

Joseph Pieterse

**SAFEGUARDING INDIGENOUS KNOWLEDGE AND HERITAGE:  
NZULEZO STILT CONSTRUCTION**

MA Thesis in Cultural Heritage Studies: Academic Research, Policy, Management.

Central European University

Budapest

May 2018

**SAFEGUARDING INDIGENOUS KNOWLEDGE AND HERITAGE: NZULEZO  
STILT CONSTRUCTION**

by

Joseph Pieteron

(Ghana)

Thesis submitted to the Department of Medieval Studies,  
Central European University, Budapest, in partial fulfillment of the requirements  
of the Master of Arts degree in Cultural Heritage Studies: Academic Research, Policy,  
Management.

Accepted in conformance with the standards of the CEU.

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Chair, Examination Committee

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Examiner

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External Reader

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Budapest  
May 2018

I, the undersigned, **Joseph Pieterston**, candidate for the MA degree in Cultural Heritage Studies: Academic Research, Policy, Management declare herewith that the present thesis is exclusively my own work, based on my research and only such external information as properly credited in notes and bibliography. I declare that no unidentified and illegitimate use was made of the work of others, and no part of the thesis infringes on any person's or institution's copyright. I also declare that no part of the thesis has been submitted in this form to any other institution of higher education for an academic degree.

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# Abstract

Transmission of indigenous knowledge tied to heritage within a community is vital and offers opportunities to preserve local heritage in a healthy and progressive manner. Since this knowledge is generated locally, based on their present environment, it is essential for such knowledge to be passed on to the younger generation who will inherit it and eventually pass it on as well. For Nzulezo, transferring the indigenous cultural mechanisms behind the production of knowledge in constructing the stilt structures on the lake will help preserve their heritage over many generations. When the process for transmitting knowledge is identified, it also helps stakeholders decide on ways through which heritage can be co-managed with the host community. In view of this, this study aims to explore the ways knowledge of the long-standing heritage, the stilt houses raised over the lake, is acquired and transmitted. The main data collection methods used in this study were interviews and participant observation. The result of the study reveals the social and practical processes lying behind construction and points out essential ways by which the exchange of knowledge occurs in Nzulezo. Some suggestions are proposed as part of contributing to heritage preservation at this unique settlement in southwest Ghana.

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# Introduction

The settlement of Nzulezo is built on stilts and is over a lake. The community is understood to have values and dynamic cultural significance for its inhabitants that are embodied through religious and social events. The stilt site adds a new perspective to Ghana's heritage assets that have attracted many globe trotters. The stile structures are made from wood and raffia giving an exotic feel to visitors. However, the construction knowledge and technical know-how of raising these structures are less known to these visitors. Yet, the building knowledge is regarded as a vital component in ensuring the continuity of the traditional building style of the community's heritage. Using an ethnographic approach, the thesis is intended to investigate how embodied knowledge surrounding stilt construction is acquired and transmitted within the Nzulezo cultural space. The thesis provides an overview of the important social values contained within knowledge transfer and its vital role in preserving, safeguarding and ensuring heritage continuity. Indigenous knowledge contains essential cultural values that need to be passed on to younger cultural bearers.

My interest in doing this research is motivated by the heritage discourse in Ghana, that is mostly one-sided and focuses on tangible objects that offer monumental benefits. I, believe the unseen aspects of heritage is equally important and thus offers valuable opportunities and benefits to local society while ensuring the smooth continuation of heritage traditions with a modern context. I believe members of Nzulezo possess a great amount of indigenous knowledge which when used innovatively can be applied in diverse ways and aspects of daily life. This kind of knowledge has not been recognized, duly engaged with or explored.

Ethnographic field research together with other methods was employed. Due to the limited literature available and the fact that this was the first such research conducted on the intangible

aspects of Nzulezo community heritage, I adopted an exploratory research design including interviews and participant observation to collect data.

# Chapter 1 - General background to the study

Chapter one will introduce the historical narrative of Nzulezo, its topographical nature and give a summary of the heritage values of Nzulezo cultural landscape. I will also present a brief narrative on the daily lifestyle, social activities of the Nzulezo community and how they engage the natural environment in sustaining their livelihoods.

Nzulezo lies in the hinterland of Beyin in the southwest part of Ghana. Beyin is located along the coast of the Gulf of Guinea.<sup>1</sup> It lies approximately 90-100 kilometers to the west of Takoradi highway in the Jomoro District of the Western Region of Ghana. Nzulezo sits midway Axim and Beyin; it is 40 kilometers from the Ivorian border. The Nzulezo community can be accessed by a 50 minutes canoe ride from Beyin, the closest town to the village. The Nzulezo community is also situated within the Amanzule wetlands the most significant inland swamp forest in Ghana. The Amanzule wetland is rich with biodiversity features. The wetlands represent peat, swamp and mangrove forests, floodplains, sandy shores with streams, rivers, a freshwater lake, lagoons and the sea as characteristics of its environmental features.<sup>2</sup> Unfortunately, this vital wetland, despite its potential socio-economic benefits to society lacks formal conservation status.<sup>3</sup> Nzulezo is surrounded by seven other villages. These villages also have access to River Tandane, but Nzulezo is the only community situated within the Amanzule wetlands on the River Tandane.

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<sup>1</sup> "Nzulezo: The World Heritage Site on Stilts in Ghana," The Global Spectrum, accessed December 1, 2017, <http://www.theglobalspectrum.org/home/2016/7/29/nzulezo-the-world-heritage-site-on-stilts-in-ghana>.

<sup>2</sup> Adupong, R., Nortey, D. D. N., and Asiedu, J. (2013) Compilation of Customary Laws and Practices in the Greater Amanzule Wetland Areas. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 35 pages

<sup>3</sup> Adupong R, Nortey D.D.N, and Asiedu J, "Compilation of Customary Laws and Practices in the Greater Amanzule Wetland Areas," 2013.

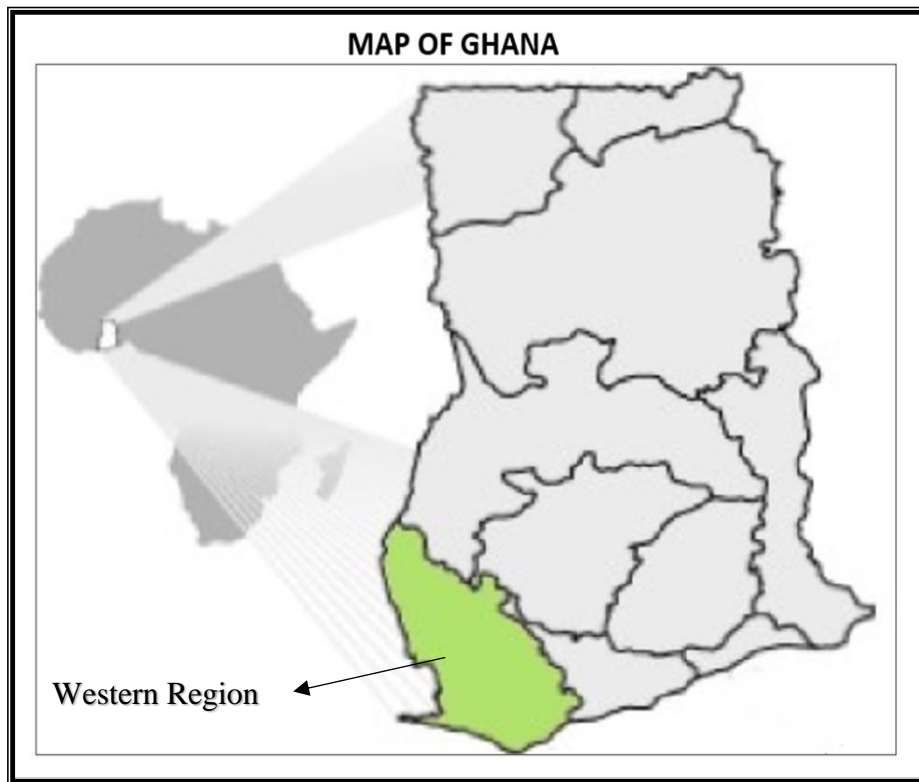


Figure 1: Map of Ghana (Source: Internet and redesigned by author)

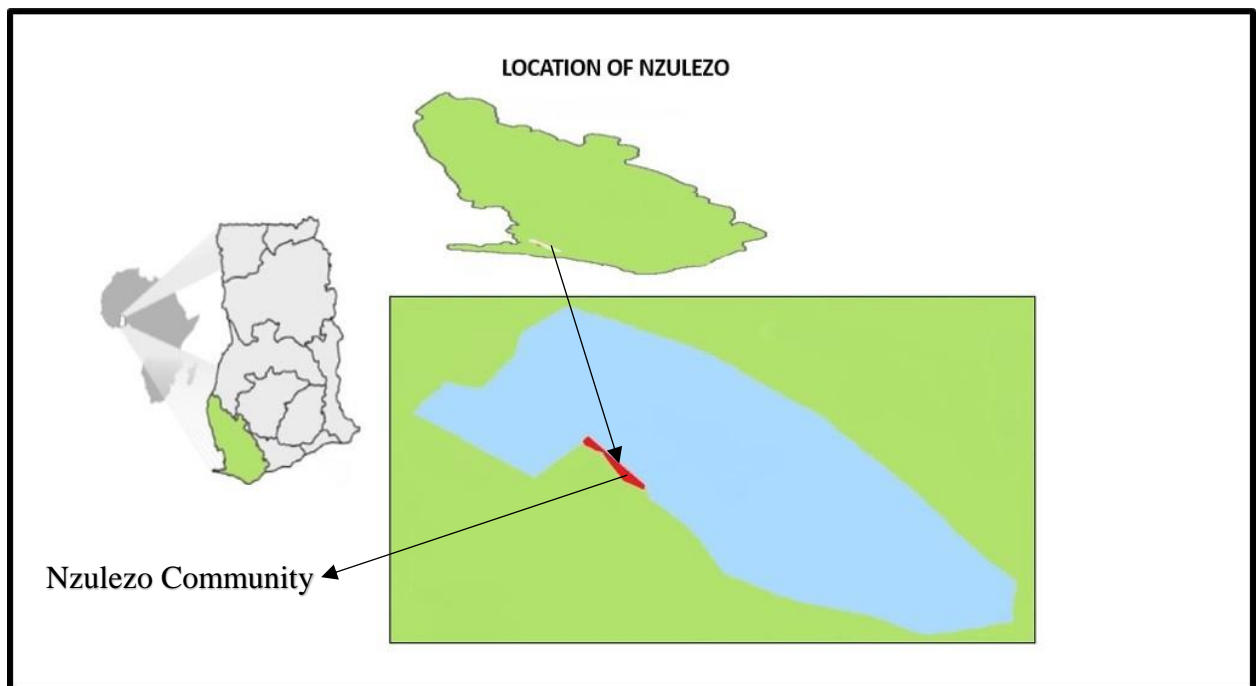


Figure 2: Location of Nzulezo (Source: Internet and redesigned by author)



## 1.1 Aquatic ecosystem

Nzulezo is situated in an environment with a source of fresh water. Over the years, the population adapted to the environment and built dwellings over the lake. The architectural design of the structures are composed from wood and raffia, these structures are raised as stilts on the Lake Tandane. The community has one main “*Kpodaa*” (Walkway) which connects the building structures on each side.

