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and Preservation, Boston University, U.S.A
and
Expert Member, ICOMOS International Committee on Archaeological
Heritage Management (ICAHM)
*Formerly, Director General of Archaeology & Museums in Pakistan
& Archaeological Advisor to the Government of Bahrain*



(June 2, 2012)

C O N T E N T S

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II. EDUCATION

III. PROFESSIONAL APPOINTMENTS

- a. Heritage Preservation and Management*
- b. Teaching and Research Appointments in Pakistan, England and U.S.A.*
- c. International Assignments as Adviser, Consultant and Expert*
- d. Assignments to the World Heritage Centre (WHC)*
- e. Assignments as International Expert and Consultant for the ICOMOS*
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IV. PROFESSIONAL EXPERTISE IN ARCHAEOLOGY AND HERITAGE CONSERVATION

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- (b) Archaeological Field Research Projects*
- (c) Establishment and Development of Museums*

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VII. PROFESSIONAL AFFILIATIONS AND MEMBERSHIP

ANNEXURE – A: List of project proposals for conservation of monuments and sites,
ANNEXURE – B: List of Newspaper articles.

Section - I
PERSONAL

Birth date and place:

September 02, 1936; Gujranwala (Punjab), Pakistan

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Section - II
EDUCATION

B.A. (Hons) 1956:

Gordon College, (American Presbyterian Mission), Rawalpindi, Pakistan.

M.A.1958:

University of the Punjab, Department of History (and Archaeology), Lahore, Pakistan.

Ph.D. 1970:

University of Pennsylvania, Department of Anthropology, Philadelphia, U.S.A.

(Title of Ph.D. Dissertation: “*The Early Harappan Period in the Greater Indus Valley and Northern Baluchistan, circa 3000 – 2400 BC.*”).

Section - III
PROFESSIONAL APPOINTMENTS

Between 1958 and 1996 (38 years), held positions of various ranks in the Department of Archaeology and Museums of Pakistan’s Federal Government except for appointments as Archaeological Advisor to the Government of Bahrain (1980-1982), Senior Fulbright Scholar, U.S.A. (1988-89), Visiting Lecturer (University of California, Berkeley (1977) and as a Graduate Student at the University of Pennsylvania, U.S.A. (1967-1970).

Several national programs of conservation of monuments, archaeological field investigations, documentation of ancient sites, establishment of new museums, training of young people and publications on archaeological heritage were initiated and implemented. The administrative appointments are listed below in reverse order.

III. a. HERITAGE PRESERVATION AND MANAGEMENT

(*Appointments in the Department of Archaeology and Museums of Pakistan's Federal Government between 1959 and 1996*)

- **Director General** of Archaeology and Museums, Government of Pakistan, Karachi: 1993 to 1996 -- (3 years).
 - **Director** of Archaeology (Heritage Preservation & Management), Lahore: 1983-88 & 1989-93 – (9 years)
 - **Director** of Explorations and Excavations, Government of Pakistan, Karachi: 1973 to 1977 and 1982-83 – (5 years)
 - **Director**, National Museum of Pakistan, Karachi: 1979-80 – (1 year)
 - **Assistant Director** of Explorations & Excavations, Government of Pakistan, Karachi: 1966-67 & 1971 to 1973 – (3 years)
 - **Field Officer**, Explorations and Excavations, Government of Pakistan, Karachi: 1961-1966 – (5 years)
 - **Curator-in-charge**, Archaeological Museum, Harappa: 1959-61-- (2 years)
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III. b. TEACHING AND RESEARCH APPOINTMENTS IN PAKISTAN, ENGLAND AND U.S.A.

In addition to the responsibilities of discovering, preserving and management of archaeological and architectural heritage, also taught at national and international academic institutions occasionally, and on full-time after retirement from the Government of Pakistan in 1996. Taught Asian cultures and civilizations of South and Central Asia, International heritage management, Asian art and architecture, religious sculptures; developed and introduced new courses aimed at promoting knowledge and understanding of Asian cultures and religions. The teaching appointments and courses are listed below in chronological order:

1977: *University of California, Berkeley, Department of South and Southeast Asian Studies (Spring Semester).*

1987-88: *University of the Punjab, Lahore, Department of History (Fall and Spring Semesters).*

1988: *University of Pennsylvania, Philadelphia, Department of Anthropology. (Fall Semester).*

1991-92: *University of the Punjab, Lahore, Department of History (Fall and Spring Semesters).*

1996: *University of the Punjab, Lahore, Department of History (Fall Semester).*

1997 and 1998 : *Boston University, Department of Archaeology, Boston (Spring Semesters).*

1999: *Harvard University, Department of Anthropology / Asia Center as Senior Research Scholar (Fall Semester).*

2000: *University of California, Berkeley, Department of Anthropology. (Spring Semester)*

Since September 2000---- Professor of Archaeology and International Heritage Management, *Boston University*, Department of Archaeology.

Teaching/ taught the following undergraduate and graduate courses:

AR 221: Archaeology of the Islamic World
AR 261: Heritage of Asia/Asia's Cultures and Civilizations
AR 262: Asian Gods and Goddesses
AR 360: The Indus Valley
AR 480-/780: Archaeological Ethics and Law
AR 504 Preserving World Heritage: Principles and Practice
AR 560: Civilizations of Central and South Asia
AR 810: International Heritage Management

Other Academic Appointments:

- *Honorary Adjunct Professor*, Delhi University, Department of History, Delhi, India (since 2008).
- *Member*, Ph.D. Examination/ Jury Committee, Sorbonne University, Paris, France (2010)
- *Adviser/ Consultant*, Department of Archaeology and Anthropology, Shah Abdul Latif University, Khairpur, Pakistan (since 2010).
- *External Examiner/ Expert* for evaluating Ph. D. and M. Phil theses, Department of Anthropology, Quaid-i-Azam University, Islamabad, Pakistan (2012).
- *Reviewer/Examiner*, Higher Education Commission, Islamabad, Pakistan. : To review curricula of all Graduate level courses offered by all Universities in Pakistan in Archaeology, Architecture, Heritage Preservation and Museums for the National Curriculum Revision Committee.

III. c. INTERNATIONAL ASSIGNMENTS AS ADVISER, CONSULTANT AND EXPERT

* **ARCHAEOLOGICAL ADVISER** to the Government of Bahrain, Directorate of Antiquities, Ministry of Information, 1980 – 1982 to advise on archaeological field research, training for capacity building, documentation of antiquities and conservation of monuments.

* **THE WORLD BANK Consultant** for *Cultural Heritage Assessment of Fordwah Eastern Sadiqia (South) Sub-surface Drainage Project in Bahawalnagar district, Punjab, Central Pakistan* during September 1998 and May-June 1999.

* **UNESCO Consultant** on special assignment for study and preparation of *Feasibility Report on the Establishment of International Institute of Comparative Civilizations at Taxila* in the context of Silk Roads Project of the UNESCO between October and December 1996. The proposal was presented in Paris at UNESCO Headquarters office and was unanimously approved. An Institute was eventually established at Islamabad, Pakistan.

* On UNESCO, Beijing Office assignment for an *Assessment of Hanyuan Hall Conservation Project, Xi'an*, a joint work of the State Administration for Cultural Heritage, China and Ministry of Foreign Affairs, Japan between March 5 and 8, 2001.

* **National Project Coordinator** of UNESCO, Japan and Pakistan for investigation and Preservation of Gandhara Monuments, 1995 – 96.

