scientific know-how, they will need a minimum of training on “how to receive” a visitor and how to present the site to tourists.

5.5. Provide training to local artisans (basic conservation techniques)

This will probably be done at the occasion of the experimental programme to be carried out. As was said earlier, the training should first focus on preventative measures. One aspect is that this training might not be only for interventions on the structures themselves. For example, the protective roofs might need to be maintained from time to time. There may also have the need to install temporary protections during winter.
5.6. Explore possibilities to establish partnership at the local/national levels

The staff of the Archaeological base is not currently capable of carrying out some of the above listed activities. Therefore, there is a need to take time to identify proper partners for undertaking them. Special efforts should be made to try to involve the local communities, but for specific professional skills, and/or because of the specific role they play, professionals from the region as well as of national importance, of course including the national institutions of Heritage, Archaeology, Conservation, Tourism, Land Administration, will have a role to play.

In order to clarify rules, it might be interesting to establish agreements or memorandum of understanding that will help everyone to contribute positively to the conservation and enhancement of the educational / tourism capacities of the site.

5.7. Explore possibilities to establish partnership at the international level

At the international level, it will be very important to keep very close relationship with the World heritage Centre. That organization can provide advises, provide technical assistance or training, if this is considered necessary by the site managers. The WHC can also help in solving conflicts of interest that may arise, more specifically if there are problems at the national level to take decision on important construction projects to be implemented in the vicinity of the site.

Still the capacities of the WHC Centre may be limited. There are also areas for which the WHC is not providing any assistance (e.g. archaeological research). Therefore, it might be interesting for the team in charge (site manager) to invite partners to contribute to the implementation of this management plan which has been clearly set as what the nation considers as being the priority.
World Heritage List 2010: Request for information - Sarazm (Tajikistan)

Dear Sir,

ICOMOS is currently assessing the nomination of “Sarazm” as World Heritage property and we thank you for your assistance with the recent Mission to the property.

As part of our evaluation process, the ICOMOS World Heritage Panel has now reviewed this nomination and identified a few areas where it considers that further information is needed.

Therefore, we would be pleased if the State Party could consider the following points and additional information:

ICOMOS considers that the comparative analysis included in the new nomination dossier only differs slightly from the one that was presented in the first nomination dossier. It recalls that decision 31 COM 8B.29 adopted by the World Heritage Committee at its 31st session included the need for the State Party to “Explore further the values and significance of the property”.

ICOMOS would be grateful if the State Party could provide a note summarizing the outcomes of academic research and archaeological investigations carried out since 2007 and explaining how these complete or impact on the potential or already established values of the property.

ICOMOS has no obligation to contact States Parties during the evaluation process. However, with a view to being as transparent as possible, ICOMOS has agreed to approach States Parties in specific cases. This does not prejudice the ICOMOS recommendation on the nomination and should be considered as preliminary information. It also does not prejudice the World Heritage Committee’s decision.

We would be grateful if you could provide ICOMOS and the World Heritage Centre with the above information by 28 February 2010.

We thank you in advance for your kind cooperation.

Yours faithfully

Regina Durighello
Director
World Heritage Unit
ICOMOS

Copy to Dr. Abdurauf Razzokov, Director - Penjikent Historical and Archaeological Reserve, Sarazm
UNESCO World Heritage Centre, Paris
Ref.: 003

Tajikistan National Commission for UNESCO presents its compliments to the International Council on Monuments and Sites (ICOMOS) and has a honour to submit the additional information prepared by Tajik experts for evaluation of the nomination "Sarazm" for the inclusion to the World Heritage List.

Tajikistan National Commission for UNESCO avails itself of this opportunity to renew to the International Council on Monuments and Sites (ICOMOS) the assurances of its highest consideration.

Enclosure: in 16 pages.

Dushanbe, February 14th, 2010

International Council on Monuments and Sites (ICOMOS)

Paris
Dushanbe, 26 February 2010
Regina Durighello,
Director, World Heritage Unit,
ICOMOS

World Heritage List 2010: response to the request for information on Sarazm (Tajikistan)/your ref. GB/MA1141.

