Preliminary Report of Early Iron Working Settlement at Maramba in Tanga Region, Northern Tanzania

Christowaja Ntandu

Abstract

Through archaeological survey and excavations, it has been possible to identify rich Early Iron Working (EIW) sites at Maramba, northern coast of Tanga region. Carbon 14 date confirmed Maramba to have EIW cultural materials, dating to between 197 and 235 A.D. The interpretation of material remains has revealed EIW communities as sedentary, with various economic and social activities ranging from domestication of animals, agriculture, iron smelting, pottery making, and trading. Various decoration techniques observed on EIW pottery suggest complex and high level of artistic knowledge which had been attained by EIW people. The first time recovery of fauna remains such as cattle's teeth and bones, in EIW context, indicate that Bantu people were not only land tillers, but also cattle herders. Like other EIW sites on the coast, evidence from Maramba supports an argument that the coast of East Africa had been settled since the Stone Age period. The cultural sequence of Maramba spans from the LSA to historic period.

Introduction

This is an archaeological report of an ongoing Ph.D. research project. It is about the excavations of (EIW) sites in Maramba Division of the Mkinga District, northern coast of Tanzania. Maramba is located 35 km North-West of Tanga-Mombasa road at 4º 51' S'38º 48'E . The site was first reported by Soper (1967) in 1960s, after his comprehensive archaeological investigations of the Usambara and northern Pare hills.

The survey work presented in this paper suggests that EIW sites covers the whole area of Maramba Town and extends to Maramba Secondary School. In comparison with other East African sites, Maramba may be exceptionally unique, following its extensive coverage and high concentration of EIW ceramic (Chami, pers com).

The aim of the archaeological work was to use the ubiquitous scattered materials (Plate 1) found at Maramba sites, to know about the culture of the people of EIW period. So far, archaeologists have learnt about the people of EIW period, particularly, on the coast of Tanzania,mainly through their ceramic and iron technology (Soper 1967; Chami 1994, 1999a, 2001c, 2002c, 2009; Chami and Mapunda 1998; and Mapunda 2002). Many other aspects such as subsistence, art and tradeor exchange networks were not thoroughly examined. Therefore, whilst this research seeks to establish the culture history of Maramba area, it also aims at understanding other activities associated with EIW cultural period, for example, trade networks and subsistence.

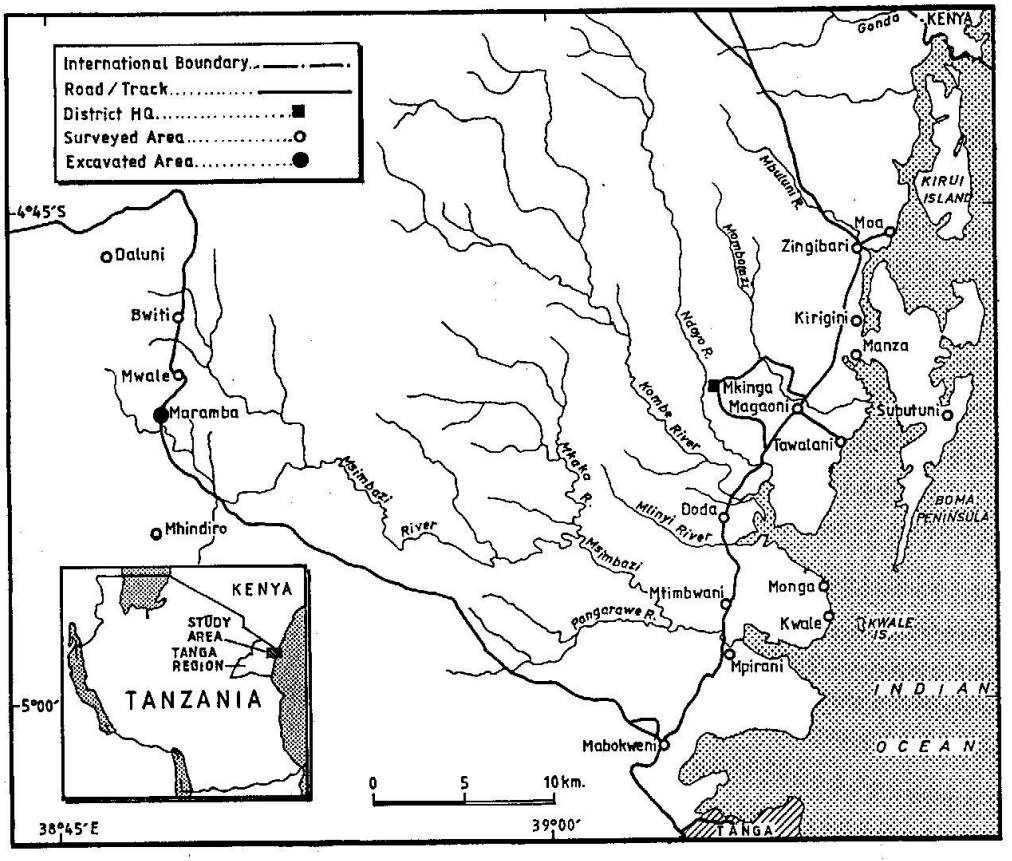

Figure 1: A Map of northern coast of Tanzania showing the surveyed and excavated areas. Modified after Soper 1967

Research Methods

Methodological approach involved survey and test excavations. Survey was carried out to locate and record potential archaeological areas, as well as earmarking EIW sites for excavation. The survey covered beyond the Maramba division, as far as littoral area from Mabokweni village to Moa (Figure 1). Survey along the littoral aimed at searching for similar EIW sites that might demonstrate hinterland and oceanic trade connection. While the littoral did not yield much evidence of EIW sites, Maramba,which is 30 km from littoral, offered a good number of sites with concentration of EIW cultural materials. The survey at Maramba Division identified six EIW sites, namely; Majengo Mapya, Zigua, Mwele Fao, Kibanda, Daluni, and Maramba Secondary school. The sites of Majengo Mapya and Maramba Secondary School (Figure 2 and 3), had dense surface scatters of EIW materials, therefore, both sites were selected for test excavations.

