

Rock Art Recording and Documentation in Ikungi, Singida (Tanzania)

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Abstract

Although several research projects on rock art have been conducted in northern Tanzania, the Lake region and central Tanzania in the past, none of them has discovered cupule and gong features. Also, these early research undertakings did not document and interpret the rock engravings, cupules, hollows and gongs from the local people's perspectives. This study sought to fill that gap through a fresh look at the rock art. It investigated and recorded ten sites in Singida region, and collected oral accounts from the local people. The fieldwork entailed systematic reconnaissance surveys which helped to discover and document more rock art sites that were not known by the scientific community as well as by the locals. Ethnographic inquiries were conducted to explore the varied meanings of the noted artistic features within the culture of the communities associated with them. Although the neighbouring Kondoa rock art sites are on the UNESCO World Heritage List, no single study has hitherto reported cupules and gongs rock engravings. Thus, this research is the first to report and discuss in detail the occurrence, types, and spread of rock paintings together with the engravings of the Singida region.

Keywords: Rock Art, Documentation, Conservation, Community Engagement, Central Tanzania.

1.0 Introduction

The Singida Region in Tanzania's central plateau is endowed with exceptional and ubiquitous rock painting sites; together with the Dodoma Region (and especially the Kondoa Irangi, and Usandawe areas), they form a famous belt in central Tanzania with rich and diversified rock paintings. Also, the region is a key locale and a one-of-a-kind resource for inquiries into the emergence of modern human cognition from the Middle Stone Age (MSA) period to the present time. The area is very rich in granitoid outcrop- rock shelters which contain prehistoric and historic rock art sites.¹ There are some rock art studies which were conducted in Kondoa and Singida² that have focused on the rock painting stylistic motifs, nature, techniques of execution and preservation status of the rock art. Nevertheless, community engagement in the management, conservation and preservation of rock

¹ Makarius P. Itambu et al, "Rock Engravings and Paintings: Rethinking of the Cupules, Gongs, and Grinding Hollows of Siuyu and Ughaughu in Ikungi District (Tanzania)," *Journal of Geoscience and Environment Protection* 6, no.6 (2018)

² H. Mahudi, "The Use of Rock Art in Understanding of Socio-economic Activities and Cultural Values: The Case of Matongo-Isanzu in Iramba District, Tanzania" (University of Dar es Salaam, MA Dissertation, 2008); Fidelis T. Masao, "Some Common Aspects of the Rock Paintings of Kondoa and Singida Central, Tanzania," *Tanzania Notes and Records*, 77-78 (1976) 51-64.

art and other archaeological sites were not put in place by these previous studies. None of these previous studies found rock engravings; therefore, they only studied the rock shelters with painted art.

During the early archaeological expeditions in the region, some rock art site names were not referenced on maps and therefore current researchers were not able to trace the locations of some sites. Again, community engagement in the conservation and management of these sites wasn't deeply employed by early researchers. However, previous work conducted by the pioneers of archaeology in the region is appreciated and this research stemmed from their initial efforts to record and document the rock art sites. Thus, this study was conducted to ensure long-term survival and incite community appreciation of the community's heritage. Community engagement was carried out to protect the sites from vandalism to preserve the rock art to boost tourism in the Ikungi District as well as to ensure its contribution to Tanzanian and global education, research, and pride in human past accomplishments.

Upon reading some important work³ it was deemed necessary to study rock paintings of the Singida region, with

³ Makarius P. Itambu and N.M. Hongoa, "Archaeology and Heritage Resource Management in Siuyu, Singida Region (Tanzania)," *Journal of Geoscience and Environment Protection* 4, No.6 (1976); Makarius P. Itambu et al., "Rock Engravings and Paintings: Rethinking of the

special emphasis on the Singida eastern-axis (Ikungi area) through digital recording and documentation. This is because early conventional methods of recording and documentation were mainly focused on the northern-axis sites in Iramba, Mkalama, and Singida North Districts, and there have been very few research projects that enacted digital documentation on the rock art of the Ikungi District.

The paucity of research that has been conducted in Singida, even though the area's landscape is composed of isolated hills with rock shelters, caves, and overhangs that may have been potential canvasses for rock painters, necessitated this research project. This study focused on surveys, digital recordings, and documentation of the rock art of the Ikungi District, and a few sites within the borders between the Singida Municipality (i.e., Ughaughu sites: Nkere/Kihade), whereby all the rock shelters with rock art and rock art styles and types were recorded. Consequently, this study intended to rescue these important cultural heritage sites of national value by involving local communities to protect these sites. Digital recording and documentation of rock art, as well as implementing a community conservation program is

Cupules, Gongs, and Grinding Hollows of Siuyu and Ughaughu in Ikungi District (Tanzania)", *Journal of Geoscience and Environment Protection* 6 no.6 (2018).

4 Mahudi "The Use of Rock Art in Understanding of Socio-economic Activities"; Masao, "Some Common Aspects of the Rock Paintings".

considered by contemporary scholars to be the first step towards their management and conservation⁴.