The aquatic environment of the community sets it apart as a tourist spectacle and as one of the only community in Ghana. Another example of such village sites, could be located on the sea coast of Benin – West Africa.<sup>4</sup>

## 1.2 Historical Narrative

Information surrounding the history of the settlement was collected through personal interviews. Interviews were targeted at selected elderly men and elders in the community who are known to be knowledgeable in “*Abeko nsem*” (History). The interviews were conducted in a structured form to ensure that relevant events were chronologically gathered as the people believe them to have occurred. Since there are somewhat varying accounts of these historical events and not one side of the story can be said to be true, the purpose of the interview is gather material information from different community members. This approach is adjusted to the need of oral history because it provides better understanding of separate account(s) of the history of how the community emerged and the reasons which lead them to occupy their current location. Another motivation to document these interviews is connected to the numerous historical accounts found on the internet. These accounts are mostly from tourists’ free writings in the

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<sup>4</sup> Linda Poon, “The Beauty of Africa’s Traditional Architecture, In One Big Database,” CityLab, accessed December 3, 2017, <http://www.citylab.com/design/2015/08/the-beauty-of-african-vernacular-architecture-captured-in-one-big-database/400778/>.

form of blog-posts after they visit the community. Their reports mostly come from tour guides who have scripted and summarized the details based on what they want to present to tourists and the part of the history they want visitors to know concerning the history of the community. The historical development of Nzulezo is crucial to this study in that it helps to understand of the patterns of how knowledge was acquired and shared within the community over the years to the present.

The forefathers of Nzulezo first migrated from Timbuktu - Mali. They fled from Mali due to land conflict between their community and the Senegalese who were believed to be stronger than the forefathers of Nzulezo. The migrating community was thought to have been led by a deity who was transformed into a snail to help find refuge. Their forefathers travelled through Niger, Burkina Faso and finally arrived in Ghana.

Their arrival in Ghana was also characterized by continuous relocation until they finally settled in their current location. Their history of consistent resettlement was connected to their rivals who were in constant pursuit of them when they arrived in Ghana. It is recounted that the first settlers settled in Wenchi and then moved on to Techiman, all in the Brong-Ahafo Region in Ghana. Among the migrating community at that time were 43 sub-chiefs and a spokes person who translated the directional messages given by the snail god to the group. From Techiman, they continued their inland migration through to Essipong in the Western Region and toward the Ankobra River until the travelers reached Asiama - a town in Nzema land along the coast in today's Ghana. Continuing their goal of finding a permanent place to settle, well away from their enemies, they arrived at Bakanta, a vast confluence of waterways which they had to cross. Believing that there were no boats to help them cross Lake Bakanta, their guardian, the snail god, directed them through the spokesman to cut vines and logs and made a raft to cross the lake. After successfully crossing the lake and finding some level of security and livelihood, the

first settlers made their discovered settlement their permanent home. They named their new found settlement Nzulezo. The name of the village was derived from the Nzema word “Nzulezo,” which means “surface of the water,” referring to the environment in which the village is located.<sup>5</sup> There are several versions of the village’s history and how the community ended up situated by the lake. In other accounts, the place they migrated from and what caused them to leave differs both on the points in their journey the teller starts the history of their long journey and the reason for that journey as well. Also, circumstances surrounding how they found and reached their permanent location varies slightly. However, careful examination reveals the consistency of repeated events which can be traced in these different versions of the history. These multiple variants are of the transmission of oral history.<sup>6</sup>

### 1.3 Other accounts

All individuals who contributed by narrating the history and other stories concerning the community were all pointed out by an elder. These two myths were purposely chosen because they were the most used on the internet. I chose these two myths to compare if it matches with that on the internet.

#### 1.3.1 Myth one

According to Mr. Justice Ackah, the 61 year old chairman of the Parent Teachers Association (PTA) in Nzulezo community who works at the wildlife office in Beyin narrates that;

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<sup>5</sup> Field interview with Alex Ninge, Interview by author, July 23, 2017

<sup>6</sup> Terence C. Mournet, *Oral Tradition and Literary Dependency: Variability and Stability in the Synoptic Tradition and Q*, Wissenschaftliche Untersuchungen Zum Neuen Testament 195 (Tübingen: Mohr Siebeck, 2005).

“In the olden days, our forefathers in Mali-Timbuktu owned land where they mined gold. The gold caused our forefathers to be in constant misunderstanding with the people of Senegal. Fearing to lose their wives and children because of endless conflicts, our forefather decided to leave Mali, and they were led by their Snail god through many countries until they settled close to the River Tandane in the southwestern region in Ghana. They raised structures and engaged in agricultural activities such as farming to sustain their livelihood. While getting used to their new location, they continually experienced fire outbreaks due to strong winds which blew in the direction of their camps. “*Moga*”, the spokesman for the chief, one day launched deep into the lake and saw a tall tree during his fishing expedition. He decided to trace the location of the tree. He realized the tree was on land, an area which also had less wind and seemed suitable for living without fire outbreaks. Out of excitement from his discovery, Moga rushed to report to the chief what he had found. When the leader was informed, he delegated some elders to confirm that the discovered land indeed had less wind and fertile soil which could be used for farming. Showing that it was an excellent location with less wind and an area nearby to farm on, the community moved and settled there”.

### 1.3.2 Myth two

Put differently by Philip Arthur, an indigenous man from Nzulezo;

The first settlers in Nzulezo were pursued in Burkina Faso by a group of people our forefathers referred to as Mendese from Senegal. Our forefathers in the olden days had carved a stool out of gold for their chief which the Mendese wanted to take from them. Knowing the Mendese could forcefully claim their golden stool, they inevitably followed the lead of a Snail god who promised to lead them to a safe location. Whenever the Snail god moved, the community believed the Mendese were in pursuit, so they also continued walking. They journeyed all the way from Burkina-Faso to Assipong in the western Region of Ghana. The travelers decided to settle there but were faced with the slave trade, so the Snail god led them on till they reached the River Tandane away from the slave trade and stopped journey there. Although they were

safe, there were sudden fire outbreaks due to the stiff sea breeze from the place where the river ran into the sea and because their building materials which were made from wood and roofed with palm fronds. The chief's linguist, a fisherman, called Mogah, discovered a new location with less wind, fertile land and suggested to the chief that the community move there.

It is said that their pursuing enemies were drowned in the lake by the Snail god on a Thursday and that marked the day they finally settled at Nzulezo's current location.<sup>7</sup> Thus, Thursdays are considered a sacred day of rest in the community, making it taboo<sup>8</sup> to fish in the lake on that day of the week. Every year in April, sacrifices are offered to the Snail god and the gods of the lake to commemorate their liberation and as thanks to the gods".

Over the years, the inhabitants of Nzulezo, due to interethnic marriage, have been accepted as natives of Nzema. They are now known to be part of the Nzema-speaking people. They are identified by seven clan groups - Mafole, Adahore, Nvavele Ndweanfo, Ezohile, Alongwaba, and Azangwuri.

Table 1: **Landscape Biography of Nzulezo**

<b>Demography</b>	The total estimated population residing in the community is a little over 600 individuals including children. There is a low percentage of out-migration of both the youth and adults. Just a hand-full of youth who have migrated for purposes of higher education such as senior high school and university. Leaving for educational purposes does not affect the regular structure of the community as these youth return during vacations. The yearly birthrate ranges from 1-3 with low death rate of deaths. The
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<sup>7</sup> Field interview with Alex Ninge, Interview by author, July 23, 17

<sup>8</sup> Adupong, R., Nortey, D. D. N., and Asiedu, J. (2013) Compilation of Customary Laws and Practices in the Greater Amanzule Wetland Areas. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 35 pages

	<p>proportion of women to men in the community is about 55%-45% respectively. There are about 95 stilt structures which mainly comprises houses, kitchens, church buildings, a school building, shops, guesthouses and a liquor shop.</p>
<b>Economic activities</b>	<p>The community relies extensively on farming - the cultivation of crops such as maize, cassava, plantain, coconut, oil palm, etc. brewing of “<i>Akpeteshi</i>” (local gin) from raffia and oil palm trees as well as fishing to support their economy. Other economic activities include shops, operating a mini-drinking bar, crafts (canoe) and a guesthouse. All food supplies are produced by the locals first for their consumption and families with the surplus sold to neighboring communities to generate income for their families.</p>
<b>Educational values</b>	<p>Culturally, studying and acquiring any form of knowledge and skill is first transmitted to children by their parents. Learning and acquiring an essential qualification is done by actively involving the young ones through social participation. However, there have been efforts to enroll children in a Western style educational system with a primary school going up to grade six (6).</p>
<b>Social organization</b>	<p>The community is governed by a traditional chieftaincy system. The leadership structure of the society is made up of the indigenous population. Together, they use their positions to ensure peace and order by making decisions on behalf of the people and set binding rules that the community adhere to. The chieftaincy title of Nzulezo is “<i>Nana Takrika</i>”.</p>

	<p>The Council of Elders is made up of seven people with each of the seven clans represented by an individual. The council advises the chief on issues of governance.</p> <p>Though Nzulezo community operates under a chieftaincy system, they also adhere to the central political governing system of Ghana.</p>
<b>Sociocultural activities</b>	<p>The people of Nzulezo also engage in cultural activities that are hosted on the stilt structure and occasionally on land during the dry season. Activities include festivals, ceremonies or rites of passages, rituals and chieftaincy practices. Other activities such as the traditional preservation of staple foods, cooking, dancing and other social meetings are all carried out there. There are also regular church services on Sundays. Christianity was introduced to the community many years after they settled, first by exposure to neighboring towns and the efforts of missionaries.</p>
<b>Religion</b>	<p>The community members of Nzulezo are customarily considered traditional believers. They remain to this doctrine because of their belief in the Snail god. However, due to the interest in other faith majority of the inhabitant of the community now identify themselves as Christians while a small number identify themselves as traditional religious believers.</p>
<b>Craft and food specialties</b>	<p>A sizable number of the community members make and sell canoe craft works. The craft activity was started during the early stages of tourist visits to Nzulezo by a schoolboy. His father capitalized on the opportunity and the potential in the craft business and took it up as a full-time job.</p>

	<p>This created several opportunities for other community members. Tourists who visit Nzulezo buy these carved canoes.</p> <p><i>Akyeke</i> is the local and favorite food of the Nzema's as well as the Nzulezo community. It is prepared from drained cassava and served with palm oil, grinded pepper and fish. Aside from <i>Akyeke</i>, members of Nzulezo community have also adopted other local foods from other Ghanaian ethnic groups. These include; <i>fufu</i>, <i>banku ampesi</i>, <i>kenkey</i>, <i>konkonte</i> and so on.</p>
<b>World Heritage status</b>	<p>During early 2000s, Nzulezo was nominated to the UNESCO World Heritage Tentative list, under the Cultural category. The village was designated and its name submitted by the Ghana Museum and Monument Board (GMMB) on 17 January 2000. The nomination was based on criteria (I); to represent a masterpiece of human creative genius. (III); to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared and (V); to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change. It was considered vital because it is one of the rare, ancient settlements on stilts left in the world. Nzulezo has since become an enormous tourist attraction. From 2004 to 2006, there was a total of 6,033 recorded visitors to the community. The location is famous</p>



	for its unique settlement over the water and its spectacular stilt structures, traditionally made from wood.
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Figure 3: Nzulezo with stilt buildings (Image by author from research field, July 2017).