III. d. ASSIGNMENTS OF THE WORLD HERITAGE CENTRE (WHC)

***Delegate** to WHC *Global Strategy Expert Meeting for Central Asian Cultural Heritage, Ashgabat and Mary (Turkmenistan)*, 11 to 17 May, 2000.

*On *Reactive Monitoring Mission to Lumbini (Nepal)*, June 20 – 23, 2000 initiated by the UNESCO's World Heritage Centre.

III e. ASSIGNMENTS AS INTERNATIONAL EXPERT/ CONSULTANT FOR THE ICOMOS (*International Council on Monuments and Sites*)

***Expert Member, ICOMOS International Committee on Archaeological Heritage Management (ICAHM) since 2012.**

***On behalf of the ICOMOS, Paris, the following sites were evaluated and prepared reports for consideration of the World Heritage Committee since 1998:**

- Evaluated ancient *Merv (Turkmenistan)*, December 1998.
- Evaluated *Longmen Grottoes (China)*, January 2000.
- Evaluated *Yungang Grottoes (China)*, February 28 – March 4, 2001.
- Evaluated *Pasargadae, (Iran)*, August 9 – 13, 2003.
- Evaluated *Kunya-Urgengh (Turkmenistan)* during August 14 to 22, 2004.

***Represented ICOMOS** at the following meetings:

***ICOMOS Sub-Regional Meeting on Conserving Himalayan Heritage: The Role of the World Heritage Convention*, held at Kathmandu (*Nepal*), August - September 1998.

** ICOMOS 15th General Assembly and Scientific Symposium, X'ian (China) October 18, 2005.

** 2008 ICOMOS Asia –Pacific Congress and Hangzhou Forum on World Heritage Conservation, Hangzhou (China), June 10 – 12, 2008.

III. f. INTERNATIONAL ACADEMIC APPOINTMENTS

* **Visiting Fellow and Professor** at Churchill College, Cambridge University, U.K. jointly sponsored with the British Academy, to conduct research on *Settlement Patterns and Cultural Landscape of Northern South Asia*, early October 1998 to March 1999.

* **Senior FULBRIGHT Scholar**, University of Pennsylvania, Philadelphia, U.S.A., 1988 –1989 for research and lecturing.

III. g. INTERNATIONAL COLLABORATIVE RESEARCH ASSIGNMENTS

- 1990: **Co-Investigator with Dr. H. Fujiwara from Japan** for research on Rice at Harappa in archaeological contexts.
- 1996: **Collaboration with Rita P. Wright from the U.S.A.** for a Joint Field Survey around the city of Harappa and beyond.
- 1980 - 82: **Joint Excavations at Sar and Buri, Bahrain** with local and Australian teams.
- 1966: **Collaborative Survey of sites in the Malir River Basin**, Lower Sindh with Dr. **Walter A. Fairservis** from the U.S.A.
- 1960: **Collaboration with Dr. George F. Dales from the U.S.A.** in the survey along the Makran Coast of Baluchistan.
- 1958: **Participant in the excavations at Charsada** headed by **Sir Mortimer Wheeler** from the United Kingdom.
- Currently, **Consultant** on *Multidisciplinary Research Project in the Thar Desert, Sindh, Pakistan* of the Department of Archaeology & Anthropology, Shah Abdul Latif University, Khairpur, Sindh, Pakistan.

Section – IV

PROFESSIONAL EXPERTISE IN ARCHAEOLOGY AND HERITAGE CONSERVATION

As an archaeologist and heritage conservator, developed a new methodology of documentation, analysis and interpretation of cultural properties which are foundational for future works. Led numerous field research projects for several years even until appointment to the highest position as Director General. Significant contributions are summarized below:

IV. (a) HERITAGE CONSERVATION AND MANAGEMENT

Implementation/ Execution of Conservation Projects

As Director of Archaeology for **ten years** and having been responsible for the protection and conservation of 229 out of 386 monuments and sites including those on World Heritage list,

provided an essential overall direction, technical support and supervision for restoration and conservation of more than **thirty monuments and excavated remains** of the Islamic, Buddhist and Proto-historic periods, located in the Punjab and Frontier Provinces and Northern Areas of Pakistan. The monuments included

- Buddhist monasteries, stupas and city remains in the Swat and Taxila Valleys;
- Structural remains of the Indus Civilization at Harappa;
- Islamic buildings of 16th and 17th centuries CE Lahore such as Fort and Shalamar Garden (both on UNESCO's World Heritage List).

. In the *Punjab Province* alone, the significant monuments on which special conservation works were carried out since 1983 consist of the following

-- GARDEN PAVILION (BARADARI) OF WAZIR KHAN, 1984 to 1990

Originally with the Punjab Public Library and mostly in dilapidated condition, it has been completely restored according to original design and style with fresco paintings, fountains, tanks and pavements buildings of the Medieval period.

-- LAHORE FORT, 1984-85, 1986-87, 1988-89, 1989-90 and 1990-91

In continuation of the Master Plan, major works included conservation of roof and walls of Shish Mahal; rooms, entrance and roof of Makatib Khana; roof and

Chhajja of Diwan Khas; consolidation of marble arches and columns; Lal Burj and Diwan-e-Aam.

-- SHALAMAR GARDEN, 1984 to 1989

Restoration of wall and marlons of the third terrace; walkways in geometric Mughal pattern; reconstruction of two pavilions in the second terrace on two sides of the central tank; and restoration of tessellated floor of Baradari on the first terrace.

-- TOMB OF JAHANGIR, 1985-86, 1986-87, 1989-90 and 1990-91

Repairs to the roof and parapets; restoration of walkways on the western side in geometric pattern and the facade of the tomb with red sandstone slabs inlaid with marble; repairs of the rooms of Akbari Sarai and relaying of walkways; investigation of the pavements and perimeter wall prior to their restoration in original form and pattern.

-- TOMB OF ALIMARDAN KHAN, 1989-90

Conservation of walls and restoration of entire platform in octagonal shape with brick-on-edge floor in original pattern.

-- SHEIKHUPURA FORT, 1986-87, 1987-88 and 1988-89

Underpinning of walls and restoration of external face and bastions in original pattern.

-- HIRANMINAR, 1985-86 and 1986-87

Conservation of floor and walls of the pavilion and entrance with Kankar lime repairs of the tank and corner pavilions.

-- TOMB OF PRINCE PERVEZ, 1986-87 and 1987-88

Investigation of the original plan and periods of rebuilding leading to exposure of tanks; restoration of plinth wall and the floor in geometric pattern of the octagonal platform and the tomb chamber; repairs of walls and the dome.

-- MIR CHAKAR'S TOMB, Satgara, 1987-88

Exposure of original features at the floor level and associated structures around repairs and conservation of walls; arches and recessed panels both on the inner and outer sides.

-- NANDANA FORT, 1987-88

Extensive repairs to the standing structures including the mosque and measures to improve the presentation of monument.

-- MOSQUES OF MARIYAM ZAMANI AND DAI ANGA, 1986-87 and 1987-88

Extensive repairs and conservation of walls affected by moisture, and relaying of brick floor in original pattern.

-- HARAPPA SITE, 1986-87 and 1987-88 and 1993

Conservation of the excavated brick remains and underpinning of walls. Provision of tourist facilities.

-- BAOLI (Stepped Well) AT JANDIALASHER KHAN, 1985-86

Extensive repairs to the steps and walls.

Formulation of Conservation Proposals

Supervised preparation of **fifty major proposals for the conservation and restoration of architectural heritage** of Pakistan and presented to the Government of Pakistan. More than FORTY were approved and funded initially. The list of project proposals is given in **Annexure – A**.