Dear Madam,

I would like to thank you on behalf of the Penjikent Historical and Archaeological Reserve Sarazm for cooperation and provide you with the following clarifications and information in response to your requests of 18 January, 2010:

1. We would like to provide the following information on the outcomes of academic research and archaeological investigations carried out since 2007

In 2007 the Sarazm team under the leadership of A. Razzokov excavated one remarkable pottery kiln. This sophisticated kiln, of the late 4th or early 3rd millennium displays the same features as the kilns discovered in the Middle East. This shows again that the level of development of the Sarazm crafts was not in any manner inferior. The production of painted potteries follows the better standards of the time. It is the first and most ancient pottery kiln found for the proto-urban civilization in Tadzhikistan, one of the most ancient if not the most of Central Asia.

In 2008 the excavations and cleaning of a mud brick building of Period Sarazm II provide a wonderful example of a construction with two rooms and a fire place, but decorated with regular pilasters on the outside façade. The building was preceded by another one and modified later during period III. This is another example of the monumental buildings constructed on the upper part of the site, typical of the elite’s dwellings that one should expect in Near Eastern early cities, but absolutely exceptional here.

Both 2007 and 2008 excavations were performed inside the areas protected by the roofs.

In 2008 a geomagnetic survey was conducted by Mr H. Becker: In summarizing the results of this very short test measurement under non-ideal conditions one can state:

1. Caesium-magnetometry is the only suitable method for archaeological prospecting mud-brick architecture even in areas very close to highly disturbing structures e.g. near steel constructions. Fluxgate-gradiometry would be not sufficient because of its less sensitivity. The big roofs would be a problem for GPS positioning of the magnetometry.

2. Therefore the whole area inside the fence should be measured by non-intrusive cs-magnetometry for completing the plan of the inner proto-urban site and showing the archaeologically interesting areas.
3. The large areas outside of the fence should be at least partially measured for finding the structure and the extension of this very important proto-urban site. This could be only done after the harvest of the agricultural fields in autumn, which was of course not possible in May 2008.

The results are here reproduced below on an aerial map of the earlier than the construction of the roofs.

The interpretation of the results (picture below) shows the density of occupation and the potential for further careful archaeological researches in Sarazm, especially regarding the buildings and the possible craftsmen quarters, so important in the proto-urban settlements.
In 2009 G. Karimova published in the Arkheologicheskie Raboty v Tadzhikistane journal a synthesis of the available data for cultic buildings and constructions in Sarazm, analyzing the symbolism of the two shape of the fire places (quadrangular or circular). The completion of interpretations of the rich Sarazm discoveries will take time and require the collaboration many scholars from various institutions and countries.

A manuscript by the late A. Isakov and V. Ruzanov about spectral analysis of the metallic objects of Sarazm was finalized for publication. It is especially important regarding the copper and copper alloys metallurgy in Sarazm. Metallic resources were most probably the main reason of the very high technological development of Sarazm and of its incredibly large network of international relations.

A study of the 4-3e millennia characteristics of Sarazm, in its cultural context, based on the results of excavation Nr IV has been prepared for publication. A wide range of comparative studies for architecture, in Central Asia and beyond, are presented there. Ore studies on the architecture of Sarazm are in preparation.

All the above mentioned progress studies improve the understanding of the site and show its universal value: see below the paragraph “explore further the values and significance of the property”.

M. D. Gandreau of CRATerre-ENSAG went to Sarazm from 9 to 12 February 2009. He observed the conservation of the metal fence enclosing the property and the roofs protecting the exposed structures. He provided also expertise and training for a better preservation of the exposed structures by using pure local mud and/or geotextiles. Experiments are conducted to improve the conservation-preservation.

In 2009 a color leaflet was edited and printed by the Penjikent Historical and Archaeological reserve Sarazm. It is intended for the visitors of the property.

Both the preservation-conservation monitoring and work and the preparation of popular literature are steps towards a better presentation of the site for a large international public.

**Conclusion: “explore further the values and significance of the property”**.

The new nomination dossier and the above studies enforce the statement that Sarazm is exceptional because of its position in the Middle Asian, Eurasian, Old World phase of the proto-urban development (Proto- or Early State).

Nobody would have expected or imagined such development in the remote Zeravshan valley, far away from the great river basins that were supposed by science to support exclusively the blossoming of the urban life and the State.

