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MISSION REPORT / RAPPORT DE MISSION

Historical Monuments at Makli, Thatta (Pakistan) (C 143)
Monuments historiques à Makli, Thatta (Pakistan) (C 143)

19-24 January/janvier 2019
REPORT ON THE JOINT WORLD HERITAGE CENTRE/ICOMOS REACTIVE MONITORING MISSION TO THE UNESCO WORLD HERITAGE PROPERTY “THE HISTORICAL MONUMENTS AT MAKLI, THATTA”, PROVINCE OF SINDH, PAKISTAN (C143)

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19 – 24 January 2019
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EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

Background

The property: Historical Monuments at Makli, Thatta was inscribed on the World Heritage List under Criterion (iii) at the 5th session of the World Heritage Committee in 1981 (Sydney, Australia)\(^1\) under the name of Historical Monuments of Thatta.

The Historical Monuments at Makli, Thatta World Heritage property is a rich example of monumental funeral architecture of the civilization of Sindh region from the 14th to 18th century. These mausolea and associated graves represent a unique breadth of artistry, architectural and decorative ingenuity, and provide a rare lexicon of the development of artistic expression, architectural form and technology of the region within one contiguous site. Long periods of neglect, inadequate management and insufficient conservation have gravely impacted the integrity and experiential quality of the historic necropolis.

Successive recommendations of the World Heritage Committee judged imperative that actions be taken immediately to protect the property from continued damage and prevent further loss of its Outstanding Universal Value (hereafter referred as OUV). At its 41st session (Krakow, 2017), the Committee requested that the State Party of Pakistan invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to the property in order to review progress with the implementation of previous Committee decisions and the recommendations made by the 2016 Reactive Monitoring mission, particularly the development and implementation of a Management Plan for the property, overall management, having regard to matters such as litter collection, site security, contemporary burials encroachment, conservation works, mechanism for physical intervention and documentation/inventory and monitoring systems. The mission was also requested to review factors that constitute a threat to the property and consider whether there is still an ascertained or potential danger to the OUV of the property and to advise on issues related to the boundaries and buffer zone of the property; (Decision 41 COM 7B.97).

Findings (see Annex 7 for the state of implementation of previous Recommendations)

Investment and preservation efforts of the Government in Sindh in recent years have greatly contributed to the improved condition of the property in general and stabilization of many of the site’s monuments.

A number of significant monuments in need of stabilization during the 2016 Joint Mission have since undergone some structural intervention and benefitted from improved site maintenance, waterproofing, and increased security. Specific recommended measures were also implemented for some of the most important monuments, such as the Mausoleum of Jam Nizamuddin and Jamia Majid.

The establishment of a Steering Committee for the property is also beneficial and is expected to contribute to the quality of site management by improving decision-making processes and involving multiple stakeholders.

\(^1\)CONF003.VIII.15
A clearer demarcation of the site with boundary walls, relocation of infrastructure and the establishment of a modern burial site contribute to the property's general management and illustrate a serious commitment on the part of authorities to facilitate ongoing dialogue with local communities and formally recognize the living aspects and values of the site.

Physical management of the property has improved noticeably since the 2016 Reactive Monitoring mission. The 2019 Reactive Monitoring mission noticed a positive change in the environment of the property, compared with 2016 and before, which has become cleaner with the cleaning of formerly overgrown areas, marking boundaries of each monument with stone pebbles, planting of trees and installation. There are more widespread receptacles for litter, even though small litter is scattered in and around the shrines and there is a need to inform the visitors of their obligation of respecting the holy character of the property. The mission noted that there were security staff on site, even late at night, and throughout the time the mission spent at the property. There is additional signage and explanation of key monuments. A new area outside the boundary of the main heritage area has been established for new burials and there was evidence that this is being actively used. A number of monuments have been stabilized and conserved through masonry infill, masonry capping, and temporary buttressing. Jamia Masjid was stabilized through masonry infill in multiple locations within the monument.

There is however a need for enhanced governance and management decision-making to safeguard the OUV of the property, as well as continued and structured intervention for physical conservation.

The Management Plan for the property remains to be formally established, in duly taking into account suggested elements in the Operational Guidelines 108-118. As referenced in Paragraph 108 of the Operational Guidelines, it is a key management tool to guide the management systems, specific to each heritage property. Such a plan should specify how the Outstanding Universal Value of a property should be preserved, preferably through participatory means, as well as to operationalize the Master Plan and integrate all staff in management processes. Crucial components of preservation still require development and implementation. These include a protocol for systematic condition monitoring, development of prioritized conservation interventions, an established documentation system for the built heritage and a documentation and a storage process for detached and displaced architectural elements.

A disaster management and emergency response plan that encompasses both the monuments and visitors should be developed and put into practice, to be included in the Management Plan.

The devolution of cultural heritage sites to the provincial government being still an on-going process, building its own capacities to deal with the heritage management is crucial challenge of the provincial authorities. Continued efforts are called upon to strengthen institutional capacities of the Management authorities.

As a new element, a visitor management plan is also needed to address circulation and safety of visitors, interpretation of the site and specific monuments, visitor amenities and infrastructure, and management of the living aspects of the site.

Integration of the local community in certain aspects of site management could help articulate a long-term vision of preserving the living heritage site for the well-being and spiritual fulfilment of diverse stakeholders. Social projects in and around the property could be aligned with the core
objectives of site management, following the official strategy adopted by the World Heritage Committee for sustainable development.

Recommendations

Management

1. Implement the Master Plan for the property by establishing a proper and comprehensive Management Plan, including accompanying action plans with clear timeframes (3, 5, 10-years as suggested by the Master Plan) that can demonstrate the rationale, projected budget, objectives and duties of the staff concerned for each prioritized fields of intervention;
2. Establish a formal organizational chart with job descriptions, relating each employee’s work and assignments to necessary interventions identified by the Master Plan/Management Plan;
3. Establish a formal mission statement for the Department of Archaeology concerning the preservation of the property;
4. Carry out a needs assessment related to staff capacity, in light of the prioritized fields of action defined by the Master Plan/Management Plan and verify regularly available international training courses and relevant capacity building opportunities for staff;
5. Explore the possibility of reinforcing the unit for the preservation/conservation of monuments, to support the chief conservator (site manager) and including a position responsible for the inventory of moveable artefacts and monuments;

Prioritization of interventions

6. Establish a methodology for evaluating the need for interventions on the short-, medium- and long-term – for instance, in light of the significance of given monuments to the OUV of the property; the state of preservation; identified mechanisms and rates of deterioration (evaluation of the principal threats); availability of capacities; availability of budget;

Risk preparedness

7. Establish a formal risk preparedness strategy and emergency response plan that encompasses both the preservation of monuments and the safety and security of visitors in case of human-made or natural disasters and train staff in the specific procedures;

Coordination of international and national cooperation on site

8. Coordinate international and external cooperation and associated fundraising with intervention priorities to fulfill the most pressing needs of specific monuments and the site as a whole (in close correlation with recommendation 6 above);
9. Draft written guidelines concerning the nature and oversight of external cooperation by establishing ethical and technical principles and criteria for collaboration (proposals to be formulated, integration and training of the Department staff, regular reporting, intervention permits and supervision);
10. Ensure the institutional mandate and high technical expertise to be provided by the Steering Committee by adopting a written statute of the Committee and including experts in different fields as permanent or associate members (conservation, history, sciences, communication, legal issues, Auqaf)
Conservation

11. Develop an action plan with clear timeline and resources for the stabilization and conservation of the tomb of Jam Nizamuddin and make the plan available for review by the Steeling Committee;
12. Establish a systematic monitoring system for all principal monuments that includes close inspection of fragile components and recording of any noted changes from baseline photographs;
13. Establish a secure storage facility for the most important displaced architectural elements;
14. Draft emergency response procedures related to monument inspection and reporting subsequent to any event capable of causing damage, including significant rain events, and train all staff in these procedures;
15. Develop clear conservation principles to aid in decision-making and enforce adherence to associated guidelines by all parties working on site;
16. Establish clear protocols for oversight for all work carried out on site that includes review of proposed interventions and supervision of implementation.

Documentation and research

Displaced architectural elements

17. Establish and implement urgently a clear documentation system and protocol enabling systematic recording of important detached architectural elements which can be followed up by a dedicated staff under the supervision of the site manager. A clear code (numbering) system, original location, current location (storage information), date of recording, weight, size, and brief description with reference to scientific information (if available) are necessary as minimum requirement. Measures should be taken to keep an up-to-date duplicate of various inventories and documentations should be ensured in another location to save the data;

Baseline documentation for monuments and regular monitoring

18. Establish a clear rule for regular monitoring of important burials/monuments and assign staff to implement it with reasonable frequency;

Site Inventory

19. Continue the site inventory work using GIS to map, record, and label visible burials. The platform used should include all necessary spatial and locational information, photographic documentation, links to any available historical information (e.g. historic photographs, information on tomb owner), and links to any available condition and intervention information. The system should be updated regularly with monitoring data, intervention records, and any newly uncovered information. Given that multiple inventory systems have been established, each with valuable data, it will be useful to integrate the information into one master GIS;
20. Investigate the history of burials to develop a more accurate estimation of burials at the property and request an amendment to the statement of OUV, if applicable;

Documentation Centre

21. Establish and run an on-site documentation centre storing documentation, inventories,
archives relating to the property with appointed, capable staff to manage it and provide access to site staff, researchers, and others, as deemed appropriate.

Archiving

22. As part of the documentation system and as the State of Conservation report from State Party suggested, it would be highly useful to digitize old photographs and historic archives with the establishment of a formal documentation centre. Such work would contribute greatly to enrich the reflection on the restoration plan and to judge the relevance of interventions.
23. Plan and implement the collection and digitization of old records, photos and historic archives concerning monuments of the Makli World Heritage property and if possible to make them available on-line or in the documentation centre for use by site management and researchers, as deemed appropriate.

Site Museum

24. In the future, develop thorough approached for presentation and display of collections to be exhibited, activities to be organized and staffing of such an institution so that it could contribute to deepen the knowledge of the property and to inform visitors of the OUV, as well as their obligations to take part in its proper management and safeguarding.

Maintenance

Drainage

25. Establish regular drainage inspection and maintenance that occurs especially before and after major rain events to clear drains of debris and repair any damage to drainage elements;
26. Develop procedure to assess drainage needs for monuments without adequate roofing to ensure that water does not pool and cause damage to building fabric;

Visitor Management

Security

27. Evaluate the need to station security guards throughout the site and at least indicate within the site the directions of the exit, instructions for evacuation in case of natural disasters;
28. Provide a written code of conduct of caretakers in order to inform them clearly their duties and obligations;
29. Provide appropriate level of lighting along the main pedestrian walkways to guide visitors to shrines and deter them from visiting other parts of the property during night-time. Ensure lit areas align with shrine visitor paths.

Litter collection

30. Continue to maintain the site to make the environment suitable for its long-term preservation and access and enjoyment of visitors;
31. Inform visitors of available rubbish receptacles and their obligation to contribute to the tidiness of the site;
32. Carry out regular trash removal on site by the site staff or outsourcing services;
Visitor infrastructure and management

33. Evaluate the possibility of building water-saving public toilets (outside or inside the site) and emergency facilities on-site, in alignment with the Master Plan;
34. Develop consistent signage for interpretation of the property and its elements and wayfinding for visitors. Signage needs to include general information on location of facilities, availability and cost of electric buses, directions to key monuments, shrines, and other significant site elements.
35. Establish a system of counting and recording visitors at main entrances and collect information on their demographics, while at the same time providing them with basic information on the history of the site, as well as on their obligation to contribute to the security and tidiness of the property, for instance by properly disposing of rubbish.
36. Undertake a detailed survey on visitor demographics and behaviour to understand typical expectations, behaviour and needs. The visitor survey should be customised to reflect the particular situation in the site.
37. Investigate and determine the feasibility of establishing guided tours for visitors, including development of routing through the site, required resources for guiding, and any associated costs for visitors.

