The support of UNESCO Regional Office for Southern Africa and the French Embassy in Zimbabwe to the organisation of this workshop is primarily a response to the call of the University of Zimbabwe (UZ) on the preoccupying state of Rock Art sites in Zimbabwe. UNESCO ROSA pleaded in favour of giving the workshop a regional scope because of similarities in the issues surrounding Rock Art conservation in the region.

In addition to a drastic drop in available expertise (cf. brain drain following the 2008 crisis), human induced threats (i.e. graffiti, mining activities, urban developments, use of Rock Art caves by worshippers for prayers and healing sessions, etc.) and natural phenomena (i.e. weathering, dust, salt encrustation, water wash, etc.) represent major risks to the conservation of Rock Art heritage.

The workshop was held in two parts:

- **Theoretical Session** dedicated to presentations and discussions of Rock Art conservation concepts (illustrated by presentations on issues threatening Rock Art in Zimbabwe, Swaziland, Lesotho and Namibia) and lectures. Dr Stephanie Touron (Laboratoire de Recherche des Monuments Historiques) gave lectures on identification of Rock Art support at landscape and site scale, deontology and policy framework for Rock Art conservation, effects of human behaviour on Rock Art, Rock Art sanitary assessments methods.

- **Practical application** carried out at the site of Chikupo in Masembura communal Lands. The site is made up two rock shelters (Upper Chikupo and Lower Chikupo). Divided in groups, participants identified threats ranging from dust, microbiological activities, graffiti, water wash and performed sanitary assessments. They also tested some of the possible solutions to mitigate the threats.

### Identified priorities

- Inventory and digital documentation (as per international standards) to enable comparative monitoring of the sites and to set up archives;
- Regional policy framework to tackle common threats to Rock Art Conservation in Southern Africa (i.e. advocate for a SADC protocol on Rock Art conservation)
- Awareness raising (cf. improvement on provision of information to the public) activities/awareness campaigns
- Training of Rock Art restorers
- Foster a plural disciplinary approach
- Economic beneficiation (through tourism, involvement of local communities)
- Enhance teaching of cultural heritage in the curricular
According to a recent survey carried out by National Museums and Monuments of Zimbabwe (NMMZ) and rock art researchers of the University of Zimbabwe (UZ), rock art sites in Zimbabwe are mainly affected or threatened by natural and human factors or pressures. Human induced damage is considered as being the most detrimental to these specific heritage sites. In Zimbabwe, the index of major threats comprises: Graffiti, mining activities, urban developments, modern uses of rock shelters, weathering, dust, salt encrustation, water wash, fading, insects and micro-plants.

Despite the existence of a national legislation on rock art sites protection (e.g. NMMZ Act, Chap 25/11), the lack of awareness of the provision of this legislation is identified as a major obstacle to its effective and efficient application. Besides, the limited knowledge of the law enforcement agencies, such as the Zimbabwe Republic Police (ZRP), on the dictates of the NMMZ Act makes it difficult to legally protect rock art heritage.

In terms of available expertise on rock art conservation related issues, Zimbabwe has benefited from several initiatives in this field. These initiatives mainly consisted of participation in training programmes with sub-regional scope that took place about a decade ago. The most recent one being the Africa – 2009 rock art conservation technical course, held in 2006, in Namibia). In addition, the economic hardship the country has gone through at the same period, has resulted in a massive brain drain among rock art experts and trained resource persons. This has drastically impacted Zimbabwe’s capacities in the field of rock art research and conservation.
1. OVERALL OBJECTIVE
To improve the capacity in rock art conservation in Zimbabwe and subsequently in three other Southern African countries (Lesotho, Namibia and Swaziland).

2. SPECIFIC OBJECTIVES
• Review and assess rock art conservation domestic challenges using Zimbabwe as pilot country;
• Provide a training in rock art conservation tailored for the sub-region;

3. EXPECTED RESULT(S)/OUTPUTS
• Gaps and needs in the field of rock art conservation identified;
• Heritage managers equipped with skills to mitigate damages caused by the major threats identified;
• National and sub-regional competencies in rock art conservation strengthen and improved;
• Roster of resource persons trained in rock art conservation developed

4. BENEFICIARIES
• National Museums and Monuments of Zimbabwe (NMMZ) staff (e.g. managers of archaeological sites, etc.)
• Representatives of local universities involved in researches on rock art-related issues;
• Sub-regional participants involved in researches on rock art conservation and/or rock art sites management;
• Staff from tertiary institutions

5. ACTIVITIES
i) Needs assessment;
ii) Organisation of a theoretical training module on existing conservation options practicable according to the forms of rock arts and threats to their safeguarding encountered in the sub-region;
iii) Practical implementation at Chikupo and Mawanga Rock Art sites (located in Masembura Communal Area, Bindura) of some of the concepts addressed in Dr Touron’s training modules.