IV.(b). ARCHAEOLOGICAL FIELD RESEARCH PROJECTS

Planned, organized and personally directed archaeological field research projects involving extensive surveys and documentation of thousands of archaeological sites and monuments. Also conducted excavations in Pakistan, Bangladesh and Bahrain (Gulf) on sites of diverse cultural contents belonging to the Buddhist, Islamic, Medieval and Prehistoric times. In all, **forty major explorations and excavations projects** were carried out in Pakistan and other Asian countries independently and in collaboration with national and international teams: 13 in Punjab, 13 in Sindh and 5 in the Frontier Provinces and Northern Areas, 5 in Balochistan Province, 2 in Bangladesh and 2 in Bahrain.

As **Project Director**, implemented two major national schemes for Survey and Documentation of Sites and Monuments in Sindh and Punjab Provinces respectively in 1994 and 1993 - 1996.

As National Project Coordinator for Preservation of Gandhara Monuments (a Pakistan / UNESCO/ Japan Trust Fund Project), 1995 – 1996, collaborated with Japanese archaeologists

and conservators to document and preserve Buddhist cultural heritage in Gandhara.

Undertook the following archaeological research projects involving excavations and explorations (listed below by regions):

Punjab Province

01. EXPLORATIONS IN CHOLISTAN, 1974, 1975, 1976 & 1977
Conducted the first ever and most extensive survey of ancient sites and monuments in the Cholistan desert covering three districts of Bahawalnagar, Bahawalpur and Rahimyar Khan for four winter seasons. Four hundred and fourteen sites were documented ranging in date from the fourth millennium B.C. to the Islamic period. These discoveries completely changed the archaeological map of Pakistan and in particular, of the Indus Civilization settlements.
02. EXPLORATIONS IN MULTAN AND FAISALABAD DISTRICTS, 1967, 1971, 1973 & 1976
Discovered and documented 42 sites and monuments of the historical/ medieval period.
03. EXPLORATIONS IN SAHIWAL DISTRICT, 1966 & 1971
Discovered two dozen cities of the early historical period.
04. EXPLORATIONS IN THE DERA GHAZI KHAN DISTRICT, 1961
Surveyed more than one dozen ancient sites in the southern part of the district.
05. EXPLORATIONS IN LAHORE DISTRICT, 1990
Recorded 64 sites and monuments.
06. SURVEY IN BAHAWALNAGAR DISTRICT, 1992
A World Bank funded project on the eastern Sadiqia Canal conducted for cultural heritage assessment.
07. EXCAVATION AT LAHORE FORT, 1959
Inside Lahore Fort, deep diggings established the settlement history and chronology of this historic fort and the city of Lahore.
08. EXCAVATION AT THE GRAVE OF QUTABUDDIN AIBEK, LAHORE, 1960
To determine the architecture of original tomb of the Sultanate period and antiquity of the place before reconstruction of tomb over the grave.
09. EXCAVATION AT TULAMBA, 1963-64
In Multan district, a long succession of Islamic and pre-Islamic cultural periods was revealed which is now a basic framework for dating ancient settlements in the central Punjab.
10. EXCAVATION AT HARAPPA, 1966 & 1992
One of the largest cities of the famous Indus Valley Civilization, 2500-1500 B.C. Discovered series of protohistoric burials and structures in 1966 and established

chronology of occupations north of the mound.

11. *EXCAVATION AT SA.TGARA, 1971*
A Muslim town in the Okara district frequently mentioned in the Medieval history of Pakistan. Discovered series of occupations and cultural materials.
12. *EXCAVATIONS AT JALILPUR, 1971 & 1976*
A settlement of the late fourth and early third millennia B.C. in the Central Indus Valley representing the early formative stage of the Indus Civilization. Established chronology of the settlement and its relation with contemporary sites.
13. *EXCAVATION AT JHANG, 1974*
An early third millennium B.C. site near Islamabad belonging to an early stage of Indus Civilization and of later occupations.

Sindh Province

14. *EXPLORATIONS IN JACOBABAD DISTRICT, 1961*
Recorded several protohistoric sites in Jhatpat area and carried out test excavations at one site.
15. *EXPLORATIONS IN NAWAB SHAH AND THATTA DISTRICTS, 1963*
Extensive explorations of the Islamic sites in central Sindh and test diggings at Bhiro Bham which revealed valuable information on the early Arab settlement and cultural materials.
16. *EXPLORATIONS OF MALIR RIVER BASIN, 1964*
More than twenty sites of Iron Age period were recorded.
17. *EXPLORATIONS IN SUKKUR-ROHRI REGION, 1966*
Survey of prehistoric sites revealed new data on prehistoric environment and stone tools industry areas.
18. *EXPLORATIONS IN KARACHI DISTRICT AND THANO BULA KHAN, 1966*
Carried out in collaboration with an American Mission from the Natural History Museum, New York led by *Dr. W. A. Fairservis*. Recorded several prehistoric sites.
19. *EXTENSIVE EXPLORATIONS IN DESERT AREA OF UPPER SINDH (SUKKUR DISTRICT), 1983*
Carried out along the dry bed of Raini-Nara. Recorded 34 sites and collected anthropological data on traditional life of the people.
20. *EXPLORATIONS IN THE INDUS KOHISTAN, 1983*
Recorded Bronze Age settlements of the early Indus Civilization period.
21. *SURVEY OF NAGARPARKAR DISTRICT, 1987*
Documented monuments, sites and traditional culture.
22. *EXCAVATIONS AT AL-MANSURAH: Three seasons : 1965-66, 1967 & 1982-83*

The first Muslim capital city founded by the Arabs in the early eighth century A.D. and lasting until about 13th century A.D. Excavated the city plan, public buildings and fortification wall.

23. *EXCAVATIONS AT BANBHORE*

Six seasons: 1958, 1959-60, 1960-61, 1961-62, 1964 & 1965

The famous city identified with Deybul located on the Arabian Sea Coast which was conquered by the Arabs in 93 Hijra/A.D. 712. Uncovered city layout, grand mosque, defence wall and gateway systems, and established chronology of this port city.

24. *EXCAVATION AT BHIRO BHAM, 1964*

A fortified towns of the Arabs contemporary with Al-Mansurah and Deybul. Uncovered partial plan of the defence wall and sequence of occupations.

25. *EXCAVATION AT JHUKAR, 1973-74*

An Indus Civilization site of the Mature and Late cultural phases located near Mohenjodaro. Established stratigraphic sequence of occupations and chronology.

26. *EXCAVATION AT MEGALITHIC SITE, 1975*

A little explored culture of unusual features dating to 3rd-7th century A.D. on the Malir River near Karachi excavated to determine the significance of the Megaliths in the cultural history of Pakistan.

Khyber Pakhtunkhwa Province and Northern Areas

27. *SURVEY OF ANCIENT SITES IN SWAT AND DIR, 1966*

Re-examination of the protohistoric and Buddhist sites and collection of antiquities.

28. *EXPLORATIONS OF THE NORTHERN AREAS, GILGIT AND HUNZA,*

1979. Documentation of the rock engravings and examination of ancient sites.

29. *EXCAVATION AT CHARASADA, 1958*

A historic metropolis excavated under the general direction of *Sir Mortimer Wheeler*. A complete cultural sequence was obtained which is now a basic frame of reference for the Buddhist and earlier period.

30. *EXCAVATION AT NIMOGRAM, 1967*

A Buddhist religious site in the Swat Valley with three stupas and monastic establishment, yielding unique specimens of Gandhara art.

