

MANAGEMENT, CONSERVATION AND RESTORATION PROBLEMS OF ANCIENT SITES / MONUMENTS AND THE PRESERVATION PRACTICES IN PAKISTAN

BY

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Significance of Cultural Heritage

- The cultural relics play a very vital role and provide the virtual foundations for advancement in corporate life of any nation.
- Our ancient land has been an important primeval stage for the grand and grim drama of man's first endeavour, his integral rise, his phenomenal fall and the great resilience.





**Riwat, Potohar Plateau, Pakistan
Gravel deposits, with fresh looking
stone tools on the uppermost levels
that are dated to + 2MYA.**

23 quartzite pieces

9 are unequivocally natural

9 are questionable and

**5 are more likely to have been
flaked by hominids**



KNOWN STONE AGE IN PAKISTAN

Paleolithic (Lower)	20,00,000 Years
Acheulean (Lower Paleolithic)	400,000 Years
Upper Paleolithic	25,000 – 18,000 Years
Mesolithic	18,000 – 10,000 Years
Neolithic	8,000 Years
Chalcolithic (Copper / Stone)	6000 – 4500 Years

(The above dates are, of course, very rough and tentative)

Incised Bull motifs - Upper Paleolithic



Middle paleolithic

Antiquities from Mehrgarh



Antiquities discovered from Gandhara



BRIEF HISTORY OF THE DEPARTMENT OF ARCHAEOLOGY

- The Cultural Heritage of the Sub-Continent started receiving attention in the second half of the 19th Century when the British Government of India established Archaeological Survey of India (ASI) in 1860 for its proper protection and preservation.

MISSION STATEMENT

- Protection and Preservation of Tangible Cultural Heritage of Pakistan.
- Archaeological researches / Surveys (exploration and excavation)
- Epigraphic and Numismatics Research Studies.
- Establishment and maintenance of Museums.
- Holding of Exhibitions at home and abroad.
- Control on illegal diggings and illicit export of antiquities.
- Collaboration with national and international agencies including UNESCO, International Centre for Conservation of Cultural Property (ICCROM), International Council for Museums (ICOM) and International Centre for Monuments and Sites (ICOMOS).

SITES / MONUMENTS OF PAKISTAN INSCRIBED ON UNESCO'S WORLD HERITAGE LIST

1. Archaeological Ruins at Moenjodaro.
2. Archaeological Ruins at Taxila.
3. Buddhist Remains of Takht-e-Bahi & neighbouring city remains at Sehri Bahlol Distt. Mardan.
4. Makli Hills Monuments at Thatta.
5. Lahore Fort & Shalimar Garden.
6. Rohtas Fort, Jhelum.

SITES / MONUMENTS PROPOSED FOR LISTING ON THE UNESCO'S WORLD HERITAGE LIST

1. Badshahi Mosque, Lahore (1993)
2. Wazir Khan's Mosque, Lahore (1993)
3. Tombs of Jahangir, Asif Khan and Akbari Sarai, Lahore (1993)
4. Hiran Minar and Tank, Sheikhpura (1993)
5. Tomb of Hazrat Rukn-e-Alam, Multan (1993)
6. Rani Kot Fort, Dadu (1993)
7. Shah Jahan Mosque, Thatta (1993)
8. Chaukhandi Tombs, Karachi (1993)
9. Archaeological Site of Mehrgarh (2004)
10. Archaeological Site of Rehman Dheri (2004)
11. Archaeological Site of Harappa (2004)
12. Archaeological Site of Ranigat (2004)
13. Shahbazgarhi Rock Edicts (2004)

SITES / MONUMENTS PROPOSED FOR LISTING ON THE UNESCO'S WORLD HERITAGE LIST (continue)

