CONSERVATION ASSESSMENT OF MUSEUMS AND STORAGE FACILITIES INCLUDED IN THE US-FUNDED PROJECT – “PRESERVATION OF ENDANGERED CULTURAL ASSETS OF GANDHARA”

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Background to the assessment

Within the framework of the US-funded project, “Preservation of Endangered Moveable Cultural Assets of Gandhara Art of Pakistan”, a mission was undertaken by Dr. Rohit Jigyasu, architect, planner and conservation consultant from 22 May to 2 June 2006 to carry out conservation assessment of the three museums, namely; the Peshawar Museum and its storage facilities, the SSAQ Museum of Archaeology and Ethnology at the University of Peshawar, and the Swat Museum and its storage facilities in Saidu Sharif.

After initial briefing on the project by Ms. Farhat Gul, Culture Officer, UNESCO Islamabad, an on-site assessment of the two museums in Peshawar was conducted from 25 to 27 June 2006. Unfortunately, visit to the third museum in Swat could not take place due to security restrictions. However a brief conservation assessment of this museum is also provided on the basis of interactions with the Director and others, who have direct knowledge of the museum.

Each of these museums has different institutional management framework. While Peshawar Museum is under the Provincial government of North West Frontier Province (NWFP), the SSAQ museum is semi-autonomous under the University of Peshawar and Swat Museum is under the Directorate of Archaeology and Museums of the federal government of Pakistan. However, due to strong professional links among the staff of these museums, there is good potential for initiating a coordinated project on endangered Gandhara collections.
In order to identify potential threats to Gandhara collections that have been housed in these museums, an integrated assessment of the museum building(s) and immediate context, the internal museum environment, display galleries and the condition of collections is conducted. Similarly, threats to collections in storage are assessed with respect to the storage building and its environment and the existing condition of collections that are kept there.

In the following pages, conservation assessment of the three museums is described, followed by some recommendations for the project.

**Peshawar Museum**

**Background**

The background of this museum has already been provided in the feasibility report. However some additional information is provided on the museum building and its Gandhara collections.

The museum complex is located at a very strategic location just opposite the Governor's house and adjacent to the newly built archives building.

The two storied building built in exposed brick and plaster with roof cenotaphs (*chattris*) is historically and architecturally very significant. Double storied central hall of the main building was built in 1907 and subsequently eastern and western wings were added. The Gandhara collections are located in the main hall, eastern and western galleries on the ground floor and western side of the first floor.

Few years back, false ceiling in plaster-of-paris (PoP) was added in the central hall to reduce volume of the interior.

The main types of Gandhara collections housed in this museum are:

- Sculptures in Schist Stone
- Figure heads in Stucco
- Smaller artifacts in terracotta
- Copper coins
- Toilet Trays in soap stone and terracotta
- Relic caskets in metal and stone.

Most of these collections have been displayed in this museum ever since they were excavated in various sites from 1907 onwards.

Recently a new building has been constructed behind the main building to house Islamic collections and storage facilities in the basement.

**Conservation Assessment of the Collections in Display**

*Main Museum Building*

Following observations were made in the building :-

- Recent earthquake on 8 October 2005 has damaged cenotaphs on the roof and also slightly affected a part of the false ceiling in the central hall.
- Due to Improper drainage on the roof of the central hall, it was reported that water gets stagnated during heavy rains as a result of which, there is water seepage from the roof.
- Due to seepage from water supply pipes, white efflorescence was observed on some external walls at the rear of the building.

However these problems have not had any direct impact on the collections and it can be concluded that the building is in sound structural condition.

The museum has plans for undertaking renovation of the building and the false ceiling in the central hall is proposed to be removed. However this decision needs to be carefully assessed as the increased volume may create problems in installing environmental control mechanisms in the future. Also restoration of the interior walls and flooring should take into account the authenticity of the historic building fabric.
Display Galleries

The collections have been displayed in wooden galleries with glass shutters. Large sculptures, figure heads and stone tablets (with inscriptions) have been mounted on wooden pedestals.