6. TIMEFRAME
The workshop run for a week with the following actions

1) Presentation and discussion (2 days)
The programme included
• Opening session
• Participants’ short presentations on damage and threats to sites in their respective countries
• The French expert Dr Stephanie Touron’s presentations on conservations approaches as well as on other issues of interest to the participants (i.e. accessibility of Rock Art sites to tourists, awareness raising among local communities, identified local and external stakeholders, inventory and documentation of Rock Arts sites, etc.)
• Discussions

2) Practical training (4 days)
Conducted at Chikupo and Mawanga Rock Art sites. The workshop participants were divided into four work groups consisting of at least three members. Each group was assigned a rock art panel on which to perform the practical application of a sanitary assessment. The on-site programme mainly addressed the following issues amongst others:
• Graffiti
• Minimising rain wash
• Soot
• Dust
• Wasps nests
• Sunlight
8. PROFILE AND NUMBER OF PARTICIPANTS

17 participants attended the workshop.

**Coordinators**

1. Ancilia Nhamo (Senior Lecturer of Archaeology, University of Zimbabwe) - BA Gen; BA Spec Hons; MPhil; DPhil
2. Happinos Marufu (Senior Curator of Archaeology, National Museums and Monuments) - B.A. Gen; B.A. Spec. Hons; M. A.; PhD National Museums and Monuments of Zimbabwe
3. Tafadzwa Makwabarara (Curator of Monuments) - B.A. Hons; M.A.
4. Kelvin Mukabeta (Curator of Archaeology) - B.A. Gen; B.A. Hons
5. Fortune Munetsi (Curatorial Assistant) - currently studying B.A. Hons (Archaeology) at G.Z.U
6. Senzeni Khumalo (Curator of Archaeology) - B.A. Hons; M.A.
7. Todini Runganga (Curator of Archaeology) - B.A. Hons; M.A.
8. Elton Munyaradzi Sagiya (Curator of Archaeology) - B.A. Hons; M.A.
9. Tendai Zihove (Curator of Archaeology) - B.A. Hons; M.A.
10. Clapperton Gutu (Curator of Archaeology) - B.A. Gen; B.A. Hons
11. Takudzwa Pasipanodya (Resident Curator at Ziwa) - B.A. Hons

**Universities**

University of Zimbabwe (UZ); Midlands State University (MSU) and Great Zimbabwe University (GZU)

12. Leslie Machiridza (Lecture of Archaeology, GZU)-BA, BA Hons, MA
13. Comfort Muringanidza (Lecturer of Archaeology, MSU)-B.A Hons, MA
14. Precious Chiwara (Assistant Lecturer, UZ)-BA Hons
15. Tendai Musindo (Lecture of Archaeology (GZU) B.A. Gen; B.A. Spec. Hons; M. A.

**Regional Participants**

16. Khabang Moffilikoane (Department of Culture, Ministry of Tourism, Environment and Culture) - Lesotho
17. Tuuda Haitula (University of Namibia) - Namibia
18. Temahlubi Nkambule (Department of Culture, Ministry of Tourism and Culture) - Swaziland
1. CURRENT STATE OF CONSERVATION

Major threats:

a. Graffiti
   The problem of graffiti is widespread. The most common graffiti is written in charcoal, although stones have been used to make inscriptions names on top of rock art sites. Names of people, political messages as well as topical issues happening in the communities are usual themes. Some copy the original art. People who use the shelters do graffiti, for example, young children while herding cattle or just playing in the shelters. The problem of graffiti is mostly found at sites that do not have custodians.

b. Mining activities
   In Zimbabwe, legal and illegal quarrying of granite for construction threatens the art. Rock art in Zimbabwe was mainly done on granite. Many sites, especially those in and around cities, are under threat and others have already been destroyed. Large-scale granite quarrying destroys parts or entire hills. Small-scale miners also do considerable damage since they can crush entire boulders with rock art. Large-scale mining for black granite also threaten to destroy entire hills together with the rock art especially in the Mutoko District, North Eastern Zimbabwe. Even though it is a requirement by law that archaeological impact assessment is conducted and mitigatory measures is put in place before the establishment of the mines, this is not always followed.

c. Urban Developments
   Expansion of old and development of new residential areas has led to the encroachment into areas with rock art sites, some on the national monuments list. Sites such as Somerby, the Bridge, and Glen Nora in Harare have survived for many years due to adequate buffer zones that existed around them. However, they are now being threatened by expansion of residential areas into the buffer zones. At Glen Nora, new houses are now within 50m of the painted site. This increases other threats such as dust, chances of graffiti etc.

d. Modern uses of rock shelters
   Many large rock shelters are used for religious prayers. However, most of the worshippers are not aware of the impact of their actions on the rock art. They light fires in the shelters during overnight prayers. These result in smoke and soot that blackens the shelter walls and roofs thereby obliterating the rock art on the rock surfaces. Further, the heat damages the shelter through exfoliation.

f. Weathering
   Much of the rock art sites are found on granite with only few on sandstone. The rock art suffers deterioration due to the natural factors that affect these types of rocks.