2.0 The Study Area

The Singida Region is one of the regions in central Tanzania. It lies in the semi-arid zone of Tanzania's central plateau between longitude 33° 24' and 35° 12' E and latitude 3° 42' and 7° 06' S (Figure 1). This study was undertaken in the Ikungi District, specifically the eastern -axis of the region. A large part of the Singida Region occurs on the high plateau overlooking the Wembere-Manonga Depression. This high plateau rises to about 1,000 meters above sea level (m.a.s.l)⁵. The Iramba plateau in the north of the region rises to about 1,500 m.a.s.l. The area south of Singida is exceptionally flat, lying with little relief except for the granite intrusions that form prominent tors.⁶

This area lies within the southwestern part of the Gregory Rift of the East African Rift Valley System. Raised blocks, fault escarpments, and basins are characteristic features of the Ikungi District landscape. Generally, Singida's undulating landscape is punctuated by small boulder outcrops and rocky hills of granite with reliefs of up to 30

⁴ Itambu and Hongoa, "Archaeology and Heritage Resource Management".

⁵ W.C. Schaniel, "The Wahi Wanyaturu and the Market", in *Journal of Economic Issues* 16, No. 2 (1982), 445-452.

⁶ *Ibid.*

meters high.⁷ These granitoid rocky outcrops, overhangs, rock shelters, and caves may have formed the canvas for prehistoric and historic painters.⁸

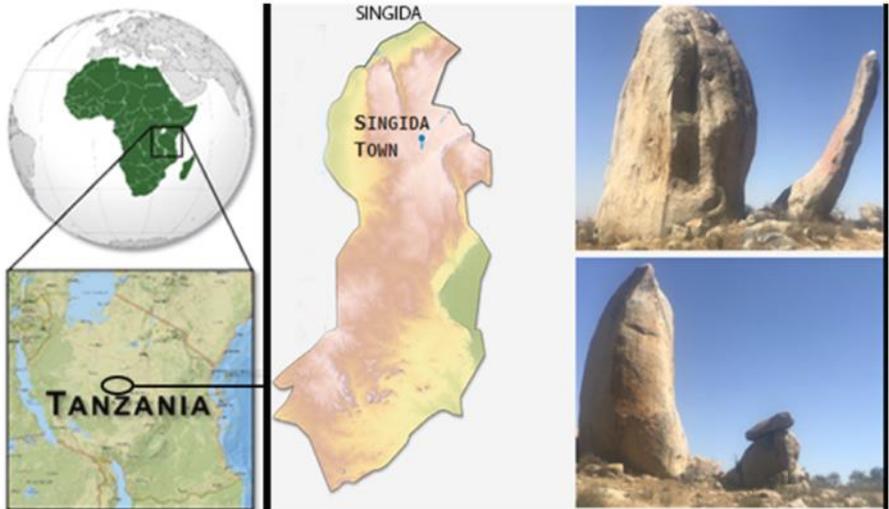


Figure 1: Map of Tanzania Showing the Location of the Singida Region

3.0 Literature Review

The existence of rock paintings in the Singida Region has been known to the World since the mid-1930s when

⁷ Y.K. Oliech, "Rural Spatial Re-organization: The Case of Singida District" (MA Thesis, University of Dar Es Salaam, 1975)

⁸ Makarius P. Itambu, "The Rock Art of Iringa Region, Southern Tanzania: A Descriptive and Comparative Study" (M. A. Dissertation, University of Dar es Salaam, 2013); M.P. Itambu, "Rediscovering the intriguing patrimonies depicted in rock shelters of Iringa, Tanzania," *Palaeoecology of Africa* 33: 10 (2015).

recording and documentation were undertaken.⁹ In the “Deutsche Afrika-Expedition 1934-1936”, Ludwig Kohl-Larsen and his team made some intensive and extensive early recordings when they travelled through the northern parts of the Singida region, especially the Isanzu, Iambi and the Iramba plateau areas. Kohl-Larsen recorded and documented more than 70 rock painting sites, made sketches and tracings of the paintings and excavated some of the rock painting sites.¹⁰ Inconveniently, all the important works by Kohl-Larsen were published in German, and therefore, read by very few African scholars of archaeology. Moreover, rock painting site names were not referenced on maps and some sites could not be ascertained by other researchers because the technology of taking GPS coordinates from the sites did not exist by then.

In his archaeological survey of the Singida Region, Masao recorded more than 15 Later Stone Age (LSA) sites in the Iramba district, five of which contained rock paintings.¹¹ Over again, between 1976-1979; he conducted an archaeological survey of central Tanzania (Dodoma and Singida Regions) in which he covered a total area of 64,000 km². Although his major focus was on LSA assemblages, he also recorded and documented both new and previously

⁹ Culwick (1931).

¹⁰ Kohl-Larsen and Kohl-Larsen (1938, 1958).

¹¹ K. Odner, “An Archaeological Survey of Iramba, Tanzania” *Azania* 6 (1971), 151-198.

known rock painting sites. Between 2005 and 2007, Masao conducted more surveys in Singida and revisited sites they studied in 1976 and 1979 as well as other known sites and recorded new sites that they found. So far, he has recorded more than 50 rock painting sites.¹²

Then followed a hiatus in terms of archaeological voyages in the region until another research project led by a H. Mahudi¹³, who essentially re-visited the sites that were recorded and documented.¹⁴ These early undertakings are acknowledged and they have inspired scholars to revisit the area for further archaeological investigations of which he recorded more than 10 new archaeological sites and more than 15 previously documented rock art sites.¹⁵ Among those newly recorded rock painting sites, Masao and colleagues discovered no single site with engravings, cupules or gongs. What is so significant about this research is that it has discovered the rock cupules, gongs, grinding hollows, engravings and rock paintings that were never before reported.