Dialogue with local populations

Boundary walls and relocation of various installations

38. Complete the boundary wall construction, and adopt officially the boundaries identified in 2013, and submit a minor boundary modification to the World Heritage Centre for consideration by the World Heritage Committee;

Living aspects of the property

39. Establish an official policy acknowledging the values of the property as a living heritage site and place of worship while extending efforts to reconcile this aspect with the preservation imperatives, by means of information, education, outreach activities;
40. Organize further educational and informational activities associating local schools and community members/groups in order to keep the site close to the populations’ daily life;

Social projects near the site

41. Explore the possibility of associating social initiatives such as the zero carbon centre more closely with the property so as to provide opportunity for marginalized and impoverished populations to benefit from the property’s World Heritage status, e.g. the co-development of signature products of the Makli property and association of populations in the site-related activities (i.e. on-site guides, information officers, production of souvenir products, etc.). Training and additional resources will be necessary;
42. Associate any future international assistance, including the new UNESCO assistance for creativity, closely with the goals of the management authorities to multiply benefits towards local populations, including marginalized members.
1. BACKGROUND TO THE MISSION

1.1. Inscription History

The property, Historical Monuments at Makli, Thatta (C 143) was inscribed on the World Heritage List on the basis of criterion (iii) at the 5th session of the World Heritage Committee (Sydney, 1981) under the name of Historical Monuments of Thatta.

The nomination dossier submitted in 1979 described two monuments groups as the proposed World Heritage property: one on top of the adjoining Makli Hill, and the other one in the City area, down in the Valley. However, this same nomination dossier has an addendum only in French which provides further information on the proposed property, but only for the monuments at Makli Hill, while the ICOMOS evaluation included the two groups of monuments, as follows: “the site preserves, in a state of exceptional integrity, an imposing monumental complex with the remains of the city itself, in the valley and especially those of necropolis, massed at the edge of the Makli plateau, covering a distance of ca. 12 kilometres[...] The effect of the grand mosque of Sha Jahan, with its complex of blue and white buildings capped by 93 domes, is absolutely unique[...] ICOMOS expresses the wish that adequate measures be taken to ensure the preservation of the archaeological site and the monumental complex of Thatta, both the city and the necropolis.”

In light of this, the Reactive Monitoring mission carried out in 2006 proposed to clarify what was inscribed on the World Heritage List. Taking into account that the addendum of the nomination dossier contained only the monuments at Makli Hill and that the Mosque of Shah was added to the Tentative List of Pakistan in 1993, it was concluded that only the monuments at Makli Hill should be considered as the World Heritage property. Accordingly, the State Party submitted an official request to change the name of the property. The World Heritage Committee approved this name change for this property, which henceforth became ‘Historical Monuments at Makli, Thatta’ in English / ‘Monuments historiques à Makli, Thatta’ in French.

1.2. Statement of Outstanding Universal Value

The following Retrospective Statement of Outstanding Universal Value was elaborated and adopted by the World Heritage Committee at its 37th session (Phnom Penh, 2013).

**Brief synthesis**

*Near the apex of the delta of the Indus River in Pakistan’s southern province of Sindh, is an enormous cemetery possessing half a million tombs and graves in an area of about 10 km2. Massed at the edge of the 6.5 km-long plateau of Makli Hill, the necropolis of Makli— which was associated with the nearby city of Thatta, once a capital and centre of Islamic culture – testifies in an outstanding manner to the civilization of the Sindh from the 14th to the 18th centuries.*

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2 CONF003.VIII.15
3 The nomination dossier, document consisting of 5 pages along with an annex and signature by Dr. N.A. Baluch, Director, National Institute of Historical and Cultural Institute, Islamabad. with the registration C 143 submitted by Government of Pakistan.
4 Dated 18 October 1980 (2 pages and signed by Muhammad Ishtiaq Khan, Director, Department of Archaeology and Museums).
5 Excerpt from the ICOMOS evaluation (October 1980)
6 Decision: 33 COM 8B.1
The vast necropolis of Makli is among the largest in the world. Kings, queens, governors, saints, scholars, and philosophers are buried here in brick or stone monuments, some of which are lavishly decorated with glazed tiles. Among the outstanding monuments constructed in stone are the tombs of JánNizámuddín II, who reigned from 1461 to 1509, and of Isa Khan Tarkhan the Younger and of his father, Jan Baba, both of whose mausolea were constructed before 1644. The most colourful is that of DiwanShurfa Khan (died 1638). The unique assemblage of massive structures presents an impressive order of monumental buildings in different architectural styles. These structures are notable for their fusion of diverse influences into a local style. These influences include, among others, Hindu architecture of the Gujrat style and Mughal imperial architecture. Distant Persian and Asian examples of architectural terra-cotta were also brought to Makli and adapted. An original concept of stone decoration was created at Makli, perhaps determined by the imitation of painted and glazed tile models. The historical monuments at the necropolis of Makli stand as eloquent testimonies to the social and political history of the Sindh.

**Criterion iii:** The historical monuments at Makli, Thatta testify in an outstanding manner to the civilization of the Sindh region from the 14th to the 18th centuries. The site preserves in a state of exceptional integrity an imposing monumental complex comprised of the remains of the necropolis, massed at the edge of the Makli plateau and covering an area of about 10 km².

**Integrity**

Within the boundaries of the property are located all the elements and components necessary to express the Outstanding Universal Value of the property, including the tombs and graves located in the necropolis of Makli. Nevertheless, a number of the historical monuments have reached an advanced stage of degradation. The integrity of the property is threatened by the significant decay caused by the local climatic conditions (earthquakes, variations in temperature, winds containing salts and humidity, heavy rains, natural growth) and the shift of the riverbed. In addition, encroachments and vandalism threaten the site, and damage and loss by pilferage have assumed colossal proportions.

**Authenticity**

The historical monuments at Makli, Thatta, are authentic in terms of their forms and design, materials and substance, and locations and setting. Because elements of the property are in an advanced state of decay and disintegration, however, the authenticity of the property is threatened, particularly concerning the materials and forms of the monuments. Unless scientific action is taken to reduce the threats to the property, irremediable damage will be caused.

**Management and Protection Requirements**

The historical monuments at Makli, Thatta, are protected under the Antiquities Act, 1975, promulgated by the Federal Government of Pakistan. The Culture Department of the Provincial Government of Sindh is responsible for managing the property. The site is staffed by a curator, archaeological conservator, technical assistant, supporting staff, and attendants. Funding comes from the annual Regular Budget of the Ministry of Culture and other Government programmes; this funding is recognised as inadequate.

Sustaining the Outstanding Universal Value of the property over time will require developing and implementing an emergency action plan to address urgent measures necessary for the security and the stabilisation of structures; completing, approving, and implementing the Comprehensive
Master Plan and a Management Plan for the property; defining the precise boundaries of the property and the buffer zone; preparing a condition report for all monuments and tombs; taking appropriate measures to stabilise the tomb of Jam Nizamuddin II; and implementing an overall monitoring programme.

1.3. A living heritage value of the property

Although it was not mentioned in the original nomination dossier, nor in the Statement of Outstanding Universal Value, a living heritage value of the property can be strongly observed at Makli, which is visited by thousands of people each Thursday evening and throughout the week. People come to venerate saints buried at Makli and pray in purpose-built shrines. New burials within the site were common until recent bans were put in place by the Government of Sindh, along with the necessary security to prevent the practice.

The foundation of Makli as a holy place for worship and burial goes back to Sheikh Hammad Jamali, a saint, poet and scholar in Lars (Lower Sindh), and to his royal devotee, Jam Tamachi, the son of the first Samma ruler at the end of the 14th century. Prior to the legendary victory of the alliance between Jamali and Tamachi, the people of Thatta used to bury their dead in the cemetery of Pir Patho, which belonged to the Sufi Silsila of pirs of the Sultans of Delhi in Sindh. The legend says that Hammad Jamali helped Jam Tamachi, who was held captive at the Sultanate of Delhi following a plot by his uncle Jam Juna, escape from Delhi and reconquer the throne in Thatta, Lars. To show his gratitude, Jam Tamachi offered large amount of money to Jamali, who asked him to build a mosque instead, which became Jamia Masjid at Makli.  

The emergence of Makli as a revered place of worship and the main graveyard of Thatta also heralded a change in the power structure in Sindh. On both religious and political levels, Thatta became independent from the influence of the local northern rulers belonging to the Sultanate of Delhi and thus firmly established itself first as the capital of Lars, and then gradually as that of the whole of Sindh.

Next to Jamia Masjid, the mausoleum of Jam Tamachi and the Khangah of Jamali constitutes, along with the mausoleum of Jam Nizamuddin, the core of the Samma cluster. South of the grave of Jamali, a number of the graves belonging to the disciples of Jamali. The original nomination dossier mentions about half a million of graves within the Makli necropolis and this figure clearly demonstrates that Makli has long been a holy place where people not only venerated but also wanted to be buried. The property still remains a living heritage site where dozens of active shrines are constantly visited and decorated, rituals and rites are performed according to the region’s old customs. A great number of pilgrims arrive everyday at Makli for various purposes, such as veneration of their favourite saints buried at Makli. Contemporary burials have been banned officially in order to respect conservation imperatives, but citizens whose relatives were buried wish to continue visiting the graves inside the property. Consequently, this living heritage value, although it is not included within the Outstanding Universal Value (OUV) of the property, should be taken into account in the management of the property.

A photo: Tomb of Mai Makli (©UNESCO/N. Hayashi, 2019): the legend of Mai Makli (Makli Mother), one of the most venerated figures at Makli, tells that she lived in the outskirt of Thatta and when the great Tughlaq Sultan of Delhi invaded Thatta in 1367, he could not make a headway, thanks to her pray\(^8\). The tomb, erected against the eastern wall of the Masjid Jamia in the northern edge of Samma cluster seems to have existed when the property was inscribed on the World Heritage List in 1981). It receives, as the picture shows, daily offerings and treatments by visitors. This kind of addition might be acceptable only by acknowledging the living heritage value of the World Heritage property “Historical Monuments at Makli”.

1.4. Integrity issues raised in the ICOMOS Evaluation

ICOMOS' Evaluation at the time of the nomination specifically mentions the extremely harmful salt borne air and its effect on brick structures, and underlines that adequate measures should be taken to ensure the preservation of the property from this damaging climate.

1.5. Examination of the state of conservation by the World Heritage Committee and its Bureau and background of the current Reactive Monitoring mission

In 2005, the World Monuments Funds, a New York-based NGO, listed the property as one of the ‘100 Most Endangered Sites’ on its World Monuments Watch List because of the property’s poor state of conservation, affected by the severe local climate conditions such as rain and wind. The property was reported to have suffered from loss of groundwater and topsoil erosion caused by the shift of the riverbed.

The World Heritage Committee requested the State Party to submit its report for examination by the Committee at its 30th session (Vilnius, 2006). At its 30th session, the Committee requested that a Reactive Monitoring mission be dispatched to the property to examine its state of conservation as a matter of emergency.

\(^8\) The Jewel of Sindh-Sama Monuments on Makli Hill', Suhail, Lari, Yasmeen, Lari, Oxford University Press Karachi 1997
The joint World Heritage Centre/ICOMOS Reactive Monitoring mission carried out in November/December 2006 made recommendations that needed to be immediately implemented, including a concrete Action Plan for stabilisation work for the mausoleum of Jam Nizzam Al-din, which was not only leaning but also cracking. At its 31st session, the Committee requested the State Party to implement the recommendations made by the 2006 Reactive Monitoring mission and submit a report on the progress accomplished, including on the urgent measures for the stabilisation of the mausoleum Jam Nizzam al-Din, for examination at its 33rd session in 2009. For this purpose, the UNESCO Office in Islamabad provided US$28,000 of financial assistance to the Government of Pakistan.