Sarazm during centuries had an incredibly large “attraction basin”, for strong reasons, and its network was larger than one would have imagined, in spite of its small size (see the map with the 2009 dossier, that added to prior comparative studies Mesopotamia and Anatolia in the West and South Siberia in the East ).
The reasons for such brilliance are still subject of researches and have to be further studied in details. History requires time and care to be properly written but it is time to restitute to Sarazm the high international status that it possessed 5000 years ago.

Dr. Abdurauf Razzokov, Director - Penjikent Historical and Archaeological Reserve Sarazm
Sarazm
Tadjikistan

Rapport de mission
Du 9 au 12 février 2009

CRATerre-ENSAG
David Gandreau
février 2009
CentralAsianEarth

Sarazm

Tadjikistan

Février 2009

Mission effectuée par:
David Gandreau, archéologue, CRATerre-ENSAG
Du 7 au 10 février 2009

Organisée avec le soutien de :
Commission Nationale de l’Unesco à Dushanbe
Bureau de l’Unesco à Tashkent
Penjikent Historical and Archaeological reserve Sarazm
CRATerre-ENSAG

Financée grâce au support de :
Ministère Français de la Culture et des communications

Central Asian Earth est un programme du Centre du patrimoine mondial de l’UNESCO, réalisé en collaboration avec des institutions nationales d’Asie centrale (Kazakhstan, Kirghizistan, Tadjikistan, Turkménistan, Ouzbékistan) responsables de la conservation du patrimoine culturel immeuble, ainsi que les Bureaux de l’UNESCO en Asie centrale (Almaty, Tachkent et Téhéran), d'autres divisions de l'UNESCO, le Centre international d’études pour la conservation et la restauration des biens culturels (ICCROM), le Conseil international des monuments et des sites (ICOMOS), des institutions spécialisées et avec l'appui technique de CRATerre-ENSAG.

Earth Central Asia vise à renforcer les capacités des autorités de gestion de sites et des experts techniques en Asie centrale en matière de conservation, présentation et gestion du patrimoine culturel mondial ou du futur patrimoine culturel mondial dans cette région grâce à une étroite collaboration aux niveaux international, régional, et national.

CRATerre-ENSAG
BP. 2636,
38036 Grenoble Cedex 2, France
Tel : 04 76 69 83 35
Fax : 04 76 69 83 69
Email : Thierry.joffroy@grenoble.archi.fr
www.craterre.archi.fr

Penjikent Historical and Archaeological reserve Sarazm,
102 Rudaki Street,
Penjikent, Sugd region,
Tajikistan 735500
Tel : +992 (92) 780 68 05
Email : rauf_razzokov@mail.ru
Remerciements :

Pour le précieux concours qu’ils nous ont apporté dans la préparation et la réalisation des activités menées sur le site archéologique de Sarazm, nous renouvelons nos vifs remerciements à toutes les institutions et personnes ayant contribué au bon déroulement de la mission. Nous remercions particulièrement:

Penjikent Historical and archaeological reserve Sarazm
- Dr. Abdurauf Razzokov, Directeur
- Dr. Scharafdin Kurbanov, Archéologue

Le ministère Français de la culture et la communication

Bureau de l’Unesco à Tashkent
- Madame Anna Paolini, spécialiste du programme
- Monsieur Sanjar Allayarov

Bureau de l’Unesco à Almaty
- Monsieur François Langlois, spécialiste adjoint du programme
- Monsieur Yuri Peshkov,

Commission nationale à Dushanbe
- Madame babajanova Munzifa, secrétaire générale

Localisation du site
SARAZM
Introduction

Le site archéologique de Sarazm, découvert en 1976 dans la vallée du Zerashan s’étend sur une surface connue de 50 ha. Les 13 sondages effectués, en partie couverts aujourd’hui par les toitures métalliques ont révélé des installations appartenant à la civilisation proto-urbaine Eurasiennne qui se développa aux périodes du Chalcolithiques et du Bronze moyen (IV-III mill. BC). Le site de Sarazm situé à l’extrême nord-est de cette « sphère d’interaction de l’Asie Moyenne» témoigne des nombreuses et remarquables interactions entre groupes de traditions culturelles différentes, reliés au monde Syro-anatolien, à la Mésopotamie et à l’Indus.


