

## ■ TANZANIA

### **The Recovery of Swahili Settlements in the absence of stone architecture: Two preliminary surveys from Pemba Island, Tanzania**

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### **Introduction**

This report presents the results of two preliminary archaeological surveys on Pemba Island, Tanzania: in the region surrounding Pujini, a 15<sup>th</sup>-16<sup>th</sup>-century Swahili site and Chwaka, a 9<sup>th</sup>-16<sup>th</sup>-century Swahili site (Figure 1). Both surveys focused on the landscape encircling known Swahili town sites, with the hope of providing regional settlement pattern data. Our goal was to contextualize the larger town sites within the surrounding region, and to begin exploring the nature of town-village relationships, a topic rarely dealt with in East African coastal literature (cf. Wilson 1982; Wright 1993; Kusimba 1999).

These small projects, however, also anticipate a larger survey on Pemba Island, to be conducted in 1999/2000, during which regional settlement patterns will be examined more closely (Fleisher 1999). Therefore, the surveys reported here are preliminary in both methods and results; additional data about these regions will be forthcoming. As preliminary surveys, this work also included tests of various survey methodologies, in an effort to determine the most appropriate approach for both the coastal environment and the types of sites we hoped to locate. However, only the survey results will be reported here (see Fleisher and LaViolette 1999 for methodological discussions).

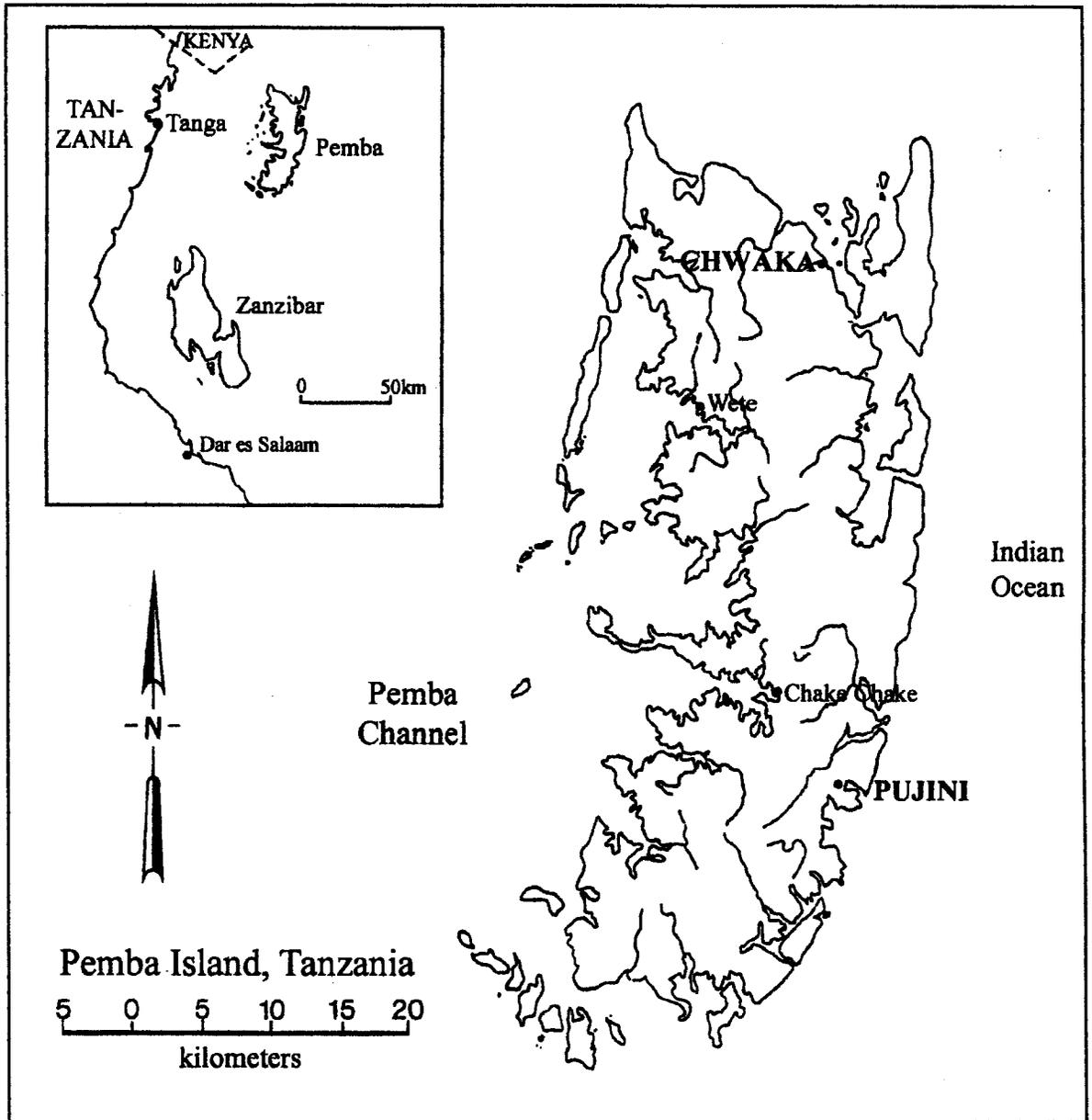
Both of the surveys contribute to long-term archaeological investigations on Pemba Island at Pujini (LaViolette 1989, 1996, this issue; LaViolette and Fleisher 1995) and Chwaka

