## Establishing a Maritime and Underwater Cultural Heritage Unit in Tanzania

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#### Abstract

Tanzania has a coastline of about 1,424 kilometres (km) with many famous ancient coastal towns such as Zanzibar, Kilwa, Mafia and Bagamoyo. The town's host many underwater cultural heritage (UCH) sites which are not yet documented. About 40 shipwrecks have been documented but most have not been surveyed.

Tanzania Maritime and Underwater Cultural Heritage Programme (TMUCHP), which started in 2009, aims at empowering a number of Tanzanian stakeholders and staff to establish the Tanzanian Maritime Cultural Heritage (MUCH) Unit with skills and resources to record, document and monitor UCH sites. The various stakeholders come from different government departments and Dar es Salaam University in the United Republic of Tanzania which includes the Tanzania mainland and Zanzibar.

The Centre for International Heritage Activities (CIE) through United Nations Educational, Scientific and Cultural Organisation (UNESCO) and Government of the Royal Kingdom of Netherlands has been implementing various activities in the TMUCHP. The programme has achieved the survey of the *Great Northern* shipwreck in Zanzibar, and a preliminary survey at the World Heritage Site of Kilwa Kisiwani. The programme has included training sessions aimed at raising awareness amongst the Tanzanian community about the importance of implementing a MUCH programme and to enhance this discipline with various stakeholders. It has also imparted knowledge and skills on diving and working on archaeological sites.

The programme contains other achievements including, stimulating the Government of Republic of Tanzania to start the process to ratify the UNESCO 2001 Convention for Protection of Underwater Cultural Heritage (2001 Convention); signing of a Memorandum of Understanding between the government stakeholders and CIE; the establishment of a database as an ongoing process; and attending Regional workshops and training in various countries.

The establishment of a MUCH programme faces many challenges; shortage of funds for strengthening an understanding of maritime archaeology and conducting more surveys. Capacity building amongst team members by visiting other countries with successful maritime archaeology practices is also sought after. Lack of diving and survey equipment is also limiting further work. While the program has had some successes, Tanzania's many maritime and UCH sites are not yet uncovered; I will expand on what we see as the way forward in this paper.

## 1. Introduction

Tanzania has a rich maritime history. Swahili culture is closely related and has a long history of interaction with the Arabs. It is important to educate and share this rich history with local people and the world. Tanzania also has a rich natural heritage including world famous National Parks such as Serengeti, Lake Manyara, Ngorongoro crater and Mount Kilimanjaro which is regarded as the roof of Africa this is a non- exhaustive list. These natural heritage sites are valuable to local communities since they create economic opportunities through employment, trading and other income generating activities. The natural heritage sites also are tourists' attractions in which both local and foreigners visit.

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Agriculture contributes most to Tanzania's national Gross Domestic Product (GDP) while in the tourism industry an average of 500,000 tourists visit Tanzania annually and contribute 22.6% of the national GDP; with the number of tourists escalating every year (MNRT 2011).

There are several categories of cultural heritage in Tanzania, e.g. the land based cultural heritage and the underwater heritage that include water bodies such as oceans, lakes, rivers and wells (Patience 2006). Currently, only 40 shipwrecks are documented along the coast of Tanzania (ibid). There are many different underwater cultural remains in Tanzania which have not yet been explored such as shipwrecks (ancient and modern), aircraft, submerged or dry maritime infrastructures e.g. harbour, lighthouses, navigation aids and cities ; submerged prehistoric coastal settlements (fish traps and weirs, salt pans), submerged lakeside settlements (crannogs), riverine and swamps systems with associated sites and remains (ship, indigenous watercraft, settlements), (Lane 2005) and land-based sites showing maritime related iconographies (rock painting and engravings, see Sukkham and Taçon this volume). The development in diving technology has made them more accessible and therefore susceptible to anthropogenic destruction.