¹² Fidelis T. Masao, *The Rock Art of Singida and Lake Eyasi in Tanzania* (London: Duggan Foundation, 2007)

¹³ Mahudi, "The Use of Rock Art in Understanding of Socio-economic Activities".

¹⁴ Masao, "Some common aspects of the rock paintings"; Masao, *The Rock Art of Singida and Lake Eyasi*

¹⁵ Itambu and Hongoa, "Archaeology and Heritage Resource Management"

4.0 Research Methods

Before the commencement of fieldwork, background research was carried out, including a review and evaluation of palaeontological, archaeological, historical, and ethnographic literature pertinent to the heritage resources and the archaeology of the Singida Region in general. In addition to historical sources, this research also relied on oral traditions. To accomplish the goals of the research, both surface surveys and inquiries about known rock painting sites were conducted.

4.1 Survey Strategies

In the field, the archaeological surveys involved both intensive and extensive pedestrian surveys on areas identified as having potential for the presence of archaeological materials. We recorded and documented in detail both the existing and new rock paintings, engravings, and sites using a handheld Global Positioning System (GPS), aerial photographs as well as topographic and geological maps. GPS instrumentation is very accurate in locating sites, and therefore, it helped in reducing the variations that can be introduced to site recording through manual measurement errors. Also, it helped to speed up site recording as manual measurements are often slow and time consuming.

Furthermore, potential areas which were selected for surveys were meticulously examined based on the occurrence of cultural heritage materials, these surveys were performed in coordination with selected pedestrian survey traverses. Spacing between individuals during the survey depended on the archaeological potential, terrain, and landform, and ranged from 5 to 30 m spacing. A selected sample of low-potential areas was also surveyed. Artefacts identified on the surface during the pedestrian survey were mapped out, recorded/photographed and left in situ unless they were determined to be threatened by developmental activity or if they were unique or diagnostic. Ground surface exposures were examined for future archaeological excavations. In an attempt to accomplish research goals and objectives in a short period, both surface surveys and inquiries were applied in combination so as to gather more complementary data about known rock-painting sites. Three teams were formed, each with ten crew members supervised by myself. We implemented a full coverage (100%) surface survey of hilly and rocky areas that contain rock shelters, overhangs, and caves. Significant archaeological sites were identified and recorded via field notes, photographs, and GPS coordinates.

4.2 Ethnographic Inquiries

An inquiry to the locals of the area about known rock painting and engraving sites was another technique employed. Random surface surveys were conducted in potential areas that yielded rock painting sites through

informants. This technique was chosen instead of systematic surveys because of the nature of the terrain of the region, which is composed of granitoid boulders and outcrops. GPS was used in describing and locating landmarks, survey areas, and rock painting sites. This approach helped in evaluating and analysing the state of preservation of the paintings and sites. GPS also helped in assessing the sources of potential threats to their integrity and survival due to modern usage of rock art sites, the shelter's/overhang's size, exposure to sunlight, slope, and suitability for public display. The researcher's experiences and knowledge of rock paintings and the sites of the Kondoa World Heritage Site and the Iringa, Ngorongoro, Eyasi, and Simiyu regions were utilised to develop this undertaking.

By and large, this approach is a conservation and management strategy. This is the first step towards saving these priceless national and international cultural heritage materials from vanishing. Inquiries about known rock painting sites were the main technique used for finding rock art sites. Cooperation with local people formed a baseline for implementing this study, this is especially true because while traversing the landscape, local people constantly inventory their resources for future use, including painted rock shelters. Considering the rough terrain of the granitoid rock shelters and outcrops of the region, with limited funds, labour, and time, local people's knowledge of rock art sites

facilitated and expedited the finding and documentation process discussed in this paper.

4.3 Focus Group Discussion

This study also employed the “focus group discussion” (FGD) technique whereby several meetings were conducted to have some informal discussions with major stakeholders, especially those with heritage interests in the Singida Region. The FGD was a pivotal element in community awareness programmes because it served as a vehicle for public outreach campaigns and community conservation. These included collaborations with the Singida Regional Museum, cultural institutions, traditional practitioners, and district and local leaders. On top of that, the results from ethnographic inquiries provided extra information that complements the meetings and interview results. The information was collected mainly from the stakeholders and the local people’s opinions and views about heritage conservation and the need for archaeotourism development in Singida. Touristic activities in archaeological sites will boost the current socio-cultural lives of the people living in the region. Lastly, the consultations were carried out with major stakeholders such as the Antiquities official in the Antiquities Division, the National Museum of Tanzania, Cultural officers in Singida as well as the officials from the nearby wards and villages where sites were discovered.