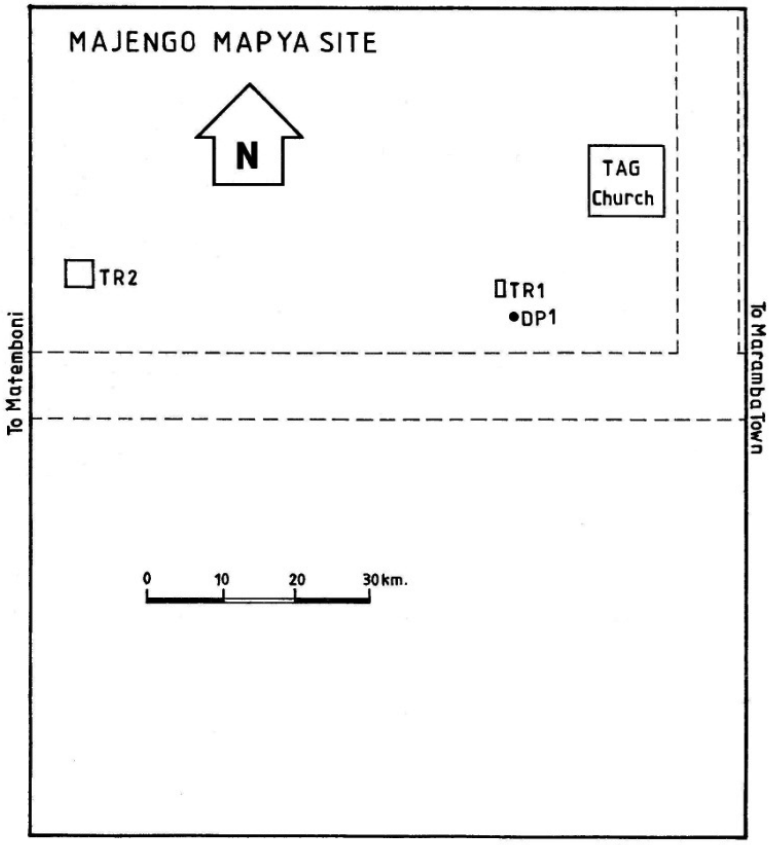

Figure 2: Majengo Mapya Site Plan

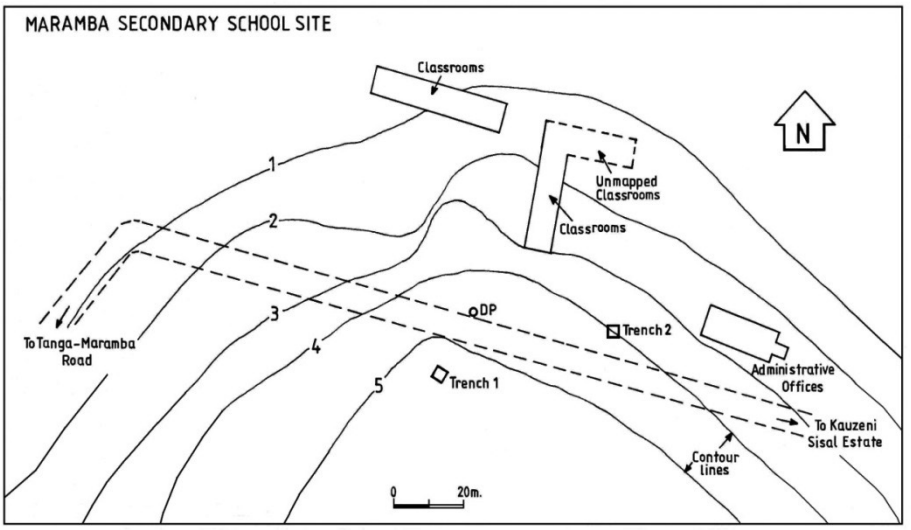

Figure 3: Maramba Secondary School Site Map

Excavations

The basic interest of excavation was to establish the chronology of the sites and to examine the context and nature of the cultural materials. Two trenches of $2m^2$ were excavated at each site. All trenches indicated comparable stratigraphic units, suggesting that they were deposited in closely related environment. The top layers from 0 – 15cm, being composed of black humus soil, yielded recent cultural materials. From 15cm – 30cm, soil colour changed to brownish and most of the potsherds yielded were plain and Maore potsherds (Figure 4).