(LaViolette, next issue of *Nyame Akuma*). These two sites are situated in distinct topographic regions on Pemba. Pemba, just under 1,000 km<sup>2</sup>, comprises three broad topographic zones. The first, in the west, is hilly with dense clove plantations, forest, and agricultural fields (Middleton 1961). The second, in the northeast where Chwaka is located, is less hilly; it has sandier soils, more appropriate for coconut growing, limited rice growing in drainages, and an array of other crops. The third, the southeast, where Pujini is located, comprises low-lying clayey soil with frequent limestone outcrops, abundant rice and other agricultural fields. Mangrove forests are distributed around the perimeter of the island (*ibid*).

Although Chwaka and Pujini are linked in local oral traditions—Chwaka's only named ruler is said to be the son of Pujini's founder—the settlements could not be more different. Pujini is a small, 1.5-hectare settlement, enclosed by a substantial rampart, and containing finely-appointed elite architecture. It was inhabited for a brief period, from approximately A.D. 1450-1550. Chwaka, however, is a sprawling, multi-component site, with substantial portions (more than 30 hectares) dating from the period of earliest known occupation on Pemba, the 9<sup>th</sup>-10<sup>th</sup> centuries, up to the 16<sup>th</sup> century, when it was apparently abandoned. While Pujini may have had only perhaps a hundred residents at its peak, Chwaka's total population numbered potentially in the thousands.

The survey data were similarly divergent. Although both surveys were successful in locating archaeological sites in the surrounding countryside, the periods of regional occupation were significantly different. Surrounding Chwaka, almost all sites located dated to the earliest period of Chwaka's occupation (9<sup>th</sup>/10<sup>th</sup> century) and its efflorescence (15<sup>th</sup>/16<sup>th</sup> century), with two possibly pre-dating the 9<sup>th</sup> century. However, surrounding Pujini, only one site was located that dated to the period of its occupation, with most of the sites dating to the 19<sup>th</sup> and 20<sup>th</sup> centuries. These settlement pattern variations surely relate to the length of stone town occupation, but also may indicate broader patterns of island settlement. The differences between Chwaka and Pujini, in terms of size and period of occupation, fit into Wilson's (1982) site hierarchy (Class 1 and Class 3/4 respectively), in which he drew distinctions between stone town types on the

Figure 1. Pemba Island, showing location of Pujini and Chwaka.



Kenyan coast based on physical size and types of structures. What Wilson's typology does not speak to is the nature of the hinterlands around those sites. Although Chwaka and Pujini were major political and economic centers, Chwaka appears to have had a large interactive hinterland, while Pujini did not.

**Pujini Survey, 1997**

Survey work was carried out from June 20<sup>th</sup> to 30<sup>th</sup>, 1997, while excavations were being conducted at Pujini itself. This work was less systematic than the later work at Chwaka, because new methodologies were being tested and a variety of site discovery techniques were used (Fleisher and LaViolette 1999). The greatest obstacle, however, was the sur-

Figure 2. Pujini area survey, northern section.