14. Mansehra Rock Edicts (2004)
15. Baltit Fort (2004)
16. Tomb of Bibi Jawindi, Baha'al-Halim and Ustead and the Tomb and Mosque of Jalaluddin Bukhari (2004)
17. Tomb of Shah Rukn-e-Alam (2004)
18. Port of Banbhore (2004)
19. Derawar and the Desert Forts of Cholistan (2016)
20. Hingol Cultural Landscape (2016)
21. Karez System Cultural Landscape (2016)
22. Nagarparkar Cultural Landscape (2016)
23. Central Karakorum National Park (2016)
24. Deosai National Park (2016)
25. Ziarat Juniper Forest (2016)
26. The Salt Range and Khewra Salt Mine (2016)

LIST OF MONUMENTS DECLARED AS “NATIONAL MONUMENTS” UNDER ANTIQUITIES ACT, 1975

- Quaid-i-Azam Birth Place, Wazir Mansion, Karachi.
- Quaid-i-Azam House (Flag Staff House) Karachi.
- Mohata Palace, Karachi.
- Ziarat Residency, Quetta.
- Khaliq Dina Public Hall and Library, Karachi.
- Mausoleum of Quaid-i-Azam Muhammad Ali Jinnah, Karachi
- Jawed Manzil Lahore.
- Tomb of Allama Sir Muhammad Iqbal, Lahore.
- Islamic Summit Minar, Lahore.
- Residency of Prof. Dr. Abdus Salam, Jhang.

SITES / MONUMENTS PROTECTED UNDER THE ANTIQUITIES ACT 1975

PROVINCE	CATEGORY			TOTAL
	I	II	III	
Balochistan	07	08	15	30
Khyber Pakhtunkhwa	25	34	33	92
Sindh	50	52	27	129
Punjab	77	58	14	149
Gilgit Baltistan	1	-	-	01
Islamabad (ICT)	2	01	01	04
	162	153	90	405

Category-I. Those monuments which from their present condition or historical or archaeological value ought to be maintained in permanent good repair.

Category-II. Those monuments which it is now only possible or desirable to save from further decay by such measures as the eradication of vegetation, the exclusion of water from the walls, and the like.

Category-III. Those monuments which, from their advanced stage of decay or comparative unimportance, it is impossible or unnecessary to preserve.

MUSEUMS UNDER THE CONTROL OF THE DEPARTMENT OF ARCHAEOLOGY AND MUSEUMS

- National Museum of Pakistan, Karachi
- Quaid-e-Azam House Museum, Karachi.
- Quaid-e-Azam Birth Place House Museum, Karachi.
- Archaeological Museum Banbhore.
- Archaeological Museum Moenjodaro.
- Archaeological Museum, Umerkot.
- Archaeological Museum, Harappa.
- Allama Iqbal House Museum, Lahore.
- Allama Iqbal Birth Place House Museum, Sialkot.
- Archaeological Site Museum, Taxila.
- Islamabad Museum, Islamabad.
- Archaeological Site Museum, Swat.
- Sikh Gallery, Armoury Gallery, Old Fort Lahore. (Transferred to The Government of Punjab on 18-08-2004).
- Mughal Gallery, Old Fort, Lahore (Transferred to the Government of Punjab on 18-08-2004).

Conservation problems of the sites / monuments & remedial measures

- The ancient monuments and archaeological sites/remains in Pakistan have suffered from variety of causes. The natural causes are numerous and varied, for instance, thick vegetation, heavy rainfall, floods and change in river courses etc.
- Another major cause of decay is action of salt-penetration.
- There are reasons to believe that the pre-historic collegiate building at Moenjodaro (2500-1500 BC) was quarried by the builders of nearby Stupa in the historic time. The ruins of Harappa (Indus Valley Civilization Site) were destroyed for laying the Lahore-Multan Railway line.
- Natural disasters and human vandalism.

I. Temperature

- Considerable differences between day and night temperatures are common in tropical areas and the alternation of day and night temperature effects on the remains.
- The role of temperature as an agent of decay is for the most part indirect. It reacts on the humidity in the pores of the rock and on the solubility of salts and gases influences the rate of chemical reaction promotes hydrolysis.

II. Wind

- Wind born particles are very harmful for the surface of any building and they are very dangerous when they are large.
- The high velocity of wind itself is very dangerous to the structures like, pagodas, towers, canopies etc.