In 2009, the State Party submitted a report without providing the requested information on the progress made with the implementation of the recommendations. At its 33rd session (Seville, 2009), the World Heritage Committee requested the State Party to provide copies of the Master Plan, which was reportedly being prepared, for review by the World Heritage Centre and the Advisory Bodies and asked the State Party to make progress with the implementation of the following:

a) Overall monitoring programme,
b) Management plan,
c) Report on the condition of all monuments and tombs,
d) Prioritized emergency intervention plan, and
e) Identification of the boundaries of the property and its buffer zone.

The Committee also requested the State Party to make progress with the soil investigations and stabilization of the tomb of Jam Nizzam al-Dinas recommended by the 2006 Reactive Monitoring mission, and submit a report for the examination of the World Heritage Committee at its 35th session (UNESCO, 2011).

In 2011, the State Party submitted a very similar report to that of 2009, informing the Committee that a Master Plan and a Management Plan were being prepared.

At its 35th session (UNESCO, 2011), the World Heritage Committee regretted the little progress that had been made in the implementation of earlier decisions and the lack of information regarding conservation works. It also expressed its concern about the serious gradation of the property and the lack of security measures to ensure the protection of the property, and urged the State Party to develop an emergency action plan, to adopt the Master Plan and to develop the Management Plan. It further requested that appropriate measures be carried out to stabilise the Tomb of Jam Nizamuddin. The Committee further decided to dispatch a second Reactive Monitoring mission to the property.

The resulting 2012 joint UNESCO/ICOMOS Reactive Monitoring mission noted that hardly any of the recommendations made by the 2006 Reactive Monitoring mission had been implemented, nor had the Master Plan or the Management Plan been finalized and implemented. The 2012 mission, however, argued that due to the devolution of Pakistan's services-related public sectors that took place in 2011, time should be given to the provincial government to carry out appropriate conservation works and equip itself with a proper management system for the property.

Furthermore, the 2012 mission took note of some of positive developments, such as the fact that the Government of Sindh, due to the lack of capacity, established a new strategy of outsourcing various urgent and necessary conservation works by establishing a Memorandum of
Understanding with a Karachi-based NGO, Heritage Foundation. The 2012 mission was informed that this NGO was entrusted by the Government of Sindh with undertaking a preliminary study on conservation of the Tomb of Jam Nizamuddin and with preparatory and survey work for the establishment of clear boundaries, including a buffer zone, as a basis for management and planning.

The World Heritage Committee, at its 36th session in 2012, requested the State Party to implement the recommendations made by the 2012 Reactive Monitoring mission and to submit a report on this for examination at its 37th session in 2013.

However, the report received from the State Party in 2013 did not include any information on the progress accomplished with the implementations of these recommendations and consequently, the World Heritage Committee, expressing its concern that significant threats to the Outstanding Universal Value of the property had yet to be fully addressed, requested the State Party to invite an ICOMOS/ICCROM Advisory mission to the property to assist the State Party to develop a comprehensive programme for conservation and stabilisation of the most threatened monuments and to define the objectives of a Management Plan for the property to address critical issues, including disaster risk management and public use, among others. The State Party was also requested to submit a report on the implementation of these for the examination of the Committee at its 39th session in 2015.

Unfortunately, the report received in 2015 did not address the concerns which had been expressed by the Committee, and there was no invitation of the recommended Advisory mission. Ultimately, the World Heritage Committee, at its 39th session, decided to dispatch a third Reactive Monitoring mission to the property to assess the state of conservation as a whole and the progress made by the State Party on the crucial issues that had been identified and for which action was requested by the Committee at several of its previous sessions.

At its 39th session (Bonn, 2015), in Decision 39 COM 7B.70, the World Heritage Committee, after expressing its concern over the slow progress of works in view of the significant threats to the OUV of the property, requested that the State Party invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to the property, to review the state of conservation, and to assess the progress of the implementation of the recommendations made by the World Heritage Committee at its previous sessions. This scope included analysis as to whether there were ascertained or potential dangers to the OUV of the property which would warrant its inscription of the List of World Heritage in Danger. The Reactive Monitoring mission, conducted in April 2016, assessed the situation of the property with many critical issues identified, and recommended a variety of measures concerning the reinforcement of governance in management and conservation practices, monitoring of physical status, planning, and the necessity of establishing a Management Plan. Concerns relating to the living aspects of the property, including its relationship with communities and visitors, challenges in decreasing poverty of surrounding communities, were also raised.

The State Party did not submit a state of conservation report by 1 February 2017, although this was requested by the Committee in 2016 in its Decision 40 COM 7B.44. Upon the request to WHC for the extension in the deadline, the State Party submitted the state of conservation report on 27 February 2017.

The Committee, in its Decision 41 COM 7B.97 (Krakow, 2017) strongly urged the State Party to adhere to its previous Decisions and the recommendations of the 2016 Reactive Monitoring
mission, notably by highlighting the lasting issues of the Management Plan, control of encroachment and access measures, stabilization of major monuments, and issues of modern burials. The establishment of the inventory system, baseline photographic documentation, as a basis of conservation planning, monitoring and research was strongly suggested. Finally, capacity building was also considered central in order to guarantee a sustainability of actions to be undertaken for preservation and conservation.

Several points requested by previous Committee Decisions remain to be implemented, as follows:

Although a version of the Master Plan was finalized by an external contractor in August 2016, it is difficult to determine how the document has been effectively used to guide decision-making and implement activities with accompanying measures such as budget and staff. Most importantly, the absence of the requested Management Plan and lack of direct involvement of site staff in the development of the plan appear to represent one challenge in its effective implementation. A regulatory plan for the buffer zone was not submitted.

Physical management of the property has improved noticeably since the 2016 Reactive Monitoring mission. The 2019 Reactive Monitoring mission noticed a positive change in the environment of the property, compared with 2016 and before, which has become cleaner with the cleaning of formerly overgrown areas, marking boundaries of each monument with stone pebbles, planting of trees and installation. There are more widespread receptacles for litter, even though small litter is scattered in and around the shrines and there is a need to inform the visitors of their obligation of respecting the holy character of the property. The mission noted that there were security staff on site, even late at night, and throughout the time the mission spent at the property. There is additional signage and explanation of key monuments. A new area outside the boundary of the main heritage area has been established for new burials and there was evidence that this is being actively used. A number of monuments have been stabilized and conserved through masonry infill, masonry capping, and temporary buttressing. Jamia Masjid was stabilized through masonry infill in multiple locations within the monument.

Although the tomb of Jam Nizamuddin now undergoes regular digital crack monitoring, there has been little progress made on the stabilization of the structure and no plan is yet in place to prevent additional structural damage. Additionally, there is no articulated reasoning for prioritization of monuments and associated treatment or stabilization. While important stabilization work has been completed throughout multiple monuments, some of which are of key importance while others are arguably less so, there are key monuments, such as the tomb of Issa Khan II that have not addressed failing temporary stabilization measures put in place decades prior.

The inventory system and associated storage of displaced architectural elements have not been established and there is confusion on site about the location of such elements or how and why they should be documented and stored.

Additional staff, including a site manager, have been hired since 2016 and this has greatly benefitted the overall property management. However, additional professionals are needed to ensure the overall management of the property and visitors, and adequately protect and care for the monuments. It was also difficult to understand the specific responsibilities of some of the staff identified.

Unfortunately, no financial documents showing actual allocation were ever provided by the Government of Sindh, so it was impossible for the 2019 mission to comment on the allocation of funds.
1.6. Justification of the mission

Decision 41 COM 7B.97 of the World Heritage Committee (Krakow, 2017) formally requested the State Party to invite a joint World Heritage Centre/Reactive Monitoring mission to review the progress accomplished with the implementation of the Decisions adopted by the Committee, review the factors that constitute a threat to the property and consider whether there is still an ascertained or potential danger to the OUV of the property, and advise the State Party on the issues related to the boundaries and buffer zone of the property as well as the completion and implementation of the Management Plan.

The Terms of Reference for the Mission are provided in Annex 1.
2. LEGAL AND INSTITUTIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF WORLD HERITAGE PROPERTY

2.1. Protected Area Legislation

The property ‘Historical Monuments at Makli, Thatta’ is protected under the Antiquities Act of 1975, and Excavation and Exploration Rules of 1978, promulgated by the Federal Government of Pakistan. The buffer zone regulation is based on the Federal Antiquity Act (Act VII of 1976 in section 22). Execution of development schemes and new constructions in proximity to immovable antiquity, and no development plan or scheme or new construction on, or within a distance of two hundred feet of (a buffer zone), a protected immoveable antiquity shall be undertaken or executed except with the approval of the Director.\(^9\)

In April 2010, the 18th Amendment to the Constitution of the Islamic Republic of Pakistan was adopted. Consequently, as of June 2011, the responsibility for the conservation and management of all cultural and natural heritage sites was handed over to the respective Provincial Governments, including all of the six World Heritage properties in Pakistan. This means that the relevant Provincial Governments are the sole authority at administrative and financial levels for the management of these World Heritage properties.

While the Government of Punjab has since made an amendment to the Antiquities Act by promulgating a provincial legislation to protect the heritage sites in the Province of Punjab, the Government of Sindh has not yet made amendments to the Antiquities Act. Pending the possible establishment of a new provincial law, the federal legislation continue to be applied in the Province of Sindh for protection of cultural and natural heritage sites including two World Heritage properties, namely the Archaeological Remains of Moenjodaro and Historical Monuments at Makli, Thatta.

2.2. Institutional Framework

Since 2011, the World Heritage property has been placed under the custody of the Directorate of Archaeology under the Culture Department, Government of Sindh.

The Mission observed that the devolution of cultural heritage sites to the provincial government is still an ongoing process in building its own capacities to deal with the heritage management. The present Mission observed a continued need to strengthen proper capacities of the Management authorities.

The Mission also remarked that the Government of Sindh continues to rely on outsourcing strategy to deal with crucial issues surrounding the conservation of the Makli World Heritage property by contracting different international and national consultants and services. It seemed to contribute to producing materials such as the Master Plan and various elements reported in the State of Conservation report. However, it is important that the Management authorities ensure its proper ownership on the planning, quality of products and most importantly, strategically engage these external expertise with view to strengthening its own capacities.

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\(^9\) Master Plan tome 1, p.9 & p.39.
It is worthy to recall that the Federal Government of Pakistan is accountable to the World Heritage Convention, although it does no longer play a direct role in the conservation and management of the six Pakistani World Heritage properties. In view of this, it would be desirable that the Government of Pakistan, jointly with the Provincial Governments, elaborate a special system to manage its six World Heritage properties in which several layers of responsibilities can be exercised both by the Federal Government but also by the Provincial Government. This would be particularly critical for provinces where there is a very little expertise or institutional capacity to deal adequately with the protection of cultural property.

Regular gatherings of cultural and natural heritage experts, as stipulated by Paragraph 15 of the Operational Guidelines should be encouraged to discuss the implementation of the Convention including, among others, the sharing of knowledge and experience, identification of cultural and natural heritage found within their territory, which would allow to harmonise the Tentative List at the national level and to foster the establishment or development of national or regional training centres to build capacities for the protection, conservation and presentation of heritage at national level. The suggestion of the 2016 Reactive Monitoring mission stands still relevant therefore for the Federal Government of Pakistan to introduce this overarching general policy and strategy by providing a platform which would allow the development of provincial and national capacities for the conservation and management of cultural and natural heritage, including the World Heritage properties in Pakistan.

2.3. Management structure (see section 3 below)

A Master Plan was finalized in 2016 but it is closer to a land use plan, and there is no established management plan which operationalizes various principles for the preservation of the property, nor any timeframe for implementation.