31. *EXCAVATION AT PAN DHERI, 1967*

A settlement site of the 5th-7th century A.D., contemporary with religious establishments of the region.

Balochistan Province

32. *EXTENSIVE EXPLORATIONS IN THE NORTHERN AND CENTRAL REGIONS OF BALOCHISTAN, 1973*

Covering the Zhob, Loralai, Quetta and Kalat valleys. More than one hundred ancient

sites and monuments were documented and a wealth of new cultural materials were collected.

33. EXPLORATIONS ALONG THE MAKRAN COAST, 1960
In collaboration with an American team led by *Prof. George F. Dales*. Discovered new Harappan sites and excavated at a coastal site of the Indus Civilization.
34. EXPLORATIONS IN LAS BELA, 1962
Documented about twenty sites of the pro-historic and Islamic period.
35. EXPLORATIONS IN KEJ VALLEY, 1964
Recorded more than one dozen sites of protohistoric and Islamic period.
36. EXCAVATION AT SUTKAGEN-DOR, 1960
An Indus Civilization port town excavated in collaboration with an American team.

Bangladesh

37. EXCAVATIONS AT MAINAMATI, 1962-63
A Buddhist religious site of 8th to 11th century A.D. Established chronology of structural periods of the stupa and its relation with the monastic cells.
38. EXCAVATIONS AT PAHARPUR, 1963
A Buddhist site of 9th-10th century A.D. Determined early history of the site.

Bahrain

As ARCHAEOLOGICAL ADVISOR to the Directorate of Archaeology & Museums, State of Bahrain, directed and supervised the following field projects and assisted international teams:

39. EXCAVATIONS AT SARAL-JISR, 1980-81 & 1981-82
A major project at the burial site about 2000 B.C. old, contemporary with the late history of the Indus Civilization of Pakistan.
40. EXCAVATIONS AT BURI AND A'ALI, 1980-82
Extensive tumuli sites with rich cultural materials of 2000 B.C.

Major Project Proposals for Archaeological Field Research

Supervised preparation of the following project proposals::

1. Project proposal for the *Survey and Documentation of Archaeological Sites and Monuments in Pakistan, 1991*.
2. Two project proposals for the *Survey and Documentation of Archaeological Sites and Monuments in the Punjab Province, 1992*.
3. Project proposal for the *Documentation of Monuments and Archaeological Sites of Sindh, 1992*.

4. Scheme for *Mohenjo-daro Excavations*, 1993.
5. Scheme for *Excavations at Mansurah (1995-99)*, 1993.
6. Scheme for *Surveys and Documentation of Archaeological Sites and Monuments in Baluchistan Province*, 1994.

OTHER PROJECTS

- *Co-investigator of Ethnoarchaeological Research in Chitral, northern Pakistan, 2003.*
- *Advisor, Multidisciplinary Excavation Project at Indus Valley Civilization sites in the Thar Desert, Sindh, Pakistan, 2007 – 2010.*

IV.(c) ESTABLISHMENT AND DEVELOPMENT OF MUSEUMS

Contributed to the *development of museums in Pakistan*. Major works include:

- A new Islamabad Museum was established in 1994.
- Reorganized Swat Museum, Saidu Sharif in collaboration with Japanese museologists.
- Prepared project proposals for establishment of Museum of Archaeology and Anthropology at Gilgit (1993); Museum at Rohtas Fort (1994); Ethnological and Archaeological Museum at Multan (1995) and for Expansion of Taxila Museum (1994).

Section - V SELECTED PUBLICATIONS

Among more than sixty original research works consisting of books, book chapters and research articles, nearly half were published in Pakistan and the rest have appeared in scientific journals of England, France, Italy, Germany, U.S.A., Bahrain, Japan, Iran, China, Turkmenistan and India. Some of the papers have also been translated into Japanese, French, German and Sindhi languages.

Books

- 1997 *Ancient Cholistan: Archaeology and Architecture*. Lahore: Ferozsons (Pvt.), Ltd.
- 1995 *Legislation for the Protection and Management of Archaeological Heritage of Pakistan*. Karachi: Department of Archaeology and Museums.
- 1983 *The Dilmun Burial Complex at Sar: 1980-82 Excavations in Bahrain*. Ministry of Information, Directorate of Archaeology and Museums, State of Bahrain.
- 1973 *Present State of Research on the Indus Valley Civilization*. International Symposium on Mohenjodaro. Karachi: Department of Archaeology & Museums.

Book Chapters:

- ❖ --“*The Archaeology of Sindh (since 1930)*”: A 55-page long supplement to the *Antiquities of Sind*. Third Edition. Karachi: Department of Culture and Tourism, Government of Sindh: 153-208, 1998.
- ❖ --“*The Indus Valley: 3000-1500 BC*”. In, Dani, A. H. and Mohan, J. -P. (eds.), *History of Humanity: Scientific and Cultural Development*. Vol. II, Paris and London: UNESCO and Routledge: 246 - 265, 1996. (Co-author B. K. Thapar).
- ❖ --“*Heritage Preservation in Pakistan from the National and International Perspectives*”. In, Zaman, Mahmood, *State Vandalism of History in Pakistan*. Lahore/ Karachi/ Islamabad: Vanguard Books (Pvt), Ltd: 104 – 128, 2011.

In Press

- “*Preliminary Observations on the Ceramics collected by A. Ghosh from Rajasthan in 1950.*” In, Essays in Honour of Dr. S.P. Gupta. Indian Archaeological Society, New Delhi (forthcoming in 2012).
- “*Cultural Continuity of the Indus Valley Civilization in Sindh, Southern Pakistan.*” In, Mokammal H. Bhuiyan (ed), *Studies in Heritage of South Asia* (Essays in Memory of Dr. Harunur Rashid). Dhaka (Bangladesh): Heritage Management and Research (forthcoming in 2012).
- “*Early Islamic Glazed Pottery from Banbhore and its Connections with Contemporary Cities during 8th to 11th centuries CE.*” In, Mokammal H. Bhuiyan (ed), *Studies in Heritage of South Asia* (Essays in Memory of Dr. Harunur Rashid). Dhaka (Bangladesh): Heritage Management and Research (forthcoming in 2012).
- “*Heritage Management and Conservation in Pakistan: The British Legacy and Current Perspectives,*” *Heritage 3*. Hazara University, (forthcoming in 2012).

Research Papers

(*In Pakistan, Japan, China, U.S.A., Germany, France, Italy, Iran, England, Bahrain, India and Turkmenistan*)

(In 2000 s)

Mughal, Mohammad Rafique

2001 Resurrecting Sir Aurel Stein from the Cholistan Desert, *Context*, (**Boston**): Boston University Center for Archaeological Studies, 15 (2): 1 – 4.

2003 Evidence of Rice and *Ragi* at Harappa in the Context of South Asian Prehistory. In, Misra, V.N. and Kajale, M.D. (eds), *Introduction of African Crops into South Asia*. **Pune**: Indian Society for Prehistoric and Quaternary Studies: 73 – 78.