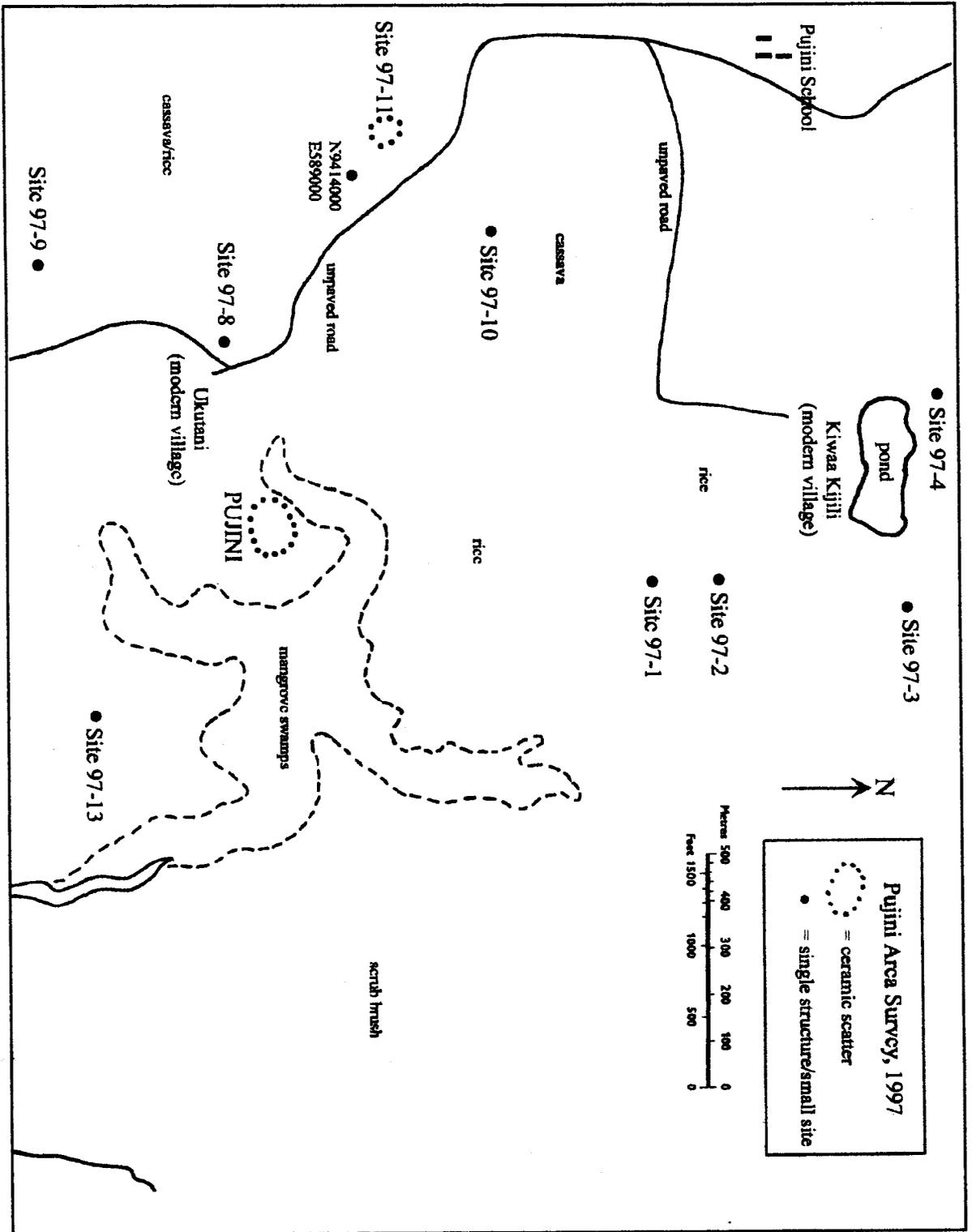
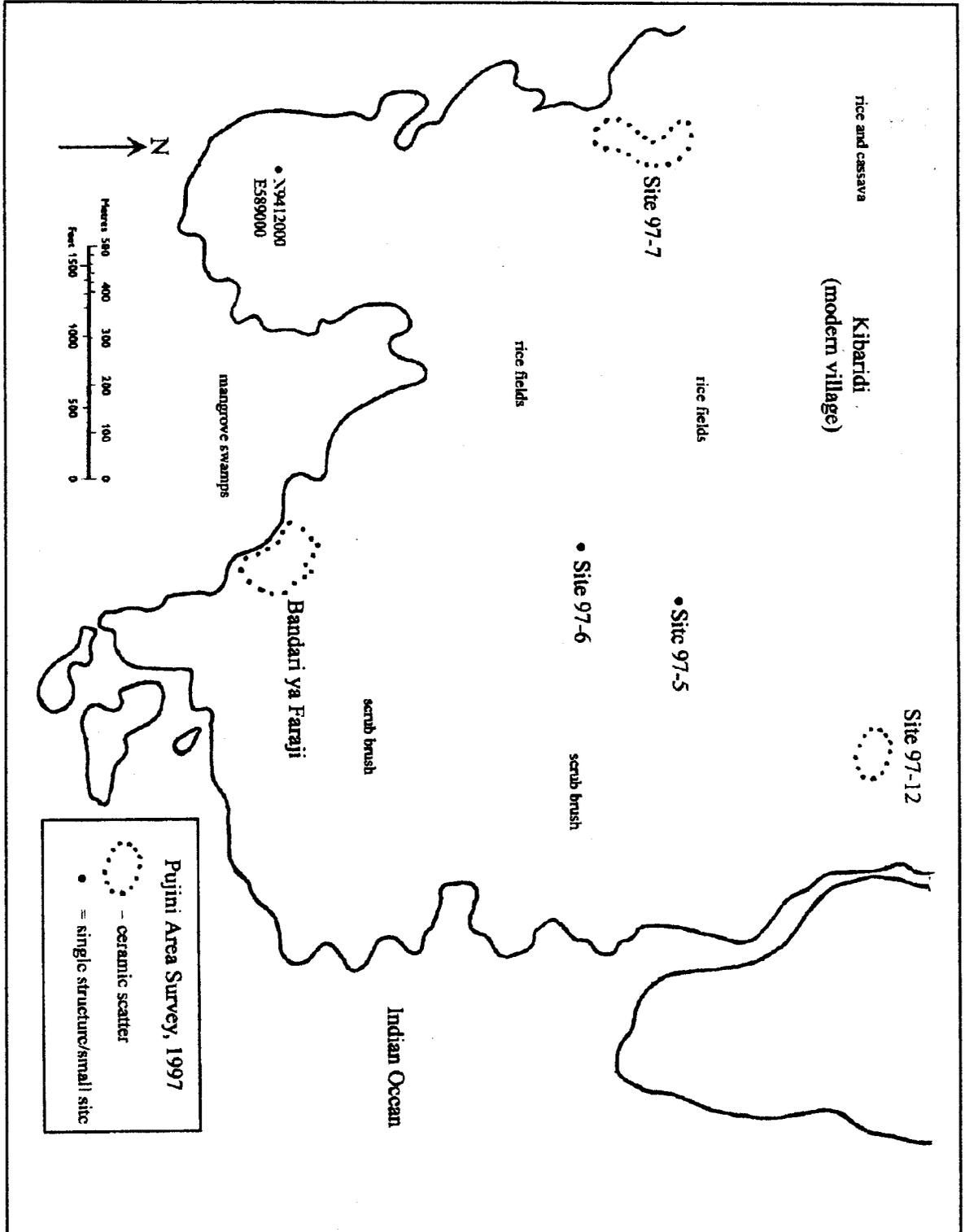