As the property stretches over 10km² with several hundred historical structures, a system for subdivision into different clusters is suggested, with individual supervision and conservation units. It would be important to subdivide the large property into 5 or 6 sub-units and provide each with an individual inventory system (reference) and an individual management structure consisting of one engineer or an architect, foremen and trained labourers. Each cluster should have its own list of actions, e.g. made according to the core priorities.
3. IDENTIFICATION AND ASSESSMENT OF ISSUES/THREATS

3.1. Governance

3.1.1. Site management tools and their implementation

Master Plan, management plan, regulatory plan and actions plans

While the Master Plan of the property, of 6 tomes, was compiled by a local external contractor in consultation with the site management authorities and finalized in August 2016 with a comprehensive set of research information including measured drawings and pictures of monuments, condition mapping, topographical maps, and land use plans, it remains unclear how this important document is effectively used to guide decision-making at the property. The Management Plan, which is aimed at operationalizing the overall management strategy set by the Master Plan, remains to be formally established as requested by the previous Reactive Monitoring Missions and Decisions of the World Heritage Committee. A document named ‘Management System Draft’ and another untitled document received by the Mission a few days before the Mission constitute some elements of a Management Plan, such as components of a policy for conservation interventions or conservation philosophy, but a proper management plan should include an extensive set of management imperatives as indicated in the Operational Guidelines (paras 108-118) including suggested timeframe for selected and prioritized actions, such as in 3, 5, 10-year cycle with prospected financial and staff allocation. Such a document should not include other types of information such as on-going restoration works. A regulatory plan for buffer zones recommended by the Decision 41 COM 7B.97 was not submitted. Most importantly, the aim of establishing the Management Plan should be understood as means of planning and implementing in a concrete manner the main actions under the stewardship and ownership of the site management authorities. The design of the management plan and its implementation are the core mandate of the site management authorities. External consultants can contribute to this work, but the management authorities should invest themselves to make the contents relevant and realizable.

Mission statement, organization chart and staff

The Mission noted that the majority of staff and key managers had been replaced or added since the last Reactive Monitoring mission in 2016 and a new management dynamic had been established. In these new circumstances, the aforementioned process concerning the establishment of a management plan or action plan is especially important not only to operationalize the directives set by the Master Plan but also to create a participatory approach, by sharing clear management objectives and benchmarks with all staff, and to ensure continuity of practice if and when personnel changes are made. The site staff needs to be involved in a clearer order in each field of works, with an established, but flexible, organization chart with job description. In the long term, a needs assessment is also necessary to plan the reinforcement of staff competencies and build professional capacity. In addition, the Department of Archaeology may benefit from establishing a clear mission statement and vision for the management of the World Heritage Property of Makli, in order to create a long-term and shared objective and solidarity of staff. An established organization chart and job descriptions would facilitate and systematize the role and obligations of all staff, their interaction and necessary tasks and reporting structure. The field of conservation for a vast site with numerous heritage structures requires a solid corps of staff.
Process for prioritization of interventions

The previous Reactive Monitoring mission and decision 41 COM 7B.97 respectively recommended the establishment of a mechanism for physical interventions, including the prioritization of interventions. The Mission received a draft document suggesting a policy on this a few days before the beginning of the mission, but it remains unclear how physical interventions on different structures and sites were prioritized in light of the assessments given by the Master Plan since 2016. Given the limited resources and human resources, it seems utterly important to establish a set of criteria on which various and urgent intervention needs can be ordered. Additionally, there is no established procedure for regular, systematic monitoring of the monuments to ensure that changes to the structures are recorded and new intervention priorities established accordingly.

Risk preparedness

The Mission was unable to identify a disaster response or emergency preparedness plan in use at the property. The Master Plan addresses some concrete measures in case of earthquake and flood, storms and hurricanes, possible relocation sites for communities displaced by floods. However, there does not appear to be any protocol for visitor evacuation, systematic inspection of monuments, or integration of emergency responders in the case of disaster. No staff manual, emergency guidelines, signs or instructions on-site for such purposes were seen.

3.1.2. Staff and capacities

Financial allocation and staff

The Mission obtained the document enabling to understand expected budget allocation over different expenditure items, but not an organization chart with clear number of staff for each assignment. Along with the mechanism recommended above for prioritizing the interventions, it seems important to allocate budget and human resources, in light of the priorities identified. The Department informed the Mission that 35 staff are permanently stationed in Makli.

Capacity building

Since 2016, training was provided to some key technical staff and international consultants were hired to deliver training on various subjects. Given the importance and variety of tasks to address conservation challenges, a systematic training needs assessment should be conducted to establish short-, medium-, and long-term training needs and international and national level training opportunities should be sought. It is advisable that the production of core management tools such as the management plan and mission statement be primarily taken care of by the site management authorities.

3.1.3. Coordination of international and national cooperation on site

A variety of technical assistance and cooperation projects, led by third party Pakistani entities, such as Heritage Foundation and the Endowment Fund, and funded by international organizations like Prince Claus Fund and foreign assistance arms of the American and German governments
have been implemented and provide positive dynamics and technical results for several monuments and for surrounding communities. It seems important that a clear mechanism of coordination and enforcing regulations, through the newly established Steering Committee or other instance, should be established and all partners should be involved in the uniform process, such as the submission of technical proposals prior to implementation, the obligation of associating national experts (from the Department) in all interventions, reporting cycle and quality control. General oversight of all project work should be the responsibility of site management and guiding conservation philosophy should be established by the Steering Committee and site management. All documentation resulted from the technical interventions, such as photography, behaviour analysis, academic research results should be duly transferred to the Department of Archaeology.

The management of particular living shrines currently under the management of Auqaf should include the Government of Sindh and the site management in order to ensure coherent and effective policies that maintain the integrity and OUV of the property.

### 3.2. Documentation and research

**Displaced architectural elements**

Despite previous requests from the 2016 Reactive Monitoring mission and Decision of the 41st Committee, details of inventory system for displaced architectural elements and documentation on the remaining architectural decoration, especially glazed tiles constituting an important part of OUV, have not been presented in the State Party’s state of conservation report received in November 2018 nor in the office of the site management authorities while some activities were reported for individual monuments such as the tomb of BakiBeig. The Mission in particular noted important architectural elements, detached from the original structures, laid on the ground without protection near the madrassa of HammadJamali, in the western cluster and in the courtyard of Tomb of Mirza Khan Tarkhan the Younger. The proper site-specific storage space was not found. In the long term, the placement of these precious pieces without protection and systematic documentation could lead to loss or irreversible damage, pending their restitution to their original locations, which requires extensive research. An open-ended, uniform, and systematic documentation procedure and form (manual or computerized) should be established urgently with a dedicated staff under the supervision of the site management to conduct documentation, inventory and storage of detached objects. The inventory work should not be limited to particular projects or elements, nor led by particular outside partners, but practiced by the site management authorities throughout the property with clear protocol. UNESCO can provide technical assistance on this depending on funding.
Baseline documentation for monuments and regular monitoring

While the Master Plan contains important information on site topography and typology of monuments of the Makli World Heritage property, even a suggested proforma for systematic monitoring\(^\text{10}\), the Mission cannot see how these data have been used to ensure the regular monitoring of visible structural changes (loss of materials, discoloration and biological growth). This action is recommended at least for the most important structures where rapid decay and imminent threats are already recognized, though systematic monitoring with varying levels of frequency dependent on significance should be established for all monuments.

**Site Inventory**

The Master Plan contains some site elements which have been inventoried and mapped, as requested in the 2012 Reactive Monitoring Mission report. The site inventory includes unique identification codes for each element and measured drawings for the larger structures and monuments. However, as already pointed out by the 2016 Reactive Monitoring Mission, georeferenced information is necessary to ensure the link between the elements and its vicinity, in order to control adjacent development or to establish necessary emergency access roads and utilities.

It should also be noted that the Master Plan of 2016 states the number of 20,044 graves recorded while the Statement of Outstanding Universal Value of the property mentions different figures, such as 500,000 burials. Other citations claim as many as 1 million burials.

**Documentation Centre**

The 2016 Reactive Monitoring Mission recommended the establishment of a documentation centre. The Mission verified the room assigned for this, but the centre has yet to be established and appropriate staff have not been assigned this responsibility.

\(^{10}\) Tome 1, Appendix 1, page 9, 10
Archiving

As part of documentation system and as the state of conservation report from State Party suggested, it would be highly useful to digitize old photos and historic archives with the establishment of a formal documentation centre. Such work would contribute greatly to enrich the reflection on the restoration plan and to judge the relevance of interventions.

Site Museum

The Master Plan suggests the establishment of a site museum to valorize the property and the Mission was also informed of the will of the authorities to construct it. Such an institution could contribute to the understanding of the rich history of the property and its region and of artistic and scientific knowledge of its attributes. However, the Mission stresses that other conservation and management priorities should be addressed prior to committing resources to this endeavour.

3.3. Maintenance

The property is recognized as a living site by the authorities as seen in their state of conservation report submitted in November 2018 and a number of pilgrims and local visitors visit the property. The Mission recognized a great change in its entire environment, compared with 2016 and before, as the cleaning of formally overgrown areas, marking boundaries of each monument with stone pebbles, planting of trees and installation of numerous litter boxes were observed. Yet, it is regrettable that small litters are scattered in and around the shrines, and visitors should be informed to respect the holy character of the sites. The State Party also reported in its state of conservation report, the actions such as the removal of graffiti from the monuments, removing of a large number of encroachments and restrictions imposed on vehicular movement inside the site premises.

Example of pebbles demarcating the monument zone: ©UNESCO/N.Hayashi2019
Drainage

A plan for site drainage is necessary and should be integrated into the Master Plan. While there may not be a need for drainage throughout the entire property, site surveys and staff observations should identify problem areas that may require intervention to ensure effective evacuation of rainwater away from important monuments and graves during and after rain events. Existing drainage in and around monuments also requires regular cleaning and inspection, especially before and after significant rainfall, to remove any debris that may be blocking drainage elements. Additionally, it is important for drainage solutions to be provided to specific monuments with partial or no roof, since the original interior spaces now exposed to the elements do not have any mechanism to evacuate water effectively and rainwater may pool and cause damage to the lower portions of the monuments, resulting in basal erosion and undermining of structural components.

3.4. Visitor Management

Security

The property is said to be guarded 24 hours a day, seven days a week. It was witnessed by the Mission during its night visit on 20 January that the entrance of the property was guarded and there were guards present at the Samma Monuments at the northern end of the property. However, the Mission was unable to discern how security staff is deployed day and night time at dispersed locations around the monuments, nor is there infrastructure, such as shelters or small buildings for their (and possibly visitors’) comfort and safety. There seems no night time lighting on-site. The Mission was unable to meet with caretakers of each monument. From the report of the State Party, it could only acknowledge the fact that a caretaker of Jam Nizamuddin mausoleum attempted vandalism to the conservation equipment and some stone structures and is now in custody.

Litter collection

The Mission observed litter boxes throughout the property, but many small litters such as plastic bags, bottles and leftovers are dispersed on the ground in and around the monuments. No evidence of communication with visitors on litter management or general maintenance efforts was apparent.
Visitor infrastructure and management

While the introduction of electric buses for visitors is useful and environmentally valuable, there appears to be little progress on developing consistent visitor infrastructure and amenities on site to provide information about the property, guide visitors through the site (i.e. a general explanation and wayfinding), opportunities for rest. There are no public toilets or other visitor facilities on the property, except at the entrance. The Master Plan proposes locations for certain facilities spread throughout the property.11

Consistent interpretation of significant property elements is also necessary in order to provide visitors with curated information and allow them to understand the property and its importance. While some signage is provided at some sites, the inconsistency of signage materials, design, and extent and nature of information clearly distinguishes monuments that have undergone treatment by third parties from the rest of the structures. Consistency in signage is recommended across the property and should be integrated into management planning documents, for the future operations.

