

Rock art Conservation and Tourism in Iringa Region, Tanzania

Makarius Peter Itambu

*Lecturer, Department of Archaeology and Heritage Studies, University of Dar es Salaam
mccpeter7@gmail.com*

&

Pastory Magayane Bushozi

*Senior Lecturer, Department of Archaeology and Heritage Studies,
University of Dar es Salaam
pbushozi@gmail.com*

Abstract

Much of the archaeological research in Tanzania over the last three decades has focused on sites that have yielded early hominin fossils and the resulting data has been analysed and discussed with the goal of generating knowledge about hominins bio-cultural evolution. Previous research focused on monumental, built heritage sites along the coast of the Indian Ocean and the interregional trade networks that existed from 1000 to 1500 A.D located along the coast of the Tanzania. This regional research prioritization in Tanzania and bias has resulted in the marginalization of some geographical regions in Tanzania from a research perspective and a resultant lack of understanding of important sites in the interior archaeological sites. Our research shifts attention from the famously well researched sites to the less investigated sites in the interior of Tanzania. We have noted that many of these sites currently face many natural and anthropogenic threats. Thus, we propose a number of sustainable management and conservation strategies to mitigate threats to these non-renewable heritage resources of Iringa Region, particularly the rock art sites. We highlight the roles of different stakeholders including the Government of Tanzania in the conservation and management of the country's patrimonies.

Keywords: Rock Art, Management and Conservation, Tourism

Introduction

Archaeological evidence in the Tanzania's Iringa Region indicates that it has been occupied from at least the Middle Stone Age (MSA) period about 200,000 years ago into the modern era (Willoughby, 2012). Numerous rock shelters such as Mlambalasi (Biittner et. al., 2017; Sawchuk & Willoughby, 2015; Miller et. al., 2020) and Kihessakilolo (Itambu, 2013) preserve a

Stone Age record of thousands of stone artefacts, animal bones, mollusc shells and land snails as well as ostrich eggshell beads and human remains. Later Stone Age (LSA) assemblages in Iringa include red ochre (Miller, et.al. 2020), which was used as an ingredient in rock art pigment (Bushozi, 2011; Itambu, 2013). The co-existence of red ochre with human burials and ostrich eggshell-beads in the LSA suggests that the rock shelters may have been used for rituals such as funerals (Bushozi, 2011; Itambu, 2015). The cultural sequence at sites such as Mlambalasi also includes historic and Iron Age deposits. Therefore, this region has a comprehensive record of the human bio-cultural evolution and occupation since the MSA times. Because of its heritage antiquity, the region deserves adequate heritage protection measures, which should be put in place to ensure such sites are permanently protected (Itambu & Bushozi, 2015).

Tanzania in general is endowed with a rich and diverse corpus of rock art, spanning the period from the Later Stone Age (LSA) to the historic period. The rock art sites are widely distributed across the Lake Victoria Basin, from Dodoma, Singida, Kagera, Mwanza to Mara Regions (e.g. Culwick, 1931; Fosbrooke, 1950; Fozzard, 1959; Leakey, 1983; Lim, 1992; Masao, 1976, 1979; Bwasiri, 2011; Itambu, 2013; Itambu & Bushozi, 2015; Itambu, 2017). These paintings are divided into three main rock art traditions, namely Hunter-forager's art, Bantu-speakers' art, and Iron Age/Historic rock art traditions (Itambu, 2015). In addition to rich archaeological deposits, Iringa Region also contains a number of significant rock art sites. For example, we have recorded many hunter-foragers' rock art sites, yet in many instances these sites are under threat from both natural and cultural forces.

Hence, this paper highlights and discusses challenges of rock art conservation and management in the region and proposes recommendations for possible mitigation. We explore the roles of different stakeholders in protecting these sites and how they might better work together in order to do so. Ultimately protecting these rock art sites relies on their becoming valuable resources for local communities. Hence, the sustainable management and promotion of cultural tourism in the southern circuit of Tanzania, whenever possible, is important. We recognise, however, that promotion strategies should not attempt to simply turn heritage sites into tourism attractions, as this would open the door for further harm if they are not managed properly. These recommendations require that immediate action be taken by government authorities in collaboration with traditional land owners, leaders and their communities to protect, conserve, and salvage the paintings from total disappearance. Some of the paintings have already

been damaged extensively and conservation efforts to preserve the paintings should be treated as a matter of urgency. Therefore, this study proposes preliminary salvage conservation measures for the sustainable preservation of Iringa's heritage sites.

The Study Area and the Sites

Iringa Region is situated in the southern highlands of Tanzania (Figure 1); and this study was conducted in three districts of this region, namely Iringa Urban, Kilolo and Iringa Rural. Geographically, Iringa is in the southern highlands of Tanzania lying between 7° 46'12" S and 35 ° 41' 24'' E and covering an area of about 58,936 kilometres (Willoughby, 2005) (Figure 1). The region is surrounded by the three major mountain ranges of Kipengere and Livingstone to the south and the Udzungwa Mountain to the northeast. The region is characterised by scattered granite-kopjes and (*euphorbia candelabrum*) candelabra trees, bushes and thickets which are the dominant vegetation type on the landscape (Itambu, 2013, 2015).

Archaeological research documenting sequences preserved in rock shelters in the Iringa Region was undertaken from 2012 to 2017. Using walkover surveys the following were recorded: six open-air sites and four rock shelters with archaeological artefacts belonging to the Acheulean, Middle Stone Age (MSA), Later Stone Age (LSA), rock-art and the Iron Age period. This paper focuses on five rock shelters/overhangs, four of which with paintings, and one with an engraved human footprint. The sites are Kihessakilolo, Mlamabalasi, Lutona, Tavimienda and Tungamalenga. Lutona and Tavimienda were discovered during the 2013 survey and had not previously been recorded by Willoughby and her team, who surveyed the area between the 2005 and 2018.