- 2004 Landscapes, soils, and mound histories of the Upper Indus Valley, Pakistan: new insights on the Holocene environments near ancient Harappa, *Journal of Archaeological Science*, 31 : 777 – 797 (Co-authorship with by Schuldenrein, J., Wright, R, and Khan, M. Afzal).
- 2005 “Impact of urbanization around the city of Lahore and the world heritage monument of Shalamar Garden (Pakistan)”, *Proceedings of ICOMOS 15th General Assembly and Scientific Symposium* on “Monuments in their Setting: Conserving Cultural Heritage in Changing Townscapes and Landscapes,” **Xi’an (China)**: World Publishing Corporation, Volume 1: 419 – 424.
(Peer reviewed and selected. Only 170 out of 600 papers were selected for publication)
- 2005 Sir Aurel Stein's Papers on the Survey of Ghaggar- Hakra River, 1940-42. In, Jarrige, C. and Lefevre, V. (eds.), *South Asian Archaeology 2001*. **Paris**: 277-280.
- 2005 Monuments at Kunya-Urgench, Turkmenistan: Comments on Preservation Policies and Procedures, *Circle of Inner Asian Art, SOAS (University of London)*, 20: 16 – 19.
(Now, *Journal of the Inner Asian Art*)
- 2005 The Emergence of Satallite Communities along the Beas Drainage: Preliminary Results from Lohama Lal Tibba and Chak Purbane Syal. In, Jarrige, C. and Lefevre, V. (eds.), *South Asian Archaeology 2001*. **Paris**: 327 -335. (Co-authorship with by Schuldenrein, J., Wright, R, and Khan, M. Afzal).

(Summaries/ abstracts of invited papers published)

- 2005 --“The Hakra Cultural Horizon in the Greater Indus Valley” originally presented in 2005 at *Harvard – Kyoto Roundtable Pre-symposium* organized by the Research Institute for Humanity and Nature, **Kyoto, Japan**.
- 2006 --“Expansion of Architectural Traditions of Kunya-Urgench to Pakistan and Beyond” presented at the UNESCO –sponsored *International Scientific Conference on Appraisal of Historical-Cultural Values and Determination of the Ways on the Protection of the World Heritage Properties*, **Ashgabad, Turkmenistan**, May 25 – 27, 2006.
- 2007 “Emerging Challenge of Preserving Human Heritage in the Context of Socio-Economic and Political Changes in Asia: Conflicts, Constraints and Compromises”, Paper presented to the Beijing Forum (2007) on *The Harmony of Civilizations and Prosperity for All- Diversity in the Development of Human Civilization*, **Beijing** , November 2- 4, 2007.
- 2007 “Preservation of the Silk Road: A View from Gandhara”. Paper presented at ICOMOS - UNESCO International Symposium at **Xian**, September 29- 30, 2007.
- 2008 Paper on “Ghaib Kari – Traditional Art of Wood Painting and Restoration in Pakistan” presented to International Seminar on Conservation of Painted Surfaces on Wooden Structures, **Beijing**, October – November, 2008.
- 2008 “Conservation and Public Use of the World Heritage: An Asian Experience” . Paper presented to 2008 ICOMOS Asia_ Pacific International Congress at **Hangzhou, China**, June 10 – 12, 2008.
- 2011 “Cultural Interaction between Turkmenistan and Pakistan during the Bronze Age (circa 2500 – 1000 BCE), presented to an International Conference at Ashgabad on April 7 & 8, 2011.

(Publications in 1990s)

01. A Preliminary Review of Archaeological surveys in Punjab and Sindh: 1993-95, *South Asian Studies* (**London**), 13: 275-284, 1997.
02. Recent Documentation of Ancient Sites and Monuments in the Punjab Province, Punjab *Journal of Archaeology and History*, Vol. 1 (1), 1997. **Lahore**: Department of Archaeology, Government of the Punjab.
(Co-authors Muhammad Afzal Khan and Muhammad Hassan).
03. Archaeological Sites and Monuments in Punjab: Preliminary Results of Explorations, 1992-96, *Pakistan Archaeology, Special Number 29 (1994-96)*: Pages 1 - 474, Figures 107 and Photographs XXII, 1996. **Karachi**: Department of Archaeology and Museums.
(Co-authors Farooq Iqbal, Muhammad Afzal Khan and Muhammad Hassan).
04. The Indus Valley: 3000-1500 BC In, Dani, A. H. and Mohan, J. -P. (eds.), *History of Humanity: Scientific and Cultural Development*. Vol. II, **Paris and London**: UNESCO and Routledge: 246 - 265, 1996. (Co-author B. K. Thapar).
05. Theory and Practice in Garden Conservation. In, Hussain, M., Rehman, A. and Wescoat, J.L. (eds), *The Mughal Garden: Interpretation, Conservation and Implications*. **Islamabad - Lahore – Karachi**: Ferozsons (pvt.) Ltd. :111- 113, 1996.
06. The Harappan Nomads of Cholistan. In, *Allchin B. (ed.), Living Traditions: Studies in the Ethnoarchaeology of South Asia*. **New Delhi**: Oxford & IBH Publishing Co. Pvt. Ltd.: 53- 68, 1994.
07. The Geographical Extent of the Indus Civilization during the Early, Mature and Late Harappan Times. In, Possehl, G. (ed.), *South Asian Archaeology Studies*. **New Delhi**: Oxford & IBH Publishing Co. Pvt. Ltd.: 123-143, 1992.
08. The Consequences of River Changes for the Harappa Settlements in Cholistan, *Eastern Anthropologist* (**Lucknow**), Special Number on Indus Civilization. Vol.45 (1 & 2): 105-116, 1992.
09. Jhukar and the late Harappan Cultural Mosaic of the Greater Indus Valley. In, Jarrige C. (ed.), *South Asian Archaeology 1989*. **Madison, Wisconsin**: The Prehistory Press: 213-221, 1992.
10. Rice and Ragi at Harappa: Preliminary Results by Plant Opal Analysis, *Pakistan Archaeology* (**Karachi**), No. 27: 129-142, 1992.
11. Ancient Sites in Cholistan, Bahawalpur (1974-77), *Lahore Museum Bulletin* (**Lahore**), and Vol. IV (2): 1-52, 1991.
12. The Cultural Patterns of Ancient Pakistan and Neighbouring Regions, circa 7000-1500 BC, *Pakistan Archaeology* (**Karachi**), No.26: 218-237, 1991.
13. Archaeological Field Research in Pakistan since Independence: An Overview, *Bulletin of Deccan College and Postgraduate Research Institute* (**Pune**), Vol.49: 261-278, 1990.

14. Further Evidence of the Harappan Culture in the Greater Indus Valley: 1971-90, *South Asian Studies* (**London**), No. 6: 175- 199, 1990.
15. The Protohistoric Settlement Patterns in the Cholistan Desert, Pakistan. In, Teddei, M. (ed.), *South Asian Archaeology 1987*. **Rome**: Istituto Italiano per il Medio ed Estremo Oriente: 143- 156, 1990.
16. The Decline of the Indus Civilization and the Late Harappan Period in the Indus Valley, *Lahore Museum Bulletin* (**Lahore**), Vol.III (2): 1-17, 1990.
17. The Harappan Settlement Systems and Patterns in the Greater Indus Valley (Circa 3500-1500 BC), *Pakistan Archaeology* (**Karachi**), No.25: 1-72: 1990.
18. The Harappan twin Capitals and Reality, *Journal of Central Asia*, (**Islamabad**), Vol. XIII (1): 155-162, 1990.
19. (In Japanese) New Archaeological Evidence on the Harappan Problem from the Recent Researches in the Cholistan Desert, *Kokogaku Zasshi* (**Japan**): *Journal of the Archaeological Society of Nippon*, LXXV (3): 34-57 (with a summary in English on p. 381), 1990.

