

ANNEX III

11.1 INTRODUCTION

- a) State Party : Zimbabwe
b) Name of Property : KHAMI
c) Localisation : Latitude : 20°09'S
Longitude : 28°25'E
- d) Date of Inscription : 1986
e) Responsible Organisation : National Museums & Monuments of Zimbabwe
(NMMZ)
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- f) Date of Report : April 2000
- g) Signature : Munjeri Dawson
Executive Director

11.2 STATEMENT OF SIGNIFICANCE

A) Justification for Inscription

- The site of Khami which is located to the west of Khami River, after which it is named, developed after the capital of Great Zimbabwe had been abandoned in the mid 16th century. The site is of great archaeological interest. It is scattered over more than 2km, from the Passage Ruin to North Ruin. The site is built on Kopjes of varying sizes in a countryside characterised by alternate kopjes and valleys. The area discerned as archaeologically sensitive, occupies about 35 hectares and this about 5 hectares account for the area occupied by the stone structures.
- As a recognition of the historic, cultural and architectural significance of the site, it was scheduled a National Monument in 1937. Khami conforms to Great Zimbabwe, its predecessor, in a number of archaeological and architectural aspects but, it possesses certain features particular to itself and its successors such as Danangombe and Zinjanja. Revetments or retaining walls found expression for the first time in the

architectural history of the sub-region at Khami, and with it were elaborate decorations. Khami boasts of the longest decorated wall in the entire sub-region which unfortunately, is threatened by collapse due to an adjacent man-made dam. Several dhaka (earthen) remains of houses are still evident but are very susceptible to the adverse effects of weather elements particularly rain, wind, sun and heat.

- The archaeological zone, which was protected against plundering thanks to its 'Royal Reserve' status up until the death of King Lobengula in 1893, was not seriously disturbed by the rampant prospecting of the treasure hunters of the *Rhodesia Ancient Ruins Company Ltd.* It was explored in the 20th century by renowned researchers whose work has provided in-depth knowledge of the site's history.
- The typology of the fences and walls is similar to that of the latest constructions at Great Zimbabwe. Worthy to note are the many decorative friezes, having chevron and checkered patterns, and the great number of narrow passageways and deambulatory galleries, not all of which are covered.
- There is a possibility that Khami was visited by Portuguese merchants and or missionaries, because a monumental cross consisting of small blocks of granite can still be seen traced on the rocky ground of the Cross Hill, a small hillock immediately north of the King residence.

b) **Criteria for Inscription** - iii) and iv)

The values for which the site was inscribed are still largely applicable.

- c) -
- d) -
- e) -

11.2.2. **UPDATE OF THE STATEMENT OF SIGNIFICANCE**

- a) A new statement of significance is provided in the recently completed (1999) Site Management Plan.
- b) resubmit
- c) The inscribed area is 35 hectares but a 1988 survey revealed more archaeological deposit in the adjacent area. This further additional acreage (of 32,7 ha.) was successfully incorporated in the property area from the adjoining Hyde Park farm. In addition to the new land acquisition an adequate monitored buffer zone exists around the boundaries of the monument although developments at a nearby school could interfere with buffer zone restrictions.
- d) NMMZ has recently revised the boundaries by acquiring an additional 32.7 ha from the adjoining Hyde Park farm.

e) A new statement of significance is included in the Management Plan. It highlights :-

