

**AUTHORITY FOR THE PRESERVATION
OF MOENJODARO
CULTURE AND SPORTS DIVISION**

**Report on the
4th International Workshop
In Moenjodaro
(19 Nov. to 30 Nov'95)**

By

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There were no local/foreign funds available for housing/equipment/staff.

- Below average performance in research and experimentation because of the non-availability of qualified persons in the field, viz Senior Chemist/Soil Mechanics Engineer.

Management

Moenjodaro site like other national monuments is under the control of the Department of Archaeology and normal maintenance is its responsibility. Unfortunately the Department of Archaeology has a poor budget for Moenjodaro and is not in a position to maintain a good labour force necessary to maintain it on a scale required for an international site. Besides, due to the easy access to the site, animals like camels and goats easily enter the area and cause local damage. The non-availability of accredited guides at the site poses many problems to the visitors who are anxious to know many details of the site. Because of the lack of desired infra-structure for tourism promotion most local and foreign visitors feel this international site neglected and often express their dismay. Another general complaint of the visitors is non-availability of good drinking water in Moenjodaro. Most of the tubewells which are main source of water supply at site have turn brackish and unsuitable for human consumption.

C O N C L U S I O N

Moenjodaro is a great site, spread over many kilometer area consisting of over 50,000 meters of unprotected walls of baked and unbaked bricks. To keep the site in perfect condition against the attacking environmental factors of degradation is a great challenge requiring continuous watch and ward by the Department of Archaeology & Museums (DAM) and inputs of labour, funds and technical personnel's capable of handling adobe structure with a sound knowledge of archaeology and archaeological structures. The Moenjodaro Conservation Cell (MCC) with a small team of dedicated workers have put in their best effort against many odds and deserve appreciation and encouragement. The difficulties are too many and too numerous, nevertheless the work entrusted by the Government of Pakistan with the help of international assistance has to be continued with the same dedication and fervor to its logical conclusion as embodied in the project document. It is hoped that with the increased knowledge and experience gained under the project, the MCC will continue to tackle numerous problems faced at the site and help the Department of Archaeology and Museums to preserve the International site of Moenjodaro.

A C K N O W L E D G E M E N T

The Authority wishes to acknowledge gratitude to the Government of Pakistan, U.N. Agencies like UNDP, Japanese Trust Fund (JTF) and the UNESCO for their assistance in terms of funding and technical know-how to assist the project. The Authority is also grateful to the members of International Consultative Committee who have been visiting the site for many years now and making relevant suggestions towards improvement of the conservation works.

RECOMMENDATION OF THE INTERNATIONAL SYMPOSIUM

ON MOENJODARO

(24- - 27 FEBRUARY, 1992)

1. Groundwater Control Scheme:

- I. The Groundwater Control Scheme should be thoroughly re-assessed based on new scientific, engineering, hydrological and geo-technical studies to determine the effectiveness of lowering the water-table with the achieved reduction of salts in the structures.

- II. Pending completion of the study under I, it is recommended that the water-table be maintained at & permanent level of 32 ft., below surface (116 ft., AMSL). To guarantee the adequate running and maintenance, the necessary infrastructure be provided.

- III. As a part of the improvement of the existing infrastructure, the stand-by channel as provided in the Master Plan should be connected to the collector drain with the Indus river This channel would also reduce the operational costs of the pumping station as it would function under gravity flow during the non-flood season.

- IV. As the present arrangement of the consumption of electricity for running the tube-wells is becoming prohibitively expensive, it is necessary to consider alternate arrangements as well. In this connection, the possibility of switching over to solar energy should be considered, and for this purpose relevant agencies should be asked to study the subject and prepare feasibility report for further action/decision.

2. River Training Works:

- I. The river training work should be annually monitored and maintained.
- II. Further construction works on the remaining spurs should be based on the following:
 - i. Completion of 5th spur before the flood season 1992.
 - ii. The river behaviour in the project locus for spurs 5 and 6 between miles 17/5 and 16/7 during the flood period should be observed to determine whether the construction of the 6th spur at mile 16/7 is essential. In the meantime the construction of 6th spurs should be postponed.
 - iii. For future observations, satellite maps should be used.

3. Plantation Scheme:

- I. Steps should be taken to implement the landscaping and planting programme in the light of the recommendations made in these reports and in the present Working Document.
- II. Negative effects of landscaping on the monuments and sites should be investigated and monitored.
- III. A programme should be initiated to pursue and develop archaeological investigations in Moenjodaro and its surrounding area.
- IV. Monitor and check rice cultivation in the area, which seems to be causing a substantial rise in the groundwater level. It might be possible to acquire some land in the rice growing area for the purpose of planting other suitable plant species.
- V. The landscaping programme should not intervene into the archaeological surface.
- VI. The Master Plan on land-scaping should be prepared by the specialists.