The overall condition of these galleries is quite fair. However following observations were made:-

- Some large sculptures have been poorly anchored to the walls / pedestals using metal straps / nails.
- Smaller objects in stucco and terracotta have not been properly secured to the base, thereby exposing them to risk from earthquakes.
- Some three dimensional objects are not properly displayed since all the facades are not visible.
- Termite attack is seen in some display cases.

However, there is a proposal to completely redesign / refurbish these galleries through grant by the provincial government.

Museum Environment

At present there is no temperature and humidity control inside the galleries and therefore the collections are subjected to extreme temperature variations. However natural light conditions are adequate inside the museum.

Although immediate impact on the collections is not visible, long term impact of temperature fluctuations is bound to affect the collections, especially the ones in terracotta and copper.
The Collections

The general condition of schist stone objects is fine since no significant deterioration pattern is visible. However following observations were made through visual inspection of collections:-

- Dust / mud can be seen on many schist stone objects. While the mud may have come from the sites, from where these have been excavated, it is difficult to distinguish it from the dust that would have accumulated on these objects over time. As a result, some delicate features of these objects are not clearly visible. Cleaning of these collections is definitely needed but this should be preceded by a discussion on the approach and techniques for interventions.

- Questionable interventions have been done to some collections in the past. These include adding cement to the bases of large stone sculptures to make them structurally stable and joining broken pieces using glue or cement. Appropriate approach for treating such collections should be discussed.

- Accession numbers have been crudely painted on the surface of several objects, thereby damaging the visual integrity / aesthetic nature of the objects.

- Due to oxidation, blackening of metal coins is observed.

Other Aspects of galleries’ management

Dating of collections:
Recently, most of the Gandhara objects have been labeled, with brief description and historical time period to which they belong. However the dates span over a century or more and in some cases need to be verified. Therefore, an extensive documentation followed by research is needed to ascertain more accurate dating of these collections.

Emergency Preparedness:
There is only one entrance and exit in the museum building and this can pose problem of emergency evacuation in the event of natural hazards such as fire and earthquakes.
Assessment of Storage Facilities

There are around 5000 Gandhara objects that are kept in the storage of the Museum, most of which are schist stone sculptures. Most of these have been in storage ever since they have been excavated.

The objects have been stacked in these stores without any order on the basis of excavation sites or material or age. Some of these have been lying on the floor / shelves, while others have been kept in metal boxes. In the absence of regular cleaning and maintenance of storage, dust has accumulated on these objects.

The stores are presently located in single storey structures built adjacent to the main museum building. However, new storage areas have been designed in the basement of the new museum building. The built-in shelves have been especially designed to store collections of various sizes and types. Although provisions for the control of internal environment have not been made, new storage areas are appropriate to house Gandhara collections. Moreover there is adequate space to keep the collections that would emerge in the future following new excavations.

The new storage is also appropriate from the point of view of the security.

The main challenge for the museum staff is to move these collections from old storage areas to new ones. However, this is also a great opportunity to document (visual, height, weight, volume etc.), create an appropriate database for these collections and also provide suitable conservation treatment before they are moved. This might as well be a good opportunity to train staff from this museum as well as others in appropriate techniques in handling collections.

Assessment of Existing Management System

The Museum Staff

As mentioned before, the Peshawar Museum comes under the Directorate of Archaeology and Museums, Government of NWFP, Pakistan. Staff of the museum
consists of one curator, who is overall in-charge of the museum, one gallery attendant, one library assistant, a junior clerk and four museum attendants. The junior administration staff consists of 24 personnel, besides security guards and sweepers. It is noteworthy to mention here that the museum does not have its own conservator although the directorate of Archaeology and Museums does have a chemist and conservator assistant besides their own administrative staff. However, they need to be trained in appropriate techniques for conservation of various kinds of Gandharan collections ranging from schist stone sculptures to metal coins.

Rest of the staff also needs to be trained in handling collections in display as well as storage, maintenance activities for the building as well as collections and also in emergency preparedness and response procedures.