(In 1980 s)

1. The Development of Protohistoric Research in Pakistan: 1970-85, *Journal of Central Asia* (**Islamabad**), Vol. III (1): 47-77, 1989.
2. (In Japanese) The Buddhist Road: Rock Engravings Along the Karakorum Highway, *Museum Kyushu* (Fukuoka: The Kyushu Association for the Promotion of the Establishment of Museum, **Japan**), Vol.28 (1): 59-61, 1988.
3. Genesis of the Indus Valley Civilization, *Lahore Museum Bulletin* (**Lahore**), Vol.I (1): 45-54, 1988.
4. (In German) Die Indus - Civilization: Entstehung Einer Hockkultur (The Indus Civilization: Beginning of High Culture), *Vegessene Stadte Am Indus*, Mainz Am Rhein (**Germany**): Verlag Philipp Von Zabern: 112-118, 1987.

(Also published in French) La naissance de la civilization de l'Indus, *Les Cities Oubliees de lí Indus: Archaeologie due Pakistan*. **Paris**: Musee National des Arts Asiatiques Guimet: 71-74, 1988.
5. The Significance of some Pre-and Protohistoric Discoveries in the Karakorum Region, *Journal of Central Asia* (**Islamabad**), Vol. VIII, No.2: 213-235, 1985.
6. Tombs of Uchh, *Heritage í85* (**Islamabad**): 39-44, 1985.
7. History of Lahore and its Monuments. In, Shakoori, A. R. and Mirza, M. R. (eds.), *Souvenir Sixth Pakistan Congress of Zoology*, **Lahore**: Department of Zoology, University of the Punjab: 1-7, 1985.
8. Allama Iqbal Museum, *Pakistan Pictorial* (**Islamabad**), Vol. III (6): 9-13, 1984.

9. The Post-Harappan Phase in Bahawalpur District, Pakistan. In, Lal, B.B. and Gupta, S.P. (eds.), *Frontiers of the Indus Civilization*. **New Delhi**: Books and Books: 499-503, 1984.
10. Current Research Trends on the Rise of Indus Civilization. In, Urban G. /Jansen M. (eds.), *Veroffentlichungen des Geodatischen Institutes der Rheinisch -Westfalischen Technischen Hochschule Aachen*, Nr. 34:500 and 6. December 1981 (**Aachen, Germany**): 13-20, 1983.
11. Recent Archaeological Research in the Cholistan Desert. In, Possehl, G. L. (ed.), *Harappan Civilization: A Contemporary Perspective*. Oxford & IBH Publishing Co., **New Delhi**, Bombay, Calcutta: 85-95, 1982.
12. New Archaeological Evidence from Bahawalpur. In, Dani, A. H. (ed.), *Indus Civilization: New Perspective*. (**Islamabad**): Centre for the Study of the Civilizations of Central Asia, Quaid-e Azam University: 33-41, 1981.
13. The Origins of the Indus Civilization, *Sindhological Studies* (**Jamshoro**): University of Sindh: 1-10, 1980.

(In 1970 s)

1. The Early Harappan Cultural Phase ñ A Reply, *Purattatva: Bulletin of the Indian Archaeological Society* .**New Delhi**, No. 10: 84-88, 1978.
2. Cultural links between Pakistan and Iran during the Protohistoric Period (5000-1000 BC). *Pakistan-Iran: A Common Culture*. Islamabad: Institute of Persian Studies: 33-82, 1975. -- Translated into Persian, *Iranian Journal of Archaeology and History* (**Tehran**), Vol.4 (1): 15-33. 1990.
3. Explorations in Northern Balochistan, 1972: New Evidence and Fresh Interpretation, *Proceedings of the IInd Annual Symposium on Archaeological Research in Iran*, **Tehran**: Muzeh- e-Iran Bastan: 276-286, 1974.
4. New Evidence of the Early Harappan Culture from Jalilpur, *Archaeology* (**New York**), Vol.27 (2): 276-286, 1974.
5. A Summary of Excavations and Explorations in Pakistan, *Pakistan Archaeology* (**Karachi**) No. 8: 113-158, 1972.
6. Introduction to the Pottery of Periods I and II of Sarai Khola. In, Halim, M. A., *Excavations at Sarai Khola, Part II*, *Pakistan Archaeology* (Karachi), No. 8: 34-53, 1972.

(In 1960 s)

1. Excavations at Tulamba, West Pakistan, *Pakistan Archaeology* (**Karachi**), No. 4: 11-152, 1967.
2. Gujrat by the Chenab (An Account of Antiquities and Monuments), *Pakistan Quarterly* (**Karachi**), Vol.12 (1): 12-19, 1964.

(In addition, more than forty articles of popular interest were published in several newspapers of Pakistan, Japan, Hong Kong and Indonesia which are listed in **Annexure –B**).

Section - VI
HONORS and AWARDS

1992: National Award of *Tamgha-i-Imtiaz*, conferred by the President of Pakistan for making outstanding contributions to the archaeology and culture of Pakistan.

- 1967 Fulbright-Hays Travel Grant to commence Graduate studies at the University of Pennsylvania, Philadelphia, U.S.A.
- 1967-68: JDR 3rd Fund Grant for Graduate study and Research, U.S.A.
1968-70: University of Pennsylvania Museum Research Fellowship, U.S.A.
- 1973: Iranian Ministry of Culture and Arts Grant to attend Second Archaeological Symposium and sites in Iran.
- 1977 Fulbright-Hays Travel Award for teaching at University of Berkeley and lecturing at various American Universities.
- 1987: IsMEO (Istituto Italiano per il Medio ed Estremo Oriente) Grant to participate in the Ninth International Conference on South Asian Archaeology at Venice, Italy.
- 1988-89: Fulbright-Hays Senior Scholars Grant to do research and teach at the University of Pennsylvania, Philadelphia.
- 1990: Postgraduate Research Institute of Archaeology, Colombo grant to participate in the Symposium on the History and Technology in South and Southeast Asia at Kandy, Sri Lanka.
- 1991 and 1995: Twice - The British Council Grants, for participation in International Conferences at Cambridge University, U.K.
- 1993: ICOMOS (International Council on Monuments and Sites) Sri Lanka Grant to attend Tenth General Conference of the ICOMOS at Colombo.
- 1994: Lumbini Development Trust and Japan Buddhist Federation Grant to attend “Specialists’ Meeting for the Maya Devi Temple Restoration Project” at Lumbini, Nepal.
- 1995: UNESCO’s Grant to attend meeting of Experts on World Heritage Information Management in Paris, France.
- 1997: IsMEO Grant to participate in the 14th International Conference on South Asian Archaeology in Rome, Italy.
- 1988: Invited to NARA Silk Road Exposition for two months.

Awarded KEY OF FUKUOKA CITY by the Mayor on the occasion of my lecture given at Kyushu University on Buddhist discoveries on the Silk Road in Pakistan.