11.3 **STATEMENT OF AUTHENTICITY / INTEGRITY**

- Khami retains its authenticity as an example of a type architecture. It is one of the few sites that had had minimal restorations. Parts of the Hill Complex were restored in the 1950's / 60's by a resident curator then. All restorations have been carried out using traditional methods and no new materials have been added. Restorations nowadays are by anastylosis which ensures that no new materials are introduced to the fabric of the site and promotes use of traditional methods of construction. Using methods developed at Great Zimbabwe restorations maintain the relative positions of individual blocks after correcting structural problems.
 - It is important to note at the time of inscription Khami had managed to retain its integrity largely because it was protected by its "Royal Reserve" status up until the death of King Lobengula in 1893. Khami was a revered site and a rain-making shrine jealously guarded by King Lobengula.
- b) National Museums and Monuments of Zimbabwe is trying hard with the meager resources it has to maintain Khami thereby ensuring that it retains its integrity. Restoration by anastylosis (as was used in 1991 and 1996) ensures that no new materials are introduced to the fabric of the site and promotes use of traditional methods of construction.
- c) The values of the site have largely remained the same since inscription. Khami is one of the few sites that has very few reconstructions.

11.4 **MANAGEMENT**

a) **Ownership and legal status**

Khami monument is managed on behalf of the people of Zimbabwe by National Museums and Monuments Act (chap. 25/11). Like all other national Monuments Khami is protected in terms of the act.

At a local level Khami falls under the Western Region administrative unit and a project manager is responsible for the conservation and development of Khami. He liaises with the Regional Director and Executive Director on administrative and policy issues respectively.

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11.4.2 **MANAGEMENT AND PLANNING**

- a) The Khami Monument like other national Monuments is managed by National Museums and Monuments as overall responsible Agency. The Monument is managed thus :

the site level	-	Project Manager
Regional	-	The Regional Director
Central Admin.-		The Executive Director

Since inscription the boundaries of the property have since been extended to protect the archaeological sensitive areas around the monument.

- b) A management plan for Khami was recently produced and has been posted to WHC. It is here again attached.

11.4.3 **MANAGEMENT PLAN FOR THE SITE AND STATEMENT OF OBJECTIVES**

- a) A management plan which derives from a masterplan for resource conservation and development, exist and is currently being implemented.

The Plan takes into account

- available human resources
- available financial resources
- aspects of training
- zoning and multiple uses of the site
- a delimited buffer zone
- and includes regular monitoring action.

- b) The Plan is implemented :-

- in accordance with National Museums and Monuments Act (chap 25/11).
- is responsible for implementation

c) **Financial Support**

The government of Zimbabwe partly funds conservation work. This is however, not enough. National Museums and Monuments provides some funds raised through entrance fees, filming fees, etc. for conservation. Funds have been made available from the World Monuments Watch for the Management Plan and partly to fund its

implementation. The government of Zimbabwe also makes available funds for capital improvements through its Public Sector Investment Programme (PSIP).

A Management Plan was completed in 1999 and is currently being implemented.

- d) The Regional Director of the Western Region has ultimate responsibility in the conservation of the site. He appoints a project Manager who is an archaeologist and is responsible for the day-to-day running of the site.

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11.4.4 **CAPACITIES IN HUMAN AND FINANCIAL RESOURCES AT SITE LEVEL**

- a) The site falls under the jurisdiction of the Regional Director - Natural History Museum. An archaeologist is a project manager. Presently he is not resident at the site but staff accommodation is currently under construction to accommodate him at the site. Four custodians live at the site. Staff levels are expected to increase to include an engineering technician, a stone mason, 2 gallery attendants, 2 tour guides and 2 guards.
- b) **Regular financial resources**

<u>Year</u>	<u>Visitors Nos.</u>	<u>Income Z\$</u>	<u>Staff</u>
1991/92	7559	4 976.80	4 custodians
1992/93	8787	5 524.80	4 custodians
1993/94	6564	38 011.16	4 custodians
1994/95	5835	51 877.27	4 custodians
1995/96	7595	62 117.16	4 custodians
1996/97	8944	69 632.27	4 custodians
1997/98	3496	30 742.00	4 custodians

- c) **Personnel Training Needs**

The Site Manager needs to be trained in Site Management. There also is need to train an engineering technician at a local institution. A stone mason needs to be trained at the Great Zimbabwe Conservation Centre.