5.0 Field Work Results and Discussion

From the local people's perspectives, the study went above and beyond the known 'rock paintings' to unravel the types, uses and meanings of the art including the engravings, whilst working hand in hand with the local community. The research was also designed to understand the meanings entrenched in rock engravings, cupules, hollows, and gongs that scholars of rock art have rarely interpreted as rock art sites in eastern Africa. Informal discussions with individuals aged 70 years old and above were held to get interpretations of the meanings of rock art. In studying the rock paintings and engravings of Singida, our major goal was not only to record and document the paintings; but also, to try to decipher the meanings and/or the motives behind the paintings or engravings. Accordingly, the paintings and engravings to be conserved were ranked according to either their rarity/uniqueness or potentiality in terms of research, education, tourism, significance to the community, and long-term survival.¹⁶

¹⁶ Pastory GM Bushozi, "Challenges and Prospects for the Rock Art of Mumba Rock-shelter", *Journal of Humanities and Social Science* 11, no.1 (2022), 1-19; Makarius P. Itambu & Pastory GM Bushozi, "Rock Art Conservation and Tourism in Iringa Region, Tanzania", *Tanzania Journal of Sociology* 7, No.2 (2021), 68 -92; Itambu, "The Rock Art of Iringa"; Itambu, "Rediscovering the intriguing patrimonies"; AZP Mabulla and A. Gidna, "The Dawn of Human Imagination: Rock Art of North- Central Tanzania." *Cradle of Humankind, Vol II, Museo Arqueologico Regional, Alcala de Henares*, (2014), 99-119.

5.1 Rock Art Data Recording and Documentation

We recorded and documented in detail the rock art sites and the surrounding landscapes in the Ikungi District sites. Nevertheless, opinions differ on how to record and document rock paintings and engravings, some scholars argue that tracing is superior.¹⁷ On the contrary, others believe that photographs and video recordings are the best methods of rock art documentation. “Photography and tracing fulfil the fundamentally different purpose of recording and documentation, they are not competing and are certainly not incompatible”.¹⁸

This study went above and beyond the conventional approaches for rock art recording as the study dwelt much on indigenous knowledge. From local people’s perspectives, we derived the meanings of the painted figures and objects from contemporary material cultures. Such decorations/incisions on traditional and ceremonial gourds/calabashes and paintings on walls of traditional houses were compared and correlated with prehistoric rock paintings to decipher the possible meanings of prehistoric rock art. Most of the informants argued that the decorations from the ceremonial contemporary gourds have some ritualistic representation the same as the rock art, for example, the moon and other concentric rings and circles

¹⁷ Fordyce cited in Itambu, “The Rock Art of Iringa”

¹⁸ Smits 1991

symbolize fertility among married couples and some instances of predicting a bright future to married couples. Some of the information from the elders of the Wanya-Turu tribe about the meanings of rock art were audio-video-taped and other valuable findings plus the visual images were later transferred to an image-based Dell computer database program. The video and digital cameras provided some features which can readily be put into context by panning in or out or detail investigated by zooming in. The complementarity nature of these techniques for rock art recording and documentation helped to infer meanings attached to different rock art traditions. By tapping and utilising indigenous knowledge and perceptions about rock art traditions, this approach has been considered by some scholars as the first step towards cultural heritage resource management and preservation.

5.1.1 Itramuka Rock Paintings Site (*UTM 36 M* *0713662/9457880*)

Itramuka rock painting sites occur in the Itramuka hills, Misimbwa village in Siuyu Ward. The northeastern side of Misimbwa village is dominated by scatters of isolated hills and rocks that continue eastward to join the rift escarpment. These hills and the associated rift escarpment are what is known as the Itramuka hills and escarpment. The painting site is located on the foot slope of the Itramuka rift escarpment overlooking Mugori valley and the village. The site occurs on the escarpment's slope in woodland vegetation

and at an approximate elevation of 1,454 m a.s.l. Loose exposed boulders characterize the area. This is a combination of a rock shelter and an overhang. The shelter faces southeast and is about 6.5 m long and 5.8 m wide from the modern dripline to the back wall, and offers just less than 25 m² of directly sheltered space due to a large rock on the western edge of the floor. This large rock within the shelter is climbable and may have been used by the painters to paint the images high up on the shelter. The height is about 4.3 m high. About three pieces of Iron Age slag were found on the surface of the shelter's floor. The overhang faces east and is about 6.8 m long, 2.4 m wide and 7.4 m high. A large rock slab occupies the entire floor of the overhang and prehistoric painters may have stood on this slab to paint the images on the overhanging wall. Overall, the slope of the painted rock is steep, about 45°.

The paintings at this site belong to Hunter-forager rock art traditions. The panel on the shelter contained more than 50 clearly visible images, while the panel on the overhang had 35 clearly visible images. All the paintings are in monochrome, weak red colour, and painted with fine brushes. The painted images are in both frontal and profile aspects and naturalistic and geometric forms. Single and scenic images occur at this site. The subject matter includes human figures, wild animals and geometric designs. Human figures dominate and are all in stylized form (Figure 2). The panel on the rock shelter contains most of the human

images. Of particular interest is a line of about 35 human images with rounded heads, arguably men and some of whom are carrying sticks. The western end of this line of human images circles an antelope.

Also, of interest, is a large human figure with a round head with spikes painted in outline. The hands of this human figure originate from the neck, one can argue that this monstrous figure could be a form of the beginning of ancient belief systems, and this figure could have been portrayed as their God, or a symbolic belief system regarding life after death or super powers/ an omnipotent being. By considering the views and information from the local people on what they think about these rock art features, this study found that some elders still have connections with the latter art tradition (Bantu speakers' art), and they have connections and attachments to them. Some houses in the Singida region still bear the white paintings that they normally paint during weddings, rituals, and initiation ceremonies every year.