From 30cm -45 cm, soil colour changed to red brownish and yielded dense EIW including Kwale potsherds (Table 1). It was in this horizon where fragments of cattle teeth and artistic ceramic objects were uncovered. From 45cm -50cm, soil colours started to change from brownish red to reddish, but Kwale potsherds continued to appear. Interesting new cultural traditions of potsherds, not known on this region before were also recovered. They are Limbo tradition first found on the central coast of Tanzania, and Dimple based ware first found on the interlacustrine region and known as Urewe. In the lower deposits, overall, excavated remains were mainly Limbo ware, which were highly represented at

Maramba Secondary School site, but below 60cm potsherds were found associated with microlithic stone artifacts. The lowest levels (12 and 13) about 60 –65 cm below the surface, were mainly composed of microlithic artifacts (Table 1).

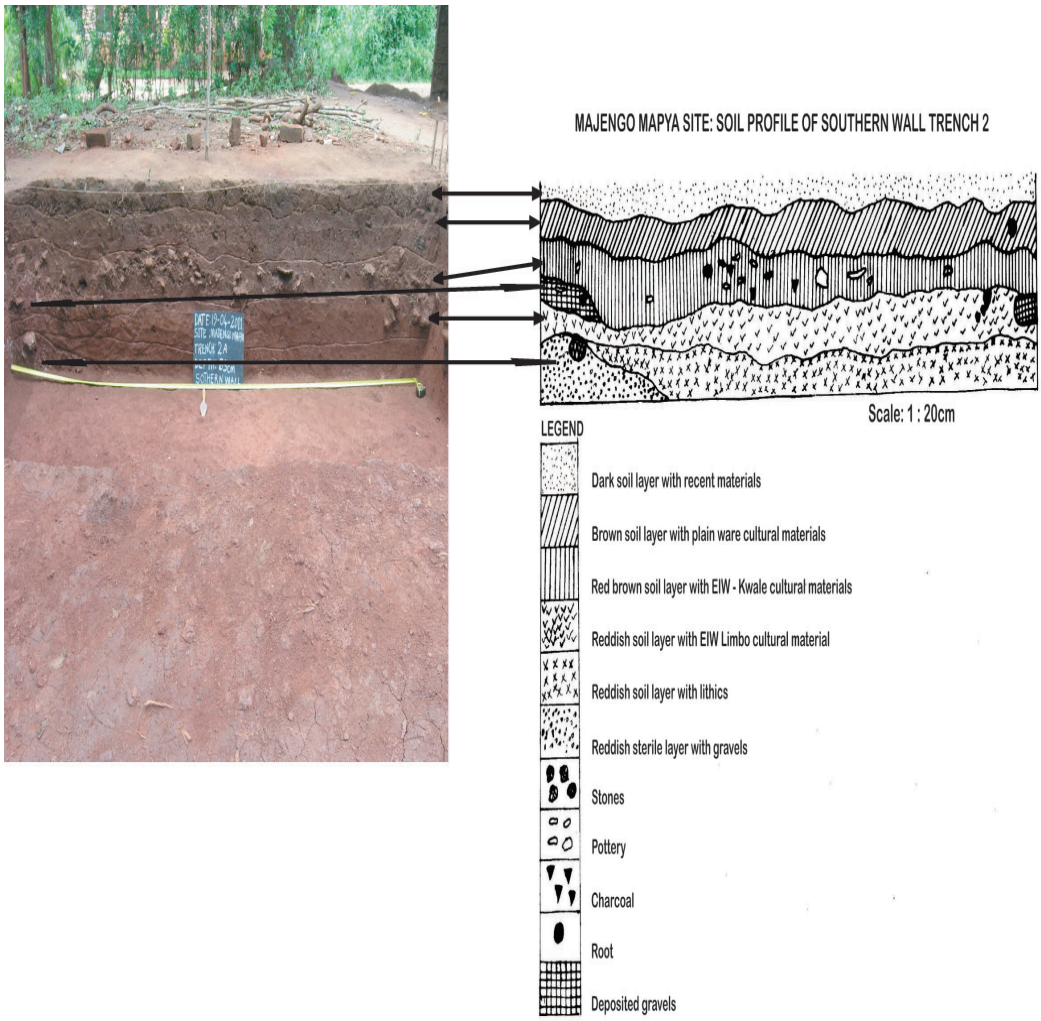

Figure 4: Soil Profile of Trench 2 at Majengo Mapya Site

Research Results

The excavation yielded various archaeological materials, though pottery was the most common artifact accounting to about 80.2% of the total (Figure 5). Lithics account to about 15%, followed by terracotta art and metal objects that make a total

of 4.6%, fauna were less represented making 0.4% of the total (Table 1). Potsherds can be categorized into three major cultural traditions. These include Plain ware at the top. Plain ware does not possess any decoration except rare lines on the neck. In most cases, the rims are thin and necks are wider than the maximum body diameters. Radiocarbon dates placed the Plain Ware potteries to about 1004 - 1204 A.D. (Table 2). Underneath the Plain Ware cultural sequence, excavated materials were characterized by Maore Ware, which occur between 30cm – 40 cm below surface. Maore pottery are characterized by thickened rims with double row or stabs, arched double lines and rocked zigzag (Figure 6). The similar potteries were found by Ordner in 1971 in northern Pare. Ordner termed the potteries from the northern Pare as Kwale-Maore tradition (Maro 2002).