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11 Tome 1, Appendix 3, Buffer zone, site infrastructure and facilities
3.5. Dialogue with local populations

As previously highlighted, the living aspects of the Makli monuments are important constituent of the property’s historical and present-day bond with different communities. The Mission recognized efforts deployed by the authorities to engage in dialogue with the local communities, including the arrangement of new burial space, the construction of boundary walls and associating local communities in decision-making processes. The Mission met with representatives of local communities who expressed various views on the ways the property has been managed and its tie with residents and surrounding areas. Outreach activities were reported.

New burials

The Mission witnessed the installation of new burial spaces, outside the buffer zones of the property, but still next to the boundary walls. The Mission expressed its appreciation for the authorities’ efforts in issuing a formal notification of ban on new burials within the property and engaging with local communities to solve the issue amicably.
Boundary walls and relocation of various installations

The entire property boundary has been more clearly demarked, with a new main gate rebuilt on the south of the property and demarcation walls under completion. Alongside the eastern boundaries, glossary shops and other illegal settlements are under removal with consent, except for a mosque which cannot be removed. Part of monuments have become visible from lower riverside in eastern side. The construction of demarcation wall on the western boundaries has progressed to be completed in March 2019. The Mission was informed that the settlements and other installations between the nominated areas and buffer zones will be removed. It was also ensured by the Department of Archaeology that large government offices and warehouses sited within the buffer zone on the inside of the recently built walls will also be resettled within two years’ time. It should be nonetheless noted that the new map showing current boundaries is needed to replace the old one in the nomination dossier and a minor boundary modification may need to be submitted accordingly.

Living aspects of the property

The identity and significance of the property as a living site has been increasingly recognized by the authorities and addressed in the state of conservation report and in the Master Plan. At a long-
term level, the Management Plan also should take these aspects into account in the daily management aspects. It is also possible to add this recognition in the Statement of OUV.

**Social projects near the property**

The Mission visited the ‘Zero carbon centre’ developed by Ms Yasmeen Lari, CEO and founder of the Heritage Fund, just behind the property. The initiative provided formerly beggar women and impoverished community members with opportunities to engage in social activities, by developing skills such as pottery making and keeping ecologic guesthouses. It appears to be a valuable socio-economic project with apparent positive results for the local community. However, it is unclear what the indirect impact of these efforts on the property and site management are. It is advisable that all similar activities and initiatives could be closely associated with the authorities’ efforts in raising awareness of local communities and populations about the interests of sharing benefits from the World Heritage property’s status, the principles of sustainable development and necessity of associating surrounding communities in some aspects of the site management, valorization and development.
4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

4.1. Conservation of Monuments

In contrast to the findings of the 2016 Reactive Monitoring Mission, the present Mission observed multiple signs of active conservation efforts and stabilization of some of the priority monuments (Figs. Jamia-1 and Jamia-2). Government of Sindh commitment to the care and protection of the property and its monuments is evident and includes the hiring of additional professional staff who live on-site, foreign and local conservation training of the head curator, who also serves as site manager, and multiple instances of foreign expert involvement at the property over the past three years. In addition to stabilization work carried out by site staff, there have been a series of projects completed or currently in progress by third parties, namely Heritage Foundation of Pakistan. Additionally, there is some regular monitoring carried out by site staff related to crack gauges installed in the tomb of Jam Nizamuddin and the weather station in the Samma cluster of monuments.

Figs. Jamia-1 and Jamia-2. South façade of Jamia Masjid in 2016 (l.) and 2019 (r.). Notice infill masonry on the right to address basal erosion and provide structural stabilization for the monument. A series of mortar/plaster tests are visible on the left with masonry repointing below.

Despite these promising developments and clear signs of progress in the preservation of the monuments at Makli, there are still a few areas that require improvement in order to ensure the integrity of the monuments and to protect the property’s OUV. An articulated system of regular condition monitoring of key monuments is necessary to record small changes and losses in the monuments, many of which incorporate notably fragile components, such as partial domes threatened by collapse or loss of structural fabric, detached and flaking plaster, and friable decorative surfaces. In addition to regular monitoring of the monuments, a systematic process of inventorying and storing detached architectural elements is crucial to maintaining the integrity of the monuments and ensuring the possibility of restituting fallen fabric, when possible. Finally, an emergency response and disaster management plan is necessary to ensure any threats to the monuments are identified immediately following an event capable of causing deterioration or loss of fabric.
Given the immensity of the site, the large number of significant monuments, and the involvement of multiple entities in conservation work, the property would benefit from development of conservation principles to assist in decision-making and provide clear direction for any third parties working at the site. It appears that in some cases, third parties working on significant monuments at the property have made crucial intervention decisions without consulting with the Government of Sindh and without the benefit of guidelines from site managers (Fig. Sultan Ibrahim-1 and Jan Baba-1). These include use of inappropriate or modern materials, partial reconstruction, and restoration of certain elements. To avoid this, it is important that the protocol consistent with heritage laws to upgrade the active supervision and monitoring by the department should be enforced and that site managers assume active supervision of all ongoing conservation work and provide clear principles and guidelines as to the preservation of the monuments.

**Tomb of Jam Nizamuddin**

Previous Reactive Monitoring Missions and World Heritage Committee decisions have highlighted the imminent threats to the structural integrity of the tomb of Jam Nizamuddin. After at least a decade of no noticeable action on the part of either the Government of Pakistan or the Government of Sindh, which was officially charged with the care of the property in 2011, the latter has taken some important steps towards understanding the condition of the monument and enabling the active monitoring of the building’s structural stability. These include the installation of a number of passive crack monitors throughout the building and one digital crack monitor and datalogger (Figs. Jam-1 and Jam-2). In spring of 2018, the Government of Sindh also contracted with a foreign structural engineer to assess the current condition of the tomb and propose possible methods of
stabilization. However, still lacking is an action plan related to the treatment of the monument with articulated next steps, projected budgetary needs, required expertise, and timeline for decision-making. Given that Jam Nizamuddin is considered the most important monument at Makli, its stabilization should be prioritized to preserve the OUV of the property and associated plans made available for review. It should be noted that both the 2016 Reactive Monitoring Mission and subsequent international structural engineering review warned against the approach to stabilization of the monument proposed in the Master Plan.


**Condition monitoring**

In contrast to the 2016 Reactive Monitoring Mission that noted no active condition monitoring at the site, the current Mission saw compiled data from active crack monitoring at Jam Nizamuddin. Interviews with site management staff indicated that there is a rudimentary system of monitoring the remaining monuments according to their geographic clusters. However, it was determined that this process is neither systematic in its approach nor does it employ any baseline documentation to help identify changes in the buildings or loss of fabric. The Mission recommends establishment of a systematic monitoring process that ensures the inspection of all significant monuments at regular intervals, using baseline documentation for comparison. The process also requires clearly articulated steps for reporting and decision-making when changes are noted.

**Emergency Stabilization**

During the 2016 Reactive Monitoring Mission, it was noted that many of the historic structures have elements in danger of collapse or that show signs of active settlement damaging to the building fabric. Aside from Jam Nizamuddin, the specific monuments mentioned in the previous Joint Mission report have been addressed through infill masonry and/or temporary buttressing. These include Jamia Masjid (Figs. Jamia-1 and Jamia-2) and Lali Masjid (Figs. Lali-1 and Lali-2), as well as some additional monuments. Based on brief inspection, these interventions are visually appropriate and effective in stabilizing the monuments. Additional monuments require similar stabilization to prevent loss of significant architectural elements and decorative components. Additional stabilization work should be prioritized according to severity of threat and significance of the monument or of the element(s) at risk (Figs. Sister Fatah-1 and Sultan Khos-1).
Figs. Jamia-1 and Jamia-2. Areas of infill masonry added to Jamia Masjid as stabilization measure (l. and r.). ©J.Bell2019

Figs. Lali-1 and Lali-2. Photos from before (2016, l.) and after (2019, r.) stabilization intervention. Brick masonry buttresses and infill masonry were added to stabilize the wall and prevent additional loss of materials. The Reactive Monitoring Mission highlighted that this intervention is effective as a temporary measure, but visually obtrusive due to its mass and negative impact on the form of the original structure. ©J.Bell2019
Figs. Sister Fatah-1 (l.) and Sultan Khos-1 (r.). Examples of fragile building fabric in danger of loss that require both regular monitoring and possible emergency stabilization to prevent collapse. Masonry dome remnants are particularly fragile because of the incomplete structure and their continued exposure to wind and rain. In these photos are also visible fragile areas of plaster and exposed masonry that require monitoring. Both of these monuments are also in need of drainage solutions for the interior spaces now exposed to the elements and possible location for pooling rainwater. ©J.Bell2019

Of particular importance to the OUV of the property is the Madrassa of Hamad Jamali (Fig. Madrassa-1), associated with the founding and naming of the property. This structure, most of which has collapsed is an elegant monument with ornate carvings, is in advanced state of deterioration and structurally compromised and in immediate need of emergency stabilization (Figs. Madrassa-2 and 3). Both the 2016 Reactive Monitoring mission and previous World Heritage Committee decision called for enhanced monitoring of this monument that included installation of a weather station in the vicinity. While a weather station has been set up roughly 40 meters away, there is little indication how the compiled data are integrated into conservation decision-making for the monument. There is no indication that there is any ongoing planning for the stabilization and protection of this monument, which is severely needed. Many of architectural elements of this structure are also stored nearby on the ground without any protection, systematic documentation, or cataloguing (see below).
Fig. Madrassa-1. A general image of the extant intact madrassa. ©J.Bell2019

Figs. Madrassa-2 and Madrassa-3 (l. and r.). The advanced state of decay of the stones used in the monument have made it extremely fragile. Severely eroded stone elements are highly friable and those bearing loads of stones above are at risk of further damage that could ultimately lead to collapse of additional portions of the monument. ©J.Bell2019
Structural Interventions

A number of important structures at Makli have been the subject of important structural stabilization during both the British period and under Federal management. While many of these interventions served the immediate purpose of emergency stabilization, they may not have been intended to be permanent solutions and have, over time, shown that additional long-term stabilization is required. In all cases, emergency stabilization should be regularly monitored and reviewed and long-term stabilization planning should begin to develop more permanent solutions to subsidence, structural instability, and possible loss of large architectural elements. In particular, Jamia Masjid, Jam Tamachi, and Issa Khan Tarkhan II (Figs. Jamia-3 and 4, Tamachi-1 and 2, Issa Khan-1) require review and monitoring of earlier interventions and development of more permanent structural interventions.

Figs. Jamia-3 and Jamia-4 (l. and r.). I-beams used for stabilization in Jamia Masjid were put in place in the 1970s as temporary stabilization solutions. Although infill masonry has been added to the east side of the building as a structural intervention, there have been no efforts to monitor the effectiveness of the I-beams or to develop alternative, permanent stabilization solutions for the western portion of the structure. ©J.Bell2019

Figs. Tamachi-1 and Tamachi-2. The canopy of Jam Tamachi. Similar to Jamia Masjid, I-beams were used as temporary stabilization interventions in the 1970-80s (l.). It appears that the I-beams have caused damage to the fragile stone surface and continued lateral movement of the monument is causing the I-beams to become incised into the stone. Long-term stabilization interventions should be developed and implemented. ©J.Bell2019
Figs. Issa Khan-1 and Issa Khan-2. Issa Khan Tarkhan II. Masonry pillars were constructed in the 1980s adjacent to original stone columns as stabilization efforts (l.). Although recent interventions on the roof and at the property aimed to address certain conditions of the monument, no effort was made to assess the condition of earlier structural interventions or develop more permanent solutions. A detail of one column (r.) shows that it has been undermined through loss of bricks. ©J.Bell2019

*Displaced Building Fabric (see also 3.2 above)*

While there has been an effort since the 2016 Reactive Monitoring mission to organize displaced building fabric on site, there is no systematic inventory system or storehouse for important elements. Some elements, like those at the Madrassa of Hamad Jamali have been organized in situ, but without any labelling or associated documentation (Fig. Madrassa-4).