Dans le même temps, CRAterre a été sollicité par les partenaires Tadjiks du «Penjikent Historical and Archaeological reserve, Sarazm » pour le suivi du plan de gestion réalisé en coopération en 2005, dans la perspective d’un renforcement du dossier de nomination par la mise en place d’activités concrètes sur le site. Une mission d’un expert sur place a été rendue possible en novembre 2008 grâce à la subvention accordée par le Ministère Français de la Culture et de la Communication à CRATerre pour les projets engagés dans les pays d’Asie Centrale. Cette subvention reconduite en 2009 a permis d’entreprendre une seconde mission courte d’un expert de CRAterre (David Gandreau) du 7 au 10 février 2009.

Objectifs et déroulement de la mission

Les objectifs fixés préalablement à la mission se sont concentrés sur deux aspects :

- **Continuation du monitoring technique.** Afin de mieux orienter un programme expérimental visant à mettre au point des techniques de conservation appropriées pour le site, il est apparu nécessaire d’étudier préalablement les processus de dégradation et d’en mesurer la vitesse. Le monitoring mis en place est basé sur une couverture photographique systématique des structures révélées sur les 13 secteurs fouillés et sur l’analyse comparative à partir de photos d’archives.
- **Essais préliminaires sur les terres.**

**Programme de mission**

Samedi 7 février
- Arrivée à Pendjikent via Tachkent en voiture
- Visite du site de Sarazm
- Finalisation du programme de travail

Dimanche 8 février
- Monitoring des structures archéologiques à Sarazm
- Recherches de carrières

Lundi 9 février
- Essai préliminaires sur les terres

Mardi 10 février
- Conclusions et recommandations
- Retour à Tachkent en voiture
Visite du site

2 km de barrières ont été réalisés en 2008-2009 grâce à un budget de 700 000 Somoni alloués par le président du Tadjikistan. Ces barrières métalliques ajourées servent à contrôler les accès tout en permettant aux riverains de voir le site. Les barrières empêcheront la circulation des animaux qui causent aujourd’hui des dégradations importantes. Leur dessin assez discret garantit une bonne intégration dans le paysage environnant. La mise en place d’un kiosque d’entrée et d’une billetterie (entrée payante) est prévue en 2009 pour garantir le suivi des actions de conservation et mise en valeur grâce aux revenus générés. Des réparations sont également prévues pour la base archéologique qui servira à l’accueil des visiteurs. Enfin, des réparations vont être effectuées sur les tôles ondulées qui ont été endommagées durant l’automne et l’hiver par les vents particulièrement violents en ces saisons vont être re-fixées.
Bien que les toitures soient largement débordantes, les fortes pluies particulièrement fortes cette année accompagnées de vents latéraux ont atteint les carrés de fouille. La neige accumulée au bord de ces zones a également fini par ruisseler dans les tranchées car les pentes de drainage vers l’extérieur ne sont suffisantes.

**Recommandations pour l’année 2009**

1. Effectuer des essais sur les terres afin d’améliorer certains paramètres des matériaux nécessaires pour la conservation (enduits, ré-enfouissement…)
2. Créer des talus de drainage autours des sondages
3. Expérimenter des solutions de backfilling en appliquant un tissu de géotextile sur la zone à protéger avant de compacter de fines couches de terre pas trop argileuse (environ 20 cm). La surface de la zone compactée doit prendre une forme qui assure « bombée » pour assurer un bon drainage et éviter toute stagnation d’eau.
4. Démarrer le programme expérimental de techniques de conservation préventive à échelle réduite : ré-enfouissement, drainage de surface, enduits sacrificiels…
5. Continuer les inspections de monitoring à intervalles régulier en prenant le présent dossier lors des visites. Compléter graduellement des prises de vue qui serviront de référence (disposer une règle et un nord au sol, dans le cadrage de la photo). Disposer par endroits des témoins de dégradation qui seront également inspectés régulièrement. Certains détails d’architecture peuvent aussi être relevés avec des mesures très précises pour compléter le monitoring.
6. Préparer un plan de conservation pour le site
Monitoring technique

La méthode de monitoring mise en place doit permettre une analyse systématique de l’évolution de l’état de conservation du site à partir de photos d’archives et d’une couverture photographique complète réalisée durant la mission réalisée en novembre 2007.

Les photos d’archives utilisées pour ce travail sont essentiellement celles réunies pour le dossier de nomination. Afin de compléter, il est possible désormais de consulter les archives photographiques détenues jusqu’alors par la famille de A.I. Isakov qui ont été léguées aux archives de Dushanbe en été 2007. Ce fond constitue une source importante pour l’analyse comparative et le monitoring.