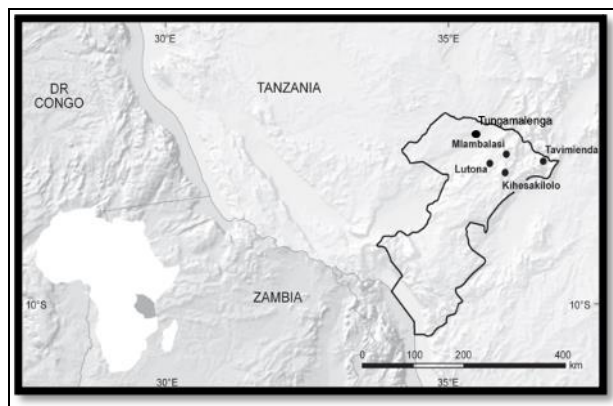


Figure 1. Maps of Iringa showing the districts and location of studied rock art sites (Source: Itambu 2015).

Kihessakilolo

The Kihessakilolo rock shelter is a rock overhang located about 5 kilometres north of Iringa town, and 10 km north - west of the Iringa-Dodoma highway. The shelter has over 50 painted figures comprising naturalistic depictions of human and animal figures including two giraffes in superposition, naturalistic eland, wildebeest, three elephants and an ostrich (Itambu and Bushozi, 2015) (Figure 2). There are a few stylized figures such as depictions of candelabra trees (*Euphorbia candelabrum*), parallel lines, a set of white dots surrounding some of the circles and two head-dresses. The majority of the paintings are in various shades of red and they are still in a very good state of preservation. The shelter's floor is bedrock with an abundant scatter of LSA lithic materials, slag, and potsherd remains. There is a dense scatter of LSA lithic artefacts and a few pieces of Iron Age pottery on the shelter's slope. The shelter has an exterior overhang that provides shade to showcase the magnificent and stunning painted friezes of various silhouettes. White dots start from the bottom and extend upwards to between 2.5 and 3.5 meters high. Due to their height, they were probably executed using a form of scaffolding (Itambu, 2015). Because is located on the outskirts of Iringa town, the site is easily accessible, and therefore potentially suitable for public display and archaeo-tourism. The rock art at this site fits in with the hunter-forager art traditions of areas such as Kondo, the UNESCO World Heritage, and those in Singida, Manyara, Mara, Simiyu and Arusha Regions.



Figure 2. Human and animal images executed in red, black, and white pigments at Igeleke rock shelter (Itambu 2013)

Mlambalasi Site

Mlambalasi is a hill site surrounded by numerous impressive granitoid kopjes of the Precambrian era (Itambu, 2013). It is an eminent historic area being the burial place of chief Mkwawa, the former paramount leader of the Wahehe who strongly resisted German colonial rule in the region. Five rock art sites are present (Mlamabalasi I-V) within the vicinity, and were firstly documented by Itambu in 2013. Most paintings were faint because of physical, biological, and other anthropomorphic agents. Only at Mlamabalsi II were a few identifiable anthropomorphic and zoomorphic figures present, particularly in the eastern wall (Itambu, 2013; Bushozi, 2015; Miller et al., 2020). As noted by Itambu (2013), figures are depicted in red-lines and stripes that are very hard to interpret. One of the identifiable figures is a long-segmented body with short radiating lines probably representing millipedes (Figure 3). Generally, the depicted images are very similar to the rock paintings of central Tanzania i.e. Dodoma, Kondoa, and Singida regions.

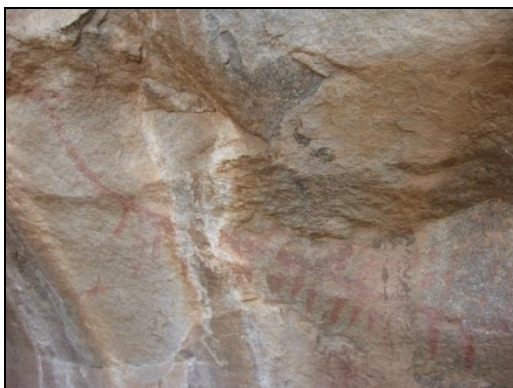


Figure 3. Depicted red geometric friezes probably of animal vertebrae or millipede at Mlambalasi (Itambu, 2013).

LUTONA ROCK SHELTER

Lutona rock shelter is a large rock shelter found in the Kitwiro area about 12 km west of Ruaha National Park. The shelter is surrounded by isolated kopjes, forests, small hills, and granite boulders (Itambu, 2013). The shelter has a lot of archaeological materials scattered on the floor such as potsherds, slag, bones and lithic artifacts. The rock shelter contains a few dusky-white monochrome - geometric paintings and a series of dots, but a majority of them faded due to anthropogenic actions (Figure 4). All paintings are executed on the roof. The site shows evidence of vandalism, likely by iron smelters and treasure hunters (Itambu, 2013; Miller et al., 2020). There is a large hole in the shelter probably dug by treasure hunters. This problem of

vandalism in rock art sites has been reported in central Tanzania, especially Singida Region (Itambu et al., 2018) whereby the treasure hunters have had a “myth” - thinking that the paintings were made by Germans during colonial Tanganyika; whereby local people believe that the Germans put beacons or landmarks to locate where they hid precious gems, rupees and other minerals after they were defeated during the World War II.



Figure 4. Geometric art and series of dots depicted at Lutona rock shelter (Itambu, 2013)

Tavimienda Cave Shelter

The site is located in Kilolo District, approximately 198.4 km from Iringa Municipal council. It is found at the foot of the Udzungwa Mountains, about 1280 metres above the sea level, and almost 9.4 km south east of the Great Ruaha River. The Tavimienda cave shelter is the most extensively painted rock shelter containing over 100 figures (Itambu, 2013). Over 50 percent of the painted figures are in a good state of preservation, while the rest faded and unidentifiable. Most of the paintings are in dusky white friezes, and are superimposed, suggesting that the shelter was inhabited seasonally, and paintings were depicted periodically (Figure 5). For instance, concentric circles and schematic humans are overlaid by depictions of animals, thus representing two different cultural traditions. The former presents hunter-forager art characterized by wild animals, stylized humans, and concentric circles, also depicted in red pigment (Figure 2). The latter symbolize Bantu speaking artists and depict figures (Figure 5) include a series of dust-white concentric circles, geometric signs, schematic humans and naturalistic animals, reptiles and lizards (see Itambu, 2013).