Figure 3. Pujini area survey, southern section.



rounding vegetation, which included abundant rice fields, thick brush, fruit trees, and open fields cultivated with cassava, corn, and millet. Rice fields were the most common, and these proved impossible to survey within.

In total, we located thirteen new sites (Figures 2 and 3, Appendix 1). Of these thirteen, ten dated from the late-19<sup>th</sup> to the mid-20<sup>th</sup> century (97-2 through 97-7, 97-10 through 97-13). Two sites (97-1, 97-9) contained only undecorated local earthenware sherds, and were undatable within established chronologies for the island. Although Kirkman (1959) began a local-ceramic chronology for Pemba, it is limited in its range of design elements and time framework; a more extensive one is under preparation based on materials at Chwaka and Pujini (LaViolette et al., in prep.). One of these undated sites, 97-1, contained the only daub recovered, confirming the presence of wattle-and-daub architecture.

The single, early site located through survey around Pujini contained red-burnished earthenware sherds (site 97-8). This site lies on a distinct mound about a half-kilometer to the southwest of Pujini, and probably dates to the 15<sup>th</sup> century or earlier (Kirkman 1959:172; Chittick 1974:324-326). Red-burnished wares can date from the 9<sup>th</sup> through 16<sup>th</sup> centuries. Because they occur on this mound in the absence of known earlier ceramics, they appear here to be 15<sup>th</sup>-century or earlier, most likely contemporary with Pujini.

Also noteworthy was 97-13, a dense scatter of sherds located at the base of a large baobab tree. Interviews confirmed this was a shrine, where offerings continue to be made to local majini or spirits. Numerous small (ca. 10 cm-diameter) pinch-pots and slightly larger carinated bowls were located on the surface amidst a thick layer of broken local ceramics, and it appears that the layer of ceramics may continue beneath the surface. Out of respect for the shrine no shovel-tests were dug.

This brief survey suggests that the region surrounding Pujini was settled sparsely during Pujini's period of occupation, and earlier. After Pujini was abandoned in the early- to mid-16<sup>th</sup> century, there seem to be no sites in the region at all; we found no sites dated to between the 16<sup>th</sup> and 19<sup>th</sup> centuries. However, during the 19<sup>th</sup> and early-20<sup>th</sup> century, at a time when many Omani plantations were estab-

lished on the island, area settlement increased significantly (Middleton 1961; Cooper 1977). More survey work is needed in areas farther from Pujini, as well as more systematic examinations, to confirm this conclusion.