11.4.5 **ADDITIONAL INFORMATION CONCERNING PROTECTION AND CONSERVATION**

a) The Project Manager is a qualified Archaeologist with a heritage Management component. He was trained at the University of Zimbabwe. Other experts consulted from time to time are from other museological regions within the country and the University of Zimbabwe. Khami as a World Heritage Site also attracts expertise from the international community. In addition the Site Manager attended the ICCROM- AFRICA2009 course on conservation of Immovable Cultural Heritage.

■ The recently completed Management Plan is currently being implemented. The plan's conservation programmes include :

- i) Documentation
- ii) Monitoring
- iii) Intervention (preservation, restoration, reconstruction and rehabilitation aspects)

The Plan therefore aims at strengthening the conservation strategies at Khami Monument.

■ Outside Government grant for re-current expenditure the other source of funds has been the World Monuments Watch.

b) **Technical Assistance**

- a) World Heritage Centre - an evaluation report inscription on the World Heritage List. 1986, ICOMOS.
- b) UNESCO / UNDP - A Masterplan for Resource Conservation and Development of Zimbabwe's Archaeological Resources, 1992, UNDP / UNESCO Project Zim 88/028.

11.4.6 **SCIENTIFIC, TECHNICAL AND EDUCATIONAL ACTIVITIES**

Scientific Studies

- a) **Research facilities** - Labs - No
 - Housing for researchers - No
 - Vehicles - Yes - 1
 - Scientific Equipment - theodolite 1
 - - camera 2
 - - Venier Calipers 2
 - - Deme gauges 1

- Databases - Yes - not computerised
- Iterliaria - No
- Zoological Collections - No
- Skilled personnel (1-Project Manager)

b) **Research and Development Programmes**

- Currently there is no research programme in place. Occasional studies (e.g. Archaeological surveys and impact assessments) are carried out by the Project Manager under his routine duties.

c) **New Management techniques**

- Computer equipment - Nil
- Access to internet - through the Museum in Bulawayo 26 km away
- Access to e-mail - through the Museum in Bulawayo 26 km away

d) **Educational Activities**

- Like Great Zimbabwe and other national Monuments Khami receives a good share of school parties.
- The Museum in Bulawayo which is the local administrative unit for Khami has a well developed educational programme aimed at schools. Primary schools for example are annually involved in a National Heritage Quiz competition which start at the district / county level to provincial level and the finals are held at National Level.
- Primary Schools in Zimbabwe have as part of the curricula an environmental science component but this is not specific to Heritage Sites.

e) **Public Information**

Information on sites is distributed through Regional Museums' in all the major cities throughout the country. In addition major sites (e.g. Khami, Great Zimbabwe, Ziwa, Matopos, Domboshawa, etc.) have site museums which give details for particular sites. Presently the Monuments Division through the office of the Co-ordinator is ensembling a multi-media C.D. on the National Monuments of Zimbabwe - Funds permitting NMMZ aims to distribute the C.D. to Educational institutions and Zimbabwe Embassies for a nominal fee.

11.4.7 **DESCRIPTION OF ELEMENTS**

a) **Diverse Elements**

- | | |
|---------------------------------|-----|
| ■ World Heritage Logo | Yes |
| ■ World Heritage Property Signs | No |
| ■ Visitor Information | Yes |

■ Site Museum	Yes
■ Discovery Paths	No
■ Hotel Infrastructure	No
■ Parking Lot	Yes
■ Toilets	Yes
■ First Aid and resume station	No
■ Information Material	Limited (brochure)
■ Open House Days	Yes 18 May
■ Impact of Inscription on visitors	Very little.

b) The National Museums and Monuments Act is currently being amended.

- It is not necessary at present to revise the administrative texts governing the property.

11.5 FACTORS AFFECTING THE SITE

a) **Visual** - At present major threat to Khami is the development of Bulawayo City. Some suburbs of the city are encroaching on the site being only 10km away. This may cause some negative pressures to the site.

