

## **Report on the State of Conservation**

### **The Minaret and Archaeological remains of Jam (Afghanistan) (May 2002, in Danger)**

**ID Number: Ref: (C 211 rev)**

1. Response from Afghanistan to the World Heritage Committee's Decision 36COM 7A.25  
Corrective measures taken by Afghanistan in reply to the World Heritage Committee's Decision(s):

Afghanistan Government and in special the Ministry of Information and Culture have identified a range of corrective measures in cooperation with the World Heritage Centre aimed to eventually have the site removed from the List in Danger. The measures include the establishment of:

- 1) A monitoring system through regular topographic measurements set-up and long-term monitoring of the Minaret and archaeological site.
- 2) Topographic and archaeological surveys carried out.
- 3) A damage assessment report developed for the Minaret and the archaeological remains.
- 4) Protection of the site against illicit excavations ensured.
- 5) Marking of the core zone as World Heritage protected area.
- 6) Consolidation of the minaret structure.
- 7) Emergency restoration of the surface decoration of the Minaret.

#### **Progress towards of World Heritage in Danger:**

an assessment mission to Jam was undertaken by a group of Afghan experts and international professionals in October 2014, with the purpose of assessing the current condition of the minaret and its surrounds and identifying key priorities for possible intervention, in the form of an Action Plan for Jam which brings together relevant findings from previous investigations and sets these beside observations during a field trip made to the Jam site in October 2014. Among the key recommendations of this Action Plan are:

#### **Inclination of the Minaret:**

An increased inclination of 28mm at 54m relative height between 2006 and 2014 is a fact. The increase is not catastrophically, but nevertheless calls for immediate attention and action. Considering the vulnerability of the minaret yet in 2002 \_ when it was listed as World Heritage Monument \_ any further increase of inclination is alarming. Whether the increased inclination is caused by the 2007 flood and is stopped by now, or whether the increased inclination is a still on-going process, cannot be stated today. The author of the 2002, 2006 and 2009 surveys advises to set up a high precision monitoring system as soon as possible. Together with experts in monitoring devices, the author proposes the

installation of high precision inclination sensors. Together with the inclination, wind velocity and temperature must be monitored simultaneously to the preparations, the installation and the implementation of the proposed monitoring system; it would be wise to start with the conception of possible consolidation measures. If the monitoring indicates a continuous movement and an increasing inclination, an almost immediate response and readiness for intervention is necessary. Therefore it is recommended to set up a small but effective team of experts in the fields of architecture, structural engineering and geophysics, combined with heritage conservation.

#### **Documentation:**

The structure and fabric of the minaret should be documented in detail, as a basis on which to make decisions about possible preservation measures. Accurate mapping of the other traces of built heritage in the area should also be undertaken to enable a better understanding of the settlement of Jam and the definition of appropriate 'core' and 'buffer' zones for this World Heritage site.

#### **Architectural preservation:**

structural repairs should initially be undertaken on the lower parts of internal brick masonry of the minaret, followed by replacement of timber lintels, treads to stairs, the reinstallation of the wooden elements which existed in the structure of the Minaret to protect the steps and which have been removed by looters and frames to the openings through its height, as well as stabilization of the uppermost sections. Following this, a detailed programme of preservation should be developed on the basis of the surveys and documentation identified above. Inclination and the damages occurred to the structure of the minaret, it is to be mentioned that the damages of minaret decoration are increasing by the passage of each year. Therefore, the urgent treatment of structure and decoration of the minaret is required. The author proposes to start with the consolidation and conservation of the decorations as soon as possible. Ideally would be to start from top till bottom.