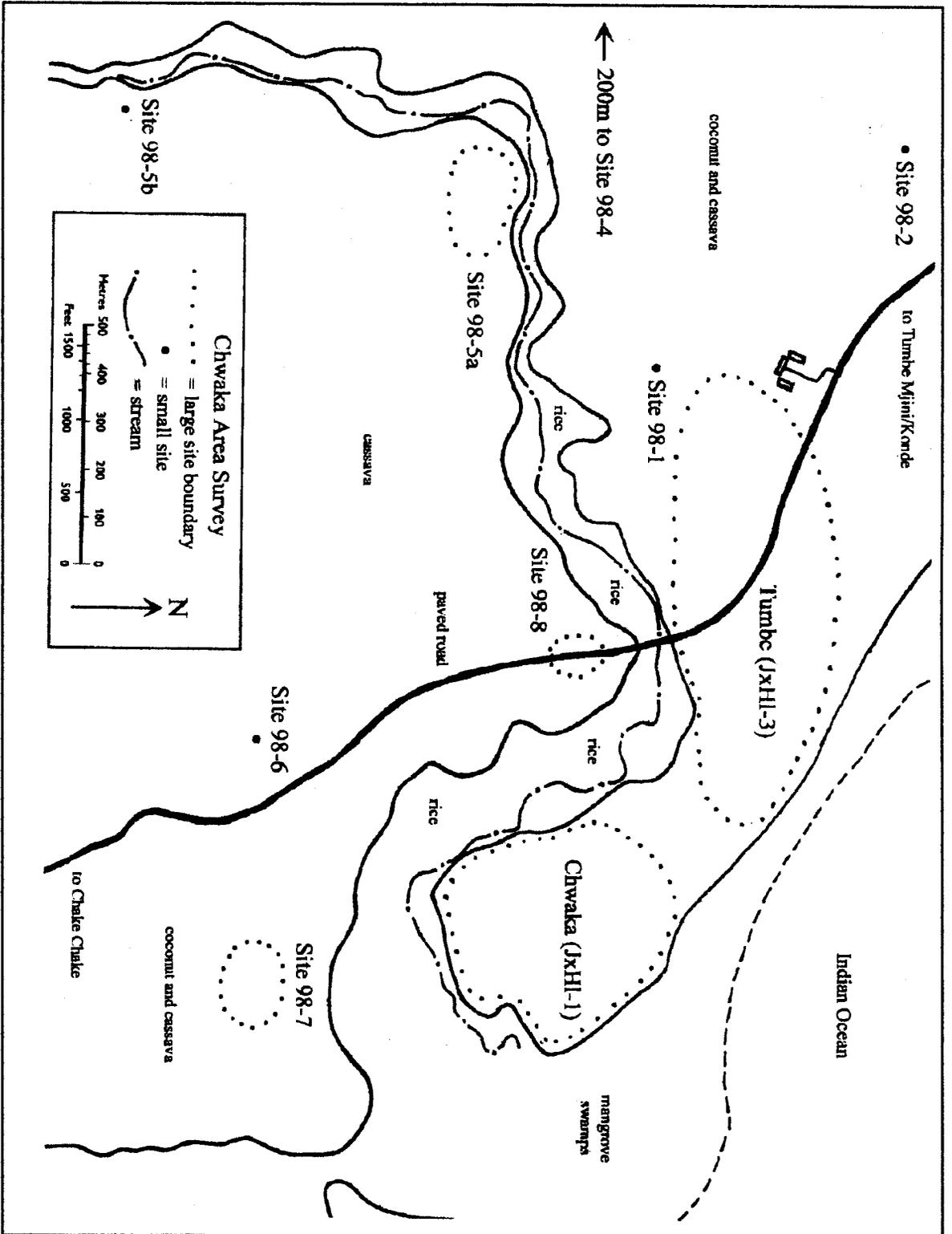
## Chwaka Survey 1998

We conducted systematic surface and subsurface survey in the environs of Chwaka between August 4<sup>th</sup> and 14<sup>th</sup>, 1998. The survey was carried out by walking 100-m-wide transects radiating from Chwaka to the north, west, and south (Figure 4, Appendix 2). We examined the ground surface in exposed agricultural fields, and dug shovel-test pits every 200 m. Unlike the region surrounding Pujini, Chwaka is situated in an area with more open agricultural fields; rice, which was a stumbling block around Pujini, was confined to drainages and was therefore less extensive.