III. light

- Natural light is also injurious to the old remains as well as the historical monuments, because it aids in chemical reactions.
- The light rays discolour pigment that do not have the ability to reflect the light in wave length.

IV. Humidity

- Humidity and temperature are closely related with each other.
- The conditions of very high temperature and humidity along with presence of light encourage the growth of organism such as bacteria, mould, fungi and algae or plants like lichens and mosses.

V. Pollution

- Sulphur dioxide is the most important pollution problem in stone decay.
- The chief sources of this pollution are domestic coal fires and industrial furnaces.

VI. Lighting

- Lighting is the nature means of equalising electrical potential of the earth and atmosphere.
- Lighting has a tendency to strike the tops of all tall buildings standing up above the ground level.
- When there is substantial electrical resistance in the path between the point of striking and the mass of the earth, damage will generally be caused.

VII. Rain

- Rain is always damaging for the archaeological sites/remains and monuments.
- Rain assisted by wind, causes general erosion of the surface.

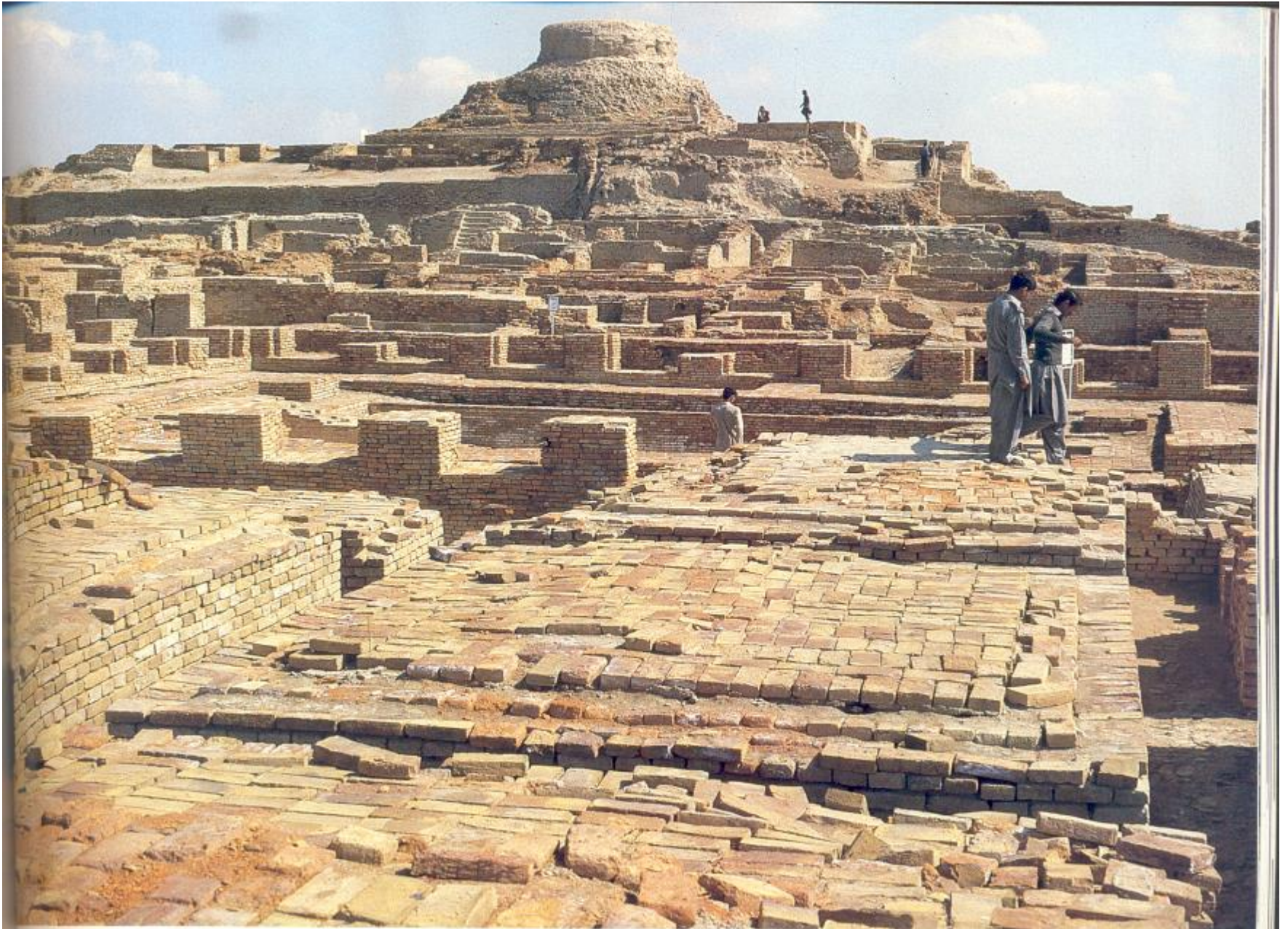


CONSERVATION
PROBLEMS TO THE
WORLD HERITAGE SITES
OF THE PAKISTAN

Moenjodaro



Buddhist Stupa Moenjodaro





BASE OF A WALL SHOWING THE HORIZONTAL DAMP-PROOF COURSE



General view newly developed Lawn





Antiquities discovered from Moenjodaro



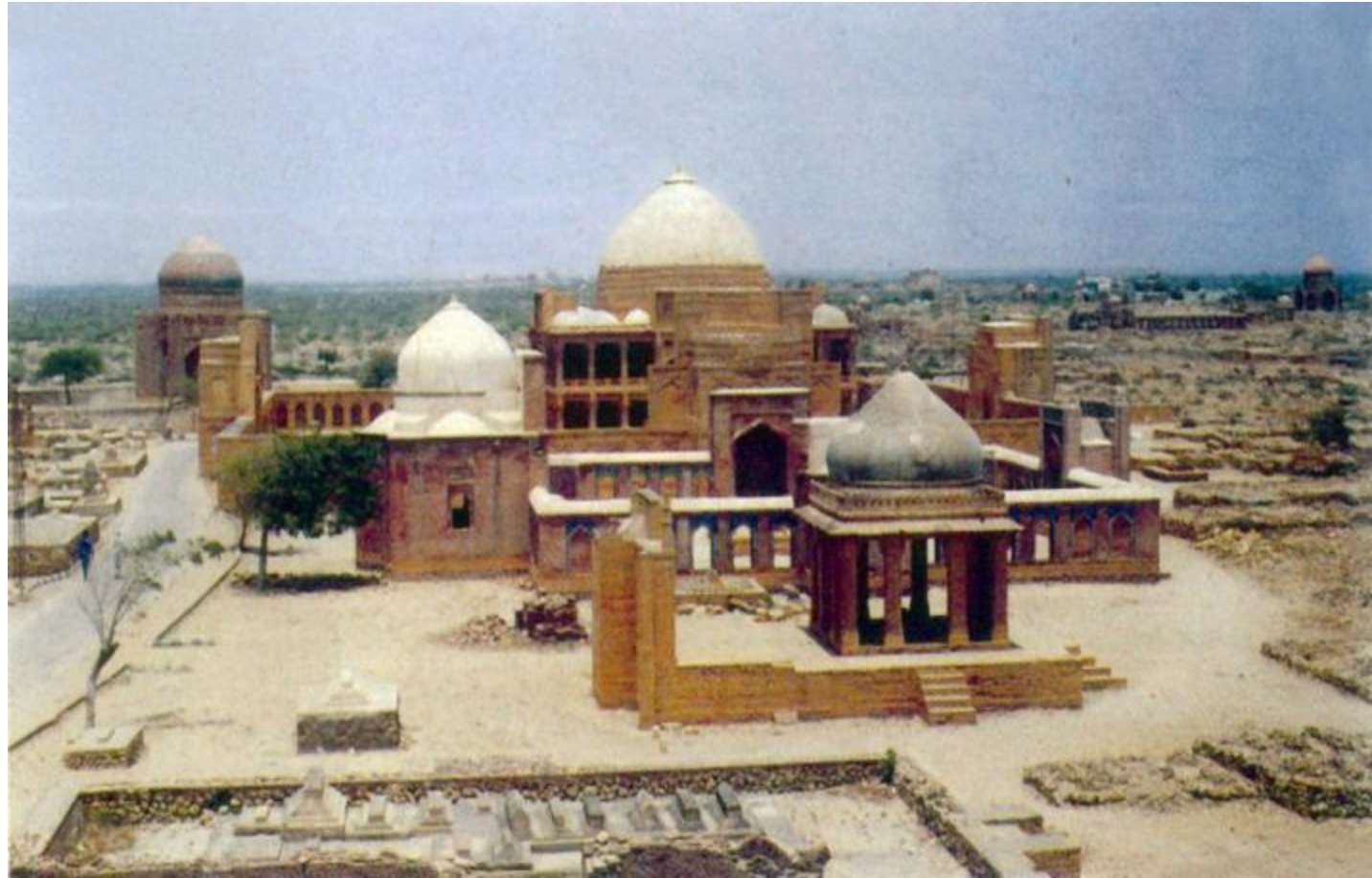
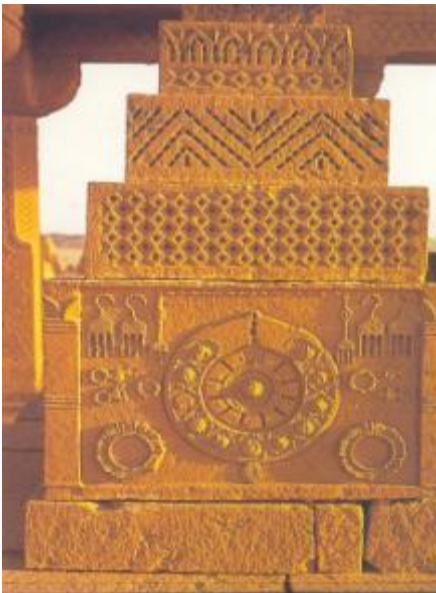
Conservation problems of Moenjodaro