Figure 4: Amanzule Lake (Image by author from field research, July 2017).



Figure 6: Structures connected to the Kpodaa (Image by author from research field, July 2017).

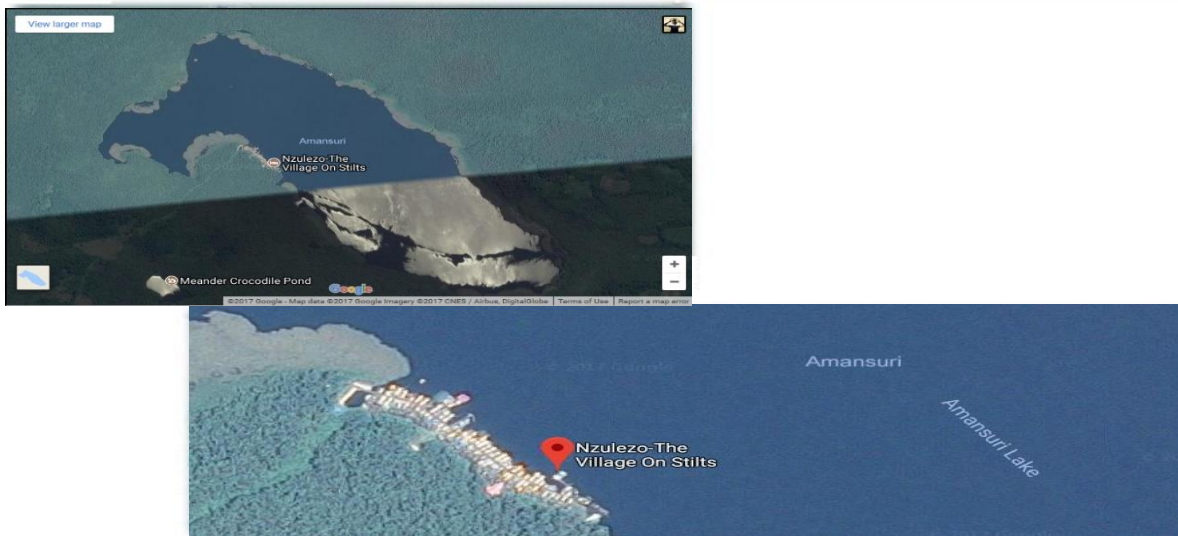


Figure 5: Google image of Nzulezo. <https://www.google.hu/maps/place/Nzulenzu>. Last accessed 12/2/2017

## 1.4 Stilt construction in Nzulezo

Based on the oral history of the community, Traces of the migratory settlement of the people could be connected to the ancient Mali Empires. By the year 1620, the Mali Empire had started collapsing therefore forcing its inhabitants to scatter along the River Niger and the River

Senegal. The migrating community were predominantly fishermen and farmers. From this perspective, claims of the origin of Nzulezo community in the ancient Mali Empire might have element of truth in it because many of its people migrated and settled in neighboring regions.

The collapse of the Mali Empire brought harsh treatments from its conquerors leading to many settlement and resettlement of villages and ethnic groups. Nzulezo perhaps might have been one of the closely related ethnic groups that eventually entered present-day Ghana.<sup>9</sup> The people of Nzulezo might have settled at the confluence of the Lake Bakanta close to the southwest coast of Ghana. They adapted to coastal life and built structures for themselves along the coast.

The slave trade in Axim, part of a trade route and center in the fifteenth century.<sup>10</sup> As a result of these slave trade route, many communities were displaced and forced to migrate along the stream from the coast through the confluence of the river and further inland towards their present location. This form of resettlement can be said to have occurred as a means of a defense strategy against slavers. Such approaches require, of course, adapting to the new environment by learning to build in a new architectures style. Migrating and relocating small villages in African as a defense mechanism has been practiced for centuries. For example, the people of Gwollu in Northern Ghana built a defense wall against the raids of slave traders. In Benin, most lacustrine villages on the edges of the lakes all represent defensive strategies to make their communities inaccessible by land.<sup>11</sup>

Building over the lake might not have belonged to the original cultural tradition of the Nzulezo community. The raised structures might also have been the result of changing weather and

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<sup>9</sup> Nobah Samuel, "Tourism and Development: A case study of the Cultural Landscape of Nzulezo" (Unpublished dissertation, University of Ghana, 2011), 55

<sup>10</sup> Aaron Kofi Badu Yankholmes, Oheneba Akwasi Akyeampong, and Laud Alfred Dei, "Residents' Perceptions of Transatlantic Slave Trade Attractions for Heritage Tourism in Danish-Osu, Ghana," *Journal of Heritage Tourism* 4, no. 4 (November 1, 2009): 315–29, <https://doi.org/10.1080/17438730903186441>.

<sup>11</sup> Louis P. Nelson, "Architectures of West African Enslavement," *Buildings & Landscapes: Journal of the Vernacular Architecture Forum* 21, no. 1 (2014): 88, <https://doi.org/10.5749/buildland.21.1.0088>.

seasonal conditions influencing water levels in the lake due to increased rainfall during raining seasons as mentioned earlier.

# Chapter 2 - Indigenous knowledge (IK)

## 2.1 Lake-dwelling communities

Lake-dwelling can simply be described as settlements extended right above the surface of water. Communities built on lakes or wet surface includes those on flood-prone areas, marshlands and swampy sites and are found today as well as prehistoric times.

Examples of floating communities can be found in Asia (Chong Kneas-Cambodia), European (Germany, France, Switzerland, Slovenia, Italy, etc.) and Africa (Makoko-Nigeria, Ganvie-Benin and Nzulezo-Ghana). Although all these communities constitute lake-dwelling settlements, they all had/have various reasons for opting to stay on water over land. Reasons communities settle on lakes may be for defense (protection, slave-raiding), as a source of livelihood (water, food and resources), for cultural reasons (belief system) or a combination of two or more of these factors.<sup>12</sup>

Interestingly, these communities are known to possess clear knowledge of their surroundings which has been used and passed down from generation to generation.<sup>13</sup> Also noteworthy among these communities is the diversity of their structures and its heritage values.

## 2.2 Definition

The term indigenous knowledge has been defined in many ways by different researchers in publications, articles and books. Michael Warren (1991), in a study on indigenous knowledge declared IK to be “the unique, traditional, local knowledge existing within and developed

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<sup>12</sup> Tijen Roshko, “The Floating Dwellings of Chong Kneas, Cambodia,” *Buildings & Landscapes: Journal of the Vernacular Architecture Forum* 18, no. 2 (2011): 43–59, <https://doi.org/10.1353/bdl.2011.0026>.

<sup>13</sup> Linda Poon, “The Beauty of Africa’s Traditional Architecture, In One Big Database,” CityLab, accessed May 6, 2018, <http://www.citylab.com/design/2015/08/the-beauty-of-african-vernacular-architecture-captured-in-one-big-database/400778/>.

around specific conditions of women and men indigenous to a geographic area”. According to UNESCO,<sup>14</sup> indigenous knowledge refers to the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. Scholars such as Sillitoe (2002), Semali and Kincheloe (1999), Agrawal (1998; 2002)<sup>15</sup> and practitioners in the World Bank, the United Nations; Society for research and initiatives for sustainability Technologies and Institutions, the World Intellectual Property Rights Organization and the World Health Organization use the term indigenous, traditional and local knowledge interchangeably. ‘Local’ and ‘traditional’ are also often used interchangeably with ‘indigenous’.

There is no generally accepted definition for IK. Interestingly, several terminologies refer to the same phenomena: indigenous technical knowledge, ecological knowledge, indigenous knowledge system, etc..<sup>16</sup> The rise of terminologies on knowledge is due to the conceptual perspective of the use of the word. Just as a term such as “set” can have different meanings depending on the context in which it is situated, in the same way, it is seemingly impossible to find a unified definition for the above terms. Words like local and traditional, however, can have social and political implications, making a standard definition of IK difficult.

The emphasis on knowledge in the study is on indigenous people. Therefore, I refer to the Nzulezo society as an indigenous community. The term ‘indigenous’ is selected over ‘local’ and ‘traditional’ to underline that, the knowledge system surrounding construction of stilt-structures is “unique particularly to the Nzulezo community”. Indigenous knowledge is known as the type of knowledge which develops over an extended period within the context of constant

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<sup>14</sup> “What Is Local and Indigenous Knowledge | United Nations Educational, Scientific and Cultural Organization,” accessed April 9, 2018, <http://www.unesco.org/new/en/natural-sciences/priority-areas/links/related-information/what-is-local-and-indigenous-knowledge/>.

<sup>15</sup> See also Dei, Hall, and Rosenberg (2000) for discussions in this area.

<sup>16</sup> See Fischer, 2004 pg. 8

and consistent interaction with one's immediate environment.<sup>17</sup> Chika Ezeanya in her study on *Innovation and Indigenous Knowledge in Africa*, remarks that communities with IK have strong roots which spring from long involvement with this form of knowledge that is specific only to the practitioners. She also notes that IK is any form of practice having an authentic expression or being an outcome of a people's history, evolution and experience.<sup>18</sup>

For the analysis as well as for cohesion and clarity of thought, I use the expression "indigenous ecological knowledge" to accentuate the link between indigenous knowledge and the surrounding environment, as well to stress its importance.

Berkes and Gadgil in (Berkes et al. 2008, 1993) defines IEK as

A cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.

This definition works as a useful definition since it acknowledges that knowledge develops and is recognized and used within the context of a specific society or within a defined space. Another essential characteristic of IK found in the literature is that it is cultural and has become the basis for local decision-making on how resources are used and for cultural survival.

McClure (1989, p. 1) defines Indigenous Knowledge System (IKS) as:

"... learned ways of knowing and looking at the world. [They] have evolved from years of experience and trial-and-error problem solving by groups of people working in their environments drawing upon resources they have at hand..."

McClure's definition includes the worldview of people which is the philosophical element of any knowledge system. However, this definition is static and does not cover innate creativity and, dynamic experimentation.

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<sup>17</sup> McKenzie B. and Morrisette V., "Social Work Practice with Canadians of Aboriginal Background: Guidelines for Respectful Social Work," 2003, 2 (1), 13–25.

<sup>18</sup> Chika Ezeanya, "Research, Innovation and Indigenous Knowledge in Africa: In Search of Nexus," n.d., 15.