**Documentation & Research**

Former director of the Directorate of Archaeology and Museums, Government of NWFP, Dr. Ihsan Ali has taken many initiatives for the preservation of endangered cultural assets of Gandhara. This includes setting up of new museums, creation of database and several publications on the museums housing Gandhara collections. Notable among these is a well-illustrated Guide to Peshawar Museum published in March 2005. An information management centre has also been proposed to house all kinds of information sources pertaining to Gandharan Art and Architecture.

Dr. Ali has been supported in his efforts by Mr. Muhammad Zahir, Lecturer in Archaeology at Government College, Peshawar. Mr. Zahir along with his team of fifteen research assistants, who are graduates in Archaeology have recorded around 800 Gandhara objects and designed a database that is especially tailored to the needs of these collections. In the process, these fresh graduates have got especially trained in database creation and management. They can be important local resource persons for the project.

However, it is important to mention here that the above-mentioned team engaged in database creation and management is not part of the museum staff. Therefore their appreciable efforts need to be coordinated with other activities being undertaken by the
museum staff. In fact, a research cell within the Directorate of Archaeology and Museums can be created for this purpose.

**Conclusion:**

Although several problems / issues have been observed in the museum building, its environment and the condition of collections that can pose long term risks to collections in the display areas, it can be concluded that there is no immediate threat to these collections. Moreover, a proposal to refurbish these galleries has already been prepared by the Directorate.

However, the Gandhara collections that are located in the storage areas are exposed to critical risks with regards to their handling, treatment, storage, accession and documentation. Therefore following activities need immediate attention:

- Moving Collections to new storage areas and appropriately treating and organizing them.
- Proper accession and documentation of the collections in the storage areas.
PESHAWAR MUSEUM – MAIN BUILDING AND DISPLAY GALLERIES

Fig. 1.1- The main building of Peshawar Museum

Fig. 1.2 - Efflorescence seen at the rear of the building

Fig. 1.3- Damage to roof cenotaph due to October 2005 earthquake

Fig. 1.4- Damage to the roof cenotaph due to October 2005 earthquake.

Fig. 1.5- Improper drainage on the roof of the main building

Fig. 1.6- Rain water can penetrate in the ceiling through roof windows
Fig. 1.7- The central hall of the main building

Fig. 1.8- A part of false ceiling fell off due to earthquake

Fig. 1.9- Display cabinets in wood and glass

Fig. 1.10- Termite attack is seen in some of the display cabinets.

Fig. 1.11- Metal straps to fasten stone sculptures

Fig. 1.12- Cement is used to glue some broken pieces together.
Fig. 1.13- Concrete has been added to stabilize base of some collections.

Fig. 1.14- Stucco figureheads in Gandhara collections

Fig. 1.15- In the absence of appropriate anchoring, terracotta objects are at risk from earthquakes.

Fig. 1.16- Gandhara objects in stone and metal may need to be reorganized in the gallery
PESHAWAR MUSEUM – STORAGE FACILITIES

Fig. 1.17- Existing storage for collections in Peshawar Museum

Fig. 1.18- Collections stacked in the storage

Fig. 1.19 - Earthquake damage is visible in the building

Fig. 1.20- A few terracotta objects are also kept in the storage

Fig. 1.21- Large schist stone sculptures are lying on the ground in the absence of proper storage space

Fig. 1.22- In the absence of proper storage space, collections are stacked without any order
Fig. 1.23- New storage areas are located in the basement of the new building. However collections are yet to be moved here.

Fig. 1.24- New storage also has space for research scholars

Fig. 1.25- Well designed shelves in the new storage
Sir Sahibzada Abdul Qayyum (SSAQ) Museum of Archaeology and Ethnology, University of Peshawar

Background

The background of the museum and its collections has been given in the feasibility report. However as mentioned before, the essential difference with other two museums is its semi-autonomous nature, since it is placed in the University of Peshawar and not under direct control of provincial or Federal Government.

The collections are housed in a new building, from where the museum started functioning in 1998. The galleries are double storied and are naturally lit by sky-lights. It also contains offices, a large auditorium, conference hall and basement for storage.

Major portion of the museum collections belongs to prehistoric, early Harappan and Gandhara Grave culture (also known as Aryan Period). However, a limited Gandhara collection mainly consisting of schist stone sculptures are housed in the museum. A few stucco figure heads, terracotta objects and coins also form part of this collection.