The panel on the overhang is largely composed of naturalistically painted images of wild animals. Giraffes are represented by four images, one jackal, two wildebeest and many antelopes. The Itramuka rock painting site provides a vantage point with an expansive view of the Mugori valley. Also, it offers a sheltered area, but with little flat space. We also discovered human and animal skeletal remains and stone tools from this site. The analyses of these materials are

underway, and some are currently housed at the Max Planck Institute of Science of Human History, Germany and thus cannot be discussed in this paper momentarily (appendix 4). This discovery at Itramuka needs further analysis and dating.



Fig. 2: Stylized Monster-like Human Figure with Spiky Hair at Itramuka Rock Shelter

5.1.2 Misimbwa Rock Paintings Site (UTM 36 M 0711402/9459216)

The Misimbwa rock painting site occurs in an isolated kopje, about kilometres west of Itramuka hills, Misimbwa village in Siuyu Ward. This is a huge rock shelter facing the north and overlooking a valley of cultivated farms. The shelter contains

a few faded paintings of animals in red colours. Due to this, no detailed documentation was done. However, the floor of the shelter contains deep archaeological deposits. The centre of the floor has been dug by treasure hunters, exposing a deep sequence and large quantities of lithic artefacts, bone and pottery. Yet, the shelter floor still has intact sediments ideal for future controlled excavations by archaeologists.

5.1.3 Nkere/Kihade Grinding hollow, Rock Paintings, and Cupules: Cluster of Sites (UTM 36Mo710930/9460158)

The Nkere Village is located about 4.5 km west side from the Siuyu Ward, this village is also known as Kihade and is characterized by typical semi-arid vegetation type of semi-arid Singida. On both sides, it is surrounded by a few bushes and thickets. Also, the area is surrounded by granitoid rock outcrops of the Precambrian era on both sides. Two rock shelters contain well-preserved rock paintings (Figure 3), depicting pictures of animals such as elands, giraffes, and elephants. Rock art belongs to the 'Hunter-foragers' art tradition'. The first rock shelter is facing eastwards and the second one is facing westwards. Unfortunately, there are large holes dug by treasure hunters who believe in the myth that the paintings were made by Germans during the colonial period, and thus the local people destroyed the sites. This notion that the rock art is signifying locations or beacons-cum-landmarks that Germans used to hide their precious gems and coins after they were defeated by British

during the WWII is not restricted to Singida only, but to other parts of Tanzania with similar rock paintings¹⁹ (see Itambu, 2013, 2015; Itambu and Hongoa, 2016; Itambu, 2017; Itambu et. al. 2018; Itambu and Bushozi, 2022; Bushozi, 2022). Six archaeological sites were discovered in this area, amongst those six sites: two contain rock paintings, two with rock engravings (cupules and gongs), and two other sites are characterized by LSA artefacts that are scattered across the surface of the landscape. As to the newly discovered rock engravings in Nkere village, ethnographic inquiries and data analysis utilized to decipher the meanings and the motivations behind this petroglyphic art on the rock boulder 'surface (these features are engraved on the granitoid rock), suggest that the cupules art could be perhaps of the same age as the rock paintings of the area at the time., When we did interview elders of the area, one named Wilbroad Makiya, aged 83, told us that his grandfather claimed he did not know when the cupules/engravings were executed and that when he grew up as a kid, the engravings were already there. This would make the engravings minimally at least more than 200 years old or probably beyond LSA.

¹⁹ *Ibid* 17.



Fig. 3: Naturalistic Elands are Painted at Nkere Rock Shelter

There is an isolated granite slab with a single depression (hole) larger than a cup mark (cupule). The depression is almost circular, measuring 28 x 29 cm. In cross-section, it is basin-shaped and about 10 cm deep (Figure 5). The hollow may have been formed through pecking or grinding with a hammerstone. Many grinding hollows have been found in the Mwanza and Geita regions.²⁰ The sites in this locality are perfectly suited for public display and tourism because they are in a very good state of preservation. The roads and accessibility to the sites are reliable although they are surrounded by farmlands alongside the homesteads (Figure 4).

²⁰ RC Soper and B. Golden B, "An Archaeological Survey of Mwanza Region", *Azania* IV (1969), 15-80.

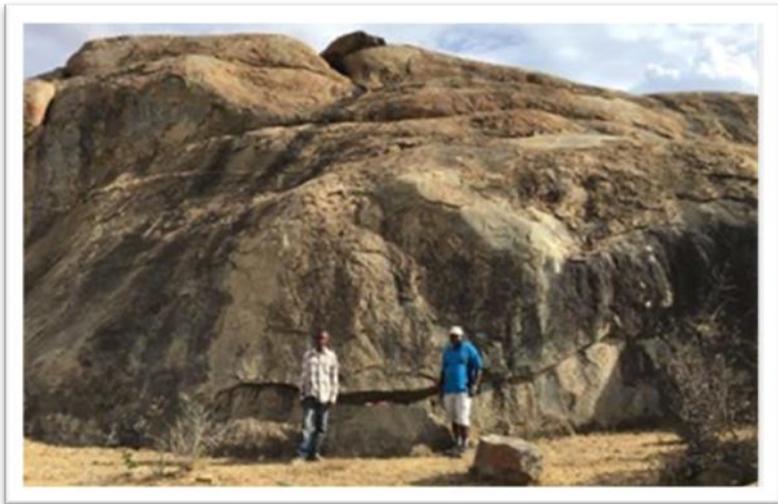


Fig. 4: Rock Engravings (Cupules Art) in Nkere Village



Fig. 5: An Isolate Granite Slab with an Engraved Hollow/Cupule at Nkere/Kihade Village