Drawing on the growing literature in the field of knowledge, indigenous knowledge can be defined as the unique embodied knowledge rooted in the everyday life of a society resulting from constant interactions with their immediate environment. The construction knowledge of the Nzulezo community relates directly to the definition of Berkes and Gadgil as they are the only community in Ghana which possesses this kind of building technique and building style. Thus, this construction knowledge is developed and used only within the Nzulezo community. Although there are six other communities situated around Nzulezo, none of these other communities employs this architectural style of building. The building knowledge of the Nzulezo community is heavily influenced and tied to the lake-side environment they are situated.

## 2.3 Application

Since the scholarly recognition of indigenous knowledge, IK have been acknowledged to have a broader practical application in both personal and global development work. The following seven areas have been noted where IK have made practical contribution: environmental monitoring and assessment; environmental ethics; resource management; dealing with disasters and current crisis; development; conservation of protected areas; and biological information and ecological insight.<sup>19</sup> Indigenous people have put into practice the application of indigenous knowledge of the environment for many years in diverse ways which Western science has only discovered recently.<sup>20</sup> There are many cases in research connected to the application of IK and its effectiveness in solving agricultural and other economic problems.<sup>21</sup>

<sup>19</sup> Fikret Berkes, *Sacred Ecology*, 2. ed, Environment / Anthropology (New York: Routledge, 2008).

<sup>20</sup> Jonathan Clapperton, "Indigenous Ecological Knowledge and the Politics of Postcolonial Writing" (Rachel Carson Center for Environment and Society, Munich, Germany, November 2016), <https://doi.org/10.5282/rcc/7694>.

<sup>21</sup> Shonil A. Bhagwat et al., "Agroforestry: A Refuge for Tropical Biodiversity?" *Trends in Ecology & Evolution* 23, no. 5 (May 2008): 261–67, <https://doi.org/10.1016/j.tree.2008.01.005>.



A case study presented by Fikret Berkes (1993) in the article “*Traditional Ecological Knowledge; Concepts and Cases*” describes certain African indigenous knowledge using some examples.<sup>22</sup> The case studies shows varying degrees of traditional low-cost approaches to safeguarding and the sustainable use of IK in resource management. Examples include; the traditional use of the neem tree as a pest control against locust attacks and Barabaig sustainable pastoral management in Tanzania which produces high milk yields while stimulating the growth of the cattle herds. These examples show the active, intentional use of IK in support of everyday activities while at the same time, contributing to sustainable development.<sup>23</sup>

## 2.4 Conservation

Attempts to conserve IK in the way Western scientific knowledge currently have proven to be a great failure. Whereas Western scientific knowledge can easily be collected, documented and stored as a means of conservation, IK cannot be safeguarded using the same protocol. IK is dynamic, and natural and constantly transforming itself to adapt to new ecological circumstances. It cannot be isolated and documented in the same way as scientific knowledge.<sup>24</sup> Indigenous knowledge is naturally dispersed and local in character, it gains strength from being deeply enmeshed with individuals' lives so that, Western essentializing, disconnection from, documentation of and transference of such knowledge can be just as conflicting.<sup>25</sup> As suggested by Warrant *et al.* (1993), indigenous knowledge must be gathered and documented in a coherent and systematic fashion as it is essential for development. Through the process of documenting the knowledge, there is a better chance for its survival is given. However, the aim

<sup>22</sup> Fikret Berkes, *Traditional Ecological Knowledge: Concepts and Cases*, ed. Julian T. Inglis (Ottawa, Ont., Canada: International Program on Traditional Ecological Knowledge, 1993).

<sup>23</sup> Emmanuel Mavhura et al., “Indigenous Knowledge, Coping Strategies and Resilience to Floods in Muzarabani, Zimbabwe,” *International Journal of Disaster Risk Reduction* 5 (September 2013): 38–48, <https://doi.org/10.1016/j.ijdr.2013.07.001>.

<sup>24</sup> Arun Agrawal, “Indigenous and Scientific Knowledge: Some Critical Comments,” n.d., 28.

<sup>25</sup> *Ibid.*, 26.

of documenting knowledge is not connected to a particular moment in time but rather aims to preserve it for a longer period if possible.<sup>26</sup>

Nevertheless, methods by which some type of knowledge which concerns activities inseparable from the livelihood of individuals can be conserved need to be carefully considered, unlike Western<sup>27</sup> knowledge which is more of philosophical and abstract.<sup>28</sup> Also, it must be recognized that those who possess the knowledge have the right to decide how it should be conserved and by whom and how it should be used.<sup>29</sup>

Some theorists<sup>30</sup> suggest that, the best approach for conserving indigenous knowledge is *ex-situ*<sup>31</sup> conservation, i.e., isolation, documentation and storage in international and national archives. This strategy, although convenient and easy is still not appropriate.<sup>32</sup> It is not appropriate in the sense that, there is no distinction made between indigenous knowledge and scientific knowledge since *ex-situ* conservation best fits scientific knowledge. To essentialize, isolate, archive and transfer indigenous knowledge which is local and embedded in the people's lives is contradictory.<sup>33</sup> This misconception of *ex-situ* conservation of IK arises because most scholars write about indigenous knowledge by adopting the methods and instruments of Western science.<sup>34</sup>

Arun Agrawal (2014) suggests *in-situ*<sup>35</sup> preservation is preferable. He further explains that the process of such preservation rests on the holders of the knowledge although this will make it

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<sup>26</sup> Ibid., 30.

<sup>27</sup> See Agrawal 2014, for discussions on Western knowledge.

<sup>28</sup> Arun Agrawal, "Dismantling the Divide Between Indigenous and Scientific Knowledge," *Development and Change* 26, no. 3 (1995): 413–39.

<sup>29</sup> Agrawal, "Indigenous and Scientific Knowledge: Some Critical Comments."

<sup>30</sup> Brokensha *et al.* (1980); Ulluwishewa (1993); Warren (1989); Warren *et al.* (1993)

<sup>31</sup> Outside of site or away from natural location.

<sup>32</sup> Agrawal, "Indigenous and Scientific Knowledge: Some Critical Comments."

<sup>33</sup> Agrawal.

<sup>34</sup> S Rajan, S., Manikandan Sethuraman and D. Suresh Baburaj. "Plants from the Traditional Medical System of the Nilgiri Tribes." *Ancient science of life* (1997).

<sup>35</sup> To preserve on site, naturally.

less understood and accessible to outsiders who might wish to gain access to it for free dissemination.<sup>36</sup> However, for *in-situ* preservation to succeed, the local community needs to maintain control over the land and resources they rely on.

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<sup>36</sup> Agrawal, "Indigenous and Scientific Knowledge: Some Critical Comments."

## Chapter 3 – Methodology

The section presents information on various aspects of the research methods, research questions, objectives and, information on the sampled population. The chapter also covers the research design selected for the study and addresses some ethical consideration for the study. The chapter continues with the description of the procedures followed in carrying out the study along with the instruments used for collecting data.

This study is the first of its kind to be conducted on the intangible heritage of the Nzulezo community. Although a few research projects preceded this study, previous studies focused either on the tangible cultural heritage, that is, the stilt houses, potential developments through tourism<sup>37</sup> or challenges faced by tourism management.<sup>38</sup> I personally developed a keen interest due to the knowledge process, skill and technique involved in the heritage construction. However, since this building style is influenced by specific learned knowledge, I first had to understand the processes entailed in learning and acquiring the construction knowledge from more experienced builders. The research included investigating how the construction knowledge of the stilt houses began, how the knowledge has been acquired and finally the transmission process.

### 3.1 Research Design

I adapted an exploratory research design. Exploratory research helps researchers recognize boundaries in which the processes, difficulties, and conditions of interest are likely to exist. It acknowledges related, relevant aspects of the study which might also be found.

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<sup>37</sup> Samuel Nobah, “Tourism and Development: A Case Study of the Cultural Landscape of Nzulezo” (Master’s thesis, University of Ghana, 2011).

<sup>38</sup> Eric Boamah, “*Towards effective management and preservation of digital cultural heritage resources*”, (PhD. Dissertation, Victoria University of Wellington, April 2014).

A qualitative approach was used to obtain data through unstructured interviews and focused group discussions. Key informant interviews, in-depth interviews and participant observation were also employed.

## 3.2 Research questions

- How is construction knowledge of the stilt building learned? How is it transmitted?
- In recent times, how are building skills acquired and what are their future?
- How does the construction process inform indigenous knowledge?
- What is the relationship between tangible and intangible heritage in managing the houses?

## 3.3 Research objectives

### 3.3.1 General objective(s)

In this study I investigate indigenous ways of acquiring and transferring construction knowledge of stilt structures within the Nzulezo cultural community.

### 3.3.2 Specific objective(s)

- The goal of the research is to recognize and preserve the intangible construction knowledge possessed by the community.
- It aims to develop awareness among community members and other interested parties of the importance of this indigenous construction knowledge, how preserving may lead to safeguarding and ensuring the continuity of their traditional heritage and building style.

- To provide proper management of the tangible structures by recognizing the importance of the intangible (construction knowledge. i.e., process, skill and technique).

### 3.4 Sample selection

Purposeful sampling was used. According to this method, also known as selective sampling, it helps the researcher use their judgment when choosing members from a population to participate in a study.<sup>39</sup> It is considered one of the most cost-effective and time-effective sampling methods. The criteria I used in deciding who to be interviewed was based on those who were considered knowledgeable about construction in the community and who had experience in stilt-house construction. These criteria were necessary because construction knowledge is not controlled and owned by specific people. It spreads across all community members at different levels of application. The sampling of participants fell into three main categories: The elder community members (knowledgeable), the youth (with experience in building), and the stilt builders (experienced and expert builders). These categories were chosen to resolve the core questions of the research by focusing on these targeted groups of people within the community to attain result since the period for the study was limited. This sampling method also helps focus attention on salient areas in which to pursue answers to the research questions.

#### 3.4.1 The Elder in the community

This group was chosen for two reasons: First, to acquire accurate details concerning the common historical narrative connected to the ancestral Nzulezo journey and how the community members came to settle on the lake. These histories contain information concerning

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<sup>39</sup> “Purposeful Sampling,” *Research Methodology* (blog), accessed March 1, 2018, <https://research-methodology.net/sampling-in-primary-data-collection/purposeful-sampling/>.

the community which only this target group can give valuable details on; Secondly, aside from the historical perspective, these older adults possess a vast amount of knowledge and information relevant to the study. They serve as a fertile source for obtaining multiple and unrevealed events surrounding construction knowledge, techniques, and processes by which these skills are transferred. This group provides information on whether it is viable to establish a kind of knowledge pattern among the elders (both men and women) in connection to the stilt construction. Speaking to this group aids in identifying legitimate grounds to investigate how the skills and techniques are acquired and passed on. Furthermore, the medium which makes all this information acquisition possible will continue to be accessible since the elderly can be recognized as the primary agents who pass on this knowledge.

### 3.4.2 Builders

Members of this group are living practitioners of construction knowledge. They make the study feasible to research because there are people who still engage in construction. If the elders secure continuity of the building style, interviewing this group develops the possibility to inquire about building knowledge which is the heart of the study. If there is such knowledge, this group will give the best required responses to substantiate the claim of acquired knowledge. They also serve as a vital group for understanding knowledge transfer systems, mechanisms, and processes. In acquiring the information needed from this sample group, four well-known builders in the community were interviewed. These four builders (Daniel Akpor, Philip Arthur, Erzoah Aka and Alex Ninge) were selected based on their experiences and the high demand for their skills by other builders within the community.