Les clichés réalisés couvrent 13 zones fouillées entre 1976 et 2007 (appareil photo numérique canon EOS 400 et appareil photo argentique Leica R8). Deux séries ont été prises pour chaque zone :

i. Des prises de vue selon le même cadrage que les photos d’archives lorsque celle-ci existent. Ces clichés d’un même sujet pris d’un même angle et si possible avec une même luminosité à plusieurs années d’intervalle font apparaître clairement les évolutions physiques du site.

ii. Des séries de détails et de vues d’ensembles manquantes dans les photos d’archives et utiles à l’observation précise de certains processus de dégradation. Une règle et un nord plus un panneau indiquant la zone photographiée sont alors disposés au sol, dans le cadrage de la photo.

Afin de clarifier l’analyse, un regroupement méthodologique a été effectué. Les 13 zones fouillées peuvent en effet être analysées en 4 groupes distincts selon le mode de conservation qu’elles ont reçues :

Groupe A : Zone protégée par une couverture métallique puis fouillée (zone 12 et 13)

Groupe B : Structures fouillées puis protégées par une couverture métallique

Groupe C : Structures recouvertes de terre après fouilles

Groupe D : Structures laissées sans protection

Les observations effectuées durant la mission se sont concentrées sur les structures du groupe A et B afin d’évaluer l’efficacité des toitures de protection après la saison d’automne et durant cette saison d’hiver particulièrement pluvieuses, ventées et enneigées.
**Groupe A : Zone protégée par une couverture métallique puis fouillée**

Dans ces secteurs de fouilles ouverts récemment, des détails parfaitement bien conservés d’architecture (murs fins, redents décoratifs...), d’aménagement (autels, portes...), ou attestant de l’utilisation du lieu (coupes stratigraphiques, écroulement de murs, traces de labours récents...) doivent être préservés en priorité. Un monitoring particulièrement précis de ces traces fragiles du passé est recommandé. Le backfilling de certaines structures est à prévoir rapidement si le monitoring montre des vitesses de dégradation rapides.

**Secteur 12**

Les rebouchages partiels des autels circulaires avec de la terre foisonnée sont à remplacer par des techniques plus appropriées (géotextile + terre compactée)
Groupe B : Structures fouillées puis protégées par une couverture métallique

La dégradation des vestiges est considérablement ralentie grâce à la couverture métallique. Toutefois, les processus ne sont pas véritablement stabilisés. Les points d’érosions ponctuelles dues au fouissement de petits animaux notamment s’agrandissent rapidement et de nouvelles galeries sont creusées. L’érosion plus homogène qui affecte à la fois les têtes de murs, les faces et les bases continue de progresser, mais à une vitesse apparemment très réduite. Notons que les creux liés aux sillons d’érosion successifs qui se sont formés le long des parements des murs (principalement extérieurs) continuent de s’accentuer. De nouveau sillons d’érosion apparaissent même par endroit.

Secteur 3

Une partie du mur s’est effondrée à la suite d’un tremblement de terre en janvier 2009

Des petites dégradations observées en 2007 n’ayant pas été réparées s’accentuent peu à peu. Des interventions d’urgences sont à entreprendre et l’accès doit être contrôlé.
Les trous creusés par les animaux fouisseurs s’agrandissent peu à peu

La végétation ne pousse plus sur les secteurs couverts par une couverture métallique, sauf par endroits aux extrémités plus exposées, où l’humidité se concentre directement (pluie, neige) ou indirectement (absorption)
Recherches de carrières et essais préliminaires

**Carrière A** : terres prélevées directement sur le site

La terre observée provient des fouilles du secteur 12. Cette terre très fine et peu organique semble convenable pour la mise en œuvre de couches d’enduits sacrificiels, mais présente un fort retrait aux premiers tests. Des expériences plus poussées doivent être menées en faisant varier le taux d’humidité du mélange et en ajoutant du sable (5% à 30% vol.)

**Carrière B** : à proximité de la rivière Zerafchan

De nombreuses carrières de terre sont ouvertes le long de la rivière par les villageois afin de produire des briques de terre crues qui servent pour la construction de leurs maisons. Les premiers essais montrent que cette terre très fine semble convenable pour les enduits sacrificiels. (Moins de retrait que pour la carrière A). Des tests complémentaires doivent être effectués.