Fig. Madrassah-1. Fallen architectural elements presumed to belong to the Madrassa Hamad Jamali have been neatly laid out adjacent to the ruins of the structure. However, none of these materials have been individually tagged or documented, preventing the ability of property managers to track their location and explore opportunities for restitution. Additionally, lack of secure storage means elements may be stolen and continue to be susceptible to the elements and other threats to their condition. ©J.Bell2019
General Maintenance

Effective management of the site also requires the general maintenance of the monuments and their environs to protect from the impacts of invasive plant growth and soil and debris build-up that may block drainage or hold moisture at the base of building fabric. In general, site maintenance has improved greatly since the 2016 mission and large areas of invasive plant growth have been cleared and debris removed to clear original drainage features and reveal original historic elements covered by decades of accumulated dirt and soil. However, a particularly exemplary case of damage caused by invasive tree roots was noticed at the tomb of Issa Khan Tarkhan II, which requires treatment to avoid further damage to historic fabric (Fig. Issa Khan-3).

Fig. Issa Khan-3. Issa Khan Tarkhan II. Invasive tree roots causing damage to historic retaining wall and pavement. Remedial measures need to be implemented to prevent further damage.
5. CONCLUSIONS AND RECOMMENDATIONS

The Historical Monuments at Makli Hill, Thatta World Heritage property is a rich example of monumental funeral architecture of the civilization of Sindh region from the 14th to 18th century. These mausolea and associated graves represent a unique breadth of artistry, architectural and decorative ingenuity, and provide a rare lexicon of the development of artistic expression, architectural form and technology of the region within one contiguous site. Long periods of neglect, inadequate management and insufficient conservation have gravely impacted the integrity and experiential quality of the historic necropolis. Successive recommendations of the World Heritage Committee judged imperative that actions be taken immediately to protect the property from continued damage and prevent further loss of its Outstanding Universal Value (hereafter referred as OUV).

The investment and preservation efforts of the Government in Sindh in recent years have greatly contributed to the improved condition of the property in general and stabilization of many of the site’s monuments. A number of significant monuments in need of stabilization during the 2016 Joint Mission have since undergone some structural intervention and benefitted from improved site maintenance, waterproofing, and increased security. Specific recommended measures were also implemented for some of the most important monuments, such as the Mausoleum of Jam Nizamuddin and Jamia Majid. It is encouraging to see that there are dedicated site management staff with relevant training working to protect the property, improve management, and address the most pressing needs of the monuments. The establishment of a Steering Committee for the property is also beneficial and is expected to contribute to the quality of site management by improving decision-making processes and involving multiple stakeholders.

A clearer demarcation of the property with boundary walls, relocation of infrastructure and the establishment of a modern burial site contribute to the property’s general management and illustrate a serious commitment on the part of authorities to facilitate ongoing dialogue with local communities and formally recognize the living aspects and values of the property.

Despite the progress made at the site since 2016, there are a number of areas still requiring substantial improvement that are quintessential to effective cultural heritage site management and preservation. These areas can only be addressed through the continued commitment of the national and provincial authorities to the protection of the property.

While specific technical interventions on individual monuments have improved, there is a need for enhanced governance and management decision-making to safeguard the OUV of the property. Despite calls over the last decade from the reactive monitoring missions and the decisions of the World Heritage Committee, the Management Plan for the property, which is a key management tool to operationalize the Master Plan and integrate all staff in management processes, remains to be formally established. Crucial components of preservation still require development and implementation. These include a protocol for systematic condition monitoring, development of prioritized conservation interventions, an established documentation system for the built heritage and a documentation and storage process for detached and displaced architectural elements. Additionally, a disaster management and emergency response plan that encompasses both the monuments and visitors should be developed and put into practice. The lack of the above components could represent persisting threat to the long-lasting preservation of the OUV.
A visitor management plan is also needed to address circulation and safety of visitors, interpretation of the property and specific monuments, visitor amenities and infrastructure, and management of the living aspects of the site. Integration of the local community in certain aspects of site management could help articulate a long-term vision of preserving the living heritage site for the well-being and spiritual fulfilment of diverse stakeholders. Social projects in and around the property could be aligned with the core objectives of site management, following the official strategy adopted by the World Heritage Committee for sustainable development. With additional effort and study, there is great potential that such efforts might be showcased as a model example.

The Mission has highlighted some resolution throughout the report and compiles them here as a list of recommendations.

**Recommendations**

**Management**

1. Implement the Master Plan for the property by establishing a proper and comprehensive Management Plan, including accompanying action plans with clear timeframes (3, 5, 10-years as suggested by the Master Plan) that can demonstrate the rationale, projected budget, objectives and duties of the staff concerned for each prioritized fields of intervention;
2. Establish a formal organizational chart with job descriptions, relating each employee’s work and assignments to necessary interventions identified by the Master Plan/Management Plan;
3. Establish a formal mission statement for the Department of Archaeology concerning the preservation of the property;
4. Carry out a needs assessment related to staff capacity, in light of the prioritized fields of action defined by the Master Plan/Management Plan and verify regularly available international training courses and relevant capacity building opportunities for staff;
5. Explore the possibility of reinforcing the unit for the preservation/conservation of monuments, to support the chief conservator (site manager) and including a position responsible for the inventory of moveable artefacts and monuments;

**Prioritization of interventions**

6. Establish a methodology for evaluating the need for interventions on the short-, medium- and long-term – for instance, in light of the significance of given monuments to the OUV of the property; the state of preservation; identified mechanisms and rates of deterioration (evaluation of the principal threats); availability of capacities; availability of budget;

**Risk preparedness**

7. Establish a formal risk preparedness strategy and emergency response plan that encompasses both the preservation of monuments and the safety and security of visitors in case of human-made or natural disasters and train staff in the specific procedures;

**Coordination of international and national cooperation on site**

8. Coordinate international and external cooperation and associated fundraising with intervention priorities to fulfill the most pressing needs of specific monuments and the site as a whole (in
close correlation with recommendation 6 above);
9. Draft written guidelines concerning the nature and oversight of external cooperation by establishing ethical and technical principles and criteria for collaboration (proposals to be formulated, integration and training of the Department staff, regular reporting, intervention permits and supervision)
10. Ensure the institutional mandate and high technical expertise to be provided by the Steering Committee by adopting a written statute of the Committee and including experts in different fields as permanent or associate members (conservation, history, sciences, communication, legal issues, Auqaf)

Conservation

11. Develop an action plan with clear timeline and resources for the stabilization and conservation of the tomb of Jam Nizamuddin and make the plan available for review by the Steering Committee;
12. Establish a systematic monitoring system for all principal monuments that includes close inspection of fragile components and recording of any noted changes from baseline photographs;
13. Establish a secure storage facility for the most important displaced architectural elements;
14. Draft emergency response procedures related to monument inspection and reporting subsequent to any event capable of causing damage, including significant rain events, and train all staff in these procedures;
15. Develop clear conservation principles to aid in decision-making and enforce adherence to associated guidelines by all parties working on site;
16. Establish clear protocols for oversight for all work carried out on site that includes review of proposed interventions and supervision of implementation.

Documentation and research

Displaced architectural elements

17. Establish and implement urgently a clear documentation system and protocol enabling systematic recording of important detached architectural elements which can be followed up by a dedicated staff under the supervision of the site manager. A clear code (numbering) system, original location, current location (storage information), date of recording, weight, size, and brief description with reference to scientific information (if available) are necessary as minimum requirement. Measures should be taken to keep an up-to-date duplicate of various inventories and documentations should be ensured in another location to save the data;

Baseline documentation for monuments and regular monitoring

18. Establish a clear rule for regular monitoring of important burials/monuments and assign staff to implement it with reasonable frequency;

Site Inventory

19. Continue the site inventory work using GIS to map, record, and label visible burials. The platform used should include all necessary spatial and locational information, photographic documentation, links to any available historical information (e.g. historic photographs, information on tomb owner), and links to any available condition and intervention information.
The system should be updated regularly with monitoring data, intervention records, and any newly uncovered information. Given that multiple inventory systems have been established, each with valuable data, it will be useful to integrate the information into one master GIS;

20. Investigate the history of burials to develop a more accurate estimation of burials at the property and request an amendment to the statement of OUV, if applicable;

**Documentation Centre**

21. Establish and run an on-site documentation centre storing documentation, inventories, archives relating to the property with appointed, capable staff to manage it and provide access to site staff, researchers, and others, as deemed appropriate.

**Archiving**

22. As part of the documentation system and as the State of Conservation report from State Party suggested, it would be highly useful to digitize old photographs and historic archives with the establishment of a formal documentation centre. Such work would contribute greatly to enrich the reflection on the restoration plan and to judge the relevance of interventions.

23. Plan and implement the collection and digitization of old records, photos and historic archives concerning monuments of the Makli World Heritage property and if possible to make them available on-line or in the documentation centre for use by site management and researchers, as deemed appropriate.

**Site Museum**

24. In the future, develop thorough approached for presentation and display of collections to be exhibited, activities to be organized and staffing of such an institution so that it could contribute to deepen the knowledge of the property and to inform visitors of the OUV, as well as their obligations to take part in its proper management and safeguarding.

**Maintenance**

**Drainage**

25. Establish regular drainage inspection and maintenance that occurs especially before and after major rain events to clear drains of debris and repair any damage to drainage elements;

26. Develop procedure to assess drainage needs for monuments without adequate roofing to ensure that water does not pool and cause damage to building fabric;

**Visitor Management**

**Security**

27. Evaluate the need to station security guards throughout the site and at least indicate within the site the directions of the exit, instructions for evacuation in case of natural disasters;

28. Provide a written code of conduct of caretakers in order to inform them clearly their duties and obligations;

29. Provide appropriate level of lighting along the main pedestrian walkways to guide visitors to shrines and deter them from visiting other parts of the property during night-time. Ensure lit
areas align with shrine visitor paths.

*Litter collection*

30. Continue to maintain the site to make the environment suitable for its long-term preservation and access and enjoyment of visitors;
31. Inform visitors of available rubbish receptacles and their obligation to contribute to the tidiness of the site;
32. Carry out regular trash removal on site by the site staff or outsourcing services;

*Visitor infrastructure and management*

33. Evaluate the possibility of building water-saving public toilets (outside or inside the site) and emergency facilities on-site, in alignment with the Master Plan;
34. Develop consistent signage for interpretation of the property and its elements and wayfinding for visitors. Signage needs to include general information on location of facilities, availability and cost of electric buses, directions to key monuments, shrines, and other significant site elements.
35. Establish a system of counting and recording visitors at main entrances and collect information on their demographics, while at the same time providing them with basic information on the history of the site, as well as on their obligation to contribute to the security and tidiness of the property, for instance by properly disposing of rubbish.
36. Undertake a detailed survey on visitor demographics and behaviour to understand typical expectations, behaviour and needs. The visitor survey should be customised to reflect the particular situation in the site.
37. Investigate and determine the feasibility of establishing guided tours for visitors, including development of routing through the site, required resources for guiding, and any associated costs for visitors.