In total, seven new sites were located and the boundaries of Tumbe (98-3, also JxHI-3), a previously-recorded 9<sup>th</sup> to 12<sup>th</sup> century site, were extended from 2 ha. to over 30 ha. Five of the new sites (98-1, 98-2, 98-6, 98-7, 98-8) contained local earthenware sherds with TIW motifs, and are therefore broadly datable to between the 9<sup>th</sup> and 12<sup>th</sup> centuries A.D. (Chami 1994; Horton 1996). At 98-1 and at Tumbe, 98-3, we recovered local pottery, bead grinders, and imported ceramics (sgraffiato, Sassanian Islamic, tin-glazed white ware). Two of these sites, 98-6 and 98-7, may date to the 8<sup>th</sup>-9<sup>th</sup> centuries, based on a comparison to known early TIW decorative motifs identified on the Kenyan coast by Mark Horton (1996:253), who calls them Tana tradition phase A pottery, type 1. Although many of the standard, 9<sup>th</sup> to 12<sup>th</sup> century TIW elements are present in these early ceramics, the designs are less precise, and the decorations not as deeply incised (*ibid.*: 248). At these two sites, only local pottery was found, no imports, and no bead grinders.

The extension of the boundaries of Tumbe (98-3, JxHI-3) are the result of shovel-testing, which located deeply buried and intact early deposits over a large continuous area. The materials recorded from the surface and shovel-tests, in addition to those shared with the other early sites, also included glass, graphite-burnished red bowls (Tana tradition phase A pottery, type 4a, *ibid.*:254),

Figure 4. Chwaka area survey.



green monochrome imported ware, daub, and slag. It is tempting to view this as evidence for a large single town spanning from the 9<sup>th</sup> to 12<sup>th</sup> centuries, although there are other possibilities that remain to be ruled out. For instance, this area may represent a series of occupations throughout the 9<sup>th</sup> to 12<sup>th</sup> centuries, comprising a number of smaller-sized villages or towns. A closer intrasite examination of artifact densities, and future excavations, will help determine the settlement history. At this point, what we can say with certainty, is that the types and densities of deposits over this large area suggest that this was a major center at some point during these centuries.

One site (98-4) dates to between the 15<sup>th</sup> and 17<sup>th</sup> centuries, based on the presence of Chinese blue-and-white and local earthenware forms similar to contemporary deposits at Chwaka. Lastly, one area of 19<sup>th</sup>-century occupation was located, represented by two scatters of imported and local sherds (98-5a/b), and a quarter-anna coin from India bearing the date '1862'.

Despite the preliminary nature of this survey, an interesting pattern is evident that will be kept in mind during future large-scale survey on Pemba (Fleisher 1999). In the early period, represented by the six settlements bearing TIW, we see a clustering of sites in the area around Tumbe, all within about 400 m of the larger site. The next period represented by sites within the survey region is the 15<sup>th</sup> to 17<sup>th</sup> century, which leaves a gap of as much as 300 years in the region, despite the ongoing presence of a large, central site (Chwaka). The single 15<sup>th</sup>-17<sup>th</sup>-century site, 98-4, lies at a distance of 1.5 km from Chwaka, suggesting that village settlement close to Chwaka was restricted during this periods, for reasons we cannot yet say. Such changes in spatial arrangements of sites within the hinterland regions of larger sites can be important for understanding the development and nature of urban systems.

## Conclusions

We can draw a number of conclusions from the research outlined above. First, there are sites to be located in the hinterlands of stone towns. Finding these countryside communities is the first step toward building a regional understanding of the development of Swahili towns. However, the data presented here also suggest that we cannot expect

these hinterlands to look the same; different types of stone towns, such as Pujini and Chwaka, may have different kinds of social, political, and economic relationships with village settlements. Particularly striking is the change in the countryside around Chwaka, as an example of how a regional pattern can alter over the course of a few centuries. Although we do not have the data to explain this shift, the pattern itself suggests that this line of research will be rewarding. Hopefully, these patterns will become clearer as the results of an upcoming survey on Pemba are available. The anticipated survey work (Fleisher 1999) intends to adopt an explicitly regional approach to Swahili sites, hoping to delineate the settlement system within which larger Swahili stone sites developed during the 9<sup>th</sup> to 15<sup>th</sup> centuries A.D. Such an approach will allow an evaluation of the nature of urban settlement within specific coastal regions, as well as broaden our understandings of the more rural components of Swahili history.

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## References Cited

Chami, Felix

- 1994 *The Tanzanian Coast in the First Millennium A.D.* Studies in African Archaeology 7. Uppsala: Societas Archaeologica Upsaliensis.

Chittick, H. N.

- 1974 *Kilwa - An Islamic Trading City on the East African Coast*. Nairobi: British Institute in Eastern Africa, Memoir 5.

Cooper, F.

- 1977 *From Slaves to Squatters: Plantation Labor and Agriculture in Zanzibar and Coastal Kenya, 1890-1925*. Portsmouth: Heinemann.

Fleisher, J.

- 1999 Viewing Stone towns from the Countryside: An Archaeological Approach to Swahili Urban Systems. Proposal submitted to the National Science Foundation.