5.1.4 Ng'ongo a Mau-Mukhekuu Rock Painting Site (UTM 36 M 0722101/9434878)

This is a huge cave with an opening to the southeast in the Ng'ongo Mau hills, located about 3.7 km northeast of Ntuntu Village, in Ntuntu Ward. The site exists on the foothill of the miombo woodland at an approximate elevation of 1,547 m a.s.l. Nonetheless, trees are being cut in this area for clearance for farmland. The cave is about 23.3 m long, 18.5 m wide and 5.6 m high. The floor of the cave contains LSA lithics and pottery fragments. A ground stone was found on the slope's surface, about 5 meters from the cave entrance. The site has two painted panels, on the ceiling of the cave at the entrance and on the wall of a boulder in the middle of the cave, and also at the entrance. Paintings in the former belong to the Bantu language speakers' art. All the paintings are in monochrome, dirty white, and painted with finger

stencils. The painted images are in semi-naturalistic forms and in both frontal and profile aspects. The subject matter includes wild animals, 11 giraffes and 1 elephant (Figure 6). There are also a few anthropomorphic figures. Stylistically, the pictographs fall under what, for want of a better term, has been referred to as the Bantu speakers' art tradition ('the dirty white' paintings), in which the pigment turns out to be ashy or dusky white due to weathering or other chemical and biological factors. The animal friezes, which decorate the ceiling and a wall of the cave, are semi-naturalistic silhouettes in which details are missing, borders vague and the finished product moderately fine.

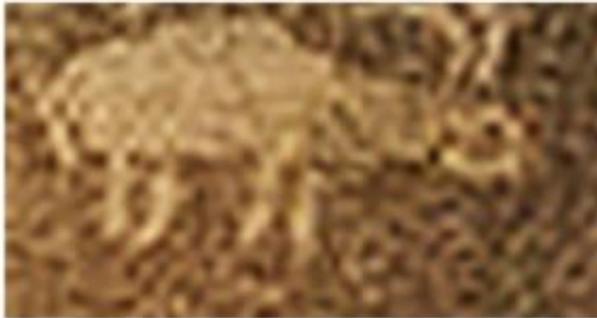


Fig. 6: Dusky-White Paintings at Mau Site

5.1.5 Kinyamberu Rock Painting Site 1 (UTM 36Mo720978/9421722)

This rock shelter occurs in the Kinyamberu hills in Mang'onyi ward approximately 5 km south of Mang'onyi village along the Ikungi-Londoni road. The Kinyamberu hills

are composed of isolated granite kopjes/inselbergs. The vegetation is typical- composed of tall grasses and miombo woodland. The Kinyamberu rock painting site 1 is a huge shelter with three faces. Face 1 faces to the north, measuring 14.5 m long, 4.2 m wide and 2.9 m high and had no visible paintings. Face 2 faces northeast, measuring 6.3 m long, 3.7 m wide and 6.2 m high and had painted images. This face contains about 20 visible paintings of Hunter-foragers' artistic tradition. All the paintings are in monochrome, faded red in colour, and painted with fine brushes.

The subject matter includes humans and wild animals. About 6 stylized human images were clearly visible and painted in stylized form. These include 2 big human individuals about 35 cm long and painted close to each other. The left human image is painted wearing a headdress while that on the right has a rounded head. The other 3 human images are of small individuals, painted standing in a single line. These also have rounded heads. About 10 images of wild animals were clearly visible. The wild animal images are rendered in a naturalistic form and include 1 elephant, 2 zebras, 1 baboon, 2 lions, 2 antelopes and 3 giraffes. The occurrence of a lion image at this shelter painted during the Hunter-foragers' art tradition contradicts Masao's claim that "no lions have been reported in Singida region other than the seemingly relatively recent one at Kitaturu and the obviously

recent one at Kinamulula”.²¹ The painted images are depicted in both frontal and profile aspects. There is no image overlies, suggesting few painting episodes were done here by hunter-foragers. Face 3 faces southeast, measuring 16 m long, 8.1 m wide and 4.5 m high and had no visible painted images. The shelter has archaeological deposits and LSA lithic artefacts and pottery were observed on the shelter’s floors and slopes, indicative of human habitation of the shelter.

5.1.6 Kinyamberu Rock Painting Site 2 (UTM 36Mo721097/9421602)

The Kinyamberu Rock Painting Site 2 is a rock shelter occurring within the Kinyamberu hills and about 200 meters southeast of Kinyamberu 1. The shelter opens northwestward and is 1449 m above sea level. It is 10 m long, 10.5 m wide and 4.7 m high. The shelter’s slope and floor contain LSA lithic artefacts and pottery fragments. Future research in this area is needed to excavate this site. The paintings occur on the right-side wall upon entering the shelter. The painted images are semi-naturalistic in form and are depicted in both frontal and profile aspects. The subject matter includes wild animals and a geometric pattern. The painted wild animals include 3 giraffes in reddish brown and an elephant in light red. The geometric design is a painting of a filled-in circle with radiating lines in pale brown.