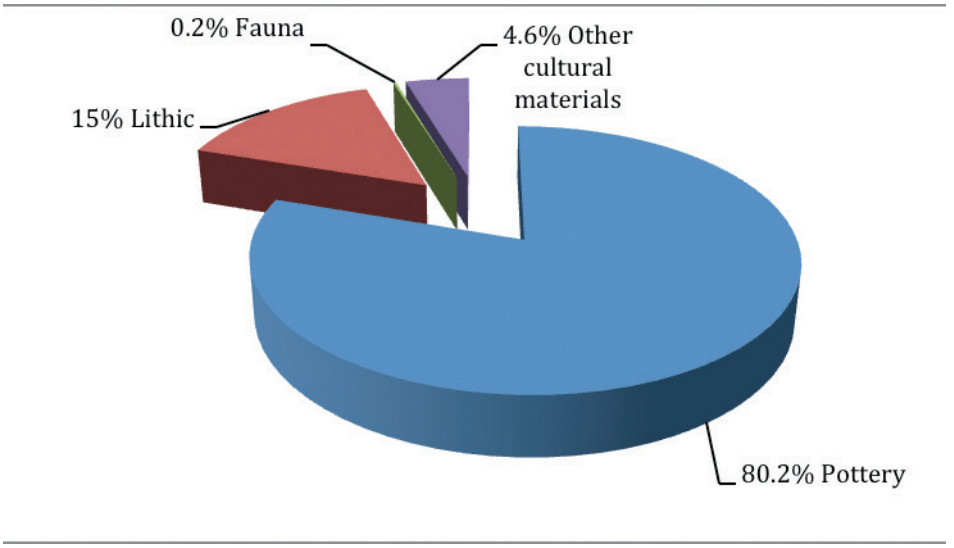

Figure 5: Percentage of Different Type of Cultural Materials Yielded from Excavation

Level	Depth (cm)	Total Materials	Lithic	Daub	Slag	Iron/Objects	Tuyere	Bones	Teeth	Terracotta beads/ Art mobiier	P/Stones	Total pottery	Diagnostic Pottery
1	0-10	198	2	45								193	7
2	10 20	52		8		1		4					
3	20-30	348		27		1		2	4	1		332	32
4	30-35	571	4	21	1		1	5	1			533	83
5	35-40	472		12	2	1		5	5		4	423	173
6	40-45	1665		12	8			3	11		5	1617	117
7	45-50	839	3		6				8		8	801	151
8	50-55	911	9	13	3		2	1	4	1		873	208
9	55-60	661	84	5	5						2	257	91
10	60-65	482	438	4	1					3	1	34	13
11	65-70	352	318		1						1	28	6
12	70-75	141	141										
13	75-80	61	61										
14	85-90	0	0										
		6753	1060	147	27	3	3	20	33	5	21	5091	881

Table 1: Inventory of Material Remains at Majengo Mapya Site Trench 2

Below the Maore Ware, were encountered EIW potsherds. They are characterized by Kwale and Limbo cultural traditions. Kwale potteries were found superimposing the former and they are characterized by decorative elements, mainly horizontal lines, false relief chevrons, oblique incisions, cross hatching, herring bones and zigzag lines (Figure 6). Radiocarbon dates obtained from charcoal placed the Kwale from Maramba between 235 and 386 A.D. Closely related decorations were found on Limbo Ware, but Limbo decorations were thin and fine, and also lack sizeable representation of false relief chevron decorations (Figure 7). A sample associated with Limbo Ware was radiocarbon dated to between 197 and 217A.D. (Table 2).

Site	C-14 dates
Kwale-Kenya	AD 270±115, AD 260±115
Kwale Island Tanzania	AD 240±60
Mafia Island Tanzania	AD 240 ±60
Kibiti Tanzania	AD 280 ± 60, AD 315±70 , AD 315±70
Limbo Tanzania	AD 233±60, AD 167±90BC, AD 93±90BC
Kivinja	AD 431±70, AD 431± 70, AD 598 ±70
Kilwa Island Tanzania	AD 320±35
Mnang'ole Tanzania	AD 320±35
Mikindani	AD 390±35, AD 470±35
Maramba	**AD 235±31, AD 197±33**

Table 2: C-14 from EIW Sites on the Coast of East Africa are compared with Maramba Site (Modified after Chami 2006: 120 and Kwekason 2010:235)

Interestingly, it is important to state that this is the first discovery of Dimple or Urewe Ware along the East African coast(Plate 1). As noted above Urewe Ware of EIW tradition were first reported around the Lake Victoria Basin (Soper 1971b; Schmidt 1978). It is the first variant of EIW tradition established in the mid of the first Millennium BC (Soper 1967a; Phillipson 1976). The discovery of Dimple based ware along the coast suggests early interactions between the people living on the coast and hinterland during the EIW period.

The presence of cattle teeth from EIW deposits (Plate 2), suggests that animal domestication was adopted along the coast of East Africa during at that age.