Fleisher, J. and A. LaViolette

- 1999 Elusive Wattle-and-Daub: Finding the Silent Majority in the Archaeology of the Swahili. *Azania* XXXIV.

Horton, M. C.

- 1996 *Shanga: The Archaeology of a Muslim Trading Community on the Coast of East Africa*. London: British Institute in Eastern Africa, Memoir 14.

Kirkman, J.

- 1959 Excavations at Ras Mkumbuu on the Island of Pemba. *Tanganyika Notes and Records* 53:161-178.

Kusimba, C. M.

- 1999 *The Rise and Fall of Swahili States*. Walnut Creek: AltaMira Press.

LaViolette, A.

- 1989 Preliminary Report: Excavations and Survey at Pujini, a Fortress on Pemba Island, Tanzania. *Nyame Akuma* 32: 35-38.

- 1996 Report on Excavations at the Swahili site of Pujini, Pemba Island, Tanzania. *Nyame Akuma* 46: 72-83.

LaViolette, A. and J. Fleisher

- 1995 Reconnaissance of Sites bearing Triangular Incised (Tana Tradition) Ware on Pemba Island, Tanzania. *Nyame Akuma* 44: 59-65.

LaViolette, A., J. Fleisher, and B. B. Mapunda in preparation. Swahili Archaeology in the Iron Age: A Synthesis of the Tanzanian Coast and Mainland, A.D. 1-1500.

Middleton, J.

- 1961 *Land Tenure in Zanzibar*. London: Her Majesty's Stationery Office.

Wilson, T. H.

- 1982 Spatial Analysis and Settlement Patterns on the East African Coast. *Paideuma* 28: 201-219.

Wright, H. T.

- 1993 Trade and Politics on the Eastern Littoral of Africa, A.D. 800-1300. In T. Shaw et al., editors, *The Archaeology of Africa: Food, Metals and Towns*. London: Routledge, pp. 658-672.

## Appendix 1: Sites Located in the Area of Pujini, June 1997

**97-1** (E589870 N9414650, 40 m x 30 m). A light local ceramic scatter centered in a grove of large baobab trees. One concentration of burned daub was noted. Shovel tests dug did not reveal intact stratigraphy or deposits, yet other portions of site may have some intact.

**97-2** (E589840 N9414805, 20 m<sup>2</sup>). Two small concentrations of ceramics and daub. Concentration to north contained mostly daub; concentration to the south contained mostly local ceramics with a few imported sherds, possibly of 19th-century date. Some intact deposits present yet erosion from farming is occurring on site.

**97-3** (E589780 N9415190, 50 m<sup>2</sup>). A dense concentration of local and imported ceramics, most of late-19th or early-20th-century date. A house was remembered on this site by Ali Haji Bakar, Sheha of Kiwaa Kijili to the south.

**97-4** (E589520 N9415210, 30 m<sup>2</sup>). Similar to 97-3, this is a dense concentration of local and imported ceramics of the late 19th or early 20th centuries. This site is also remembered as occupied within the life of Ali Haji Bakar (approx. 60 yrs. old).

**97-5** (E589930 N9412855, 50 m x 30 m). A light scatter of local and imported ceramics and a filled coral-lined well was noted. Probably early- to mid-20th century in date. This site is linked historically (and probably spatially) with 97- 6.

**97-6** (E589840 N9412650, 10 m<sup>2</sup>). This site is the remains of a small rough coral structure, possibly a house, surrounded by a light scatter of local and imported sherds similar to 97-5. The structure was heavily overgrown and not cleared. No plaster was apparent but cement was noted.

**97-7** (E588940 N9412740, 60 m x 20 m). Probably a 20th-century village site. Two house foundations were visible as low mounds surrounded by local and imported sherds. Directly to the south are salt fields.

**97-8** (E589380 N9413750, 80 m<sup>2</sup>). This site directly west of the modern village of Ukutani has a medium density sherd scatter on the surface and deep intact stratigraphy. Only local sherds were located and many red-burnished wares were located in shovel tests, as well as faunal remains. This may be a site contemporary to Pujini.

**97-9** (E589200 N9413340, 30 m<sup>2</sup>). This is a very small light sherd scatter of local ceramics. Much of the area is deflated with little or no topsoil before subsoil. No decorated or imported sherds located.

**97-10** (E589085 N9414295, 30 m<sup>2</sup>). This is a light scatter of local ceramics and slag. Shovel tests revealed no intact stratigraphy and few areas of topsoil deposits. Some imported sherds suggests this is a late-19th to 20th-century site.

**97-11** (E588940 N9414065, 80 m<sup>2</sup>). This was probably a small village in the early- or mid-20th century. The site now comprises a light scatter of local and imported sherds.