*Dialogue with local populations*

*Boundary walls and relocation of various installations*

38. Complete the boundary wall construction, and adopt officially the boundaries identified in 2013, and submit a minor boundary modification to the World Heritage Centre for consideration by the World Heritage Committee;

*Living aspects of the property*

39. Establish an official policy acknowledging the values of the property as a living heritage site and place of worship while extending efforts to reconcile this aspect with the preservation imperatives, by means of information, education, outreach activities;
40. Organize further educational and informational activities associating local schools and community members/groups in order to keep the site close to the populations’ daily life;

*Social projects near the site*

41. Explore the possibility of associating social initiatives such as the zero carbon centre more closely with the property so as to provide opportunity for marginalized and impoverished populations to benefit from the property’s World Heritage status, e.g. the co-development of
signature products of the Makli property and association of populations in the site-related activities (i.e. on-site guides, information officers, production of souvenir products, etc.). Training and additional resources will be necessary;

42. Associate any future international assistance, including the new UNESCO assistance for creativity, closely with the goals of the management authorities to multiply benefits towards local populations, including marginalized members.
6. ANNEXES

Annex 1: Terms of Reference for the mission

**TERMS OF REFERENCE**

Joint World Heritage Centre / ICOMOS Reactive Monitoring Mission

Historical Monuments at Makli, Thatta (Pakistan)

January 2019

At its 41st session, the World Heritage Committee requested the State Party of Pakistan to invite a reactive monitoring mission to Historical Monuments at Makli, Thatta World Heritage property, to be conducted jointly by the World Heritage Centre and ICOMOS (Decision 41 COM 7B.97, Annex 1).

The objective of the monitoring mission is to assess the state of conservation of the property, and in particular to:

a) Review the progress accomplished with the implementation of the decisions adopted by the Committee at its 40th and 41st sessions, as well as the recommendations made by the 2016 Reactive Monitoring mission, including:

   i) the development of the Management Plan, a regulatory plan for the buffer zone of the necropolis and the Master plan;
   ii) the overall management of the property, in relation to all criteria for which the property was listed, and on particular points raised as critical in the previous decisions and recommendations (e.g. litter collection, site security, contemporary burials encroachment, stabilization of important monuments particularly the Jamia Majid and the Jam Nizzamuddin Mausoleum and several other monuments groups, including the production of the necessary preliminary assessments and studies, as requested by Decision 40 COM.7B.44);
   iii) conservation works carried out on site;
   iv) the mechanism established for physical interventions, including the prioritization of interventions;
   v) the establishment of documentation/inventory and monitoring systems;
   vi) human resources development;
   vii) financial allocation;

b) Review progress made in engaging with the local community about new burials and the relocation of dwellings currently found near the barrier wall at the western edges of the property, and related educational and outreach initiatives; In particular, in relation with the recent desecration of the grave of Jam Nizamud Din, the mission holds a consultation session with representative(s) of local communities in order to understand the background of the incident and their general feelings about the state of the property, including the issue of access to it;

c) Advise the State Party on the issues related to the boundaries and buffer zone of the property as well as the completion and implementation of the Management Plan;
d) Review the factors that constitute a threat to the property and consider whether there is still an ascertained or potential danger to the OUV of the property which would warrant its inscription on the List of World Heritage in Danger;

e) In line with paragraph 173 of the Operational Guidelines, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

The State Party is requested to facilitate and accompany necessary field visits. In order to enable preparation for the mission, the following items should be provided to the World Heritage Centre (copied to ICOMOS) as soon as possible and no later than 1 month prior to the mission:

a) All relevant technical and planning documents under preparation for the property, including all documents relevant to the elaboration of the Management Plan;

b) All available information, reports and records about the actions implemented in response to the previous decisions of the Committee (e.g. conservation, security, management etc);

c) Available elements showing the actions concerning the documentation/inventory:

The mission should also consult with the authorities at national, provincial and municipal levels, in particular the Ministry of Culture of the Government of Sindh. In addition, the mission should consult with a range of relevant stakeholders, including i) staff of the site management authorities; ii) NGOs; iii) the UNESCO Office in Islamabad; and iv) representatives of local communities.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Government of Pakistan and the World Heritage Committee with the objective of providing guidance to the State Party for actions to be taken to address identified threats to the property, and to improve the conservation of its Outstanding Universal Value. It should be noted that recommendations will be provided within the mission report (see below), and not during the mission implementation. The mission will prepare a concise report on the findings and recommendations within six weeks following the site visit, following the World Heritage Centre reactive monitoring mission report format (Annex 2).
Annex 2: Decision: 41 COM 7B.97

The World Heritage Committee,

1. Having examined Document WHC/17/41.COM/7B,
2. Recalling Decision 40 COM 7B.44 adopted at its 40th session (Istanbul/UNESCO, 2016),
3. Expresses its appreciation for the significant efforts expended by the State Party to improve the state of conservation of the property by regularly removing litter, graffiti and vegetation from the property, hiring security guards, and documenting/storing displaced original architectural elements;
4. Notes however that important requests made by the Committee are yet to be addressed or fully implemented, including the completion of the barrier wall, the encroachment of contemporary burials on the property, the stabilisation of important monuments, and the finalization of the Management Plan;
5. Requests the State Party to:
   a) Submit, at its earliest convenience, details of the inventory system for displaced architectural elements and documentation on the remaining architectural surface decoration, and especially glazed tiles, which constitute an important part of the attributes of Outstanding Universal Value (OUV) of the property,
   b) Ensure that programmes to record and analyse data from weather stations and crack monitors are implemented and that the results contribute directly to the management and conservation of the property and its monuments,
   c) Finalize the Management Plan for the property, taking into account the findings and recommendations of the 2016 Reactive Monitoring mission, together with a regulatory plan for the buffer zone of the necropolis, in consultation with the World Heritage Centre and the Advisory Bodies;
6. Urges the State Party to:
   a) Continue the stabilization of all elements in danger of collapse, in order of priority, particularly the Jamia Majid and the Jam Nizzamuddin Mausoleum and several other monuments groups, and produce the necessary preliminary assessments and studies, as requested by Decision 40 COM.7B.44,
   b) Determine the most appropriate way of accommodating new burials, notably by considering the allocation of an area outside of the property’s boundaries to this use, set up a mechanism for civilians to obtain burial authorisation, and ensure that the Management Plan acknowledges and addresses the living heritage values of the property and institutionalizes consultation with local communities,
   c) Consult with local communities regarding new burial arrangements and residential relocation and seek to incorporate programmes for education and outreach, making sure that changes do not create further risks of vandalism or damage,
   d) Establish clear standards and mechanisms for the continued supervision of all interventions carried out at the property, whether by the Sindh Government’s staff or by third parties, ensure that all regulations are followed and that proposals for works are submitted, reviewed, and approved before any work is undertaken on site,
e) Develop a process for the prioritization of work and any related budgetary allocation to ensure that the most critical needs are met first. Priorities should be determined according to the significance and condition of the monuments, such that the most significant monuments in the worst condition are treated before those of lesser significance and/or in a less degraded state of conservation.

f) For each major monument, create an extensive baseline photographic documentation that can be used to monitor visible structural changes (e.g. loss of material, cracks, discoloration and biological growth). All photographs should include size and colour scales for reference;

7. Encourages the State Party to provide short- and mid-term training programmes for the staff of the Department of Archaeology, to hire experts whenever necessary, and to develop a detailed list of responsibilities and a schedule of activities for each member of staff;

8. Also requests the State Party to invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to the property in the first half of 2018, in order to:
   a) Review the progress accomplished with the implementation of the decisions adopted by the Committee at its 40th and present sessions, as well as the recommendations made by the 2016 Reactive Monitoring mission, and in particular:
      i) the development of the Management Plan,
      ii) the overall management of the property (e.g. litter collection, site security, contemporary burials encroachment),
      iii) conservation works carried out on site,
      iv) the mechanism established for physical interventions, including the prioritisation of interventions,
      v) the establishment of documentation/inventory and monitoring systems;
   b) Review the factors that constitute a threat to the property and consider whether there is still an ascertained or potential danger to the OUV of the property,
   c) Advise the State Party on the issues related to the boundaries and buffer zone of the property as well as the completion and implementation of the Management Plan;

9. Further requests the State Party to submit to the World Heritage Centre, by 1 December 2018, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 43rd session in 2019, with a view to considering, in the absence of substantial progress in the implementation of the above mentioned issues, the possible inscription of the property on the List of World Heritage in Danger.
## Annex 3: Programme of the Joint WHC/ICOMOS Reactive Monitoring Mission

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>18 January 2019</td>
<td>Mr Jonathan Bell arrival to Karachi</td>
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</tbody>
</table>
| 19 January 2019 | Ms Nao Hayashi arrival to Karachi  
Mission members’ internal briefing on the objectives of the mission and study of the background documents |
| 20 January 2019 | AM: Karachi  
Meeting with Ms Yasmeen Lari, CEO of the Heritage Foundation Pakistan  
Meeting with the Director General, Antiquities & Archaeology of Sindh Province, at the National Museum of Pakistan  
PM: Travel to Makli (2 hours)  
Evening: visit to the site (to check the security conditions and living shrine) |
| 21 January 2019 | Morning: Tree planting ceremony on-site  
9AM to 3PM  
Visit of the property from western cluster to eastern cluster  
3PM to 5PM  
Visit to the western boundary wall and modern burial space, eastern boundary and Heritage Fundation’s project site |
| 22 January 2019 | 9AM – 3PM  
Meetings in the site management office with technical staff, Endowment Fund, local communities  
3PM  
Travel back to Karachi |
| 23 January 2019 | Debriefing with the Director-General  
Debriefing with the Minister of Culture and Education of Sindh Province |
| 24 January 2019 | Ms Hayashi and Mr Bell departure from Karachi |
Annex 4: Composition of the Mission Team

Nao Hayashi (World Heritage Centre)
Jonathan S. Bell (ICOMOS)
Annex 5: List of persons met

Site authorities

Mr Syed Sardar Ali Shah
Minister
Culture, Tourism and Antiquities Department, Government of Sindh

Mr Manzoor Ahmed Kanasro
Director General Antiquities and Archaeology
Culture, Tourism and Antiquities Department, Government of Sindh

Mr Abdul Fatah Shaikh
Director
Antiquities and Archaeology
Culture, Tourism and Antiquities Department, Government of Sindh