- Moenjodaro is not only a challenge for the Department of Archaeology & Museums but the entire world.
- The problems at Moenjodaro are unique and difficult to overcome through ordinary means.

Problems

- Salinity/ salt efflorescence caused both by capillary action from beneath the surface of the ground and by atmospheric action on the surface of the bricks.
- Under Ground water logging and rising of moisture through capillary action.
- Leaning walls.
- Drainages and run of water.
- Thermal Action.
- Wind Action.
- Erosion due to storm rain water,
- Visitors.
- Improper conservation.
- Wild growth.

MAKLI HILLS MONUMENTS, THATTA



Conservation problems of Makli Hill Monuments

- Located on top of the Makli hillocks, the Makli monuments comprising both stone and brick buildings are exposed to different kinds of threats.
- The annual functions at different mausoleums attended by thousands of people mostly unmindful of the importance of the monuments located there, erect camps, lit fire and prepare food within the monuments.
- The strong wind congaing dust particles erode the surfaces of both stone and brick buildings at an alarming pace.

SHALAMAR GARDENS



SHALAMAR GARDENS, Lahore



Conservation problems of Lahore Fort & Shalamar Garden

- The conservation of Lahore Fort is a difficult task. The unique monuments are sufferings from different problems of various degrees.
- Both national and international experts have studied the conservation problems and its restoration work is in progress.

ROHTAS FORT



Conservation problems of Rohtas Fort

- Similarly, Rohtas Fort is heavily encroached from inside and complete village is housed in it.
- Congenial climatic conditions are also necessary for the proper preservation and maintenance of the huge edifice of the paramount military importance from the medieval Islamic period.