**97-12** (E590285 N9413265, 60 m x 80 m). A mid 20th-century site consisting of a light scatter of local and imported sherds in agricultural fields.

**97-13** (E590185 N9413440, 2 m<sup>2</sup>). This is a modern shrine at the base of a very large baobab tree which sits on the western side of Mteka Maji, a shallow pond. Whole shallow carinated bowls were noted as well as smaller pinch pots. The area surrounding the baobab is carpeted with dense ceramic deposits. Due to the present use of the shrine, no test pits were dug and therefore the depth remains unknown.

## Appendix 2: Sites Located in the Area of Chwaka/Tumbe, August 1998

**98-1** (E587920 N9451290, 50 m<sup>2</sup>). This is a multi-component site consisting of TIW, 15<sup>th</sup>-century, and 19<sup>th</sup>/20<sup>th</sup>-century deposits. TIW diagnostics were noted in shovel test pits (STPs) and eroding out of the southern ridge slope. 15<sup>th</sup>-century artifacts including red painted bowls and sgraffiato were noted only in one STP (98-1-1). Finally, 19<sup>th</sup>- and 20<sup>th</sup>-century ceramics including whitewares and porcelaineous sherds were visible on the surface. A scatter of sherds similar to Kwale ware motifs was noted and collected from the surface but it is unlikely that these are acutally Kwale ware; it is more likely that they represent a similar 19<sup>th</sup>- or 20<sup>th</sup>-century motif. The TIW scatter appears to be related to 98-3, but this site was recorded separately to describe the 15<sup>th</sup>- and 19<sup>th</sup>/20<sup>th</sup>-century deposits.

**98-2** (E587460 N9451800, 50 m<sup>2</sup>). This site was located with an STP (CA16/98-2-6) that yielded a medium density of sherds with TIW motifs. The site is not visible on the surface, yet a very light scatter of later local sherds (possibly 20<sup>th</sup>-century) was noted on the surrounding surface. The site is very small and appears to be a solitary dense scatter of sherds, possibly representing a single house or, at most, a few houses.

**98-3** (E588150 N9451550, 900 m x 350 m). This site extends and forms the majority of old Tumbe, a site previously recorded and assigned a site code (JxHI-3). In a series of transects and STPs, the boundaries of this site were considerably extended to the north and west. Many STPs contained medium to heavy densities of local sherds (20-100 sherds) with TIW motifs that appear to date to the 9<sup>th</sup> to 12<sup>th</sup> centuries. Other artifacts located include Sasanian Islamic imported sherds, imported glass, daub, and bead grinders. All artifacts were observed in STPs and no artifacts were noted on the surface.

**98-4** (E586580 N9451140, 60 m<sup>2</sup>). This is a small light surface scatter of local and imported sherds. The site appears to date to between the 15<sup>th</sup> and 17<sup>th</sup> centuries, based on the presence of a few blue-and-

white Chinese porcelain sherds. However, rim forms of some of the local sherds may indicate a slightly earlier occupation date, possibly contemporaneous with the final period at Chwaka.

**98-5a** (E587550 N9450900, 250 m<sup>2</sup>)

**98-5b** (E587380 N9450160, 50 m<sup>2</sup>). This site is a scatter of local sherds and one 1862 coin. It probably represents the accumulation of a small village from the mid- to late-19<sup>th</sup> century. It is possible that the site has been occupied continuously since that date. Site 98-5a is under the modern village of Uwaani, while 98-5b represents an isolated scatter of 19<sup>th</sup>-century ceramics (including Maastricht wares) approximately 500 m to the south. They were possibly related during this time period.

**98-6** (E588700 N9450450, 50 m<sup>2</sup>). This site was discovered in STPs, that revealed a high density of local sherds with TIW motifs including incised lines and punctates. Like 98-2, this site is small and isolated and may represent a single house or a small group of houses. It lies to the west of the modern hamlet of Ziwatuwe, just off the Chake-Konde road.

**98-7** (E589200 N9450430, 200 m x 150 m). This is a large site which contains heavy densities of local ceramics with TIW motifs, all buried deeply and not visible on the surface. Successive STPs along transects revealed heavy densities of local sherds only, many with what appear to be early TIW motifs. All deposits lie intact at depths 40 to 90 cm below the surface.

**98-8** (E588530 N9451130, 50 m<sup>2</sup>). This scatter of local sherds with TIW motifs, glass, slag, and iron is only visible in the road cut just south of old Tumbe (JxHI-3) and Chwaka (JxHI-1). While this may be a contemporary site of old Tumbe, it may represent fill dumped in the road cut taken from old Tumbe. STPs on the ridges above the road cut revealed no intact stratigraphy or TIW sherds.