A small portion of the shelter's ceiling is predominantly an exposed rock, but its floor is non-exposed basement rock with deposits of bone fragments, stone artefacts of LSA affinity and a small amount of pottery.



*Figure 5. Complex patterns representing script-like signs, naturalistic lizard/alligator and concentric rings executed at Tavimienda cave
(Source: Itambu, 2015)*

TUNGAMALENGA ROCK ENGRAVING

The site is in Tungamalenga village a few meters from the main entrance of Ruaha National Park. The area was surveyed because of information provided by the indigenous community about the existence of ancient footprints at Tungamalenga. After detailed surveys, only one engraved feature resembling a footprint was found, and it was depicted on a granite rock (Figure 6). The characteristics of the engraved foot suggest that it was man made and not natural (Biittner, 2011). The intangible elements and stories that the community attach to this footprint show that it has significant symbolic value for members of the local community, who use the site for rituals. The site is not, as yet, formally protected as a gazetted heritage site.



Figure 6. The footprint recorded at Tungamalenga (Biittner, 2011)

Research Methods

In some instances, ethnographic enquiries were performed to attain additional information about how the sites are currently utilised by local communities and their interpretations of the art (Itambu, 2013). The selection of key informants involved identifying elders with deep knowledge of traditional norms, values, and belief systems of the area in order to explore the traditional conservation practices of the local community. Other informants were sourced through a process of nomination undertaken by the elders of Iringa Region. This ethnographic investigation was intended to ascertain the current traditional socio-cultural practices of rock art conservation and acknowledge the ways in which present conservation approaches are attached to the belief systems of the local communities.

The study examined the connections between the art, rock shelters and religious practices attached to the paintings, as well as how the spiritual and cultural belief systems link the communities and rock art sites together. Thus, in this paper we propose alternative modalities that can provide support for sustainable management of rock art sites at community, national and global levels. The importance of belief systems and the use of shelters with paintings for religious practices stand out against the background of the plundering of cultural heritage resources that is happening across Tanzania presently. More importantly, this study noted that indigenous people interact with shelters with painted art by frequenting the sites and performing rituals, and therefore, they value them. That is why they have been protecting the sites and the landscape around the vicinity of the shelters since time

immemorial, and thus the rock shelters and rock paintings are attached to the belief systems of the indigenous people in terms of sacrifices, rituals, blessings, offerings, rain making and appeasing their gods or spirits and ancestors e.g. Tavimienda and Lutona rock shelters. This is because during surveys with found some calabashes, ceremonial gourds, potteries, animal skin, fire ashes, animal blood and bird feathers, which the indigenous people told us that they do perform some rituals whenever they face difficult moments in their daily affairs such as famine and drought. Thus, they pray for rainfall from their ancestral spirits. However, it was discovered via ethnographic enquiries that present ritual practices at heritage resource areas are indirectly or directly restricted by heritage legislations/laws (Itambu, 2013, 2015, 2017).

The Current Status of the Iringa Rock Art Sites

The field survey revealed that rock art paintings of Iringa are affected by natural weathering, physical and biological corrosion as well as anthropogenic actions. Physical weathering includes exfoliation, oxidization, and putrefaction of painted walls. At Mlambalasi, most rock paintings are collectively concealed with fungi, mould, foliage, bird and hyrax droppings as well as termite grunges (Figure 4). These threats are widespread at the Tavimienda cave shelter (Figure 5). Anthropogenic threats include unauthorized drawings (*graffiti*) (Figure 8), formation of soot on paintings due to fire setting (Figure 4) as well as gigantic holes likely dug by treasure hunters. Soot and fire making in rock shelters are highly associated with ritual and sacred practices, as evidenced in Mwanza and Mara Regions of Tanzania (Mabula, 2005; Kwekason & Chami, 2003; Mwitondi, 2015). Unwarranted excavations in rock shelters are widely influenced by an on-going myth that rock art indicates the probable presence of treasures and armaments left by Germans after losing the Second World War (Lim, 1992; Masao, 1982; Itambu, 2013). The effects of such myths were evidenced at the Lutona rock shelter, and it is closely associated with lack of knowledge or awareness of the subject matter (Figure 4).

A recent study by Miller et al. (2020) at Tungamalenga site indicates that local people believe that it is an ancient hominin track, though we nevertheless documented them as cultural sites. Tungamalenga demonstrates that local people have keen awareness of the scientific, cultural, and economic value of LSA archaeological heritage (Miller et al., 2020), thus it needs protection from the Antiquities Department. Therefore, this paper reports on and discusses mainly the current state of conservation and continuing threats to the rock art sites as well as propose mitigation strategies.

Heritage Legislation and Policy Framework, Management Challenges

African countries have legal frameworks for conserving heritage. Such laws have created administrative structures responsible for heritage protection in its various forms. For example, the Antiquities Department in Tanzania, the South African Heritage Resources Agency, and the National Museums and Monuments of Ghana are mandated with heritage protection in their countries. These administrative organs are responsible for the identification, protection, and conservation of heritage resources (Chirikure, 2013). Also, African heritage management systems have provisions for ranking heritage places according to their significance in countries with a clearly defined system of ranking sites, such as South Africa. National heritage sites or monuments are at the top of the value scale, while provincial monuments or sites occupy the intermediate position. Chirikure (2013) points out that in most countries, local sites have the least value or significance. The conservation of African heritage includes good and bad aspects that create significant challenges. In moving forward, African universities must teach heritage conservation using their local experience (Chirikure, 2013; Itambu & Hongoa, 2016). Such teaching should draw from other disciplines, such as planning, environmental studies, and conservation, to best prepare graduates to conserve heritage. New research must also devise local best practices for managing African sites (Chirikure, 2013). There are many stakeholders in heritage conservation, and their interests must be balanced without privileging one group over another.