4. Conservation scheme:

- I. Immediate attention must be paid to the highly endangered structural remains. The conservation measures may possibly include:
 - A. Isolation Works;
 - B. Consolidation Works;
 - C. Desalinization Works;
 - D. Drainage Works.
- II. Once the highly endangered structures have been saved from sudden collapse and further deterioration, it is recommended that the remains be surveyed to quantify, the extent and scale of fabric spalling and structural distress. The results of the survey will aim to help develop an overall strategy for research/experimentation on scientific basis.
- III. Further research aimed at data collection and experiments should be carried out for improving the ongoing conservation techniques on scientific lines.
- IV. For further research, the existing laboratory at Moenjodaro should be expanded.

- V. All conservation measures should be based on and be accompanied by adequately comprehensive documentation and for that purpose a documentation centre equipped with computers, photographic and survey equipment and technical library should be set up at a central place.
- VI. The existing small Moenjodaro Conservation Cell at Moenjodaro (MCC) should be strengthened in accordance with the recommendations of Technical Committee constituted by the Board of Governors of the Authority for the Preservation of Moenjodaro and the UNDP.
- VII. The conservation staff should be given proper training in their respective fields at Moenjodaro and/or at suitable institutions abroad.
- VIII. The main focus should now be on the conservation of structural remains and the environment and at least funds should be provided for this purpose.
- IX. As an emergency stabilisation original, walls with severe undermining and now structurally unstable should be supported with butteresses.
- X. National training workshops should be organized at Moenjodaro as frequently as possible. The 'Workshop' will provide practical training in
 - Scientific testing, analyses and reporting;
 - Conservation skills;
 - Site recording and documentation.
- XI. The site conservations and support scientists should be encouraged to publish their works in national and international scientific journals.

5. Promotion and fund raising:

- I. A well-defined strategy and general plan for overall promotional, communication and fund raising activities be worked out especially with the assistance under the ongoing UNESCO/UNDP project for Moenjodaro, and for the specific campaigns launched from time to time in close collaboration with UNESCO in particular.
- II. Effective coordination framework should be provided at the level of Authority for the Preservation of Moenjodaro to utilize the potential of existing government owned and private sector media agencies to carry out the objectives of the promotional campaigns.
- III. Honorary Promotion and Fund-raising Committees be established in major potential donor countries* These Committees may consist of, among other NGOs and the representative of the Pakistan Embassy to provide a regular flow of information and feed-back with a view to organize fund raising activities.

- IV.** A good package of promotional material of international standard be made in appropriate number of sets, utilising as far as possible already available materials.
- i. This package may be composed of: Brief promotional guidelines, a series of leaflets, booklets, stamps, slides with pre-recorded tapes, VTHs, a film (e.g. short spots documentaries etc.), post cards, posters, some crafts, e.g. Textile (Ajrak, Lungi, Tie-and-dye, leather, embroidery, patch-work, etc.) and could be offered for sale. The films (and/or VTRs) will be on 3 subjects, "Moenjodaro, its several cultural aspect", "Indus Civilization, past, present and future" and Indus Script".
 - ii. For the TV, Radio and VTR programmes, some international corporations and organizations, e.g. Radio Granda TV. BBC. NHK. ACCU, French TV. Etc. have either recently started a Moenjodaro programme or are interested in developing such programmes. Services of organizations like Ministry of information, Tourism Division, Lok Virsa, Department of Films and Publications and professional writers are important components of this programme.
- V.** National and International travelling exhibitions be organized more regularly on the model of previous exhibition which was developed jointly by Pakistan, UNESCO, ICOM, Aachen and other Museums in selected countries* Possibility should be explored for publishing a reprint edition of 5 selected professional publications and 5 new monographs on Moenjodaro and the Indus Civilization.
- VI.** In this context, the proposals contained in the Master Plan, prepared in 1972-73, may also be taken into account along with the suggestions of Authority for the Preservation of Moenjodaro, annexed to these recommendations.

SUMMARY ON
FIRST INTERNATIONAL INTERDISCIPLINARY WORKSHOP
ON THE CONSERVATION
(FEBRUARY 1992)

The International symposium dealt in detail various schemes of the Master Plan for preservation of Moenjodaro. Schedule wise recommendations are as under:

- i. That immediate action has to be undertaken to preserve the highly endangered structural remains of Moenjodaro.
- ii. That further research and experiment strategies have to be worked out and applied for a long term preservation programme of the structural remains.
- iii. That all preservation actions have to be based on and be accompanied by adequately comprehensive documentations.
- iv. That for scientific execution of the preservation programme a documentation centre has to be set up.
- v. That further research should be carried out to enlarge the knowledge about the unique Bronze Age city of Moenjodaro.