Mr Serfraz Nawaz Jatoi
Archaeological conservator

Mr Mohsin Soomro
Assistant curator

Mr Nauman Palijo
Librarian

Mr Ashraf Palijo
Draft man

Mr Meher Muhammad
Cook

Mr Jan Muhammad Palijo
Attendant

Mr Masoom Shah
Booking clerk

Partners

Ms Yasmeen Lari
President
Heritage Foundation of Pakistan

Endowment Fund Trust for Heritage of Sindh

Local community representatives
Annex 6: Map of the property (as received by the mission in January 2019)
<table>
<thead>
<tr>
<th>Recommendations</th>
<th>2016 RMM</th>
<th>Decision 41 7B.97 (2017)</th>
<th>State of implementation as appraised by RMM 2019</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5 (c) Finalize the Management Plan for the property, taking into account the findings and recommendations of the 2016 Reactive Monitoring mission, together with a regulatory plan for the buffer zone of the necropolis, in consultation with the World Heritage Centre and the Advisory Bodies;</td>
<td>In progress but incomplete</td>
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<tr>
<td>Management Urgent (by 2017)</td>
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<tr>
<td>1. Establish immediately a management plan including a systematic monitoring system as well as a plan for capacity building of the staff of the department of archaeology of the Government of Sindh without waiting for the finalization of the Master Plan.</td>
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<tr>
<td>2. Station 24-hour security around the site. Regularly inspect the most important areas and monuments 4 times throughout the day and 2 times during the night. Monitor visitors and prevent inappropriate uses and unsanctioned vehicular access. Record and report all activities on the site and prevent any new burials and illegal dumping.</td>
<td></td>
<td>Partially complete (24-hour guides staffed but unclear cycle of patrolling) Incident recorded at Jam Nizamuddin mausoleum</td>
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<tr>
<td>3. Complete remaining stretch of barrier wall to arrest encroachment from the west side of the property, adopt officially the</td>
<td></td>
<td></td>
<td>Barrier wall under completion Minor boundary modification not submitted</td>
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<tr>
<td></td>
<td>Boundaries identified in 2013, and submit a minor boundary modification to the World Heritage Centre for the approval of the World Heritage Committee.</td>
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<tr>
<td>4.</td>
<td>Consult with local communities in order to determine the most appropriate way of accommodating new burials and consider allocating an area dedicated to this use as well as a mechanism for seeking and obtaining permission. Continued supervision of the selected area and the process is recommended. The requested management plan should acknowledge and address living heritage value of the property and should institutionalize consultation with local communities.</td>
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<tr>
<td>6 (b)</td>
<td>Determine the most appropriate way of accommodating new burials, notably by considering the allocation of an area outside of the property’s boundaries to this use, set up a mechanism for civilians to obtain burial authorisation, and ensure that the Management Plan acknowledges and addresses the living heritage values of the property and institutionalizes consultation with local communities.</td>
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<td></td>
<td>New burial space arrangement complete Management Plan in progress but incomplete Participatory approach should be integrated in the Management Plan.</td>
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<tr>
<td>5.</td>
<td>Develop and begin implementation of a plan for regular trash removal. Train site staff to collect trash.</td>
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<td>Partially complete (litter bins were installed but cleaning is not efficient, but the site is far tidier than in</td>
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<td>when they see it. Determine most appropriate locations for trash receptacles according to visitor management planning and design and install unobtrusive bins within reach of visitor circulation paths (see Visitor Infrastructure).</td>
<td>2016; visitors need to be informed of their obligation</td>
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<td>Conservation</td>
<td>6. Install on an urgent basis at least three environmental monitors/weather stations (to be installed in each of the monuments clusters such as the Sammas, Arkhan/Tarkhan, and Mughal) to collect data on fluctuations in temperature and relative humidity that may serve as factors of deterioration in critical monuments, as well as to record wind speed and directions, as well as rainfall and other data.</td>
<td>Weather station in the Samma cluster Integrated monitoring system is in progress but incomplete (there is little understanding of the generated data or how they can inform decision-making)</td>
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<td>7. Install Avongard tell-tales (crack monitors) on cracks of concern in the principal monuments, including tomb of Jam Nizamuddin and Jamia Masjid. Photograph all locations before and after installation and establish a regimen of monitoring that begins aggressively (every three months) and slows down (annually) if no change is recorded. If change is</td>
<td>Crack monitors installed in Jam Nizamuddin with regular data collection</td>
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<td>noted, more frequent monitoring (monthly) should be undertaken.</td>
<td>8. Conduct a systematic soil investigation/geo-physical survey in the vicinity of the Mausoleum of Jam Nizzamuddin. Resulting data, along with data from a crack monitoring and a condition assessment of the structure, should provide the basis for a conservation plan of the monument;</td>
<td>In progress but incomplete (a geophysical soil analysis was conducted, but there is no plan developed for stabilization of the monument)</td>
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<td>9. Stabilise all elements in danger of collapse, including in the Jamia Masjid, Jam Nizamuddin, as well as in a number of other monument groups. Prior to commencing work on each monument, develop: 1) detailed condition mapping and documentation; 2) characterization of original building fabric (e.g. stone and brick masonry, mortar, plaster, tile and glaze); 3) history of interventions to understand the series of subsequent work on each building and how that may affect development of successful interventions; 4) design of compatible intervention materials, which must be</td>
<td>6 (a) Continue the stabilization of all elements in danger of collapse, in order of priority, particularly the Jamia Majid and the Jam Nizzamuddin Mausoleum and several other monuments groups, and produce the necessary preliminary assessments and studies, as requested by Decision 40 COM.7B.44,</td>
<td>Partially complete (Stabilisation of some monuments (Jamia Masjid, Sultan Ibrahim, Jan Baba, Lali Masjid, Sister Fatah Sultan Khois, etc) but Jam Nizamuddin still requires urgent stabilization, as well as other important monuments, such as the Madrassa of Hamad Jamali. The Mission was not shown the assessments and studies requested by the 2016 Mission and the 2017 Decision)</td>
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informed by analysis of original fabric mentioned in #2; 5) specifications for interventions that include instructions for fabrication of intervention materials and their application and implementation; and 6) plan for monitoring and maintenance after interventions are completed.

10. Document fallen original fabric and store it carefully in sanctioned storehouses, and establish a documentation procedure for this purpose. The procedure should include the following steps: 1) photograph materials as found in situ; 2) label and photograph individual elements; 3) store materials in dedicated storehouse/magazine; and 4) create and maintain an inventory of all collected items.

5 (a) Submit, at its earliest convenience, details of the inventory system for displaced architectural elements and documentation on the remaining architectural surface decoration, and especially glazed tiles, which constitute an important part of the attributes of Outstanding Universal Value (OUV) of the property.

In progress but incomplete (There is no systematic process for recording or tagging fallen elements and they are left unsheltered outside near the associated monuments)

11. Carry out on an urgent basis full documentation of the existing architectural surface decoration such as remaining glazed tiles, which are important attributes of the OUV and have already been largely lost, and establish a condition report to be accompanied by a damage assessment.

Partially complete (documentation has been undertaken as part of conservation work, but there is no evidence of a coordinated effort across all monuments to document and assess the condition of decorative elements)
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<th>12. Determine how best to resume and complete the conservation work at the Sultan Ibrahim mausoleum, taking into account its critical state both at the structural and surface level including the domes and surface architectural decoration.</th>
<th>Complete (This work was completed by the third party already working on the site in 2016.)</th>
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<td>For consideration and implementation by 2019</td>
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**Management**

<p>| 1. Develop and install consistent signage with visually engaging and informative content at each of the principal monuments and along the main access road in front of the four principal monument groupings (Samma, Arkhun, Tarkhan, and Mughal). Together, the signage should provide a narrative about each of the periods represented at the site, the principal structures and their significance, building materials and architectural styles, and conservation of the monuments and the site. Signage should be visually unobtrusive and provide content at least in Urdu, and English. It is also possible to integrate QR codes and website links on | In progress but incomplete (New signage has been placed in front of some monuments and in other parts of the site, but most of the signage is inconsistent with at least five different versions comprising distinct aesthetics, information, and construction materials) |</p>
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<td>select signs to provide additional resources for interested visitors.</td>
<td>In progress but incomplete</td>
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<td>2. Determine the most appropriate locations for dispersed visitor facilities (e.g. bathrooms, rest stops, shelters, trash bins, information kiosks) and design and install unobtrusive infrastructure that is accessible from principal areas but that does not result in visual intrusion.</td>
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<td>3. Using the new inventory as a baseline, investigate the history of burials and develop a more accurate estimation of burials at the site and request an amendment to the statement of OUV, if applicable.</td>
<td>In progress but incomplete (there is some recent published research on the epigraphy at the site that investigates burials, but this is limited to those gravesites with carving, and no further updates were presented to the Mission)</td>
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<td>4. Consider the best options for the future of structures within the buffer zone and develop a five-year plan for phasing out or diminishing current use and relocating necessary activities outside of the buffer zone.</td>
<td>Five-year plan not seen</td>
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<td>Conservation</td>
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<td>5. Establish clear standards and mechanisms for continued supervision of ANY AND ALL interventions carried</td>
<td>In progress but incomplete (there was no evidence of specific guidelines or standards for</td>
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<td>6. Develop a process for the prioritization of work on site and related allocation of budget to ensure the most critical needs are met first. Priorities should be determined by significance and condition, such that the most significant</td>
<td>6 (d) Establish clear standards and mechanisms for the continued supervision of all interventions carried out at the property, whether by the Sindh Government’s staff or by third parties, ensure that all</td>
<td>In progress but incomplete (this may be under way with the Steering Committee, but was not in place during the mission)</td>
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<td>out at the site, whether by Sindh Government staff or third parties. Ensure all regulations are followed and proposals for work submitted, reviewed, and approved PRIOR TO ANY WORK AT SITE COMMENCING. It is also recommended that the Government of Sindh establish an independent Technical Advisory Committee to review and provide commentary on intervention proposals to inform Government decisions. This is particularly important since it appears that the Government of Sindh does not have sufficient staff with the necessary expertise to assess the appropriateness and effectiveness of interventions, nor does it have in place any specific mechanisms for adequate decision-making.</td>
<td>conservation work, nor is there evidence of supervision of third party work at the site; it is unclear how conservation approaches and proposals are reviewed and approved; a TAC has been established, but it does not appear that all work is being approved accordingly)</td>
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monuments in the worst conditions are treated in preference to those of lesser significance and/or in a less severe state of conservation.

regulations are followed and that proposals for works are submitted, reviewed, and approved before any work is undertaken on site,

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<th>7. Prioritize principal monuments according to process developed above. Plan and begin to implement stabilization work to prevent collapse or loss of structural and decorative elements. The process should follow the basic steps outlined above (see Intervention Design and Implementation), but take priority over other work because of the severity of conditions and resulting threat of damage or loss. Continued triage and prioritization of need should be practiced at the site to identify and address, even temporarily, critical conditions. This approach should similarly be practiced as part of disaster response</th>
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<td>6 (e) Develop a process for the prioritization of work and any related budgetary allocation to ensure that the most critical needs are met first. Priorities should be determined according to the significance and condition of the monuments, such that the most significant monuments in the worst condition are treated before those of lesser significance and/or in a less degraded state of conservation,</td>
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<th>(see Risk Preparedness).</th>
<th>8. Create extensive baseline photographic documentation of each principal monument that can be used to monitor visible changes in the structures (e.g. loss of material, cracks, discoloration, biological growth). All photographs should include size and color scales for reference.</th>
<th>6 (f) For each major monument, create an extensive baseline photographic documentation that can be used to monitor visible structural changes (e.g. loss of material, cracks, discoloration and biological growth). All photographs should include size and colour scales for reference.</th>
<th>Data in Master Plan but actual use for monitoring is unclear</th>
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<td>9. Use baseline photography for annual monitoring to determine changes in principal structures and gravesites of significance. These photographs should also be used in disaster response inspections (see Risk Preparedness section).</td>
<td>Not yet complete (there is no evidence that this work is being carried out)</td>
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<td>10. Create extensive baseline photographic documentation of each principal monument that can be used to monitor visible changes in the structures (e.g. loss of material, cracks, discoloration, biological growth). All photographs should include size and color scales for reference.</td>
<td>Data in Master Plan but actual use is unclear</td>
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<td>11 is redundant with 9</td>
<td>Not yet complete</td>
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<td>12. Develop and implement an appropriate drainage system that evacuates water away from the monuments and off the site. This system should be unobtrusive, but sufficient for a 50-year rain event.</td>
<td>In progress but incomplete (some drainage work has been done around certain monuments, but more protection and evacuation of rainwater are required).</td>
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<td><strong>Capacity-building</strong></td>
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<td>13. Increase expertise of the Department of Archaeology by urgently developing, providing a short and mid-term training programmes for ALL STAFF of the Department of Archaeology, and hiring experts whenever necessary, and develop a detailed roster of responsibilities and schedule of activities for each staff member. Training should include best management practices, safety protocols, visitor management, inspection and survey, and emergency response appropriate to the responsibilities of each staff member.</td>
<td>The site manager received training from an ICOMOS course. Other capacity building activities were unclear in terms of their actual implementation.</td>
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<td>14. Identify and/or hire key staff with the necessary skill sets to</td>
<td>Unclear except for the appointment of a site manager and his team who</td>
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<td>generate, manage, and maintain digital information relevant to the maintenance and protection of the site and provide them with the requisite computers, software, and associated tools.</td>
<td>implemented an important quantity of work on the site for stabilisation, cleaning and other conservation work.</td>
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<td>15. Multiple staff should be aware of and facile in decision-making processes and share in responsibility of ongoing conservation work and management practices.</td>
<td>Staff number was increased but their actual involvement in decision making process is unclear.</td>
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<td>16. Establish a documentation center at the site with appointed, capable staff to manage it and provide access to site staff, researchers, and others, as deemed appropriate.</td>
<td>No progress except for the collection of documents.</td>
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