Plate 1: Dimple based Pottery Plate 7

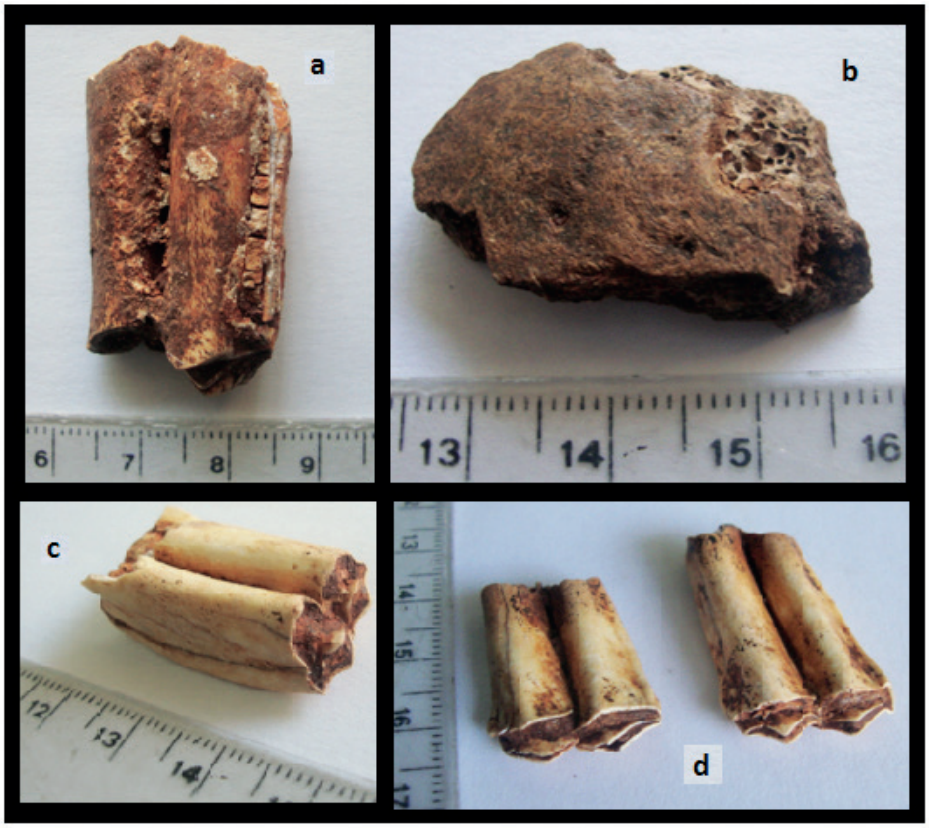

Plate 2:Teeth remains and a skull fragment of bovid (cattle size)

Few ceramic art objects uncovered in the layers of Early Iron Working context confirm that people of EIW did work of arts (Figure 7&8). Of interest is the recovery of an object which looks like a crucible with Schematic Geometric Amorphous (SGA) script?. It should be noted here that, SGA script was firstly reported by Chami (2006) to have been used by the people of ancient period in Sub-Saharan Africa. But, this is the first time to be found in the archaeological contexts in the coast of East Africa. We also uncovered imported pottery, probably from India, Asia, and Red Sea. Among these are the potsherds with greyish colour while others have pinkish colour (Plate 3, 4 and 5). The morphologic appearances such as thick rims suggest that some of these potteries were used to keep or transport liquid materials (Plate 6). Potteries with thick rims are very hard and seems to be well fired and, when hit, they produces a metallic sound. The origin of such potteries is not well established, but likely, they were imported from abroad.