Similarly, it has been argued by some Africanist scholars that the history of research on the continent has involved engagement with colonial and post-colonial systems of power and dominance, which very often, along with factors like the significant cultural distances between foreign archaeologists and members of host communities, has tended to marginalise those communities, preventing them from exercising any control over the forms that research would take in their own lands (Schmidt & Pikiyai, 2016). Modern African people have all too frequently been rendered invisible in archaeological accounts that attempt to portray the lives of their ancestors, while forgetting that some of them are knowledgeable about the past. This is essentially true due to the fact that some of them inherited skills and knowledge that was passed to them by these ancestors through oral accounts. However, these mitigation strategies that probably apply equally to all heritage sites in Africa should be revised. In Tanzania in particular, sometimes scientists advise the responsible government authorities on how best to handle such heritage artefacts, but such recommendations are not actionable in most cases (e.g. Schmidt & Pikiyai, 2016).

Another important issue is how to manage the balance between site protection and developmental projects in Africa; thus Ndlovu (2017) hints that as a result of various economic development factors such as mining, manufacturing and retail industries which are springing around many countries in Africa, they have led to tensions between the growth and socio-economic development on the one hand, and the environment on the other hand. Any opposition, on environmental or heritage grounds against proposed development is thus seen as a threat to the creation of employment for destitute communities (Ndlovu, 2017).

The Tanzania's legal framework protecting cultural heritage, including rock art, is the Antiquities Act of 1964, amended in 1979, and the National Museum Act of 1980. These Acts together form the basis for the preservation and promotion of cultural heritage resources of the global, national, and local significance. The UNESCO National Commission Act, likewise, established a commission charged with implementing UNESCO and ICOMOS activities in Tanzania's sites with global cultural and natural significance. Likewise, the National Museum Act establishes national, regional, or local museums, whose primary responsibility is conserving and displaying movable heritage resources. Related policies relevant to this study are the Cultural Policy of 1997 and Cultural Heritage Policy of 2008. The Cultural Policy offers an opportunity to establish traditional knowledge, skills, and technology, which are environmentally friendly. The Cultural Heritage Policy creates favourable circumstances for safeguarding intangible and tangible cultural resources, including through the empowerment of local communities and other stakeholders in the planning, conservation and management of cultural heritage resources found in their respective environments. The policy defines cultural stakeholders as partners, individuals, groups, or organizations interested in cultural heritage resources. The main strength of these policies is their insistence on the incorporation of local communities and traditional knowledge in conservation initiatives. Both policies have been described as a paradigm shift in conservation circles from colonial protectionism (Antiquities Act, 1964; Museum Act, 1980) to more collaborative approaches where communities are regarded as partners and not as enemies of conservation. Despite the opportunity presented by the policy framework, however, the policy implementers in Tanzania have dramatically failed to invite local people to have discussions, conduct workshops, or create community outreach programmes that promote awareness about the importance of sustainable management and conservation issues in the Iringa Region for the benefit of present and future generations (e.g. Kamamba, 2005).

Both the Antiquities Act and the Cultural Policy vest responsibilities in the Antiquities Department that is supervised by the central government (Kamamba, 2005; Bushozi, 2014). From 2008, when the Cultural Heritage Policy was inaugurated for the first time, only small efforts, with insignificant outcomes, have been made to sensitize and improve awareness among local communities about the socio-economic value of the cultural heritage resources located in their areas. Instead, the Government has maintained its supremacy by engaging key heritage institutions under the same ministry such as the Ngorongoro Conservation Area Authority (NCAA), Tanzania National Parks (TANAPA), and Wildlife Management Authority (WMA) custodianship in managing cultural heritage resources (MNRT, 2014). The approach is still in use and continues the same basic protection system of using mandatory power to control and protect heritage assets countrywide. State agencies are authorised to nominate, monitor and protect sites and monuments which are considered to be of national interest (Bwasiri, 2011; Bushozi, 2014).

Under the current international law, national heritage institutions are obliged to consult local communities before any development affecting their lands and resources. More broadly, any decisions directly affecting local communities and their self-determination require their consultation and consent (Bushozi, 2014). It implies that consent and information related to intended activities are obtained in advance. Such information should be objective, accurate and presented in a manner and form understandable to local people (UNESCO-ICCROM, 2017). For instance, the fencing of rock shelters to prevent paintings from vandalism by limiting entrance of local people inside shelter denies the community rights. Even if the intention were to strengthen community development through cultural tourism, refusal to admit other community privileges such as rights to ritual and religious practices may lead to non-engagement of local people in conservation activities. Fencing as a strategy for conservation was widely used in Kolo, in central Tanzania in the 1970s, but it has proven to have deleterious side effects, including mounting of erosion outside the fenced area, rising of abrasive dust and a decrease in visibility (Lim, 1992; Gale & Jacobs, 1987; Taruvinga & Ndoro; 2003). Fencing a site does not only inhibit entrance to the site, but also breaches civil rights by disallowing religious rites and ceremonies without considering the fact that these local communities have been performing rituals at the sites since time immemorial, and that is the reason why we still find the art preserved today. The traditional conservation approaches have implications for sustainable management through traditional conservation systems; and this is due to the

fact that heritage is always contested, and that as a resource it cannot be separated from peoples' lives (Taruvinga & Ndororo, 2003; Itambu, 2015).

Generally, in Iringa tourism is not overseen by the local community, and it is only directed by wildlife Safaris; thus, the Cultural Heritage Policy of 2008 sought to modernize conservation practices by considering the incorporation of local governments and communities in the preservation of archaeological, historical, and cultural sites in accordance with the international legislation.