**Carrière C** : à proximité des montagnes

Des veines de terre plus graveleuses que les autres semblent être mieux adaptées pour les travaux de backfilling. Des essais complémentaires avec géotextile doivent être réalisés.

Les essais de terrain ont consisté à compacter les terres à l’aide d’une dame fabriquée spécialement et à réaliser des essais d’enduits sur des briques de terre crue. Une procédure systématique de tests a été mise au point et transmise à Mr. Abdurauf Razzokov ainsi qu’à deux techniciens du site pour qu’ils puissent continuer les expérimentations et affiner le choix des terres et des mélanges.
SARAZM 5500
Sarazm is a Proto-Urban centre which developed trade and monumental architecture during the Neolithic and Bronze Age periods (middle of IV - end of II millennium B.C.). The settlement is located on the left bank of the Zaravshan river 15 km west of Pendjikent in Zobastana region in Tajikistan. Its surface covers approximately 100 ha.

Subsistence economy was represented by farming and cattle tending. The craft economy had a complex nature: metallurgy, jewelry and pottery production, weaving, basketry, and leather works, stone cutting and working of precious and colored stones were developed. In sum, the “Sarazmians” were a people with a highly developed material culture, according to the standard of Proto-

Urban Eurasia.

Architecture is represented by domed, public and cultural buildings. The population possibly worshipped fire, as suggested by the presence of large and small circular and quadrangular accurately constructed fireplaces or “altars” located in the main rooms of the complex buildings.

Excavations and research in the settlement revealed specialized rooms located in the building complexes, workshops devoted to the craft production: pottery, weapons, jewelry etc. Public monuments included granary and cultic premises.

The hierarchical social structure of the Sarazm population is remarkably illustrated by the monumental burial of the so-called “Princess of Sarazm”, who was buried in a large stone circle, escorted by other bodies and accompanied by a rich funeral deposit, typical of high social status.

The artifacts discovered in Sarazm find analogues with materials of contemporaneous sites in Pakistan, Iran, Afghanistan and Turkmenistan, and farther East and West along the early ancient “Silk Road”. This analogy show how large was the network of exchanges relations of the “Sarazmians”.

Sarazm is a unique early agricultural settlement for the Proto-Urban civilization of Eurasia, displaying an exceptionally wide and complex network of “international” relations. Its discovery and study opened a new epoch for the history of Ancient Orient and gave it a worldwide fame.
The Culture Sector

H. E. Mr Saymumin Sattorovich
Yatimov
Ambassador - Permanent Delegate
of the Republic of Tajikistan to
UNESCO
Ambassade du Tadjikistan
16, Bld Général Jacques
1050 BRUXELLES

WHC/74/MR/APA/10/375

06 OCT 2010

Subject: Inscription of Proto-urban Site of Sarazm (C 1141rev)
(Tajikistan) on the World Heritage List

Dear Ambassador,

I have the pleasure to inform you that the World Heritage Committee, at its 34th
session (Brasília, Brazil, 25 July – 03 August 2010), examined the nomination
of Proto-urban Site of Sarazm and decided to inscribe the property on the
World Heritage List. Please find below the Decision 34 COM 8B. 25 adopted by
the Committee.

I am confident that your government will take the necessary measures for the
proper conservation of this new World Heritage property. The World Heritage
Committee and its Secretariat, the World Heritage Centre, will do everything
possible to collaborate with you in these efforts.

The Operational Guidelines for the Implementation of the World Heritage
Convention (paragraph 168), request the Secretariat to send to each State
Party with a newly inscribed property a map of the area(s) inscribed. Please
examine the attached map and inform us of any discrepancies in the
information by and not later that 15 December 2010.

The inscription of the property on the World Heritage List is an excellent
opportunity to draw the attention of visitors to, and remind local residents of,
the World Heritage Convention and the outstanding universal value of the
property. To this effect, you may wish to place a plaque displaying the World
Heritage and the UNESCO emblems at the property. You will find suggestions
on this subject in the Operational Guidelines for the Implementation of the
World Heritage Convention.

In many cases States Parties decide to hold a ceremony to commemorate the
inscription of a property on the World Heritage List. Upon request to the World
Heritage Centre by the State Party, a World Heritage Certificate can be
prepared for such an occasion.