Cracking and block disintegration is pronounced in granite regions while sandstone also suffers exfoliation and chemical disintegration. Sandstone is more porous that granites, therefore the percolation and water wash problems are exaggerated. However, the major problem found in sandstone region is the chemical weathering that results in flaking, disintegration, and crumbling of the rock surfaces. It is very common to find parts of the image missing due to both chemical and mechanical weathering of the rock.

f. Dust
   Most rock shelters and open boulders trap dust and it builds up on top of the art. The dust obliterates some of the images.
g. **Salt Encrustation**
Granite tends to emit different kinds of salts when water percolates into the rock through cracks and fissures that develop on the shelter caves. The salts usually leave discoloration that obliterates the rock art.

h. **Water wash**
In most shelters with rock art, one can easily identify the wash zone due to the salt encrustations. The wash zones also tend to develop algae and lichens both of which darken when they dry out. Thus, the zones also turn blackish in places. Sandstones also tend to emit minerals that have shades of red, pink, maroons and so on. These also obliterate the rock art. The red colour imitates the stains and these can be mistaken for faded paint. Apart from all these discolorations, a closer look at the wash zones also reveals that pigment is washed away.

i. **Fading**
Exposure to sunlight leads to fading of some rock paintings.

j. **Insects**
Insects either building their nests on to the rock art or depositing their excretion on the art. The most common threat comes from different kinds of wasps such as Sphecidae and Crabronidae. These build their mud nest on top of the art and cover up the art with mud.

k. **Microplants**
Lichen is the common plant threatening the

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### 2) CURRENT MANAGEMENT APPROACHES

The following are the current management approaches applied to rock art in Zimbabwe.

a. **Legislation**
Rock art sites are protected by the National Museums and Monuments Act (Chap 25/11), which prohibits destruction and alteration of cultural heritage. However, lack of awareness of the provisions of the current heritage legislation law militates against its effective application. For instance, very few people (stakeholders) realize that it is a criminal offence to damage or vandalize the rock art. Furthermore, the law enforcements agencies such as the Zimbabwe Republic Police (ZRP) have limited knowledge on the dictates of the NMMZ Act, making it difficult to legally protect rock art.

However, there is hope for significant improvement in the near future since NMMZ has begun engaging key stakeholders in the heritage sector in the country in an endeavour to raise awareness of the (new) draft heritage legislation as well as a strategy for getting their inputs. There is a bold attempt by NMMZ to engage local communities and relevant stakeholders in the management of heritage resources from a holistic approach.

b. **Proclamation to National Monuments List**
The NMMZ’s National Heritage Register has a total of 32 rock art sites declared as National Monuments. Heritage sites declared for national significance receive priority attention from NMMZ compared to thousands of undeclared monuments scattered across the country. Traditionally, national monuments were fenced off from the public, and plaques were erected on site to educate the visitors about the national significance of the site and to exercise caution. However, the fences at many of these have long been removed and many of the plaques have been vandalized together with the rock art. With the exception of national monuments with site museums and resident custodians, majority of the national monuments without such arrangements have been exposed to several human induced problems.

c. **Rock art Recording**
Recording of rock art has been undertaken since the advent of colonization in the early 1890s (Garlake 1997). As a result, substantial information has been assembled over the years with more than 4000 rock art sites being on the archaeological database of the country. Few rock art sites in Zimbabwe have not been recorded before. These records are housed mostly in the Archaeological Survey Department of the Museum of Human Sciences in Harare. However, the usefulness of the records in the conservation of rock art is somewhat limited because:

- Most records were not generated for conservation purposes. The data available is mostly on general site records with very little on conservation history of the sites. Nevertheless, with painstaking analysis of the photographic documentation available the history of the state of conservation of some sites might be deduced.

- The documents need collation since they are not systematically archived

The current management approaches lack active mitigation strategies for damage when it occurs. This workshop will compliment and expand on these management strategies by focusing on conservation actions.
There have been previous attempts to improve the capacity for rock art conservation in Zimbabwe. This has mainly been in the form of regional training programmes for southern Africa and sub-Saharan Africa such as

a. Southern African Rock Art Project (SARAP)/Conservation and Management of Rock Art Sites in Africa (COMRASA) (1999), Matobo Hills, Zimbabwe. The course was focused on the development of a management plan and basic recording methods (Deacon 2003).


c. Africa-2009 rock art conservation technical course (2006), Namibia

Zimbabweans have participated in these training workshops. However most of these training courses were not focused on intervention measures which will be addressed in the proposed workshop. After these courses, individual countries in southern Africa were supposed to identify their needs and raise funds to run courses that will be assisted by expertise from SARAP members and ICCROM administration. Although other countries such as South Africa did these follow up local training courses, these never took off in Zimbabwe. This was mainly because of the economic hardships that were being faced during the last decade.

To compound the situation, Zimbabwe suffered massive brain drain such that it still lacks capacity in rock art conservation. There was high turnover of staff at MMMZ were most of the participants were drawn. Many of those trained within the regional programmes have left both NMMZ and the country altogether. Those who left include Christabel Chakanyuka, Simon Makuvaza, and Joymore Matsikure who participated in the COMRASA courses. However, the most notable person is Pascall Tarvinga, who was first rock art specialist to work for NMMZ. He was now the project manager at Robin Island Museum in South Africa. Donald Chokuda, who attended the Africa 2009 technical course has left heritage management and is working for private practice in South Africa. Almost all the people are no longer involved in rock art management or conservation.