***Fahari Yetu* Training programme**

The Iringa Town Council in collaboration with *Fahari Yetu* cultural solutions have begun fencing the Kihessakilolo (Igeleke) site. *Fahari Yetu* is a programme led by the University of Iringa supporting sustainable community development and poverty alleviation in the southern highlands of Tanzania through conservation, management, communication, and promotion of cultural heritage resources to increase information flow across and between communities and government. The *Fahari Yetu* project has been offering preservation outreach programmes to the local people since its inception in 2016, run by Jan Kuver, from the Anthropology Department at the University of Iringa. Despite all their efforts in the conservation of heritage assets, the University does not have sufficient staffing who are trained archaeologists. It is recommended that this University should start offering degrees in archaeology so that we can have several trained archaeologists from around the area. Unlike the Government's top-down approach system of heritage conservation, *Fahari Yetu* involves local communities in all aspects pertaining to heritage documentation and preservation in Tanzania. The project has trained local guides to work at the Kihesakikolo rock paintings site and offers pro-bono annual workshops and meetings to the local community by educating them on how to manage, conserve, and preserve the archaeological sites and other historical assets found in their region (Figure 7). It has created room for the local community to access heritage resources in contrast to current heritage legislations. During the interviews, the local community leaders appreciated the roles performed by this project and their training that have been offered by the *Fahari Yetu* project. At the interviews, the elders provided us with some feedback and they requested that we inform government authorities about their desire to have many projects of this nature across the region.

Elsewhere in Africa, the colonial legislation denied the legitimacy of the African culture and therefore, traditional beliefs that necessitate a link between natural and cultural landscapes were denied completely at

archaeological sites (Bushozi, 2014). It has continued to suppress traditional heritage management systems by concentrating all powers to government heritage institutions i.e. Antiquities Departments and National Museums (Bwasiri, 2011; Bushozi, 2014). This situation has progressively trailed heritage sites, especially those that have been continuously attached to sacred rituals, as it is the case for rock art.



Figure 7: Community outreach meetings by Fahari Yetu in Iringa to promote heritage resources conservation (Photo credits: Fahari Yetu cultural solution's website).

Public outreach programmes to raise awareness on preservation of heritage patrimonies are crucial in any area of Tanzania. In Iringa specifically, local communities are useful in understanding spatial distribution and current usage of rock art sites. For example, studies of the same nature from southern Africa have stressed the need to manage the balance between the heritage conservation legislative frameworks and the desired needs and values of the local communities which are embedded within the rock art sites (Bushozi, 2014; Itambu, 2017). In South Africa at the uKhahlamba/Drakensberg Park, Duval and Smith (2013) noted that regulations which are supposed to balance preservation with tourism development rely on a custodianship system to protect the paintings, and do not involve local people in the preservation and presentation of the rock art sites. This system satisfied the government requirement that public bodies

act to promote poverty relief and socio-economic regeneration via the sites, but does not make the local communities feel that they are the actual owners and custodians of these sites (Duval & Smith 2013). In Iringa, while conducting focus group discussions, we observed that the indigenous community had the feeling that there are no deliberate efforts from the Tanzanian Government to conserve these patrimonies, thus they demand more projects of this nature that will be supported by governmental heritage authorities, and not allow these heritage conservation programs to be spearheaded by private stakeholders alone.

Therefore, our three years research work in Iringa Region aimed at strengthening conservation strategies through community engagement and sustainable use of the heritage assets. Our efforts were solely directed towards reducing vulnerability of the art because of undesirable human activities that are currently taking place across the landscape. Heritage institutions in Tanzania also need to understand the link between rock art and its ritual value among local communities (e.g. Harari, 2015). Regarding belief systems, local communities use rock art as a spiritual symbol to release themselves from bad feelings (Itambu, 2015). Oral tradition suggests that the rock art in Iringa belongs to ancient hunting and gathering communities, and most of the depicted animals were locally found in the surrounding landscape (Itambu, 2015). Several interviews with elders aged 60 years and above (16 individuals) from eight villages of Iringa Rural District exposed new ideas or alternative understandings of the rock art. The present-day communities use the rock shelters for various ritualistic activities such as offerings, prayers, and rain making and as temporary homes or shelters during rainy seasons as homes for those with thatched houses which cannot withstand heavy rains of December – February (Itambu, 2013). Thus, the shelters contain national and global values that call for attention in order to conserve them. Importantly, local people use shelters with paintings to communicate with other living and non-living entities in the universe through artistic objects depicted in rock shelters, caves, and overhangs. Communication between humans and spirits was and is still initiated in various rock shelters through speeches, songs, dance, and ceremonial practices. The rock art also communicates distant past land use systems, significant biodiversity in a certain habitat, and ways in which local communities adapted to a certain landscape.

Rock Art Tourism and Conservation

Tourism is one of the fastest growing sectors in Tanzania's economy. As a result, the Government has transferred cultural heritage sites from the Antiquities Department, Ministry of Natural Resources and Tourism

(MNRT) to other government sectors that focus on commercialization and income generation through tourism. Hence, several rock art sites were reallocated to other government heritage agencies such as the Tanzanian National Park (TANAPA), Ngorongoro Conservation Area Authority (NCAA) and Wildlife Management Areas [WMA] URT, 2014]. Commercialization of cultural heritage is attractive as can be seen at Kihessakilolo, the local government of Iringa town in collaboration with the community and *Fahari Yetu*, developed a site as a tourism destination that would link cultural heritage sites with wildlife tourism; the Safari activities that have been taking place in Iringa since colonial times.

Unfortunately, the site has been fenced to limit accessibility as a conservation strategy. Local communities believe that the rock art intensifies the connection with their ancestral spirits and rock shelters serve as places for ritual activities. However, worship performances are carried out alongside actions such as cooking, making fire, touching the painted walls or *graffiti* (Figure 8) that may potentially damage the art. The local community relates to these heritage sites differently in that it is the 'what cannot be seen' which supersedes that which can be seen, and is prioritized by heritage managers (Ndlovu, 2009, 2011), thus emphasizing the spiritual management of the site. Such practices emanate from the Eurocentric/colonial way of thinking about the local community's use of sites as destructive practices (e.g. Ndlovu, 2011). People are willing to acquire new knowledge and find out the best alternatives to performing rituals. Achieving better conservation approaches is a fine balancing act because the success of a management success endeavour often depends on the personalities involved in sites protection. Smith (2006) argues that, the extent to which the fences protected the rock art and the sites themselves is always not clear. This is because graffiti and other damage continued, and the fences may have served to increase the amount of damage because of their authoritarian nature that disregards the roles of the traditional approaches (Smith, 2006). Wherever they were used, fences were breached and some sites were then allowed to return to being unfenced; others were reinforced with dramatic cages such as those at the White Lady site in the Brandberg, Namibia, the white rhino shelter in the Matopos, Zimbabwe, and a range of sites around Kondoa and Iringa in Tanzania (Smith, 2006).