### 3.4.3 Youth

Youth were also interviewed to acquire specific information about their history; that is, stories or narration they might have heard from their grandparents/parents who might not be part of

the already interviewed older adults. As the youth provides a hand during construction, it was useful to have them respond to few questions on the construction knowledge they observe along with their involvement in the construction process as well. Their response to both history and the construction knowledge are valuable within the study to compare and relate the responses of the youth to other answers. Another important question raised here was the feelings or importance of the heritage to the youth.

Since not all youth provide a helping hand during construction and it would not have been easy for me to find out who they were, I asked the experienced builders to name some of the youth who were frequently involved in construction activities.

### 3.5 Community entry

A meeting was first arranged with the chief and the elders of Nzulezo. The purpose was to obtain their permission to conduct the fieldwork as well to gain the community's agreement in research participation. More specifically, I got in touch with the community leaders to explain the nature and scope of the study. The explanations were also crucial since the quality of the work involved ethnographic study of the daily activities of the community.

As customs demands in the traditional Ghanaian setting, a bottle of alcoholic drink (schnapps) was presented as a token of respect to the council of elders. Presenting the drink is traditionally a sign of respect when meeting community heads. It also serves as a conduit to establish good working relationships with community structural heads. The elders, on the other hand, pre-informed the members of the community of my stay and urged the community to assist me by giving information relevant to the research. Respondents were willing to participate in the study and the interviews were conducted in July 2017.



### 3.6 Ethical Consideration

The current study was subject to specific ethical issues. All participants indicated their acceptance of their participation in the research through oral consent. Although participants gave general approvals, I also informed participants personally during each session on the purpose of the study. Privacy and anonymity were assured. Participants were told that they were not obliged to participate and that they could withdraw from the process at any time without any negative consequences. No consent forms were signed. Consent forms were not provided because of how participants might have felt about the whole process. However, consent was obtained verbally from participants and the elders of Nzulezo. Additionally, permission to collect pictures, audio, and video recording were also obtained from participants although a fee was paid for using a video and still camera. It was explained to participants that the purpose of the audio was to aid in transcribing each session. Permission was given for the video recording to be used for a short documentary which might be put on the internet. Participants were reassured their answers were treated as confidential and used only for the academic purposes of the research. It was also made known that the findings would be in the form of a thesis which could be shared among interested institutions with Nzulezo even owning a copy themselves.

### 3.7 Data collection methods and tools

A pilot interview was first conducted to gather the requisite information to plan for the field research work. During this period, contact was made with a community member (Emmanuel Kulu) through social media to gather necessary for further field work information and to constitute a direct contact with someone from the research location.

After necessary information about the community and the study area had been gathered, a contact in the field was then established. I utilized the following methods, in-depth interviews, and participant observation to investigate the mode of knowledge acquisition and transfer.

### 3.7.1 In-depth interview

In-depth interviews are unstructured interviews aimed at confirming opinions, feelings, emotions regarding a subject. In-depth interviews are used to get detailed information about a person's thoughts and behavior and explore new issues in depth.<sup>40</sup> An advantage of this kind of conversation is that it provides much more detailed information than what was currently available. Such interviews involved personal and direct contact between the respondents and myself while minimizing the non-response rate. However, to efficiently yield valid results from this method, interviewers are required to expand the skills needed to communicate in an interview.<sup>41</sup> In-depth interviews demonstrate flexibility in the flow of the interview process. Another goal of the conversation is to explore the respondent's point of view, feelings, and perspectives deeply. It also involves probing for more profound meaning and understanding of the responses.

One-on-one interviews were also used to develop a detailed narrative (what part of history is documented and which part oral tradition) information on the history of the community which helps provide insight into when and how the community began settling on the lake. The interviews also helped me to recognize former learning patterns connected to the construction of the stilt houses and how the knowledge has been practiced to date. Getting responses from the elderly community members was highly crucial to the success of this study. Therefore,

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<sup>40</sup> Carolyn Boyce and Palena Neale, "Conducting In-Depth Interviews: A Guide for Designing and Conducting in-Depth Interviews for Evaluation Input," 2006.

<sup>41</sup> Fisher Kenn, "Research into Identifying Effective Learning Environments," Evaluating Quality in Educational Facilities, 2005.

engaging a participant in an informal one-on-one conversation allowed me to come to a tentative hypothesis concerning the motivations underlying their attitudes and behaviors. This process helped identify individual connections to construction knowledge. A list of questions was prepared and used during all interviews (see appendix).

### 3.7.2 Participant observation

The nature of the field work required understanding lifestyle patterns among Nzulezo community members. Besides community activities, I observed targeted participants who were vital for attaining accurate information. This kind of observation required participating in the daily lives of the community to appreciate better their way of living and activities which leads to the acquisition and application of construction knowledge. Participatory observation was employed for this reason. Participant observation encompassed a broader aspect by involving me in the lives of the community to understand how the construction knowledge is acquired, learned and transmitted.

In the field of construction knowledge management, the relationship and co-dependency between the holders of the knowledge; i.e., the individual or community, is coterminous with the knowledge these people embody. Thus, it is noteworthy to consider the social life of individuals as well as the Nzulezo community. It helps in understanding the interplay of the embodied knowledge with their everyday life of individuals.

## 3.8 Data analysis

Content analysis was used to examine the data collected from interviews. In qualitative research, data is analyzed through reading and re-reading of data notes to reflect on what is

read to organize them into similar themes and patterns.<sup>42</sup> In this study, the interviews were transcribed from the audio recording in the Nzema dialect into English. Various themes emerged after the transcripts had been read several times. I also referred to the audio recordings when necessary while reading the transcript to verify specific responses. It demonstrates the ability of a researcher to structure collected data to attain the research objective.<sup>43</sup>

### 3.9 Research limitation

The following include some of the limitations of the study:

- The period of research was not long enough to see the complete construction process from beginning to end. I only witnessed the construction of the upper structure being put up. The research period also fell during the raining season when water level were high, making building impossible.
- The elderly and more well-informed community members were only available in the evenings after they had returned from the farm.
- The older adults in the community were reluctant to talk about their version of the history of the community. They always referred to another person who had been appointed by the community leaders solely for transmitting this information.

### 3.10 Positive research impact

My research can open new scope of thought regarding intangible heritage and ecological management. This research will shed more light on the need for Ghanaians to safeguard their tangible and intangible cultural heritage as most tangible heritages in Ghana have deteriorated

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<sup>42</sup> William Lawrence Neuman, *Social Research Methods: Qualitative and Quantitative Approaches*, 7. ed., Pearson new internat. ed, Pearson Custom Library (Harlow: Pearson, 2014).

<sup>43</sup> Kimberly A. Neuendorf, *The Content Analysis Guidebook*, 9. [print.] (Thousand Oaks: Sage Publ, 2010).

due to lack of attention connected to intangibleness. I also admit my research might add to the continuing commodification of cultural heritage through tourism where it will be unduly exposed, allowing people to objectify it or use the cultural knowledge without proper referencing or proper acknowledgment. Despite its negative impact, my research can nevertheless create awareness for this settlement through my findings and help in the development of ideas or ways to engage this material academically, socially and politically foster intangible heritages continuity in Ghana.

## Chapter 4 - Knowledge embodiment and transmission

Means by which skills and techniques are passed on to the available learning generation is often achieved through the social structure of a community. The transmission process and acquisition of knowledge might not necessarily conform to formal educational norms but what is most important is that the entire process must integrate holistically with the values of the society. The method of knowledge transmission is part of this cultural process as well and is by no means haphazard or unstructured.<sup>44</sup> Irrespective of how the construction knowledge of the Nzulezo community is passed on and learned by the youth, whether, by teaching-learning, silent observation or observation by imitation, the transmitted and acquired knowledge needs to reflect the cultural norms of the society or community. Unlike scientific knowledge which is generalized and based on a broad worldview, IK connects with particular groups of people. The way indigenous knowledge differs from scientific knowledge can be summed up as follows (Adapted from the work of Einar Eythorsso in “*Sami Fjord Fishermen and the State*”);

- a) Indigenous knowledge regularly encompasses a reference to time and space but as points of reference that are diverse from scientific knowledge. Time may be referred to as construction seasons or diverse stages of the season. Space can be made up of different building spots, or a "mental map" covering the topography of land and sea-bottom.
- b) Indigenous knowledge is holistic because it is not split into diverse disciplines. It regularly incorporates multi-species environmental models, clarifying causal relations between events in the environment.

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<sup>44</sup> Berkes, *Traditional Ecological Knowledge*.

- c) Additionally, indigenous knowledge is social knowledge. The ecological models include social and cultural components such as the social consequences of diverse ways of maintaining or managing common property resources.

This section will discuss the construction process of the stilt structures as well as the way knowledge acquisition and transmission takes place within the Nzulezo cultural space. Discussions in this chapter derive from the response and personal observations drawn from my fieldwork. The objective of this chapter is also to answer the following research questions; (a) how is construction knowledge of the stilt building learned? and transmitted, (b) in recent times, how is the skill acquired and what is its future? (c) how does the construction process inform knowledge? and (d) what is the relationship between tangible and intangible in managing the houses?

## 4.1 Conditions vital for knowledge transfer

Although there is almost general agreement about the value of knowledge, transferring knowledge has proven to be a consistent challenge for organizations. I adopted William Seidman and Michael McCauley's chart<sup>45</sup> to support the below conditions and to serve as an illustration. To successfully improve performance by transferring useful and important knowledge the following conditions must exist:

1. There must be knowledge available to transfer that is significantly better than the user's existing knowledge.
2. There should be a means of transmitting it from the holder, or 'source,' to not just one, but many recipients.

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<sup>45</sup> William Seidman and Michael McCauley, "Optimizing Knowledge Transfer, Pdf" (Cerebyte, Inc., 2005).

3. The learner must be both willing and able to use this better knowledge, both immediately and over the long-term.

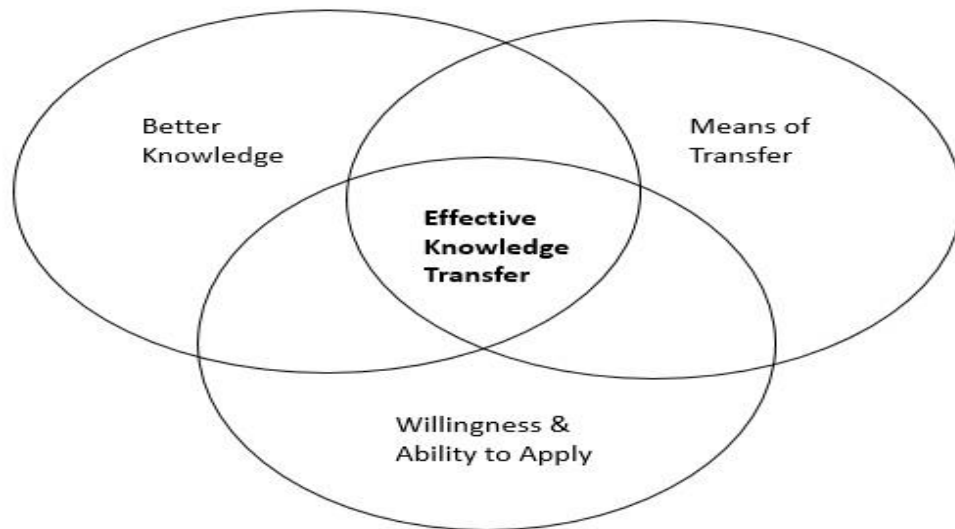


Figure 7: Necessary conditions for transfer knowledge. Adapted from William Seidman and Michael McCauley, "Optimizing Knowledge Transfer".