#### 2. Location and History of Tanzania in Maritime and UCH

Tanzania has an area of 945,000 square kilometers located in the eastern part of Africa. Dodoma is the official capital city while Dar es Salaam is the administrative city. It had an estimated population of 39,024,800 in 2006 while more than 80% of the population lives rurally, 95% of the population are Bantu consisting of 130 tribes. Tanzania has a distinct geographical environment including central plateau, lakes in north and west, coastal plains, southern highlands, lakes (Victoria, Tanganyika, and Nyasa). Half the country is forested. The country comprises of the islands Zanzibar and Pemba. Mount Kilimanjaro is the highest peak in Africa at 5,895 meters. Tanzania also has the world first known site of modern man's ancestors in Olduvai Gorge. And last, but not least, we have the Ngorongoro Crater, which is 14.5 km across and 762 meters deep.



Figure 1. Map of Tanzania (source http://zhenghe.tripod.com/maps/tanzania.jpg)

#### 2.1 Tanzania cultural heritage sites

In Tanzania there are many cultural heritage sites but in this paper I will mention three famous sites which are associated with detailed surveying done by MUCH. The sites are Zanzibar, Kilwa and Mafia.

#### Zanzibar

The main city of Zanzibar, Stone Town evolved through several millennia of maritime mercantile interaction. The surviving town is a physical reflection of testimony to this long-term interchange of human values within the coastal region of East Africa. It gives an authentic impression of the living Swahili culture and it is the best preserved example of its kind. The layout, technology, and design of the Stone Town buildings, expertly blending imported and local ideas, materials, and techniques, makes Stone Town an example of indigenous creativity. Its continuous use as a residential and commercial town is a powerful medium for manifesting the memories of the slave trade and of explorers such as Vasco de Gama and David Livingstone (ICOMOS 2000).

Two major cultural traditions merge to form the Swahili civilization on the East African coast. A series of harbour towns developed under influences from the interior of Africa and from the lands across the Indian Ocean. There was a loose confederation of small coastal city states known as the Zenj bar (Black Empire) which operated in the 8<sup>th</sup>-10<sup>th</sup> centuries (ICOMOS 2000). The best preserved of these towns is Zanzibar, the name of which is derived from the Perso-Arabic word meaning, "the coast of the blacks", (ibid). The earliest of these

towns has been excavated at Unguja Ukuu on Zanzibar Island, where 5<sup>th</sup> century Common Era (CE)<sup>2</sup> Roman and Sassanian-Islamic pottery has been found (ibid).

#### Kilwa

Neville Chittick (1974:27) considered settlement on Kilwa Kisiwani to have begun around CE 800. Kilwa was a small place with limited external trade and a subsistence economy based upon fishing, shell gathering, bead grinding, and iron smelting (Chittick 1974:28-29; Shepherd 1982:136). The site offered security as it was separated from the mainland by a channel 1 to 2 km wide, protected from ocean storms, and a harbor with sufficient depth to moor sailing vessels, including ocean-going *dhows*<sup>3</sup> (Sutton 1998:133).

Late Stone Age and early Iron Age artifacts from the 4<sup>th</sup> century have been discovered at Kilwa Kisiwani (Moon 2005:6). Kilwa Kisiwani therefore contains about 1600 years of tangible and intangible heritage in connection with the coast and sea and the development of the Swahili culture. It is a very significant site and while considerable work has been implemented on land to interpret and promote the value of the site, very little has been carried out on underwater sites.

#### Mafia Island

Mafia Island is located 120 km south of Dar es Salaam. The western side of the island faces the extensive Rufiji river delta. The history of Mafia is attributed by Shiraz who dominated trade in East Africa during 11<sup>th</sup> - 13<sup>th</sup> centuries (URT 2000;MIMP 2002). They built their settlement at Kua and Ras Kisimani. Ruins at Kisimani are earlier (12<sup>th</sup> Century) and have been partially washed into the sea, but Kua have survived with outstanding walls and archways still standing (URT 2000). In 19<sup>th</sup> century Kua, being a capital of Mafia, was invaded by "Sakalafa" people from Madagascar (MIMP 2002). In 1890 Germany took over and controlled the whole of Mafia (URT 2000).