- 1998- 99: Visiting Fellowship, Churchill College, University of Cambridge, U.K.
- 2000: Stein-Arnold Research Grant of the British Academy, London.
- 2001: Travel Grant from Boston University to attend 16th International Conference on South Asian Archaeology in Paris, France.
- 2004: De Montfort University, Leicester and Circle of Inner Asian Art, University of London Grant to participate in an International Conference on “The South Asian Legacy of Sir Aurel Stein” at Leicester, U.K., 6 & 7 March, 2004.
- 2004 Ministry of Culture, Government of Turkmenistan Grant to participate in the International Conference on Architecture of Sultan Sanjar at Ashgabat, November 17 & 18, 2004.
- 2005 Research Institute for Humanity and Nature, RIHN, Kyoto Grant to participate in an International Symposium on Ethnogenesis of South and Central Asia, June 6 – 8, 2004.
- 2005 Two Grants from Boston University, U.S.A. and Victoria & Albert Museum, U.K. for participation in the Biennial Conference of the European Association of South Asian Archaeologists and Art Historians at London, July 4 – 8, 2005.
- 2006 ICOMOS (International Council on Monuments and Sites) China Grant to participate in the ICOMOS 15th General Assembly and Scientific Symposium on “Monuments in their Settings: Conserving Cultural Heritage in Changing Townscapes and Landscapes” at Xian, Octo21,2005.
- Ministry of Culture, Government of Turkmenistan grant to attend UNESCO –sponsored *International Scientific Conference on Appraisal of Historical-Cultural Values and Determination of the Ways on the Protection of the World Heritage Properties*, Ashgabat, Turkmenistan, May 25 – 27, 2006.
- 2007 Award by Beijing Forum to participate in an international conference on *The Harmony of Civilizations and Prosperity for All- Diversity in the Development of Human Civilization*, Beijing , November 2- 4, 2007.
- 2007 ICOMOS – UNESCO grant to participate in an International Symposium at Xian, September 29- 30, 2007.
- 2008 ICOMOS-China sponsored grant to attend an International Seminar at Beijing, October-November, 2008.
- 2008 ICOMOS Asia- Pacific grant to attend International Congress at Hangzhou, China, June 10 – 12, 2008.
- 2011 Ministry of Culture of Turkmenistan grant to participate in an an International Conference at Ashgabat on April 7 & 8, 2011.

Section - VII
PROFESSIONAL AFFILIATIONS AND MEMBERSHIP

Current International Affiliations

***Hon. Fellow**, *Society of Antiquaries of London*.

***Member**, *International Committee on Historic Gardens and Cultural Landscapes*, Italy.

***Research Associate**, Peabody Museum, Harvard University.

***Consulting Scholar**, University Museum of University of Pennsylvania, 1988 – 2006.

Former affiliations

***Hon. Chairperson**, Cultural Heritage Management, Lahore.

***Hon. Director**, Pakistan Heritage Society, Lahore.

***Member**, Pakistan Society of Archaeology, Archives & Museums, Lahore.

***Member** of the Permanent Council, International Union of Prehistoric and Protohistoric Sciences, Gent, Belgium until 2006.

***Member**, Editorial Board, ENCYCLOPEDIA OF ARCHAEOLOGY, 2001 - 06.

***Member**, Editorial Board for South Asia, ENCYCLOPAEDIA BRITANNICA 1998 – 2000.

(Also served on the following Trusts, Boards and Committees at different times):

Trustee, Mohatta Palace Gallery Trust, Karachi.

Trustee, Baltit Heritage Trust, Aga Khan Cultural Service, Karachi.

Secretary, Board of Governors, National Fund for Cultural Heritage, Islamabad.

Secretary, Advisory Board for the Department of Archaeology and Museum, Karachi.

Member, Committee for Sindh Cultural and Historical Heritage, Jamshoro.

Member, Board of Governors of Bahawalpur Museum, Bahawalpur.

Member, Board of Governors of Lahore Museum, Lahore.

Member, Advisory Board for Pakistan Maritime Museum, Karachi.

Member, Advisory Committee for Sindh Cultural Heritage, Karachi.

Member, Executive Committee, National Fund for Cultural Heritage, Islamabad

Member, Executive Committee, Quaid-i-Azam Academy, Karachi.

Member, Acquisition Committee for the Establishment of Quranic Gallery, Lahore.

Member, Committee for Conservation of Monuments in Sindh

ANNEXURE -- A

(from Section IV a)

**LIST OF PROJECT PROPOSALS FOR CONSERVATION OF
MONUMENTS AND SITES**

01. Revised Master Plan for the Preservation and Restoration of *Lahore Fort*, 1984, (Modified).
02. Project for the Preservation and Restoration of *Wazir Khan's Baradari*, Lahore, 1984. (Implemented)

03. Project for the Pakistan-Italian Project for Training of Professional Personnels for the Conservation of Cultural Heritage of Pakistan, 1984. (Revised).
04. Project for *Wah Garden*, District Rawalpindi (Preservation and Restoration), 1984. (Revised and enlarged in 1994).
05. Project for the Mughal *Baradari and Garden at Valai*, District Peshawar (Preservation and Restoration), 1985. (Revised).
06. Master Plan for the *Tombs of Jahangir and Asif Khan and Akbari Sarai*, Lahore (Preservation and Restoration), 1986. (Revised).
07. Project for the Preservation and Restoration of *Shish Mahal inside Lahore Fort*, Lahore, 1986. (Revised in 1991).
08. Project for Restoration and Development of *South-Western Part of the Lahore Fort*. "Proposed Survey 1986-87", 1986. (Revised and enlarged in 1991. *Pakistan Institute of Archaeological Training and Research* was established and essential facilities were created.
09. Master Plan for the Restoration and Preservation of *Kamran's Baradari*, Lahore, 1987. (Revised and implemented by the Lahore Development Authority).
10. Project for Restoration and Preservation of *Eastern Dalans of Jahangir's Quadrangle inside Lahore Fort*, 1987. (Revised in 1991 and 1994).
11. Master Plan for the Conservation and Restoration of *Jahangir's Mausoleum, Lahore (Walkways and Water Channels)*, 1987. (Revised in 1991 and implemented).
12. Project for Restoration and Preservation of *Rohtas Fort*, District Jhelum, 1988. (Revised in 1991 and completed).
13. Project for Preservation and Restoration of *Mir Chakar's Tomb at Satgara*, District Okara. "Proposed Survey 1986-87", 1988.
14. Project for the Preservation and Restoration of *Perimeter Wall of Jehangir's tomb*, 1989. (Revised in 1991)
15. Project for the Preservation and Restoration of *Red Sandstone Facade of Jahangir's Tomb*, Shahdara, Lahore, 1989. (Revised in 1991).
16. Master Plan for the Preservation and Restoration of *Sang-e-badal Flooring of Plat form of Jahangir's Tomb*, 1991.
17. Revised Proposal of *Rohtas Fort - Nomination for UNESCO's World Heritage List*, 1990.
18. Project for the Development and Preservation of *Asif Khan's Tomb*, Shahdara, Lahore, 1992.
19. Development Project for the Preservation of *Noor Jahan's tomb*, Shahdara, Lahore, 1992.
20. Project for the Preservation and Restoration of *Akbari Sarai*, Jahangir's tomb, Shahdara, Lahore, 1992.
- 21-23. THREE Schemes for the provision of Public Utilities Areas (1992) in
 - (a) Lahore Fort (completed)
 - (b) Shalamar Garden (revised)
 - (c) Jahangir's Tomb (completed)
24. Project for Preservation and Restoration of *Basement Chamber of Shish Mahal*, Lahore Fort, 1992. (Revised).
25. Project for Restoration and Preservation of *Western Dalans of Jahangir's Quadrangle*

inside Lahore Fort, 1992.

26. Project for the Preservation and Presentation of *Harappa Remains and Development of Museum*, 1992.

27-31. FIVE Scheme for Landscaping and Development of Historical Gardens at (a) Shalamar (b) Lahore Fort, (c) Jahangir's tomb, (d) Akbari Sarai, (e) Asif Khan's Tomb and (f) Tomb of NoorJahan, 1993.