The architectural knowledge needed for constructing the stilt wooden structures belongs to the Nzulezo community. The process, skill and techniques of construction, is embedded in the tangible building structures. Therefore, the social aspect and value of the built structures cannot be ignored. Although the focus of this study investigates the intangible aspect of Nzulezo building knowledge, the interplay of the tangible with the intangible help in the understanding of the embodied construction knowledge. Importantly, ways by which the techniques, skills and the process of construction is accepted and shared requires involvement and participation by the learner to acquire the necessary knowledge. Before this can happen, there are basic pre-requisite qualities every member of the community must possess to engage and ensure survival of construction knowledge.



### 4.1.1 Language

It is estimated that at least every two weeks, somewhere in the World, a tribal elder dies. They take with them the last remaining knowledge of his/her language, along with the wisdom, skills, other insights and craft knowledge acquired through the years of experience.<sup>46</sup> The above statement is like the old African proverb which says, “*a whole library disappears when a knowledgeable old person dies*”. When a community loses its native language, it is sure to lose essential traditions. This is because much of African indigenous knowledge often exists in oral form which is passed on from a knowledgeable person through shared practices.

The traditional means of teaching at Nzulezo begins with the grandparent and parent teaching the young ones. This has ensured that the younger generation learned and revitalized their traditions through their native tongue.

### 4.1.2 Land

The territorial interest of any community is to occupy a land for the long-term. The occupied land and resources supports and connects to the culture of the community while ensuring survival of the people. From the standpoint of a community, the territory it occupies is generally understood to be their own.<sup>47</sup> The land considered integral to Nzulezo community comprises the farmed land, forest and marsh lands in the surroundings of the village, the liminal area between the shore and the water and the lake itself as a transport route, place for play and was as well as a source of fish.

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<sup>46</sup> “Languages Are Going Extinct Even Faster Than Species Are | Living Tongues,” accessed April 30, 2018, <https://livingtongues.wordpress.com/2014/09/13/languages-are-going-extinct-even-faster-than-species-are/>.

<sup>47</sup> Berkes, *Traditional Ecological Knowledge*.

### 4.1.3 Knowledge of the environment

This knowledge is crucial for individual survival and for managing resources. In the case of the Nzulezo, knowledge of the environment includes knowing routes to follow when riding a canoe. Although there are no restrictions on places not to ride, using certain routes which are known by the community members saves time and requires less efforts in paddling. Also, identifying the right location to build certain structures such as *Agyade* (kitchen) prevents fire outbreaks. To prevent fires, all construction of the *Agyade* (kitchen) are situated on the east side towards the bushy area of the main community in the direction of the wind (See Figure 9).

## 4.2 Transmission and acquisition of knowledge

It is observed in Nzulezo that, knowledge i.e., the skills and techniques of construction is transmitted in the context of an activity which is situationally relevant to performing daily tasks. For example, knowing how to paddle a canoe is one of the prerequisites of life for everyone from



Figure 7: A child having his swimming lesson. (Photograph by author. July 2017)

the community. For that reason, children are taken at a young age into the lake to swim with family members. Also, from age 3, they start their paddling lessons and are given their own canoe between the ages of 4-6 depending on how fast they learn. The learning process first begins by observation followed by imitation by both children and adults.



Figure 8: Children practicing how to paddle a canoe in turn. (Photograph by author. July 2017)

## 4.2.1 Observation

Another means of acquiring construction knowledge is through observation. Knowledge is known to be grasped visually as well.<sup>48</sup> Observation is important and useful for children who take part in aspects of the construction process where they can be of real help. For example, beginning the initial construction demands strength as well as standing in the water at least as deep as three feet. Since children cannot be productive in this part of the work due to their size,

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<sup>48</sup> Roland G. Tharp, "Making History: Pukapukan and Anthropological Constructions of Knowledge Robert Borofsky," *Anthropology & Education Quarterly* 21, no. 1 (March 1990): 93–95, <https://doi.org/10.1525/aeq.1990.21.1.05x1167w>.

they can learn by observing what the adults do. Although not paramount, repetitive observation helps to set the basis for acquiring useful skills. Also, some acquisition of knowledge comes from listening to instructions when active work is ongoing.

### 4.2.2 Community participation

Involvement in the work when construction is in progress is critical for the transmission and acquisition process. This period is the most important and crucial aspect for both holders of the construction skills and technique and those who the knowledge will be passed on to. The main channel for transferring the embodied knowledge, skills and techniques on how to build the stilt houses is through community participation. This is the time when less knowledgeable members of the community work with the knowledgeable and more experienced community members. During this period, the knowledge is put into action and can be seen. From personal interactions with the four experienced builders and those who likewise know how to build it was clear that both groups were always active whenever there was construction going on. It did not matter if the construction is for housing, used as an “*agrayi*” (bathhouse), an “*agyade*” (kitchen) or a storage facility for storing their harvested food crops, both experienced and inexperienced community members were always involved. It is after this stage that imitation becomes important.

## 4.3 Description of the construction process

The building structures is connected at each side in the community to the “Kpodaa” (the main walkway) which serves as the main street for the community. Structures at the east wing are deliberately position there because that area is less exposed to flooding and has shallow water level. All the “*Agyadi*” (Kitchen) are constructed at the east wing close to the bush to prevent fire outbreak. The primary school and church are also in that location. Structures at the west wing of the community are more into the lake. That area is about three to nine feet deep

depending on the season and water level. It is only the shrine of the deity which is further west in the lake.

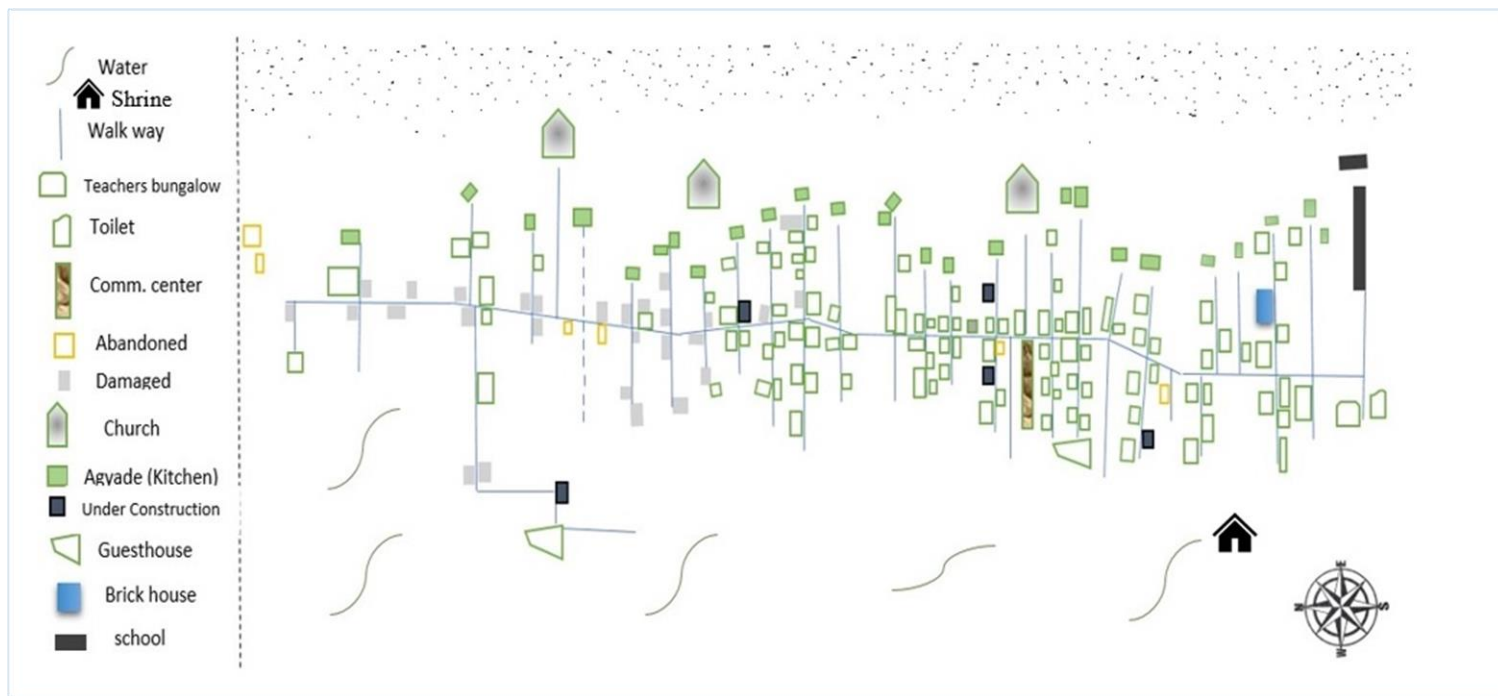


Figure 9: A sketch of how the structures are distributed (Drawn by author during field research, July 2017)

Knowledge without application is futile. Regardless of how experienced or knowledgeable an individual is if there is no construction to apply his expertise to, his skills will be of no use. Likewise, construction knowledge becomes active when there arises a need to build a structure. Construction knowledge cannot be applied when there is no construction and when there is no construction, learning, sharing and transferring knowledge cannot take place. One can say that the process of construction supports application and sharing of knowledge.

before construction, one must have an area to build on. Generally, it is not difficult to obtain a space to build a structure. Space can be allocated either by family affiliation, i.e., a father can offer part of the allocated family space, or a request can be made to “Nana Takrika” (the Chief) if an individual wants to build outside the allocated family space.

It is also essential for the person who wants to build to have all the necessary building materials available, especially the wood for the foundation. The next important steps are to fix a day when construction will take place. This step is vital to inform the entire community about the upcoming construction work so that people will be aware and plan for it. Otherwise, construction might have to be postponed due to the unavailability of helpers. Informing the community of the construction day marks the final preliminary steps of the construction after which construction can begin when everything is put in place. (See appendix for a detailed description of the construction process).