## 3. Tanzania Maritime and Underwater Cultural Heritage Program

The status of UCH in Tanzania dates back to 2006. Stakeholders meetings and training sessions on UCH were conducted both to raise awareness on the field building capacity of Tanzanians and, as per stakeholders opinions, the requirements for possible ratification of the 2001 Convention.

<sup>&</sup>lt;sup>2</sup> A Georgian Calendar designation starting at year one, which is marked by the birth of Jesus Christ of Nazareth, with each year, added one by one. <sup>3</sup> A Traditional Arab, wooden built Sailing canoe commonly used for carrying goods or

passengers along the coasts of Indian Ocean.



Figure 2. Tanzania Maritime and Cultural Heritage team (House of wonders, Zanzibar).

In 2008 the Tanzanian government, through the Antiquities division under Ministry of Natural Resource and Tourism (MNRT), requested the Embassy of the Kingdom of Netherlands (EKN) to assist in a capacity building program in the field of UCH in the country. In February 2009, phase 1 of the program in building the capacity of Tanzanians in implementing maritime and UCH activities commenced under the leadership of the experts from the Centre for Heritage Activities – CIE of Netherlands.

Since 2009 a series of training sessions were conducted and a team of 14 trained personnel currently operate in Tanzania. Participants of the team are accrued from the following institutions namely Marine Parks and Reserves, National Museum of Tanzania, Tanzania Fisheries Research Institute, Antiquities and Museum – Zanzibar, University of Dar es Salaam, and Zanzibar Ports Authority. These experts could effectively implement a number of aspects required for maritime and UCH program through the Department of Antiquities as the national coordinator.

Marine Parks and Reserve Unit is one stakeholder who's mission is to establish and manage marine protected areas (MPA) for sustainable use. There are several MPAs which are already established in Tanzania. These are Dar es Salaam Marine Reserves (2005), Mafia Island Marine Park (1995), Mnazi Bay and Ruvuma Estuary Marine Park (2000) and Tanga Coelacanth Marine Park (2009). The *Marine Parks and Reserves Act of 1994* speculates on conservation of cultural heritage that are within the MPA.

The TMUCHP (2008) aims at,

Protecting and researching significant Tanzania maritime heritage sites, establish a "Competenty Authority" and implementing a proactive programme, implementing community engagement and awareness, implementing community academic and heritage management projects and developing a sustainabble tourism programme.

The program has involved many theoretical and practical sessions from learning to dive, through to the implementation of a non-disturbance survey of a shipwreck off Zanzibar and Kilwa, community involvement, and reporting these activities.

Tanzania has not ratified the 2001 Convention, but is preparing to do what is best for the ratification. In April 2011 the Department of Antiquities (Tanzania) in conjunction with the UNESCO Office in Dar es Salaam, Tanzania organized a workshop to raise awareness to member countries of the UNESCO on the relevance of ratifying the 2001 Convention, and the benefits behind the convention. The state parties countries which participated in this workshop include Kenya, Comoro, Seychelles, Mauritius, South Africa, Mozambique, Uganda, Kenya, Madagascar, International experts from the Centre for International Heritage Activities (CIE) – Netherlands and the host country Tanzania.

#### 3.1 Implemented training projects

MUCH Program has implemented several projects: the great northern shipwreck survey in Zanzibar, Tanzania; signing a Memorandum of Understanding (MoU); stake holders meetings and workshops; Kilwa (world cultural heritage) survey and database establishment.

#### 3.1.1 The Great Northern Shipwreck survey Zanzibar, Tanzania

The *Great Northern* shipwreck survey was carried out by the MUCH Unit and is in partial fulfilment for the Nautical Archaeology Society (NAS) Part II Certification<sup>4</sup>. The *Great Northern* shipwreck is located to the south west of Zanzibar about 8 km from Stone town.