In addition, the Antiquities Department in Tanzania continues to issue treasure hunting permits, a pattern, which causes adverse impacts on rock shelters with paintings as is the case with the Lutona rock shelter (Figure 4). Allowing treasure hunting activities in heritage sites is also functionally illiteracy among the heritage authorities (Itambu, 2015). According to the

Tanzanian heritage legislation, rock art sites open for tourism must be documented in detail. Currently, there is no detailed documentation and conceivable management strategies that have been put into practice by heritage agencies to enhance the preservation of these non-renewable heritage resources, even at the sites of Kondoa, which are under UNESCO's World Heritage list need a detailed and systematic documentation to cater for the current conservation and management needs.



Figure 8: Vandalism of rock paintings at Lutona rock shelter in Magubike village (Graffiti on paintings, Source: Itambu, 2015).

Proposed Mitigation Measures

Many challenges in site management and conservation have been spotted throughout the African Continent (Ceri et. al., 2011), but the key issues and challenges facing site managers in sub-Saharan African are myriad and diverse. They are also not static, and whereas fifteen to twenty years ago attention was focused on the issue of looting, site destruction, and the illegal trade in African material culture (e.g. Schmidt & McIntosh, 1996 cited in Ceri et al., 2011), much has changed. Whilst the issue of looting cannot be ignored, there are new pressing issues as well. It is argued currently that the challenge for heritage practitioners must then be to balance the competing demands of local communities, a variety of regional stakeholders (who may not be 'local'), national interests, professional requirements, and global economics (Ceri et al., 2011). Indeed, it is perhaps this interplay of the extremely local and the global that brings the greatest challenges, but also, conversely, also brings out the best in sub-Saharan practice, as regional practitioners respond and adapt, thus creating innovative solutions to site management and conservation (Ceri et al., 2011). In a similar vein, Chirikure (2013) and Ndlovu (2017), note that one of the greatest ironies about African heritage is that, despite being priceless, it often ranks very

low in terms of government priority scales, this situation is also endemic in Tanzania whereby each new incumbent government has been placing the Antiquities Department in various ministries, from the Ministry of Sports and Culture, to the Ministry of Natural Resources and Tourism, and sometimes in the Ministry of Education. These unpredictable changes about who and which one is the responsible custodian-cum-organ of the country's patrimonies show that the Government does not warrant due weight to her patrimonies. The expectation from this priceless tag is that the benefits of heritage conservation to society are so immense that they should not be compared to those of competing endeavours. Chirikure (2013) once argued that, "heritage is a public good, essential for national identity, national cohesion, employment generation, education, and cultural and religious values". Thus, African governments should give them the same weight as they do to wildlife management and tourism sectors.

Some recommendations have been put in place by some scholars such as Smith (2006) and Ndoró and Pwiti (2001) regarding the management and protection of African patrimonies by suggesting that many aspects of indigenous management practices should be fostered and retained, whereby the most effective management process for heritage sites proposed is that one which contains a management plan that is drawn up and implemented through a partnership between community members and appropriate heritage and conservation professionals in a particular country. This is because the indigenous community brings the knowledge of the significance and meaning of the site and a wealth of experience as to how the site was protected in the past (Smith, 2006). The professionals bring broad experience of practices that have worked effectively in other places and complex scientific skills that can help conserve the significance of the site. The challenge is to create a workable partnership between the two; one in which issues and concerns are made explicit by both sides and compromise reached and sometimes effected (Smith, 2006).

In Tanzania, the present conservation efforts of cultural materials are biased, mainly directed towards maintaining the physical attributes of the sites and not the intangible aspects attached to the rock art (Itambu, 2013; Bushozi, 2014). This approach was inherited from colonial conservation policies and laws that emphasised physical protectionism and a top-down approach (Ndlovu, 2009, 2011; Bushozi, 2014; Harari, 2015). It should be kept in mind that communities preserved these sites because they were guided by taboos and cultural values associated with cultural landscape (Ndlovu, 2009). Community outreach promotion campaigns with the local community should be a prerequisite in Iringa, traditional landowners should

be provided with skills in active engagement in the management, conservation, and preservation of these heritage assets. Additionally, this should be elaborated in both the Antiquities Act in Tanzania and the Heritage Policy of 2008, and significant amendments to these provisions should be made to meet the standards and contemporary demands from stakeholders' involvement in heritage conservation.

Sites with better preservation of the paintings, which are still visible, decipherable, and identifiable, such as in the cases of the Kihesakilolo and Tavimienda sites, should be promoted for tourism, and thus link them with Safari tourism that is currently taking place in the region. This is because of their proximity to Mikumi, Udzungwa, and Ruaha National Parks. Therefore, it is pertinent for the responsible authorities to think on linking up eco-tourism and cultural tourism in the region. These sites are potential for boosting archaeo-tourism in the Iringa Region if properly promoted by relevant authorities. Some of the sites are facing numerous threats to rock art survival that range from zoomorphic, chemical, and anthropogenic factors, and if rescue or salvage programs are to be launched at these sites; the paintings from these sites could act as potential sources of income through tourism.

Furthermore, the ethnographic inquiries with the elders in six villages of Iringa and Kilolo Districts evinced that rock shelters are widely associated with ceremonial practices (Itambu, 2015). Practically, this trend implies that cultural heritage sites have relevance to local communities. Even though many changes have occurred in the last two decades, interviews with the local people showed that they have maintained their spiritual link with ancestors through natural landscape, a situation that can be linked with the animism belief system, and local people continue to believe in the inscriptions depicted in rock panels as their sacred sites.