²¹ Masao, *The Rock Art of Singida and Lake Eyasi*.

Though painted in reddish and light red colours, the wild animal images are stylistically similar to those at Ng'ongo, a Mau-Mukhekuu rock painting site. Thus, this rock shelter contains both Hunter-foragers' and Bantu speakers' art traditions.

5.1.7 Kinyamberu Rock Painting Site 3 (UTM 36Mo721327/9421470)

This is a combination of an overhang, shelter and cave, occurring about 300 km southeast of Kinyamberu 2. The site borders a farm and homestead with a kraal on the eastern side. The overhang faces to the northwest, measuring 6 m long, 6 m wide and 5.5 m high. This face contained faded images of Hunter-foragers' art tradition. The visible images are of wild animals, including 4 antelopes and a giraffe. The shelter and cave both face southwest and contains faded paintings in various shades of red. Archaeological deposits and many lithic artefacts and pottery fragments were spotted on the surface of the slop and cave floor.

5.1.8 Ng'ongo a Taru Rock Painting Site (UTM 36Mo723479/9423280)

This rock painting site has also been reported²². It occurs in the miombo woodland vegetation area and on the southern slopes of Taru hills. The site is an overhang facing southwest and measuring 12.5 m long, 2 m wide and 4.5 m high. The

²² Masao, *The Rock Art of Singida and Lake Eyasi*.

floor has archaeological deposits, part of which has been dug by treasure hunters. The painted slope is steep, 40-90°. This site has very impressive and relatively well-preserved images of H-F, FFL art tradition. Over 30 painted images of naturalistic wild animals, birds and ideograms are clearly visible. Two panels were observed. The first panel covers at least a quarter of the overhang's wall to the east. This panel contains 2 big elephants on the top, a bird in front of one of the elephants, 3 elands below the elephants, a rhinoceros, two ostriches on top of the rhino and a giraffe facing one of the ostriches (Figure 7). The second panel occurs in the middle of the overhang's wall. The panel is composed of a painted giraffe on the top east part, ideograms/symbols in the middle and a large giraffe in outline, about 1.5 m long. The front legs of this giraffe are superimposed on a filled-in giraffe, about 0.71 m long. Below this giraffe, there are about 4 zebras. This is perhaps the most inexhaustible and the best-preserved site in the region. It is located in the same kind of undisturbed vegetation as the previous site but on the slopes of Taru hill. The site is a straight-faced rock shelter on the southern face of which are depicted several animals in a very elaborate style employing two shades; deep red and light ochreous red. The subject matter includes animals such as elephants, giraffes, eland, ostrich, monkeys, porcupines and so forth as well as anthropomorphic. Since we do not know how long it will remain in this state of preservation, it is strongly recommended that it should be

digitally documented for possible preservation and reproduction at the Singida Regional Museum²³



Fig. 7: A Painted Frieze of Naturalistic Rhino at Taru Rock Shelter

4.1.9 Misughaa sites (S $-5^{\circ}10'35''$ / $5^{\circ}6'13''$ and E $35^{\circ}04'79''$ / $35^{\circ}2'52''$)

There are two important rock art sites located in this area; the first is located at Musule village and it contains the Hunter-foragers' art tradition depicted in dusky-red colour and black pigments which are in monochrome fashion. In the whole panel, the animals have been executed in three styles; boldly filled-in silhouettes like the eland and giraffe on the lower left and right of the panel, the thick line open line profile infilled with different motifs as in the case of the eland on the right side, and the thick line profile without infilling. There is also a geometric representation resembling

²³ Masao, *The Rock Art of Singida and Lake Eyasi*.

a sun, moon, complex concentric rings or cycles. The site is in a relatively good state of preservation. The highest painting, an anthropomorphic with a bow and arrow is 1.9m high, another one is a shamanic depiction of a man and a woman having sex. The painted panel is 3 wide and 6 m high. This hunter-foragers art site is located on the steep slopes of the Misughaa escapement approx 2.5 Km southwest of Musule Primary School (Figure 9).

The Musule II rock shelter is approximately 3.5 km northeast of Minyighi-Musule hot springs and is dominated by Bantu speakers' art tradition (Figure 8). The white paintings on the rock shelter exhibit various friezes and other zoomorphic silhouettes and were executed by a Bantu-speaking community. Most of the painted figures are representations of reptiles portrayed in white monochrome pigments.



Fig. 8: Bantu Speakers' Rock Art in Musule Village, the White Zoomorphic Figures are Executed in White Colour



Fig. 9: Naturalistic, Schematic, and Stylized Figures as well as Geometric Designs, Concentric Rings, and Circles at Misughaa-Musule Site

Although fish on the whole have been rarely found painted by these prehistoric painters, they have been found painted together with reptiles in the Misughaa cluster of sites (Musule II rock shelter). In addition to animal and human depictions, symmetric and asymmetric designs were found.