<sup>&</sup>lt;sup>4</sup> Fulfillment of NAS II training you have to undertake a site survey and prepare a report



Figure 3. Undertaking Site survey (Photo by Bill Jeffery, 2009).

*The Great Northern* was a British-built ship used to lay steel cables, which sunk on New Years Eve in 1902. A non-disturbance survey of the shipwreck site was undertaken to ascertain the identity, nature, integrity and condition of the site. The shipwreck has archaeological, ecological and recreational significance (TMUCH 2009).

# 3.1.2 Signing Memorandum of Understanding between Tanzania government agencies

The MoU was signed in 2009 between the Government of the United Republic of Tanzania and the CIE through the Netherlands Government. The MoU depicted issues on training cooperation in maritime heritage management, collaboration in maritime management, funding/finance of program and administration.

#### 3.1.3 Regional workshop and collaboration

Five Members of MUCH, Tanzania attended the Regional workshop conducted by South Africa Heritage Resource Agency (SAHRA) with collaboration with the CIE in 2010 and 2011. The workshop was held at Robben Island Museum, Cape Town, South Africa from 17 February – 10 March 2010. The aim of the workshop was raising awareness of the UNESCO convention on the protection of the Underwater Cultural Heritage and also entailed strategic planning on management of UCH resources (UNESCO convention 2001).

Sub Saharan Africa regional cooperation was enhanced by the meeting held in Dar es Salaam in April 2011. The meeting was supported by UNESCO and participant countries included Tanzania, Mozambique and South Africa. Each country gave a report on the progress of MUCH activities and the countries agreed to cooperate on MUCH policy and database.

#### 3.1.4 Development of the Tanzanian MUCH database

The Tanzanian team eventually managed to develop the Tanzanian MUCH database after being trained for two days. The database contains the following headings: General information, shipwreck, maritime infrastructure on land / intertidal area, natural heritage site with cultural values, traditional cultural site, and other type of site on land or underwater and administrative information. The database will expose all surveyed and not surveyed cultural sites in Tanzania and it will enhance its management.

#### 3.1.5 Kilwa Survey (World cultural heritage site)

Kilwa is among the world cultural heritage sites located in south eastern Tanzania (http://whc.unesco.org/en/statesparties/tz).

The survey at Kilwa has two aims: on one hand it aims at removing the Ruins of Kilwa from the World Heritage in Danger List; and on the other it attempts to foster sustainable development and social cohesion in the Kilwa district through implementation of various heritage related activities. The survey involved community engagement, site investigation and site inspection.

#### Community engagement

The report on the survey of the World Heritage Site Kilwa Kisiwani and Songo Mnara in November 2010 concluded, amongst other things, consideration of the needs and benefits of the Kilwa Kisiwani and Kilwa Masoko communities when implementing a MUCH project in the area. The survey carried out in November, 2010 was a first step in engaging the communities but more community engagement needs to be done, particularly given their comments about previous researchers at Kilwa and their lack of follow-up (Jefrey 2011).

#### Site investigation

The following sites were investigated through oral history i.e. accumulated or dropped of Ceramic pots off pier on Kilwa Kisiwani, Submerged ruins at Songo Mnara and intangible remain story of "Jiwe la Jahazi "(Stone Dhow) which narrated that a dhow and its crews turned to be a stone when tried to invade Kilwa during British era.

#### Site inspection

The survey managed to find the iron anchor which is 2.4 meters along the length of the shaft and 1.9 meters around the crown from fluke to fluke<sup>5</sup>. It was the only ships' remains found in an area of about 80 meters radius from the anchor. It is located on a hard limestone seabed and other lighter, smaller ships' remains would get easily broken-up and washed away (Jeffery 2011).

<sup>&</sup>lt;sup>5</sup> The end points of an anchor which holds a vessel by attaching to a seabed substratum.