Additionally, the communities need to be integrated in education programmes related to ignorance eradication, raising awareness, and promotion of cultural heritage resources. Community awareness programmes should be taken as a major milestone in ensuring the long-term success of cultural heritage management. It should integrate guidance in site documentation and registration procedures, interpretation of cultural sites and allied objects, heritage management plans, tour guidance and infrastructure development strategies. Without a clear plan of these important elements, escalating cultural tourism industry would not be sustained. When thinking about the escalating cultural tourism we should think also about their universal value and envision a tourism industry fully

supported by government poverty alleviation programmes. Community awareness programmes in such key areas will help Tanzanians develop a long-term and sustainable cultural heritage management and economic gain through tourism.

Despite its limitations, the Antiquities Department remains an example of institutional management for a sustainable existence of cultural heritage resources in Tanzania. The most important step to be taken by the Antiquities Division is to amend the legislation so as to give room for community participation. As the tourism industry is becoming a leading economic sector in Tanzania and the Government's intention is to promote cultural heritage sites to attract tourists, then community activities related to rituals and religious aspects should be considered as part of tourism attraction packages. However, there is a need for balancing requirements and interests of local communities and economic necessities expected of the tourist industry. Issue of site's carrying capacity in terms of the number of tourists a site could support and cultural and environmental degradation should not be underestimated. In this case, documentation, protection, and education to improve community awareness should go together with serving those needs. Thus, tourism initiatives should aim to improve livelihood and poverty alleviation among the local communities and avoid key threats that may arise from mass tourism.

The sustainable preservation of the Iringa rock art will become a reality if all stakeholders in cultural heritage will decide to dedicate their efforts in waging rock art conservation campaigns. These campaigns will ensure that these non-renewable assets are well managed and protected by all stakeholders. Government heritage agencies should take the lead in these heritage promotion programs countrywide for sustainable management. Training institutions should recruit scientists and heritage professionals at different levels (degree, diploma, and certificate) that will be charged with the task of developing heritage centres and museums at community, district, and regional levels. This should go alongside with detailed recording and documentation of these priceless heritage assets across the country (Itambu, 2017). Thus, we are calling for heritage practitioners to learn from the best conservation practices elsewhere in the world, even beyond Africa in terms of the best management methods of rock art tourism sites in collaboration with indigenous communities.

Conclusions

At present, the *Fahari Yetu* conservation project is conducting heritage promotion campaigns by engaging local communities in cultural heritage management. Communities are being informed about the threats facing the rock paintings' survival and the ways in which they could jointly work with other stakeholders to conserve the sites of Kihesakilolo, Mlambalasi, Lutona and many other archaeological sites found in the region. Our research realized the need for engaging local communities in setting up teams or task forces, which would work with other stakeholders, including governmental heritage institutions so as to establish site management plans. This will help traditional landowners to benefit from tourism activities that are currently taking place in the region. This could only be successful through facilitation of comprehensive investments in public awareness, making an assessment in the state of preservation of heritage assets, promoting indigenous awareness, and undertaking more research on preservation measures that warrant future accessibility and sustainable use of these resources. Lastly, in order to accomplish conservation solutions such as community engagement and education, we are launching annual meetings with *Fahari Yetu* project members so as to discuss the best practices in conserving and managing the Kihesakilolo rock shelter site and how we could better integrate the indigenous communities in day-to-day management of visitors and conservation endeavours.

References

- Biittner, K. M. (2011). Characterization of Stone Age Lithic from Two Rock Shelter Sites in Iringa Region, Southern Tanzania. Unpublished PhD thesis. Edmonton, Alberta: University of Alberta.
- Biittner, K. M., Bushozi, P. G.M., & Willoughby, P. (2007). The Middle and Later Stone Age of the Iringa Region, Southern Tanzania: An Introduction. *Nyame Akuma*, 68, 62-73.
- Biittner, K. M., Sawchuk, E. A., Miller, J. M., Werner, J. J., Bushozi, P. M., Willoughby, P. R. (2017). Excavations at Mlambalasi Rock Shelter: a Terminal Pleistocene to Recent Iron Age Records in Southern Tanzania. *African Archaeological Review*, 34(2), 275-295.
- Bushozi, P.G.M. (2011). Lithic technology and hunting behaviour in the Middle Stone Age (MSA) of northern and southern Tanzania.

- Unpublished PhD thesis. Edmonton, Alberta: University of Alberta.
- Bushozi, P.G.M. (2014). Towards Sustainable Cultural Heritage Management in Tanzania: A case study of Kalenga and Mlambalasi sites in Iringa, Southern Tanzania. *South African Archaeological Bulletin*, 69(200), 136-141.
- Bwasiri, E.J. (2011). The Challenge of Managing Intangible Heritage: Problems in Tanzania Legislation and Administration. *South African Archaeological Bulletin*, 66(194): 129-135.
- Ceri, A. et al. (2011). Conservation and Management of Archaeological Sites in Sub-Saharan Africa Conservation and Management of Archaeological Sites, 13(2-3), 95-102.
- Chirikure S. (2013). Heritage conservation in Africa: The good, the bad, and the challenges: *South African Journal of Science*, 109(1-2), 1-3.
- Culwick, A.T. (1931). Ritual Use of Paintings of Bahi. *Man*, 31, 33-36.
- Fosbrooke, H.A. (1950). Tanganyika Rock Paintings: A Guide and Record. *Tanganyika Notes and Records*, 29, 11-14.
- Fozzard, P. (1959). Some Rock Paintings of Western Usandawe. *Tanzania Notes and Records*, 65, 57-62.
- Gale, F., & Jacobs, J. (1987). Aboriginal Art: Australia's Neglected Inheritance. *World Archaeology*, 19(2), 226-235.
- Hamilton, A.C. (1982). *Environmental History of East Africa: A Study of the Quaternary*. London: Academic Press.
- Harari, Y. N. (2015). *Sapiens: A brief history of Humankind*. HarperCollins Publisher. New York.
- Itambu, M.P. (2013). The Rock Art of Iringa Region, Southern Tanzania. A Descriptive and Comparative Study. MA Dissertation, University of Dar es Salaam.
- Itambu, M.P. (2015). Rediscovering the Intriguing Patrimonies Depicted in Rock Shelters of Iringa, Tanzania. In Runge J. (ed.) *Changing Climates, Ecosystems and Environments within Arid Southern Africa and Adjoining Regions: Palaeoecology of Africa*, pp.240.
- Itambu, M.P., & Bushozi, P.G.M. (2015). The Rock Art of Iringa Region in the Southern Highlands of Tanzania: Studies in the African Past. *Journal of African Archaeology Network*, 12, 182-200.