## Chapter 5 – Identified problems and suggestions in managing heritage

*‘How can you protect my heritage without involving me?’*

*---Bruku*

Despite the efforts implemented by UNESCO to safeguard and preserve ‘tangible heritage values’ such as monuments, ruins, buildings and artefacts, more work needs to be done. This work must include the preservation and management of ‘intangible heritage values’ (e.g. knowledge system(s) and living heritage), integrating them into all cultural heritage management. The tangible and intangible heritage spheres are entangled in complex ways with each other. Neglect of one area may lead to failure to implement heritage schemes for the other. It is for this reason that it is especially vital to sustaining collaboration between local populations and the cultural heritage at both social and resource management levels.<sup>49</sup>

Cultural Heritage Management is “*the systematic care taken to maintain the cultural values of cultural heritage assets for the enjoyment of present and future generation(s)*”.<sup>50</sup> For the management to be successful in practice, the local community should be engaged.<sup>51</sup> Often, heritage sites are located where a group of people are living. This location then becomes a ‘living heritage’. The concept of ‘living heritage’ emphasizes links between a community situated within the confines of a heritage place, a place where people participate daily cultural activities such as language, festivals, crafts and performing arts etc., within the social

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<sup>49</sup> “Convention for the Safeguarding of the Intangible Cultural Heritage 2003,” *International Journal of Cultural Property* 12, no. 04 (November 2005), <https://doi.org/10.1017/S0940739105050277>.

<sup>50</sup> Bob McKercher and Hilary Du Cros, *Cultural Tourism: The Partnership between Tourism and Cultural Heritage Management*, Reprinted (New York, NY: Routledge, 2009).

<sup>51</sup> S. O. Keitumetse, “The Eco-tourism of Cultural Heritage Management (ECT-CHM): Linking Heritage and ‘Environment’ in the Okavango Delta Regions of Botswana,” *International Journal of Heritage Studies* 15, no. 2–3 (March 2009): 223–44, <https://doi.org/10.1080/13527250902890811>.

landscape.<sup>52</sup> These daily activities are experienced and practiced through community events and direct engagement with visitors.<sup>53</sup>

Excluding the local community's participation in heritage management in most cases is connected to the top-down administration of local governments in developing countries.<sup>54</sup> This form of isolation in decision-making creates tension between local communities and the government bodies responsible for managing the community. In contrast, if the community is engaged in the heritage planning process, the result will be more associated with the values traditionally embraced by the community.

In this chapter I will propose some suggestions to be used in ensuring an all-inclusive strategy geared towards safeguarding heritage in the stilt-village of Nzulezo while ensuring proper management of the community.

## 5.1 Objective

The objective of the proposed suggestions is aimed at safeguarding and preserving the cultural heritage of the people of Nzulezo. This will be achieved by highlighting the importance of integrating the Nzulezo community as co-managers. Additionally, I will suggest how the new guidance can build traditional ways of learning to create longer and broader sustainable applications in the future. The goal is to suggest and develop strategies based on the local Ghanaian management system rather than strategies based exclusively on western discourse on best practices.

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<sup>52</sup> "Safeguarding Communities' Living Heritage | United Nations Educational, Scientific and Cultural Organization," accessed May 16, 2018, <http://www.unesco.org/new/en/culture/resources/in-focus-articles/safeguarding-communities-living-heritage/>.

<sup>53</sup> Keitumetse, "The Eco-tourism of Cultural Heritage Management (ECT-CHM)."

<sup>54</sup> Frank L. K. Ohemeng and Joseph R. A. Ayee, "The 'New Approach' to Public Sector Reforms in Ghana: A Case of Politics as Usual or a Genuine Attempt at Reform?" *Development Policy Review* 34, no. 2 (March 2016): 277–300, <https://doi.org/10.1111/dpr.12150>.



## 5.2 Proposed Suggestions

Article 39.4 of the 1992 Constitution of the Republic of Ghana states, ‘the State shall endeavor to preserve and protect places of historical interest and artifacts’. Also, the 2004 Cultural Policy further asserts, ‘through State and private initiative, Ghana shall develop its heritage and cultural assets and promote their use and appreciation’. It can thus be said that there exists an established framework for safeguarding and promotion of heritage in Ghana. However, there are established institutions for the management of cultural heritage in Ghana. They include (i) The National Commission on Culture (NCC), an institutional body responsible for the safeguarding of intangible heritage and cultural life. (ii) the Ghana Museum and Monument Board (GMMB) which serves as the legal custodian of cultural heritage, with monument and site division responsible for protecting, conserving and managing all listed national monuments and World Heritage sites and properties. (iii) The Environmental Protection Agency (EPA) that complement the GMMB by commissioning environmental impact assessments (EIA) affecting cultural heritage sites and the environment at large.

### 5.2.1 Stakeholders

These are the group of individuals or institution(s) mandated with rights and the capacity to participate in planning and decision-making process. The tendency to permit unbalanced or unequal say between government officials and local populations in the management process is evident. Furthermore, there is even a stronger tendency for one of the stakeholders to become inactive or not active at all. To combat this, I propose that each stakeholder should be held accountable for their clearly defined roles.

Although The NCC, GMMB and EPA are the main bodies responsible for managing heritage sites, in the case of Nzulezo, the entire management has been left to the Ghana Wildlife Society. Due to inertia on the part of the mother institutions, decisions concerning managing Nzulezo

have for many years been the sole responsibility of a Non-Governmental Organization (NGO). From my observations in the field, it is notable that the focus of their management is tourism-driven, with less regard for the community members. Proper, active support from the mother heritage institution (GMMB) will help teach the Ghana Wildlife Society about the heritage value of the ‘living community member’ in heritage preservation.

## 5.2.2 Community participation

As an effective means of managing cultural heritage communities/sites, the involvement of local communities is recommended.<sup>55</sup> Community participation serves as a way of empowering the community while generating through local sources, their indigenous ways of managing their heritage.

Since the Nzulezo community is the ‘knowledge bank’<sup>56</sup> of this heritage community, authorities need to make good use of local know-how to develop and manage tourism. They must not be exploited and left out of the decision-making and management process. The community needs to have a substantial say which must be honestly considered by other stakeholders.

It is important to involve the community in better managing their heritage in order to incorporate in that management their traditional ways of learning and knowing about the world. Traditionally, imposing sanctions, norms and taboos serve as important social tools for managing heritage assets. This method is mostly adhered to since it is linked to a belief system. With a community such as Nzulezo, who strongly believes in tradition, incorporating and

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55 “Safeguarding Communities’ Living Heritage | United Nations Educational, Scientific and Cultural Organization.”

56 To possess vast amount of information and insight of the heritage.

implementing these knowledge systems as part of managing the community will yield better results compared to the current situation.

### 5.2.3 Tourism

The link between intangible heritage management and tourism is more complex than with tangible heritage and tourism.<sup>57</sup> The impact of tourism on skills, techniques and processes of creating and repairing stilt houses is more disruptive than the impact of tourism on the wear and tear on the physical structures. The concept of tourism at Nzulezo has been the center of many misunderstandings which led to disputes between the community, the surrounding communities and especially the managers. Commodifying the ‘living heritage’ of the community for tourism makes them uncomfortable. Visitors invade the private space of the community to add to their touristic adventure. This tension has already led to a pilot demonstration by community members on 28<sup>th</sup> December 2014.<sup>58</sup> Nzulezo should not be a destination like the Eiffel Tower or Victoria Falls which does not constitute a living heritage. There have also been cases when community members threw visitors’ cameras into the water for taking photos of people without permission.<sup>59</sup>

In other words, to preserve the heritage and the dignity of the Nzulezo people, visiting days and number of visitors need to be controlled and reduced. Also, there should be an exclusive zone for the local population to prevent tourist encroachment in private parts of the village. For instance, the visitors’ movements can be restricted by not allowing them to leave the main walkway which connects the private houses (See Figure 5).

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57 McKercher and Du Cros, *Cultural Tourism*.

58 Ninge Alex, Interview by author, August 10, 2017.

59 Arthur Philip, Interview by author, August 9, 2017.

## 5.2.4 Risk management

As part of managing the community, a careful examination of potentially harmful occurrences and tourist-local interactions, which can affect both heritage (tangible and intangible) and the community, needs to be identified. Anything which exposes the community and heritage to threat must be assessed through the values of the community's cultural belief system, that is, judged by local authorities.

For these suggestions to take effect, official government authorities mandated to oversee issues of heritage, must have a meeting with other stakeholders. The purpose of the meeting is for the NCC, GMMB, EPA and the GWS to agree on the terms of the Managing the heritage. Also, these authorities jointly need to agree on what needs to be implemented. As suggested above, the authorities will first have to be committed to this course by being active in their assigned roles. It should be ensured that there are no overlapping duties in their operations. Also, the previous dispute between the Nzulezo community and the GWS needs to be solved in the presence of the community members or with community leaders. It will imply letting the people of Nzulezo co-manage the community with GWS while NCC, GMMB and EPA closely supervise them. Since NCC GMMB are experts in the field of heritage, an educational training program should be held to teach and train both the local community and GWS on cultural heritage management. It will help them better identify strategies in combating any form of future risk while improving living conditions and the management of both tangible and intangible heritage.

The following are a list of threats identified during field research. This is not a complete list of likely risks, but measures should be taken to prevent the following problems:

- Dumping rubbish into the river.
- Using nontraditional material for construction (such as roofing sheets).
- Large-scale tourist visits.
- Constructing brick house(s) (which distort the authenticity of the heritage community and creates a gap in the indigenous construction knowledge).

If the above proposed suggestions can be implemented, I believe heritage conservation, preservation, and managing Nzulezo will be harmonized with each other. A more integrated and socially mindful approach will also enable the local population to better interpret heritage tourism and one that suits the living heritage of the community.

## 5.3 Impact of tourism and local management

### 5.3.1 Tourism

The rise of tourism has seen millions of people traveling over the world to view historic sites of international renown. International sites such as the Egyptian pyramids, the Statue of Liberty, the Eiffel Tower, and countless of other famous sites around the world records large numbers of visitors. Amidst the personal and economic benefits of tourism, such large-scale tourism also to a large extent contributes to the gradual degradation of cultural heritage sites worldwide. Likewise, improper or inattentive management of heritage sites also has negative physical and social impacts. Most of these problems are connected to inadequate monitoring, inexperience in managing cultural spots and especially conflicts between managing institutions and the host community.

Indigenous communities represent culturally distinct groups whose language traditions and social institutions help them withstand and integrate incoming impacts from other cultures into their region.<sup>60</sup> However, indigenous people in many countries are politically, socially and economically disregarded by government administrations. This communication gap is evident when mostly their opinions about tourism development of their heritage are not sought.<sup>61</sup>

Nzulezo, like any other heritage site, has seen a fair share of issues arising from tourism visits. Since the community gained international recognition in 2000, there has been a massive influx of both national and international tourists. It has impacted most aspects of community life including:



Figure 10: Damaged connecting bridge caused by large numbers of tourist visits. (Photo by author. July 2017)

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60 Tourism Concern, “Indigenous People and Tourism -,” September 14, 2014, <https://www.tourismconcern.org.uk/indigenous-people-and-tourism/>.

61 “Indigenous People and Tourism -.”

### 5.3.2 Economic impact

In Ghana, tourism is the third foreign exchange earner for the national economy. The revenue from tourism is gained through licensing fees from tourist enterprises, tax from businesses and individuals working within the sector.

Direct benefits to the Nzulezo community come in the form of donations offered by tourists (both local and international), fees charged during history tours conducted by the public relations officer who represents the Nzulezo community and the youth who serve as tour guides for visitors.