Suggestions as to their meaning include that they represent ethnographical objects such as fish weirs, bird cages, traps, or the skeletal woodwork of a hut. In descending order of frequency, rock faces were also seen to have lines, squares, ladders and circles. However, the most interesting are the signs and symbols such as a circle and rays, the spiral, concentric rings, and what, for want of a better term, we refer to as schematic, geometric, and amorphous (SGA) designs or symbols. These would be comparable to the pastoralists' cattle ownership signs (see also Masao, 2007).

5.2 Community Conservation in Rock Art Sites

We conducted community outreach programmes to promote awareness of the conservation and preservation of heritage resources in the Singida region, this was done solely because many sites are facing vandalism by treasure hunters who think that the rock art in this region is the marks/beacons made by German colonialists indicating where they hid precious gems and rupees during Colonial Tanganyika. In order to fight this critical problem, some key stakeholders were invited to the sites during fieldwork in order to assist in promoting conservation awareness in the region. These include the Antiquities Division of the Tanzanian Ministry of Natural Resources and Tourism, represented by the Conservator (DoA) Dr Christowajja Ntandu who actively participated in fieldwork in the Singida Region. Similarly, she participated in community conservation outreach

programs. The University of Dar es Salaam (UDSM), the leading research institution in the country also played a crucial role in the conservation and protection of archaeological sites whereby the Vice Chancellor Prof. William Anangisye spearheaded the heritage conservation campaigns. He visited the sites and provided public education and stressed the importance of the management and conservation of heritage patrimonies across the country. We worked side-by-side with local village authorities in collecting, documenting, conserving, and developing Singida's cultural heritage resources outreach programs. This opportunity has provided an exceptional experience for Secondary school students who would like to pursue graduate degrees in archaeology or heritage management in the near future.

In addition to the academic importance of better understanding rock art types, this study expanded the horizons of the known sites, and newly discovered sites plus their locations, distribution, and scale of rock art preservation status. Currently, we are creating an online repository system which will be implemented through a digitized cataloguing computer program in the form of a database that is easy to use and maintain by the stakeholders. Sustainability is ensured by involving the Singida Regional Museum staff and Cultural Officers in Singida during the creation of this online database. Although the focus of this project is on the archaeological sites,

specifically rock art, the database will be generated so that it that would be available online for all stakeholders to access and share information pertinent to rock art studies and community engagement with the aim of conservation of archaeological sites.

6.0 Conclusions

During fieldwork in this region, we engaged Singida Primary Schools as part of community engagement and public outreach strategy of management, conservation and preservation of heritage resources in the region. Through public archaeology and knowledge dissemination, we aimed at engaging all members of local communities and individuals interested in archaeology or heritage management and conservation. Our goal was to raise the profile of archaeological sites with local cultural/political authorities, visitors, and communities by focusing on integrating education, outreach, and community engagement. This was accomplished by designing a program to capacity-building programmes through collaborative learning. Throughout fieldwork, we offered pro-bono training regarding cultural heritage management and conservation as part of a transfer of knowledge and capacity building. Importantly, this study liaised with government ministries and institutions in order to introduce our ideas, observations, and key frameworks of potential Singida heritage management plan. During the preliminary fieldworks and in carrying out this research, all relevant

national policies and laws as well as international requirements, including those of the World Bank, IFC, and IUCN standards on cultural heritage, were reviewed. For instance, EMA Act of 2004, Environmental Impact Assessment and Audit Regulations of 2005, the Antiquities Act of 1979, Tanzania Cultural Policy of 2008, the Land Act of 1999, Land Village Act of 1999, and others more reviewed.

All such regulations were observed during this study in order to be able to collect archaeological, environmental and cultural data while in discussions with regional and local authorities concerning the preservation of archaeological and heritage resources. Also, the study carried out consultation with representatives of the local communities around the Singida Region in order to integrate their requirements into our research endeavours. Local people's perceptions and interpretations of the rock art were recorded for future use. The local media were also engaged i.e. Standard Radio FM to promote conservation awareness in the region because most of the sites we discovered, especially those with rock paintings, have been vandalized by treasure hunters who believe the myth that those rock paintings were made by German colonialists hiding their precious gems when they were defeated during the World War II. Therefore, the incorporation of the media in this research was an invaluable collaboration and resource in the promotion of archaeological sites, heritage protection and

public awareness about the management and conservation of heritage patrimonies in the region.

7.0 Rerecommendations and Future Research

The Nkere Kihade sites are very close to Singida Municipality, and very close to the Njiapanda weekly market, at least 5 km southwest. Due to their proximity to the Njiapanda business hub and the Municipality, these sites are suitable for public displays and archaeotourism. New data garnered from this research will help to create a digital platform to share information on local participant involvement in fieldwork and meetings. Furthermore, through community engagement the data from this study, apart from this publication will encourage future heritage management studies that will stem out from here and be able to produce site monographs, a series of brochures, and the creation of an online repository. It will also generate new data through an interdisciplinary collaboration working at some truly unique locales that host rock art of various traditions as well as stone tools. The cross-disciplinary research in Singida will illustrate the differences and similarities in tool technologies and ecological settings in a greater, Tanzanian-wide archaeological framework. Dating of the early human bone collagens and teeth of two individuals (*Homo sapiens*) we discovered last year under the rock shelters of Singida (Appendix 4) will shed new light on the history of humankind and evolutionary trajectories in the region.