The following heritage conservation schemes / projects were prepared under Dr. M. R. Mughal's supervision and technical guidance:

32. Project for the Conservation and Restoration of Archaeological Remains of *Takht-e-Bhai*, District Mardan, 1992. (completed in 1996).

33. Project for the *Restoration of Gorkhattree*, Peshawar, 1992 (completed in 1996).

34. Conservation Project for *Archaeological Remains of Butkara*, Swat, 1992. (completed in 1996).

35. Project for Conservation and Restoration of *Four Anonymous Tombs at Lal Mohra Sharif*, Daia Ismail Khan, 1992. (completed in 1996).

36. Project for Restoration and Conservation of *Archaeological Sites of Jamal Garhi*, Mardan District, 1992. (completed in 1996).

37. Project for Restoration of *Tomb of Mirza Jani Beg, Makli Hill, Thatta*, 1993.

38. Documentation and Preservation of *Historical Necropolis at Makli Hill, Thatta.*, 1994.

39. Conservation and Restoration of *Ghulam Nabi Kalhora's Tomb* at Hyderabad, 1994.

40. Restoration of *Diwan Shurfa Khan Tomb* at Maldi Hill, Thatta, 1994.

41. Conservation and Restoration of *Tomb of Mirza Isa Khan II* at Makli Hill, Thatta, 1994.

42. Restoration of *Four Stone Canopies at Makli Hill, Thatta*, 1994.

43. Conservation and Restoration of *Mir's tomb*, Hyderabad, 1994.

44. Restoration of *Kohat (Durrani) Fort*, 1993.

45. Restoration of *Bala Hisar Fort*, 1993.

46. Conservation and Restoration of *Attock Fort*, 1993.

47. Preservation and Restoration of the *Tajjar building* at Jinnah Bagh, Larkana, 1995.

48. Preservation and Restoration of *Khudabad Mosque*, district Dadu, 1996.

49. Conservation and Restoration of *Mir Masoom Shah Minaret* at Sukkur, Sindh, 1996.

50. Conservation and Restoration of *Sathayan-jo-than*, Rohri, district Sukkur, Sindh, 1996.

ANNEXURE -- B

(from Section V) LIST OF NEWSPAPER ARTICLES

On art, archaeology and architecture published in the national and some international Newspapers aimed at creating public awareness of the cultural heritage:

(on ancient civilizations and cultures)

01. Origin of the Indus Civilization, *Mainichi Daily News*, Tokyo (Japan), March, 23, 1980.

02. Indus Civilization : How it all began. *The South China Morning Post*, (Hong Kong), March

- 23, 1980.
03. The Origins of the Indus Civilization, *The Indonesia Times*, Djakarta (Indonesia), May, 1980.
 04. Muslim Ceramics from Banbhore, *Pakistan Times* (Lahore), October 21, 1966 and *Morning News* (Dacca and Karachi), October 18, 1966.
 05. Banbhore Glass Discoveries, *Morning News* (Karachi), September 20, 1967.
 06. A Forgotten Tomb of an Arab Governor, *Dawn* (Karachi), 24, 1966.
 07. Evolution of the Mosque, *Pakistan Times* (Lahore), Part-1 August 5, 1966 and Part-11, August 12, 1966.
 08. Pakistan's Oldest Mosque, *Morning News* (Dacca and Karachi), September 11, 1966.
 09. Pakistan's first Mosque was built 1250 years ago (In Urdu), *Kohistan* (Lahore), November 24, 1966.
 10. Discovery of the Oldest Mosque at Banbhore (In Urdu), *Anjam* (Karachi), September 24, *aadMashriq* (Lahore), September 18, 1966.
 11. The Great Mosque at Qairwan, *Pakistan Times* (Lahore), October 14, 1966 and *Morning News* (Dacca), December 2, 1966.
 12. Exquisitely Carved Chaukhandi Tombs, *Morning News* (Karachi), November 2, and *Evening Star* (Karachi). October 28. 1966.
 13. History Revealed at Mangoo Pir, *Morning News* (Karachi), July 31, 1966.
 14. Ruins of a Mosque at Dhandy, *Morning News* (Karachi), December 3, 1966.

 15. The Roots of Islam in Pakistan *The Muslim* (S\amahaiX) June 15 1979.
 16. The Mosques and Mausolea in Pakistan (In Urdu), *Daily Imroze* (Multan), July 13, 20 and 27, 1979.
 17. The Mosque and Muslim Shrines in Pakistan (In Urdu), *Imroze* (Special Edition of Conference on Islamic Heritage, Multan), September 29, 1987.
 18. The Tulamba fort, *crmlngNews* (Karachi), September 10, 1967.
 19. Impregnable Kalan Kot was built of burnt bricks. *Illustrated Weekly of Pakistan (Karachi)*, Vol. 19, No.52, October 8, 1967. Also published under the title, "Kalan Kot" in *Morning News* (Karachi), October 1, 1967.
 20. Alore - The Ruined Capital of Sindh, *Morning News* (Karachi), February 12, 1967. ,
 21. Bhiro Bham : Arab Settlement in Sindh, *Morning News* (Karachi), November 19, 1967.
 22. Mughal Treasures at Umarnkot, *Pakistan Times* (Lahore), December 1966.
 23. Shrine of Ala-ud-Din Mauj Darya, *Morning News*, August 27, 1967.
 24. The Majestic Derawar Fort in *Cbolistaii, Sayyahat Nama*, April 1991.

(on Early historical heritage)

25. Buddhist Remains near Islamabad (Manikyala), *Morning News* (Karachi), August 9, 1964.
26. Landmarks at Bela, *Morning News* (Karachi), November 12, 1967

(on Protohistory)

27. Bela - The Ancient, *Morning News* (Karachi), October 8, 1967.
28. Mysterious City of Caves in *Lasbel&, MorningNews* (Karachi), July 17, 1966.
29. Unusual Slabs (Megaliths) on the Hab River, *Morning News* (Karachi), July 10, 1966.

30. Relics of Forgotten Culture at Malir, *Morning News* (Karachi), September 4, 1966.
31. Amri - A Prehistoric Town, *Morning News* (Karachi), February 12, 1967.
32. Prehistoric Civilization unearthed in the Quetta Valley, *Illustrated Weekly of Pakistan* (Karachi), Vol. 19, No.45, August 20, 1967. Also under the title, "Discoveries in Quetta Valley", in *Morning News* (Karachi), October 29, 1967.
33. Prehistoric Pandi Wahi, *Morning News* (Karachi). September 17, 1966

(On Indus Valley Civilization)

34. Indus Civilization's Vast Reach - A Spatiotemporal Vista, *Pakistan Times* (Lahore), Friday Magazine, June 26, 1987.
35. Jewellery of the Indus Valley, *Morning News* (Karachi), February 27, 1967.
36. Granaries of Harappa and Mohenjo-daro, *Morning News* (Karachi), December 18, 1966.
37. A Harappan Fort on the Makran Coast, *Morning News* (Karachi), January 8, 1967.

(on new archaeological discoveries)

38. Search of Pakistan's Past in the desert of Cholistan (In Urdu), *Imroze* (Multan), in four parts dated February 20, 27 and April 18 and 20, 1979.
39. Pakistan's Past in the Cholistan desert (In Urdu), *Alzubair* (Bahawalpur), Cholistan Number. June: 9-22. 1979.
40. Forty Years of Archaeological Discoveries in Pakistan, *Pakistan Times* (Special Edition on 40th Anniversary), March 16, 1987.

(On general history and Folklore)

41. Some facts about the grave of Sassi - Punnu, *Morning News* (Karachi), August 28, 1966.