- Itambu, M.P & Hongoa, N.M. (2016). Archaeology and Heritage Resource Management in Siuyu, Singida Region (Tanzania). *Journal of Geoscience and Environment Protection*, 4(6).
- Itambu, M. P. (2017). Integrating Rock Art Heritage Conservation with Eco-Tourism: The Case of Iringa Region, Tanzania. UNESCO Proceedings: African Heritage and the Pillars of Sustainability.
- Itambu, M.P., Bushozi, P., Mulinda, F., & Emmael, S. (2018). Rock Engravings and Paintings: Rethinking of the Cupules, Gongs, and Grinding Hollows of Siuyu and Ughaughu in Singida East (Tanzania). *Journal of Geoscience and Environment Protection*, 6(6).
- Kwekason, A., & Chami, F. (2003). The Archaeology of Muleba, South west of Lake Nyanza: A Preliminary Report. In F. Chami, G. Pwiti and C. Redimilahy (eds.), *Climate Change, Trade and Modes of Production in sub-Saharan Africa. Studies in the African Past*, no.3, pp. 59-85. Dar es Salaam: Dar es Salaam University Press.
- Kamamba, D. (2005). Cultural heritage legislation in Tanzania. In Ndoro, N & Pwiti, G. (eds.), *Legal Framework for the Protection of Immovable Cultural Heritage in Africa*, pp. 13-17. Rome: ICCROM.
- Leakey, M. D. (1983). Africa's Vanishing Art: The Rock Paintings of Tanzania. New York, Doubleday and Company, Inc.
- Lim, I.L. (1992). A Site-Oriented Approach to Rock Art: A Study from Usandawe, Central Tanzania. Unpublished PhD dissertation, Brown University.
- Mabulla, A.Z.P. (2005). The Rock Art of Mara Region, Tanzania. *Azania* XL pp. 19-42.
- Masao, F. T. (1976). Some Common Aspects of Rock Paintings of Kondoa and Singida, Central Tanzania.
- Masao, F.T. (1979). The Later Stone Age and the Rock Paintings of Central Tanzania. PhD Thesis. Simon Fraser University.
- Masao, F.T. (1982). The Rock Art of Kondoa and Singida: A Comparative Description. National Museum of Tanzania Occasional Paper no.5.

- Miller, J. M. & Willoughby, P. (2014). Radiometrically Dated Ostrich Eggshell Beads from the Middle and Later Stone Age of Magubike rock Shelter, Southern Tanzania. *Journal of Human Evolution*, 74, 118-122.
- Miller, J.M. et. al., (2020). Fourteen Years of Archaeological and Heritage Research in the Iringa Region, Tanzania. *African Archaeological Review*, 37, 271–292.
- Msemwa, P. (2002). Archaeology of the Ruaha Valley, Iringa District. Published Report on File with the National Museum of Tanzania.
- Mwitondi, M.S. (2015). Kasoma Rock art Shelters: A Reflection on Local Awareness and conservation Challenges. *UTAFITI*, 11 (1/2).
- Ndlovu, N. (2009). Access to rock art sites: a right or a qualification? The *South African archaeological bulletin*, 68 (189): 61-68.
- Ndlovu, N. (2011). Management Versus Preservation: Archaeological Heritage Management in Transforming South Africa. *Conservation and management of archaeological sites*, 13(2–3), 123-133.
- Ndlovu, N. (2017). Fragmented Approach to Governance? Critical Review of the Role Played by Various Government Departments and Agencies in the Administration of Heritage Matters in South Africa: Archaeologies. *Journal of the World Archaeological Congress*.
- Ndoro, W., & Pwiti G. (2001). Heritage Management in Southern Africa: Local, National and International Discourse. *Public Archaeology*, 2(1): 21-34.
- Schmidt, P., & Pikirayi, I. (2016). *Community Archaeology and Heritage in Africa: Decolonizing Practice*, pp. 309. London: Routledge.
- Smith, B.W. (2006). *Rock Art Tourism in Southern Africa: Problems, Possibilities and Poverty Relief in book: Of the Past, for the Future: Integrating Archaeology and Conservation*: Neville Agnew, Janet Bridgland: Getty Conservation Institute.
- Taruvinga, P. & Ndoro, W. (2003). The vandalism of the Domboshava rock painting site, Zimbabwe: Some reflections on approaches to heritage management. *Conservation and Management of Archaeological Sites*, 6(1), 3-10.

- United Republic of Tanzania. (1964 & 1980). The National Museum Act. Government Printer. Dares Salaam.
- Vinnicombe, P. (1976). Rock Paintings Analysis. *South African Archaeological Bulletin*, 22: 49-121.
- Willoughby, P.R. (2012). The Middle and Later Stone Age in the Iringa Region of southern Tanzania. *Quaternary International*, 270: 103-118.
- Willoughby, P. (2009). From the Middle to the Later Stone Age in East Africa. In Camps, M., and P. Chauhan, eds., *Sourcebook of Paleolithic Transitions*, pp. 301-314. New York: Springer.
- URT. (2014). Justification for the proposed Heritage Department in the NCAA, MNRT. Dar es Salaam.
- UNESCO-ICCROM. (2017). UNESCO and ICCROM Joint Forces to Protect Cultural Heritage. Accessed online on 10th October 2017.