Structure - The process of creeping (similar to solifluction in cold regions) induced by the slopy nature of the terrain, the absorbene nature of the infill (enhanced by vegetation), and the antiquity of the monument, has manifested itself at the site through wall cracks, bulges and collapses. This has resulted in a serious deterioration of the structures, ornamental features and architectural coherence of Khami (Article 1, section 79 of World Heritage Convention).

Pollution - The property suffers from pollution of nearby river (Khami river) used for discharge of Bulawayo's effluent.

Environmental - Undesirable visitors access the site through undesignated routes because of the inability of present fencing to keep these people out. Ac of vandalism by the people include cutting down of trees for fire wood removing stones from walls to use as building materials elsewhere and digging up roots and pulling out herbs from walls and floors for medicinal purposes and destabilising the walls and dhaka structures in the process.

Wild Animals - In particular rodents and baboons and monkeys as well as those that burrow in the ground such as the ant-bear (aardvark) are a threat. They burrow into the ground and the trenches so formed weaken the foundation of stone walls which subsequently subside and collapse.

Vegetation - During the wet season wish vegetation overwhelms the entire site. Plant roots and stems have contributed significantly towards the formation of cracks an bulges in the walls culminating in the collapses of some walls. Controlling the vegetation by

physical means (cutting, pulling and slashing) has also caused deterioration effects on the fabric of the walls and the dhaka structures.

Rain - In the rain season water percolating into the platforms causes soil creep of the infill. The infill then pushes the retaining walls out causing structural problems. These problems include bulges, splits, shears and sometimes sinking of foundations.

Natural - Khami does not lie in volcanic or earthquake zones.

d) **Tourism and Consequence**

Khami lies 22km West of Bulawayo (Zimbabwe's second largest city). However, some outlying suburbs of Bulawayo are less than 10km from the site. Bulawayo is serviced by an airport and the 22km road to Khami is paved.

Visitor Statistics

Khami receives very few visitors and this has been because it has very few visitor facilities when compared other tourist resorts like Great Zimbabwe or the Victoria Falls. The limited visitor facilities at Khami include three small ablution blocks and a camp / picnic site. There is no overnight accommodation and the site does not have a visitor centre.

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Khami can accommodate at least 90 000 visitors a year and at the moment it receives a maximum of 10 000 people. It is therefore far from its carrying capacity. This has resulted in the site being less affected by tourism pressure. The effect of visitors at present is limited to displacement of a few blocks and to the deterioration of dhaka structures.

e) **Relations with Neighbouring Residents**

Number of Inhabitants

Only three (3) families seven adults and five children live within the site. Construction is, however, underway to build accommodation for other members of staff including the site

manager who will be resident at the site. This will increase the number of inhabitants in the estate.

Geographical distribution of human habitats

- Khami is located in a commercial farming area which is characterised by a very small population. Bulawayo, being the capital of Matebeleland lacks a historical link with Khami. Khami was a Shona regional capital of the Torwa and presently the local population is of Nguni origin largely the Ndebele.
- The local people are expected to provide paid labour when needed.
- There are no refugee problem affecting the site.

Other factors affecting the Site

- illegal cutting down of trees for building and fire-wood purposes / and removing blocks for construction purposes. The proposed remedies in the Management plan are :
 1. Public Education / awareness
 2. Secure Fencing
 3. Patrol guards
- Wild Animals - baboons displace stones in their search for food. Aardvarks dig burrows which sometimes affect the foundation of walls and archaeological stratigraphy. Proposed remedy - monitoring / patrols.
- The Community was not adequately involved in the nomination of site to the World Heritage list and they therefore do not fully understand the implications of the nomination.