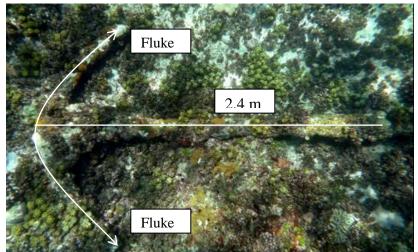


Figure 4. An iron anchor found in Kilwa survey (Photo by Bill Jeffery, 2010)

## Benefit of the implemented projects

- Members were trained in site surveying methods theoretically and practically including scuba diving.
- Revealed / uncovered the *Great Northern* shipwreck located at Zanzibar by conducting a non disturbance survey.
- Establishing MUCH database of cultural heritage sites which will have status records of sites in Tanzania.
- Engaging local communities by raising awareness on the importance of cultural heritages sites and become ready to co-operate in managing and conserving.
- The Government of the Kingdom of Netherlands supported MUCH Tanzania some facilities to assist in the implementation of the program: a digital camera and an underwater housing, laptop computer, GPS, slates, measuring tapes, waterproof film, pencils, several books, a large carry case, food containers and a 12 volt battery. However the team members do not have their own diving gear such as wetsuit, BCD, regulator, mask, snorkel and fins. To date this gear is hired when projects are implemented. This is a significant expense each time. It also slows the project as gear is returned each day and picked-up again the next day.
- Regional cooperation was enhanced through Workshop and Training (e.g Tanzania is now cooperating with Mozambique and South Africa through SAHRA).

## Challenges on implementing the projects

- The unit lacks sufficient surveying equipment and the costs to conduct survey are high.
- Shortage of funds for strengthening an understanding of maritime archaeology and conducting more surveys.
- Members of MUCH unit are not responsible full time therefore members spend most of their time on work for their respective institutional responsibilities.

## General Challenges of Much in Tanzania

- Tanzania as a developing country faces many economic challenges related to poverty hence funds are usually allocated to the most sensitive issues such as education, health, developing infrastracture. Therefore less funds are allocated to cultural heritage conservation.
- Most of Tanzanian communities are not aware of cultural heritage hence they destoy and use the sites for other economic activities.
- Cultural heritage is not given as high priority as natural heritage since it is not familiar and as a result does not generate as much revenue as natural heritage does.
- The cultural heritage sites are vuneralble to environmental hazards and human activites but yet less efforts are made to combat the situation.

#### The way forward

- Capacity building amongst team members by visiting other countries with successful maritime archaeology practices is sought after.
- Securing diving and surveying equipment and other necessary resources, these will minimize the costs which MUCH incurred by hiring equipment.
- The team sees the need to implement regular site surveys, to continue to improve their skills in implementing MUCH activities, in addition to building-up the <u>Database of MUCH sites in Tanzania (TMUCH 2011)</u>.
- Strengthen Tanzania UCH Unit and ensure the Unit facilitates community awareness, particularly on the management of cultural heritage sites.
- In order to accelerate MUCH activities in Tanzania, the ratification of the 2001 Convention should be given priority.
- Conducting more regular site surveys in order to develop three areas which are identified as priority areas to conduct surveys: Kilwa, Zanzibar and Mafia, and there maybe other areas that warrant surveys for other reasons (eg. Tanga)<sup>6</sup>.
- Members of the Tanzanian MUCH to participate in regional and international workshops.
- Developing and disseminating an action plan to all appropriate Tanzania stakeholder agencies for them to put it into their media in addition to their funding proposals.

## Conclusion

Tanzania has potential cultural sites which need support to protection. We need to conserve and share them. Unlike other countries, Tanzania has strong ethical

<sup>&</sup>lt;sup>6</sup> Famous Coastal town in Tanzania which was chosen in 1889 as military post of German East Africa

approaches for banning treasure hunting but it needs funding to implement activities to protect and promote UCH.

Regional and international cooperation is the necessary tool for maritime and UCH to prosper. Collaboration and support from stakeholders from various countries would no doubt assist with the protection of marine cultural heritage in Tanzania.

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#### **Abbreviations**

ICOMOS	International Council on Monuments and Sites
TMUCH	Tanzania Maritime and Underwater Cultural Heritage

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