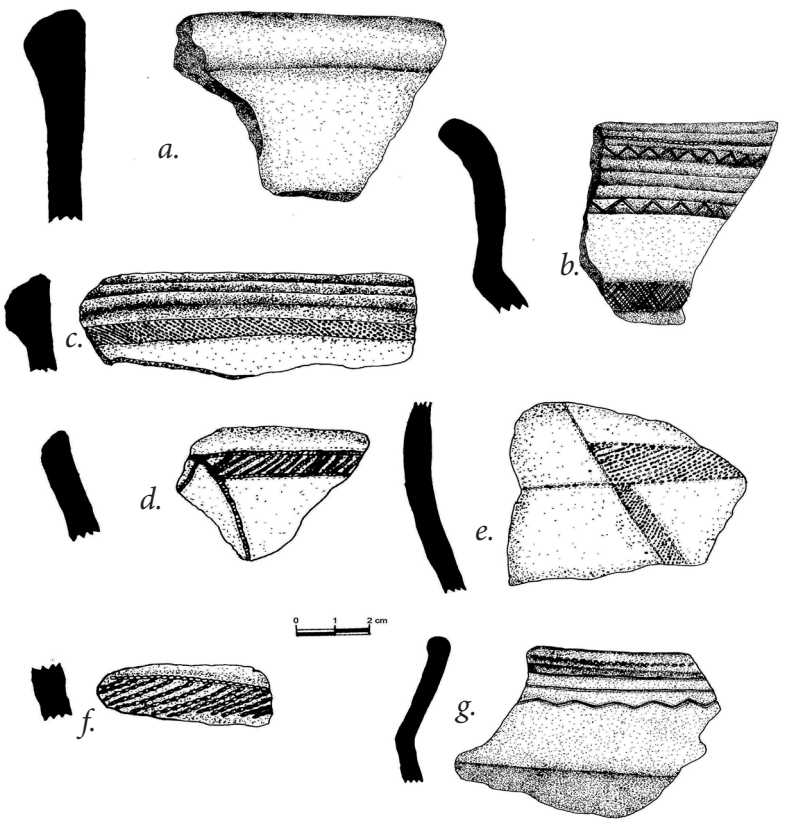

Figure 6: Kwale Pottery

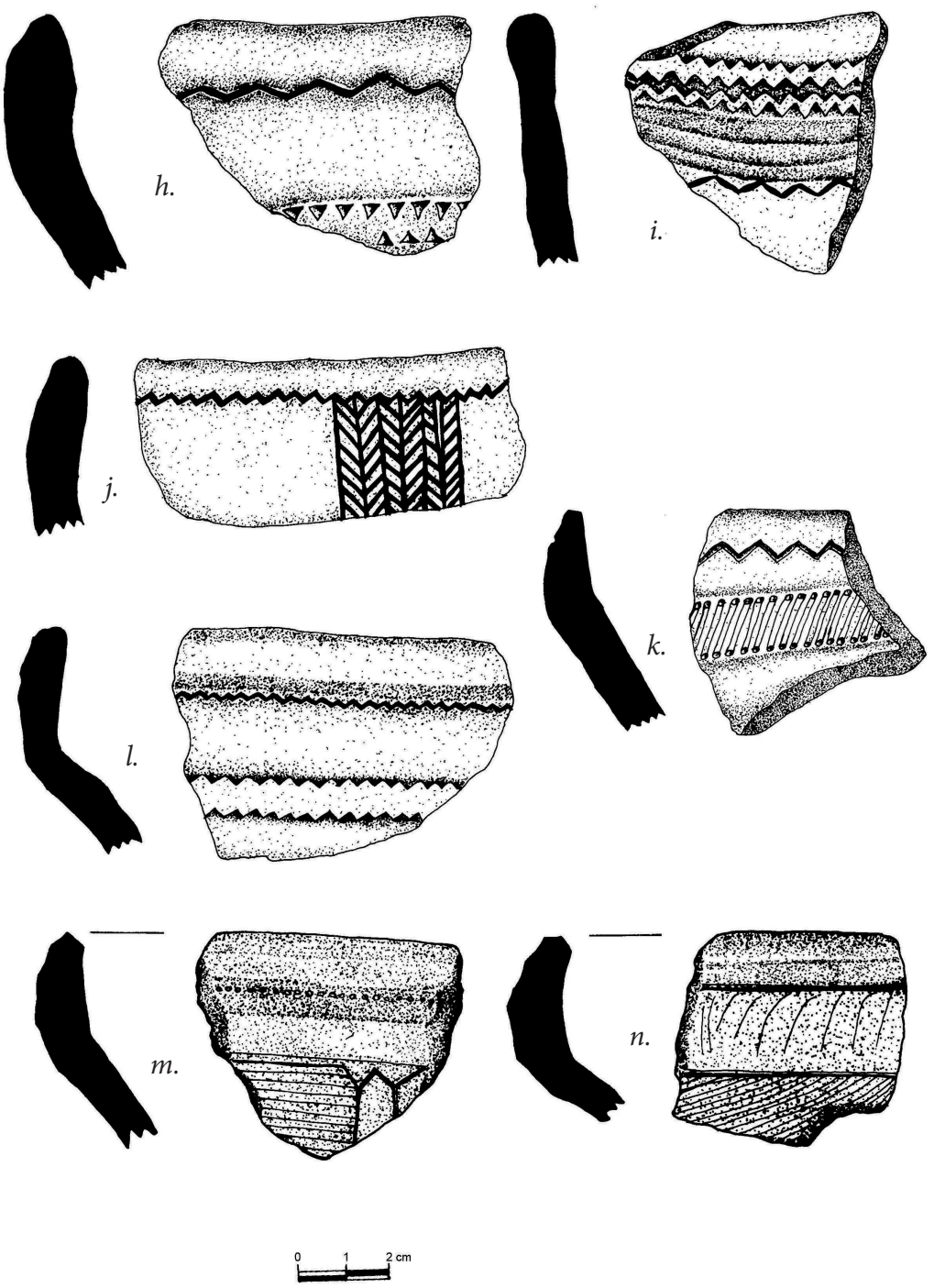

Figure 6: Kwale Pottery

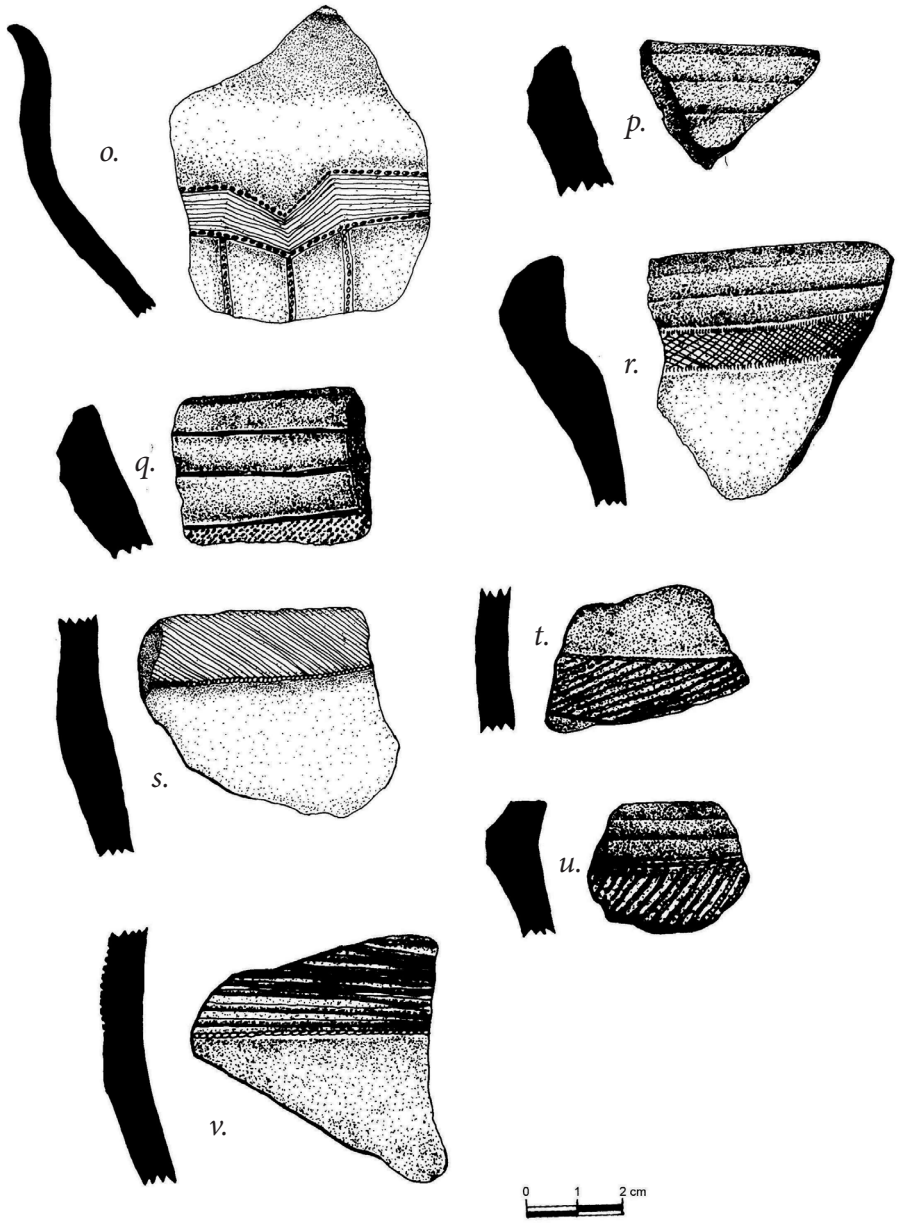

Figure 7: Limbo Pottery

About 90% of daubs uncovered from the EIW context were reddish. This indicates that EIW people had the technology of firing daubs/bricks for house construction. They seem to be more durable than the current ones. Some of these daubs had wood impression, a good indication of the use of wattle, in the construction of houses.