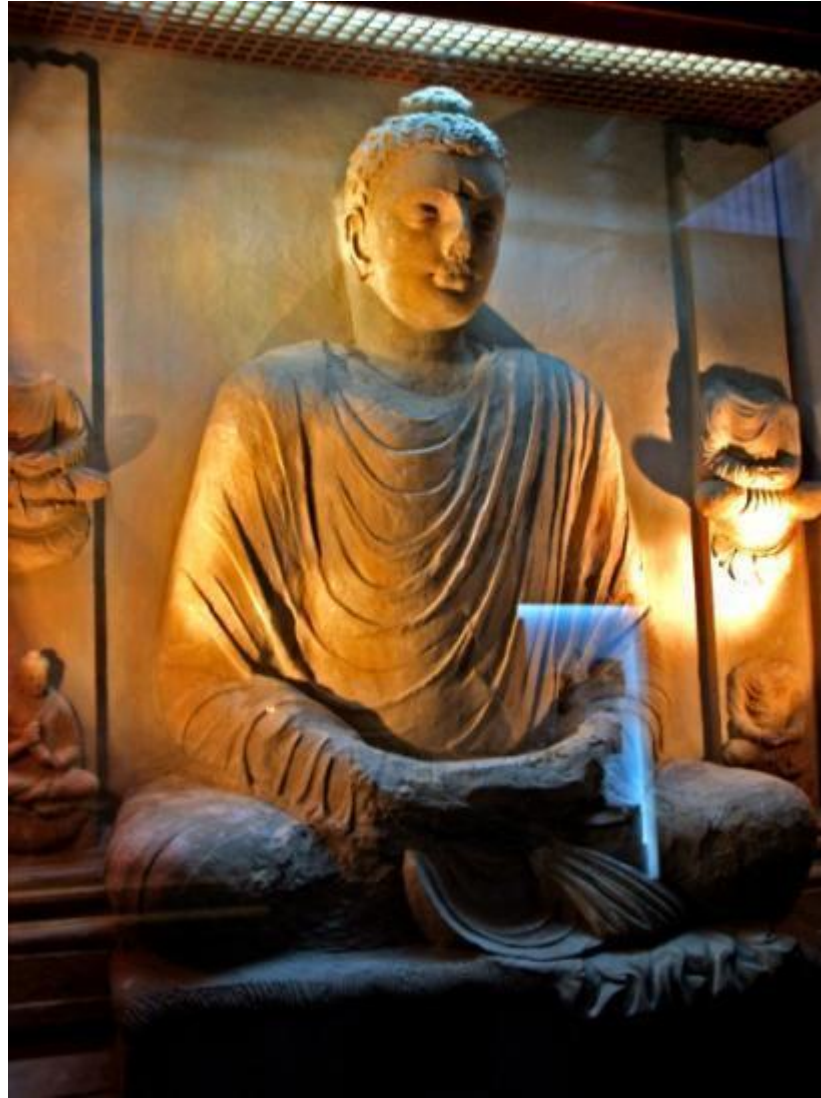
DHARMA RAJIKA SITE, TAXILA



SIRKAP REMAINS TAXILA



ANTIQUITIES DISCOVERED FROM TAXILA



Conservation problems of Taxila

- The problems at the archaeological remains of Taxila are also complex. The wild growths are virtually uncontrollable.
- The micro and macroclimate of the valley has been disturbed at a rapid pace, which has also adversely affected the monuments.

TAKHT-I-BAHI, MARDAN



Conservation problems of Takht-e-Bahi

- The World Heritage Buddhist site of Takht-e-Bahi, District Mardan, NWFP is though preserved but the problems of conservation are even bigger.
- The restoration of the suitable micro and macro climatic conditions is also the need of the time for the better preservation and maintenance of the cultural relics in the original environments.

TAXILA MUSEUM



ARCHAEOLOGICAL MUSEUM, SWAT



NATIONAL MUSEUM OF PAKISTAN, KARACHI



QUAID-E-AZAM HOUSE MUSEUM, KARACHI



PRESENT CONDITION OF THE MONUMENTS

RANI KOT FORT



KOT DIJI FORT





SHEIKHU PURA FORT



Hiran Minar, Shekhupura



A VIEW OF APPROVED DESIGN OF NATIONAL MUSEUM OF PAKISTAN, ISLAMABAD





THANK YOU