Conservation Assessment of Collections in Display

Museum Building

Since the building is newly constructed, no major structural problems are seen in the building.

However, the design of the building is certainly questionable with respect to available space for galleries, thanks to closely spaced columns. Besides there is inadequate natural ventilation as a result of which, heat gets trapped during summers.
Display Galleries

Most of the collections are displayed in well designed cabinets, which have been contributed to the Museum through Japanese grant.

Poor labeling/nomenclature for these objects again emphasize the importance of research followed by documentation of these collections, which requires precise information on the subject, location and dating of these objects.

Museum Environment

There is no temperature and humidity control within the museum and it is subjected to extreme temperatures thereby putting some of the collections in terracotta and stucco to slow and progressive risks of deterioration.

The roof ventilators are the source of natural light, which also falls directly on some of the collections on display thereby exposing some of the painted terracotta objects to the risk of discoloration.

Collections

Although no direct impact of the museum environment could be seen on the collections, long term adverse impacts are bound to occur. In fact, the main curator of the museum mentioned that discoloration, material disintegration has been observed in some stucco objects and metal coins. However this could not be corroborated on site.

Emergency Preparedness Measures

There are only two fire extinguishers in the entire museum and existing emergency preparedness measures leave much to be desired.
Assessment of Storage Facilities

The storage facilities are located in the basement of the museum. The following observations were made:-

- The storage area is adequate for the present collections and can also accommodate collections from newly excavated sites.

- Some of the collections are kept in old display shelves, most of which are in precarious condition.

- In the absence of appropriate storage shelves, most of the collections are lying on the floor, wrapped in gunny bags. These objects are exposed to high risks from accumulating dust. Also many of these have to be frequently moved by the cleaners, who sweep the floor on regular basis thereby exposing them to the risk of damage.

- These collections have been grouped together according to their sites of excavation. There is no distinction on the basis of their material or period. Therefore it is very difficult to specifically identify Gandhara collections among these.

- Termite attack and dampness due to seepage in the storage area is also exposing the collections to high risk.

- There is no adequate infrastructure for the store keepers as well as researchers to study these collections.

Assessment of Management System

The Museum staff consists of the director, deputy curator and two assistant curators. Also there are three museum attendants, one clerk and two security guards. However, there is no conservator in the museum.
Conclusion:

Like Peshawar Museum, Gandhara collections in storage areas of SSAQ Museum are at much higher risk than the ones in display galleries. Following immediate needs have been identified for these collections:-

1. A separate section for the storage of Gandhara collections can be created within the existing storage area.

2. Following equipments are urgently needed for the maintenance of stores:
   - Adequate Storage Shelves / cabinets
   - Vacuum Cleaners for cleaning storage area
   - Basic Infrastructure for store keepers and researchers.

3. A trained conservator is required to maintain/treat the collections in display as well as storage.
SSAQ MUSEUM, PESHAWAR – DISPLAY GALLERIES & STORAGE AREA

Fig. 2.1- Direct sunlight falls on some displays from roof sky-lights

Fig. 2.2 - The museum has new display cabinets through Japanese support

Fig. 2.3- The objects are wrapped in gunny bags and stacked on the floor according to the sites of their excavation.

Fig. 2.4- Termite attack is observed in the storage

Fig. 2.5- Storage shelves are in precarious condition

Fig. 2.6- Objects stacked on the floor
Fig. 2.7- Some objects are kept in the boxes for study by Japanese researchers.

Fig. 2.8- Dampness can be seen on the walls of the storage.

Fig. 2.9- Due to inadequate storage space, many objects are stacked on the floor.

Fig. 2.10- Space for the manager of storage area. It is also used by the researchers.
Swat Museum and its storage facilities in Saidu Sharif

Unfortunately due to security restrictions, the consultant could not pay visit to this museum and its storage facilities. However the following points were noted through discussions with Dr. Fazal Dad Kakar, Director General, Department of Archaeology and Museums, Islamabad and Mr. Muhammad Zahir, Lecturer in Archaeology, Government College, Peshawar.