#### **River defense protection:**

From 2007-2009 the MoIC and UNESCO implemented a "River Defense" project of retaining wall to protect the Minaret from seasonal flooding of the Jam and Hari Rud Rivers. Some part of this wall by devastating floods of fall 2012 washed out. For the safeguarding of the minaret against the seasonal floods, a temporary retaining gabion wall has been constructed in the bank of Jam Rud River with the financial help of US Military Founding. Since the constructed gabion wall is considered as temporary solution, and the width of the Jam Rud River has been narrowed, this gabion wall completely removed on September 2014. Therefore, by the financial support of MoIC and UNESCO office a strong retaining wall has been constructed on the bank of Jam Rud River on 2014. As will flood breakers in several points of Jam Rud River have been implemented to reduce the power of the floods. The retaining walls on Hari rud are still in good condition: no cracks, no cavities, no distortions. The initial design foresaw a diaphragm, a deep vertical wall of concrete, preventing erosion of the subsoil near to the foundations of the minaret. But the south bank of the Hari Rud should be consolidated with

extension of gabions and planting of trees upstream of the minaret. A system of recording the height and flow of both rivers should be instituted to facilitate planning for future seasonal flooding.

**Community development:**

A footbridge should be constructed over the Hari Rud to enable year-round access for inhabitants of nearby villages and for future conservation works. Because during the spring and summer time the water level of rivers are high and there is no any another possibility and rout to reach the Minaret.

For security of the Site, the MoIC and the Ministry of Interior have deployed a team of police officers for the protection of cultural property to monitor and safeguard the World Heritage property. They are currently in place at the site to address the issue of illicit traffic.

**Project guest house:**

The project guest house and kitchen, built by UNESCO in 2003 and now is property of MoIC, HM which needs of repair, most windows have no glass panes but a plastic cover, bathroom and toilets are out of use, blocked sewerage, no water supply no cold no warm water for the toilets and bath, the pump-pit is dry, the roof is locally leaking, the storage room has no shelves or cabinets, the kitchen has no shelves or cupboards. So to offer a basic accommodation to experts during the missions working at Jam, it is recommended to do some urgent repairs at the project guest house.

**Major Restorations / alterations and new constructions within the protected area and buffer zone envisaged:**

**For gaining this urgent need, MoIC has set a plan to reach the scope of:**

1. Set up a high precision monitoring system as soon as possible together with experts in monitoring devices.
2. Recommended to set up an effective team of experts in the fields of architecture, structural engineering and geophysics, combined with heritage conservation.
3. The structure and fabric of the minaret should be documented in detail, as a basis on which to make decisions about possible preservation measures.
4. The south bank of the Hari Rud should be consolidated with extension of gabions and planting of trees upstream of the minaret. A system of recording the height and flow of both rivers should be instituted to facilitate planning for future seasonal flooding.
5. A footbridge should be constructed over the Hari Rud to enable access for future conservation works.
6. The urgent treatment of structure and decoration of the minaret is required. Proposes to start with the consolidation and conservation of the decorations as soon as possible.

7. To offer a basic accommodation to experts during the missions working at Jam, it is recommended to do some urgent repairs at the project guest house.

**Best Regards**

**Mosadiq Khili**

**Acting minister of Information and Culture**



Gabion wall on the bank of Hari Rud river total length 43 meter with the height of 5.5 meter has been built on 2000 a part of the wall destroyed due to heavy floods on 2007.



New retaining wall on the bank of Hari Rud River has been built on 2007 total length 55 meter with the height of 8 meter and wide of 2 meter. The retaining walls on Hari rud are still in good condition no cracks, no cavities, no distortions.



Retaining walls on the bank of Jam Rud River has been built on 2007-2009 total length 110 meter with the height of 4 meter and foundation wide of 2 meter.



Once again floods in the Jam Rud River during spring time of 2012 damaged 30 meter of retaining wall as will a lot of stones brought by floods on the bed of river which needed for cleaning.



For the safeguarding of the minaret against the seasonal floods, a temporary retaining gabion wall has been constructed in the bank of Jam Rud River with the financial help of US Military Founding. Since the constructed gabion wall is considered as temporary solution, and the width of the Jam Rud River has been narrowed, this gabion wall completely removed on September 2014.



By the financial support of MoIC and UNESCO office a strong retaining wall with the length of 45 meter and height of 4.5 meter has been constructed on the bank of Jam Rud River on 2014. As will flood breakers in several points of Jam Rud River have been implemented to reduce the power of the floods.



In addition in the route of Jam valley the gabion wall (Jam Rud River) which was in bad condition has been removed and new retaining wall has been constructed with length of 50 meter and high of 4.5 meter. 2014