11.5.2 PREVENTION OF THREATS AND NATURAL AND HUMAN PRESSURES

- a) **Natural disasters** - the site is not affected by earthquakes, volcanoes, landslides, avalanches and floods. However the site periodically experiences *veld fires*. These have usually left the site desolate. Granite is also sensitive to fires and if subjected to temperatures of 1000°C or above it cracks weakening the stone structures within the Monument. A fire-prevention programme is part of the Management Plan a 15m fire-guard on the boundaries of the Estate should be cleared of vegetation every dry-season.

Industrial Pollution and effluent discharged into Khami rivers should be controlled and monitored in consultations of major stakeholders - the Bulawayo City Council. The threat of *urbanism* is growing and future developments should respect buffer zone requirements in order to protect the site from the encroaching townscape.

- Khami river bounding the monument attracts fishermen and religious groups some of whose activities have negative effects on the monument.

11.6 MONITORING

- a) Monitoring at Khami National Monument had not yet been formalised due to both lack of expertise resident on the Site and a Management Plan.
- Wall stability, bulges and cracks on the walls are very important indices of any changes taking place in the monument's structures. These can only be accurately measured using demec gauges and other quantitative monitoring techniques.
 - Demec gauges and Vinier calipers have been used to monitor in-plane movement. Out of plane-triliteration movements have not been carried out at Khami.
 - Wear of blocks is recorded through patination. This is most evident on low walls and entrances.
 - Colour coding of stone blocks ensures that collapsed or displaced blocks can be restored to exact relative positions.
 - The Management Plan sets monitoring standards / schedules for different regimes including stone-walls, vegetational resources, faunal resources and the landscape.
- b) Monitoring schedule will involve general and scientific observations of wall problems on a weekly, monthly or triennial basis (depending on the state of preservation of the wall) using a demec gauge. The results of such observations shall be used to determine whether a wall needs intervention. This monitoring will include dhaka structures.
- Intervention shall include restoration and / or rehabilitation of stone walls and dhaka structures and shall follow international (acceptable) guidelines.

Human Resources allocated for Monitoring

<u>Recommended</u>		<u>In Place</u>
1 Project Manager (Archaeologist)	Yes	
1 Technical Officer (Engineering)	No	
1 Stone Mason	No	
5 Technical Assistants		4
2 Gallery Attendants	Nil	
1 Tour Guide	Nil	
2 Patrol Guards	Yes	

11.7 CONCLUSIONS AND RECOMMENDED ACTIONS

- a) A new Statement of Significance of the site is provided in the New Site Management Plan. It captures that :-

Khumi is the second largest stone built Monument in Zimbabwe. Its historical importance lies in the fact that it formed a watershed between the history of Great Zimbabwe (1200 - 1500 AD and of the later Zimbabwe period (1500 - 1830 AD). It is one of the few of the Zimbabwe's which were not destroyed by treasure hunters and the undisturbed stratigraphy has been scientifically important in providing a much clearer insight into the history of Zimbabwe. The site is a living testimony of our history, is an invaluable educational resource and school parties from as far as USA, South Africa, Europe and Asia pay visits to Khumi. It has become a popular destination for local and international visitors and a picnic spot for Bulawayo residents, surrounding schools, communal and commercial farming areas.

The Khumi river nearby, attracts fishermen and religious group.

■ The Authenticity of the site has largely been retained. It is one of the few sites that has had very few reconstructions.

b) A new Management Plan has greatly enhanced the management of the property.

c) Proposed Future Actions.

- i) Fencing of the entire site Perimeter - to prevent uncontrolled human traffic and vandalism.
- ii) Erection of protective sheds over archaeological remains.
- iii) Provide specialist training to relevant staff.
- iv) Increase staffing levels at the site.
- v) Provide research facilities at the site including accommodation of research staff.

d) **Responsible Implementation Agency**

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e) Timetable for implementation - provided for in the Management Plan.

f) Need for International Assistance

- 1) Technical expertise and co-operating research institutions
- 2) Training - Project Managers and technical
- 3) Financial Assistance to implement the Site Management Plan

4) Equipment - computers, vehicles, tractor, and survey equipment.