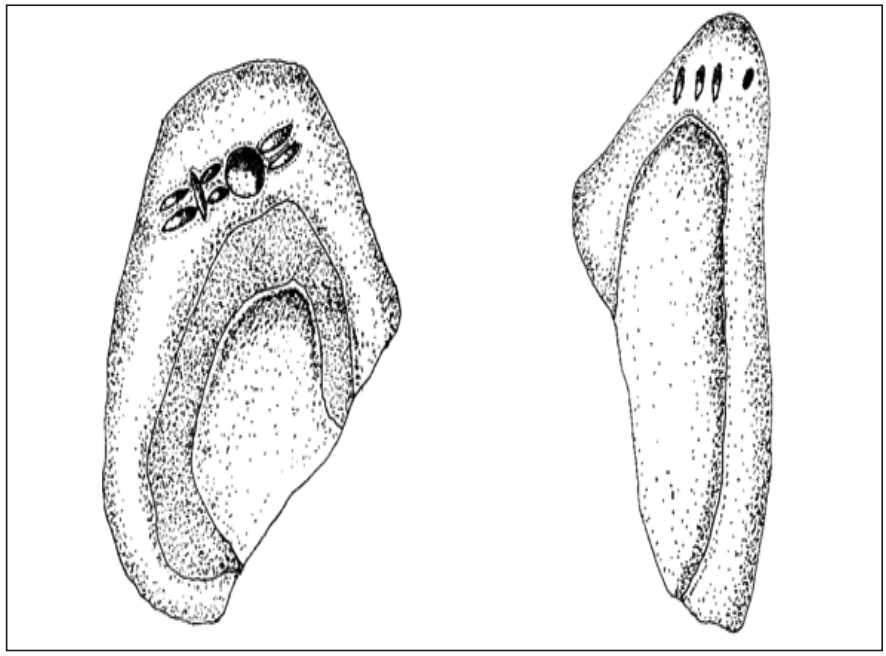

Figure 8: Art Ceramic with SGA

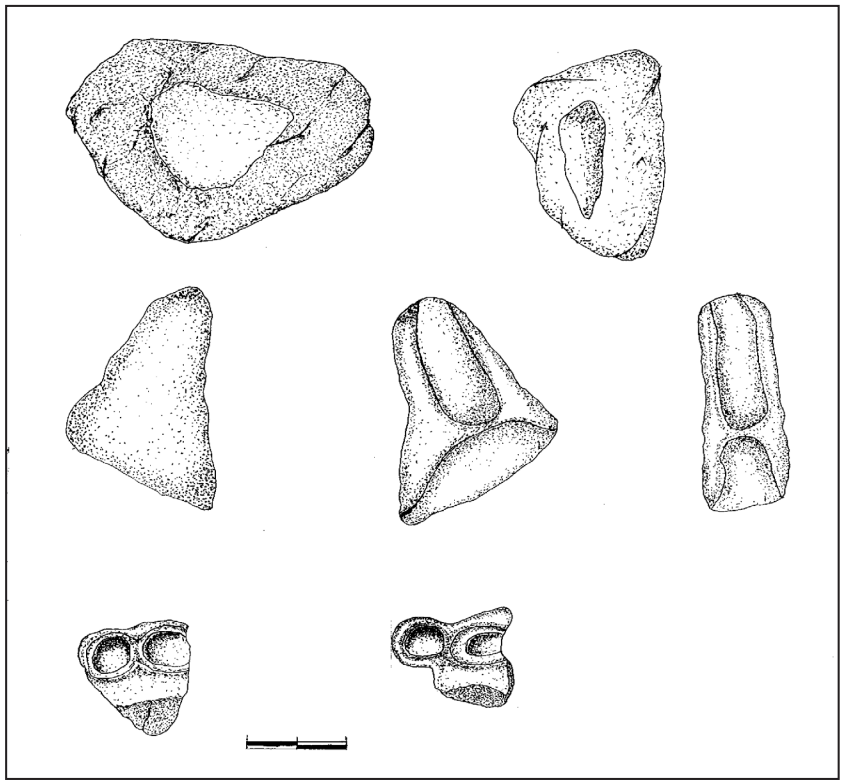

Figure . 9: Other Art Ceramic with non SGA

Plate 3: Greyish Pottery

Plate 4: Pinkish Pottery

Plate 5: Thickened Rims Pottery

Plate 6: A hard Pottery Rim with Bevels and Flutes

Discussion

Although the analysis is still in progress, preliminary observations have confirmed that Maramba was an area with EIW settlement, which supported large population of people who practiced various socio-economic activities. The spatial distribution of EIW pottery over the landscape, as well as the amount of pottery yielded (Table 1) in the excavations confirm that there was a large population that existed at Maramba from 197 to 386 AD.

The recovery of cattle teeth and bones from EIW context indicates that EIW communities on the coast were cattle herders. There are many EIW sites that have been identified along the coast (Soper 1967, 1971; Chami 1994, 2001, 2004), however, none has been reported to yield fauna remains and particularly of cattle. There has been a notion that, Bantu speakers attained cattle from Cushites and then spread to other southern places (Abungu 1994, 1995; Sutton 1994, 1995. Consequently, Phillipson (1976: 8) reports that there is no cattle evidence prior to eighth century AD in eastern stream. All these perceptions have associated cattle domestication with Bantu migration. On the other hand, archaeologists had never found bones on EIW sites, simply because of the notion of wet and acidic soil (Posnansky 1981). It is true that, fauna remains in tropical soils decay very fast; however, this does not deny the presence of animal domestication along the coast during the EIW. Importantly, these findings serve as the earliest evidence for cattle domestication along the Tanzanian coast. What should be understood is that People of the coast of East Africa had been domesticating animals even before the EIW period. More cattle evidence comes from Kuumbi cave in Zanzibar where cattle remains of Neolithic period have been uncovered (Chami 2009). Chami argues that EIW people had inherited animal domestication skills from their ancestor, most likely, the Neolithic people.

As it was noted earlier , EIW pottery has a deep history in the hinterland, in particular, in the interlacustrine region. It is becoming obvious now that the people of the coast had interacted with those of deep hinterland during the EIW period. This assertion is also supported by the presence of EIW Maore derived pottery at Maramba. This kind of pottery was first recorded at the hinterland at Kilimanjaro, Pare and Usambara Mountains (Soper 1967; Odner 1971;

Maro 2002). The presence of Maore and EIW potteries at Maramba suggest that, EIW people had connections and interactions with hinterland for a long time. These connections were probably facilitated by trade and exchange networks. It is likely that the relationships between the coast and the hinterland started at the EIW period or before and continued to the later periods (Ordner in 1971). This view was later on confirmed by Maro (2002), arguing that Maore pottery tradition, which is now found on the coast, evolved from Kwale pottery on the northern highlands.

The findings of imported pottery, particularly, the greyish one at EIW cultural context, suggests transoceanic trade networks. . On the other hand, it is argued that, East Africa started to network with the Nile valley, Middle East and the Mediterranean Sea, since the third millennium BC (Chami2002). The same potsherds have also been reported at Ras Hafun in Somalia (Smith & Wright 1988). For this case, Maramba could have been a place mentioned by Roman visitors to Azania, as a Toniki Market (Freeman-Grenville 1962; Casson 1989; Laxroix 1998).

Preliminary analysis suggests that the landscape of Maramba was endlessly inhabited from the LSA to the present. Similar trends have been established in the central and southern coast of Tanzania (Chami 1994, 1998, 2006; Kessy 2005; Helm 2000; Kwekason 2010). Association of lithic artefacts with EIW pottery is not a surprising issue, as it is widely agreed that the succession from one industrial tradition i.e., lithic to iron technology, went through a gradual process (Gramly 1978; Kessy 2005).

Conclusion

The research reported here has been able to establish that the culture of EIW was that of sophisticated and elaborated type. Various types of decorations and shapes of pottery as studied by many scholars reflect complex and high level of artistic knowledge, attained by EIW people. It is also established that this was the culture of people who lived in wattle and daub houses, domesticated animals, smelted iron, and were involved in wider trade networks.

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