I would be grateful if you could provide me with the name, address, telephone
and fax numbers and e-mail address of the person or institution responsible for
the management of the property so that we may send them World Heritage
publications.
Please find attached the brief descriptions of your site, prepared by ICOMOS and the World Heritage Centre, in both English and French. As these brief descriptions will be used in later publications, as well as on the World Heritage website, we would like to have your full concurrence with their wording. Please examine these descriptions and inform us, by and not later that 15 December 2010, whether there are any changes that should be made. If we do not hear from you by this date, we will assume that you are in agreement with the text as prepared.

Furthermore, as you may know, the World Heritage Centre maintains a website at http://whc.unesco.org/, where standard information about each property on the World Heritage List can be found. Since we can only provide a limited amount of information about each property, we try to link our pages to those maintained by your World Heritage property or office, so as to provide the public with the most reliable and up-to-date information. If there is a website for the newly inscribed property, please send us its web address.

As you know, according to paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention, the World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the World Heritage Centre, of their intention to undertake or to authorize in the area protected under the Convention major restorations or new constructions which may affect the outstanding universal value of the property.

The full list of the Decisions adopted by the 34th session is available online at http://whc.unesco.org/en/sessions/34COM/.

May I take this opportunity to thank you for your co-operation and for your support in the implementation of the World Heritage Convention.

Please accept, Dear Ambassador, the assurances of my highest consideration.

Francesco Bandarin  
Director a.i.  
World Heritage Centre

Cc: National Commission of Tajikistan  
ICOMOS  
UNESCO Almaty Cluster Office
BRIEF DESCRIPTION
Sarazm, which means "where the land begins", 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. The ruins demonstrate the early development of proto-urbanization in this region. 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. Sarazm also demonstrates the existence of commercial and cultural exchanges and trade relations with peoples over an extensive geographical area, extending from the steppes of Central Asia and Turkmenistan, to the Iranian plateau, the Indus valley and as far as the Indian Ocean.

BREVE DESCRIPTION
Sarazm, qui signifie « le commencement de la terre », est un site archéologique qui témoigne de peuplements humains sédentaires en Asie centrale, du IVe millénaire avant J.-C. à la fin du 3e millénaire avant J.-C. Les vestiges montrent l’essor d’un proto-urbanisme précoce dans cette région. Ce centre de peuplement, parmi les plus anciens d’Asie centrale, est situé entre une zone montagneuse propice à l’élevage du bétail par des bergers nomades et une grande vallée favorable au développement de l’agriculture et de l’irrigation par les premières populations sédentarisées de la région. Sarazm démontre aussi l’existence d’échanges matériels et culturels et des liaisons marchandes entre les steppes de l’Asie centrale, le Turkménistan, le plateau iranien, la vallée de l’Indus et jusqu’à l’océan Indien.

Extract of the Decisions adopted by the 34th session of the World Heritage Committee (Brasilia, 2010)

Decision: 34 COM 8B.25

The World Heritage Committee,

1. Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1,

2. Inscribes Proto-urban Site of Sarazm, Tajikistan, on the World Heritage List on the basis of criteria (ii) and (iii);

3. Adopts the following Statement of Outstanding Universal Value:

Brief synthesis
The proto-urban site of 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. The Proto-urban Site of 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 Site 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, the Proto-urban Site of 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. The Proto-urban Site of Sarazm had connections with the steppes of Central Asia, and in addition with the Turkmenian, proto-Elamite, Mesopotamian, and Indus worlds.
Criterion (iii): The Proto-urban Site of 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. The Proto-urban Site of 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.

Protection and management requirements
The Proto-urban Site of 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.

4. Recommends that the State Party:

   a) Continue and reinforce the upcoming archaeological programme in the context of the international cooperation projects currently under way, in particular through the use of non-invasive geophysical techniques, and to try to determine the boundaries of the proto-urban site of Sarazm to further the knowledge in relation to the recent discoveries;

   b) 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;

   c) 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;

   d) 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;

   e) Strengthen the training of the personnel employed by the Reserve, particularly in connection with international scientific and conservation cooperation projects;

   f) 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.

Surface and coordinates of the property inscribed on the World Heritage List by the 34th session of the World Heritage Committee (Brasilia, 2010) in accordance with the *Operational Guidelines*.

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