### 5.3.3 Socio-Cultural impacts

Exposure to other cultures within the Nzulezo cultural space has meant that young people sometimes pick up rude and culturally unacceptable behaviors such as resistance to authority and disrespecting parents and the elderly. These behaviors are connected to the income they can earn which makes them independent and arrogant since they earn more than their parents. Habitual drinking and at times smoking has also been observed among some of the youth. Additionally, begging tourists for money is also practiced now in the community.

Contact with the diverse visitors and their different way of dressing influences the community. Traditional and locally dress can hardly be seen now. Men who used to put on traditional clothes during special festivals now prefer T-shirts and shorts. Likewise, women who used to wear long skirts prefer jeans instead. Formerly, such styles of dress were not encouraged due to the body parts which are exposed, especially in the case of women. I acknowledge that modern clothing style is cheaper, easier to maintain and comfortable. Such clothing helps young people feel connected to the youth culture in urban areas. But this feeling of wanting to associate with that growing culture is fast erasing the importance of their traditional way of

CEU eTD Collection

dressings. The question is how to find a good balance with protecting traditions and the cultural change that is natural in any living community exposed to outside cultural influence.

### 5.3.4 Environmental impacts

The Nzulezo cultural space has been interfered with by some people from outside their community who have put up structures of their own. Amazingly, these foreigners have isolated their structures about 600 meters from the main village. This attitude gradually erodes the value of the Nzulezo cultural space and community life.

Many visitors arriving on the weekends and holidays puts pressure on the community and its immediate environment. Tourist numbers can reach as high as about 1000 visitors a day during some holidays, meanwhile; the total population of the local inhabitants is a little over 400 individuals. The community already faces issues of waste sanitation as rubbish and sewage are dumped directly into the water in the hope it will just float away.

### 5.3.5 Impact on the construction and structures

Modernization, tourism and globalization have exposed and influenced the construction of vernacular structures by incorporating new trends in building materials and style. Most people who own structures prefer to use nails, roofing sheets, paints, and dressed woods among other materials to ensure the structure will be firm and steady (Interview with Mr Akpor). This change in building materials is directly connected to increasing number of visitors who weakens the structures through over use. An anonymous experienced builder revealed that the use of this material shortly began after Nzulezo was inscribed into the tentative list of the World Heritage List of UNESCO. Surprisingly, investigation during my fieldwork reveals that



provision for tourism was made some years before Nzulezo was inscribed on the World Heritage Tentative list.<sup>62</sup> It means that tourism boomed after it gained World recognition.



Figure 11: Nzulezo during the early 1990's. This image shows the traditional way of roofing their structure be Nzulezo achieved international recognition (Source: Flickr)

## 5.4 Local management

As stated earlier, years of the Ghana Wildlife Society (GWS) managing the community have only resulted in a constant misunderstanding between the managers and the Nzulezo community. This misunderstanding extends to the neighboring villages as well.

It was agreed between the GWS and the Nzulezo community that, since opening the community for tourism is the initiative of GWS, they will take charge of managing the community for five (5) years after which it will be handed over to the local community to manage their heritage. Although the agreed years have elapsed, the community is still being managed by the GWS. It makes the local community feel lied to and cheated out of a source of income.

It must be acknowledged that the Amanzuri Conservation and Integrated Project initiated by GWS generates almost all its funds from the income from tourism. The project aims to create

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<sup>62</sup> Emuah Emmanuel, Field interview, Tape recording, July 2017.

tourist attractions among six (6) communities in the other area but Nzulezo remains the main of tourist attraction. The income is shared among the six (6) communities in the following proportion: Nzulezo – 12%, Beyin – 10%, Ekebaku – 8%, Ebonloa – 8%, Miengyinla – 8% and Ngelekazo – 8%.<sup>63</sup> Other money is also portioned out to the District Assembly – 5%, West Nzema Traditional Council – 10%, Stool lands – 11%, and the remaining 20% is saved as seed capital.<sup>64</sup>

## 5.5 Summary

This chapter as a form of recommendation outlines the value of heritage management in contributing to heritage preservation. For this reason, a suggestions are proposed to help tackle issues of poor management concerning the heritage and the Nzulezo community. Co-management of the community with the local community members and stakeholders to achieve an effective management system is encouraged. Additionally, government and other heritage institutions fulfilling their assigned roles are advised. Various impacts of tourism and issues faced by local managers are also highlighted.

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<sup>63</sup> Nobah, “Tourism and Development: A Case Study of the Cultural Landscape of Nzulezo.”

<sup>64</sup> Ibid.

# Conclusion

This study focused on investigating how the construction knowledge of the Nzulezo community is acquired and to identify the key means by which the knowledge is transmitted to the younger generation. Acquiring and transferring knowledge to subsequent generations in any social setting is a fundamental process linked to cultural continuity. These processes are not only embedded in belief systems but also closely connected to the qualities of the immediate location.

The main findings of this study include the idea that the construction process serves as a major platform through which construction knowledge is shared and acquired through participation. Although indigenous knowledge (the construction process, skills and techniques) of Nzulezo community is paramount in setting up structures. It is by ensuring this place for exchange of construction knowledge that preserving and safeguarding both the tangible and intangible heritage of the community is ensured. This indicates that the survival of the tangible construction heritage will be sustainable if the processes, skills and techniques of putting up the stilt structure is learnt by the less experienced through working with a knowledgeable elder community member. The findings also recognize how the raised structures, identified as tangible heritage, relies on construction knowledge to fuel its continuity, sustainability and preservation.

The outcome of this study contributes to identifying the practical process through which skills and techniques of well-informed individuals are shared with the less experienced in preserving construction heritage. That is, the study provides a unique insight into ways of acquiring and transmitting applied construction knowledge among people of Nzulezo. In addition, the study has identified activities relating to heritage management which threatened the local heritage that defines the local community.

Through interviews and observation approaches, it is evident that more needs to be done for the local Nzulezo community to preserve and safeguard their own heritage. In this thesis, I propose some guidelines to bring all obligatory stakeholders (national heritage institutions, the local government) and the community together to achieve a more fulfilling course of action.

As this study is the first to analyze data from research into the intangible heritage of the Nzulezo community, further academic research is encouraged in other cultural spheres in the community not covered in this study. As the Wildlife Division of the Ghana Forestry department has already shown interest in receiving a copy of my thesis, I am hoping to make copies of this thesis available to all heritage faculties in Ghana Universities as a means of creating awareness among heritage students to take up research work in this area.

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# Appendices

Table 2 Description of the construction process

<p>Setting the foundation</p>	<p>This phase is the most technically demanding part of the entire construction. It requires strength, accuracy and application of the right construction knowledge, technique and skills. Because it is impossible to dig and place in the pillars in the lake alone, the people form groups of at least five individuals in each group. They then pound the pillar of wood into the ground together until it sits five feet deep. After pounding, a heavy metal tool is then used to hit the top of the pillar to make it firm and level with the other pillars. If the pillars are not levelled, it will result in an unbalanced structure. It is the stage where most help and experience is needed. Due to the difficulty in setting up the base, construction mostly takes place during the dry season in April, when the water level is low. The type of wood used for the pillars is called “<i>kako</i>”.</p> <div data-bbox="411 1124 1056 1599" data-label="Image"> </div> <p>Figure 12: Pillars erected and awaiting construction of a building. (Photograph by author. July 2017)</p>
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**Setting up the structure**

Stage two comprises raising the structure on the pillars. This stage is carried out by the experienced and knowledgeable builder and does not require many people. In an interview with one experienced builder who was constructing a structure alone said, “from this stage, an individual can do it” (interview with Mr Daniel Akpor, July 2017). He further explains that, after the pillars are placed, the owner of the building then chooses among the experienced builders the ones who will help him set up the structure. All the same, there are still hands needed during this stage although not as many as when the pillars are set up. Often, those who have no knowledge and skill in constructing the structures are those who normally help and learn during the process. It is also during this stage where the skills and building techniques are passed on and learned. Raffia sticks are used as the main material for the structures. The raffia sticks can last up to 40years without needing to be replaced (Interview with Alex. July 2017).

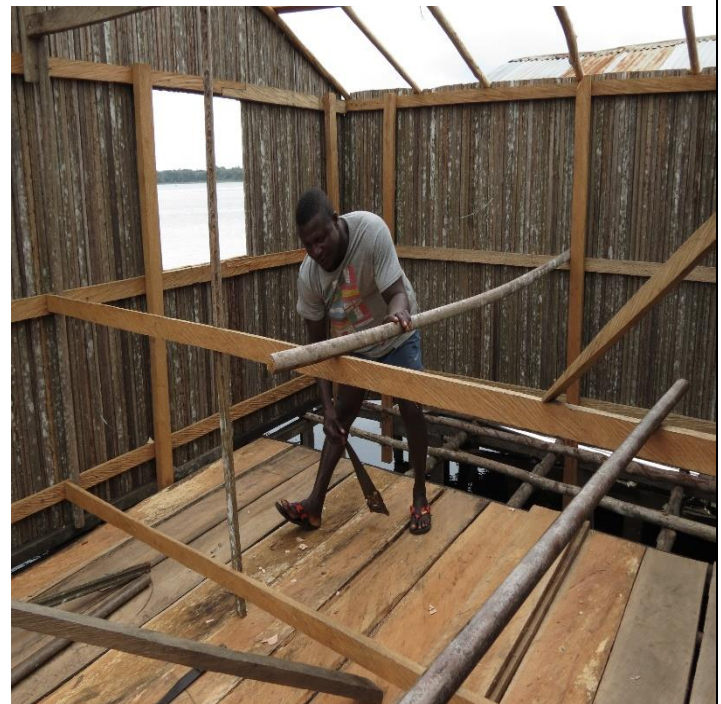


Figure 13: An individual setting up the upper structure of a building. (Photograph by author. July 2017)

<b>Roofing the structure</b>	<p>The final and finishing phase of the construction is roofing the built structure. According to Mr Daniel Akpor, the estimated period of construction for a complete structure takes a month. He also acknowledges that there is a possibility that construction can take less than a month depending on how urgently a building is required. Likewise, the building process could also take longer than a month when all the construction materials are not ready or there is no hurry.</p>
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### **Guideline question used during field research**

- **Elderly community members**

How did this community come about?

How important are the construction processes and associated skills?

How often do you build structures like this?

Is someone appointed by the chief as a lead builder?

How is the appointment carried out or how does the lead builder emerge?

Has there been a time when a master builder died and someone had to replace him? How was the replacement carried out?

Have there been any challenges, misunderstandings or difficulties to find a point in time for deciding who should lead the building someone to build?

Does the application of the building process follow some sort of strict rule(s)?

How is this knowledge (skills and techniques) learnt and passed on?

Have there been any significant changes in applying the knowledge, skills and techniques?

- **The youth**

How do you relate to this community and the things that go on around here?

Do you take part in construction work?

Does participating in the construction process have any special relevance to you?

Do you see this traditional knowledge as important to you and the survival of the next generation?

- **Tourist**

Do you regard the construction knowledge as important to the community?

What experiences have you gained by visiting the community?

What was most significant about this community that aroused your interest?