- The museum is managed by the Peshawar Circle of the Department of Archaeology and Museums and directly comes under the Federal Government of Pakistan. Although general staffing is quite similar to the other two museums, Swat museum follows the management system for the museums that come under the department of Archaeology and Museums.

- The museum and its storage facilities are located in the archaeological areas, which are extremely rich in Gandhara collections. Therefore the storage areas have to cope with ever increasing number of excavated objects.

- Existing storage facilities are very poor and there is problem of dampness, which is severely affecting the collections. Moreover there is need for cleaning and reorganization of the collections.

- There is urgent need to build capacity of the museum staff for managing collections.

- A conservator has to be trained for cleaning/treating the collections, especially those from newly excavated sites.

- According to Dr. Kakar, since many of the objects are left at the excavation sites before bringing them to the storage, the museum staff should also be trained in in-situ conservation techniques.
Recommendations

Priority Areas

Reorganization of storage areas in the three museums has been identified as the priority area towards the cause of preservation of Gandhara collections. This would demand various activities that would compliment each other:-

- Training of museum staff in handling, treatment, maintenance and emergency preparedness of storage collections according to their form, material, age and condition. This can be conducted by international conservation expert(s) in cooperation with local experts, who have requisite experience in this area.

It goes without saying that various approaches / techniques for interventions should not only take into consideration the specific nature of materials (schist stone, soap stone, stucco, terracotta) but also take into account local social, economic and administrative context.

In order to sustain preservation efforts, a laboratory with the basic facilities for cleaning / treatment of Gandhara collections should be housed in one of the three museums. This laboratory should be managed by a trained conservator and should cater to Gandhara collections from all the three museums. SSAQ Museum seems to be good location for such a laboratory since a space has already been allocated for this purpose and it can also serve department of archaeology that is located within the University.

- As mentioned before, comprehensive documentation of the objects in storage and further development of database has already been initiated by a team of young professionals under the leadership of Mr. Ihsan Ali, former director, directorate of Archaeology and Museums, Government of NWFP and with the assistance of Mr. Muhammad Zahir. Along with high resolution digital photographs, the database has provision of various fields containing objective information on the collections (such as accession number(s), age, name of the
excavation site etc.) as well as qualitative information (such as historical background, material condition etc.)

It is hoped that a coordinated action will help in standardizing the documentation procedure and design of database, with the hope that a comprehensive information management system for the entire Gandhara collection can be developed over time.

Towards this end, the project could facilitate necessary infrastructure for documentation and database creation such as high speed computer(s), high resolution camera(s) and authorized software for the database.

**Special Considerations:**

The above-mentioned activities should take into account the specific nature and needs of the three museums with regards to reorganization of collections in storage areas. For example, in case of Peshawar museum, the reorganization would entail moving collections from existing stores to newly designed storage space in the basement of new building. In the case of SSAQ museum, this would involve reorganization of existing storage area and provision of appropriate storage space to keep the collections. The third case of Swat Museum may require development of completely new storage facilities. However all the museums can learn from the specific situation being offered by each museum and its storage areas. It is hoped that the project would facilitate this mutual learning process.

**Capacity Building:**

Although, the initial phase of the project is only limited to three museums, it is proposed that the above activities be used towards involving staff from other museums with an objective of capacity building through 'training the trainers'.

A workshop can be organized at one of the three museums to initiate the entire process. Peshawar Museum which has better infrastructure facilities can be the most appropriate venue for such a workshop. It is hoped that a systematic monitoring procedure can also
be set up to review progress of the activities that would be initiated through this workshop.

**Institutional Management**

Since the three museums that have been considered for the first phase of the project come under three different management systems, appropriate coordination of project activities is indeed crucial for the success of the project. Therefore the role of project director as administrative head has already been emphasized in previous reports. However, the director would need to be supported by a project coordinator, who has direct knowledge and experience of managing Gandhara collections and able to coordinate between local, national and international stakeholders.

In order to work out project management system in detail, a steering committee can be set up before experts meeting. The committee should comprise of representatives from all the three museums, UNESCO and International donors and consultants for the project. The committee should prepare draft framework of action to be discussed during the expert meeting.
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