Addis Ababa University

School of Graduate Studies

Documentation of Cultural Landscapes in Welkait *Woreda*: Western Tigray, North Ethiopia.

By Yilikal Demis

November, 2016

Addis Ababa, Ethiopia

Documentation of Cultural Landscapes in Welkait *Woreda*: Western Tigray, North Ethiopia.

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A Thesis Submitted to

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This thesis presented by Yilikal Demis entitled: *Documentation of Cultural Landscapes in Welkait Woreda: Western Tigray, North Ethiopia*; submitted in Partial Fulfillment of the Requirements for the Degree of Masters of Arts in Archaeology, in the Department of Archaeology and Heritage Management, Addis Ababa University, compiles with the regulations of the university and meet the accepted standards with respect to originality and quality.

Approved by the Examining Committee

Alemseged Beldados (PhD)	----------	----------
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Chairperson	Signature	Date

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Acronyms

ARCCH – Authority for Research and Conservation of Cultural Heritage

asl – Above Sea Level

CHLRD - Cultural Heritage Landscape Resource Document

CSA - Central Statistical Authority

CLECP - Cultural Landscape of Ethiopia Conference Proceedings

DRMFSS - Disaster Risk Management and Food Security System

ECHP - Ethiopian Cultural Heritage Project

EPLUAAT- Environmental Protection and Land Use and Administration Authority of Tigray

ESC - Ethiopian sugar Corporation

EWNHS - Ethiopian Wildlife and natural History Society

FDRE – Federal Democratic Republic of Ethiopia

OGIWHC - Operational Guideline for the Implementation of World Heritage Convention

PROWWP – Public Relation Office of Welkait Woreda Pamphlet

SRMP – Survey Report and Management Proposals

TBFED – Tigray Bureau of Finance and Economic Development

TDTCCG- Tana Dashen Trading Company Consultancy Group

TWWSDSE – Tigray water Works, Study, Design and Supervision Enterprise

UTM - Universal Transverse Mercator

UWA – Uganda Wildlife Authority

WWARDO – Welkait Woreda Agriculture and Rural development Office

WWPFO - Welkait Woreda Plan and Finance Office

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Abstract

This study was conducted in Welkait Woreda, Western Tigray in particular the heritage sites of Bete Mulu, the Burials of Women ("Weyzazirt Mekabir"), Ona Eyesus Church, Zuwa Kidne Mihret Church, May Gaba Mikael, and Medhanialem Holy Water. The main objective of this study is to document the cultural values and history of these sites for the purpose of heritage management and possibly tourism development. To achieve the stated objectives, the researcher designed a proper methodology which includes both primary and secondary data sources. The primary data was collected through pedestrian survey, interview and field observation from these study sites. To support the primary data, secondary data was also collected and all were analyzed both qualitatively and quantitatively. However, the research has involved more of qualitative than quantitative method. Purposive (judgmental) sampling techniques were employed in order to select the study sites and respondents within the study area. During the study, a total of 8 tumuli, 3 churches, a Castle, and Holy Water sites were identified. The burial tradition in this area was also compared with other sites in the country and the region. Accordingly, it is observed that there is a similarity and continuity of the tradition in terms of the material composition, shape and spatial coverage. Ruined churches and medieval structures were also documented for the first time. Based on the findings of the study, the researcher recommends that creating community awareness, establishing sufficient infrastructural conditions, and continuous promotion of the area should be the focus done by the concerned authority. This paper also recommends that participation and coordination of all concerned bodies and stake holders is imperative in supporting and conserving the unique landscape values of the study area.

CHAPTER ONE

1. INTRODUCTION

1.1 General Background

Different academic fields and disciplines emphasize different characteristics of cultural landscapes that make such landscapes valuable. Common to these approaches is the view of the cultural landscape as something valuable to the extent that it imposes certain obligations regarding the manner in which people relate to it (Bender, 2001: 75-77). According to its broad conception, cultural landscape is understood in contrast to natural landscape, as a landscape or area "bearing the imprint more or less of human activity," or as "any landscape which is visibly influenced by human interference." It illustrates the development, interchange, and interaction of human values and the environment over time. They exemplify the complex relationship between nature and the human activity therein (Didora, 2010:40).

With these considerations in mind, one can distinguish three senses in which cultural landscape can be understood: the humanly modified landscape in the broad sense as any landscape that has the physical or visible marks of human activity, the humanly modified landscape in the narrow sense as a landscape where the marks of human activity are subject to the land's limiting conditions, and the landscape in the immaterial or symbolic sense of influencing people's views of themselves, of their history and identity, etc. These considerations suggest that the idea of the complex cultural landscape applies to humans' relationship with the land at the purely spiritual level as well as at the physical level (Arntzen, 2002: 23- 49).

For the purpose of this study, Cultural Landscape is regarded as a cultural property in a given geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features (Charles, 1994: 160).

This research mainly conducted to study the cultural landscapes of Welkait Woreda: Western Tigray, North Ethiopia. The main purpose of studying in this area is documenting the Cultural Landscapes of heritage sites that are a cultural heritage value to the community. The study is mainly focused on six selected sites; which includes the landscapes of Bete Mulu Castle, Zuwa Kidane Mihret Church, Ona Eyesus Church, May Gaba Mikael, Medhanialem Holy Water and the Burial Sites of Women ("Weizazirt Mekabir").

1.2 The Physical and Cultural Settings of the Study Area

1.2.1. Location

Welkait Woreda is one of the thirty four rural Woreda in the western administrative zone of Tigray region. It is located 1,335 km far from Addis Ababa, to the North, 552 km from Mekelle, to the West and 68 km from Humera in the East (Welkait Woreda Public Relation Office (WWPRO), 2015).

Geographically, the study area lies between 0318179 North Latitude and 1520121 East Longitude with an elevation of 2051 meters above sea level. The Woreda is bordered in the West and North West by Kafta Humera, in the east by Tselemiti and Asgede Tsimbila, in the south by Tsegede and in the North by Tahtay Adiabo.

According to Welkait Woreda Plan and Finance Office (WWPFO) 2015, the total land area of the Woreda is 3,811.18 km^2 (381,118 hectare), and this is the area that the study is conducted.

Location of the Study Area and Distribution of Sites

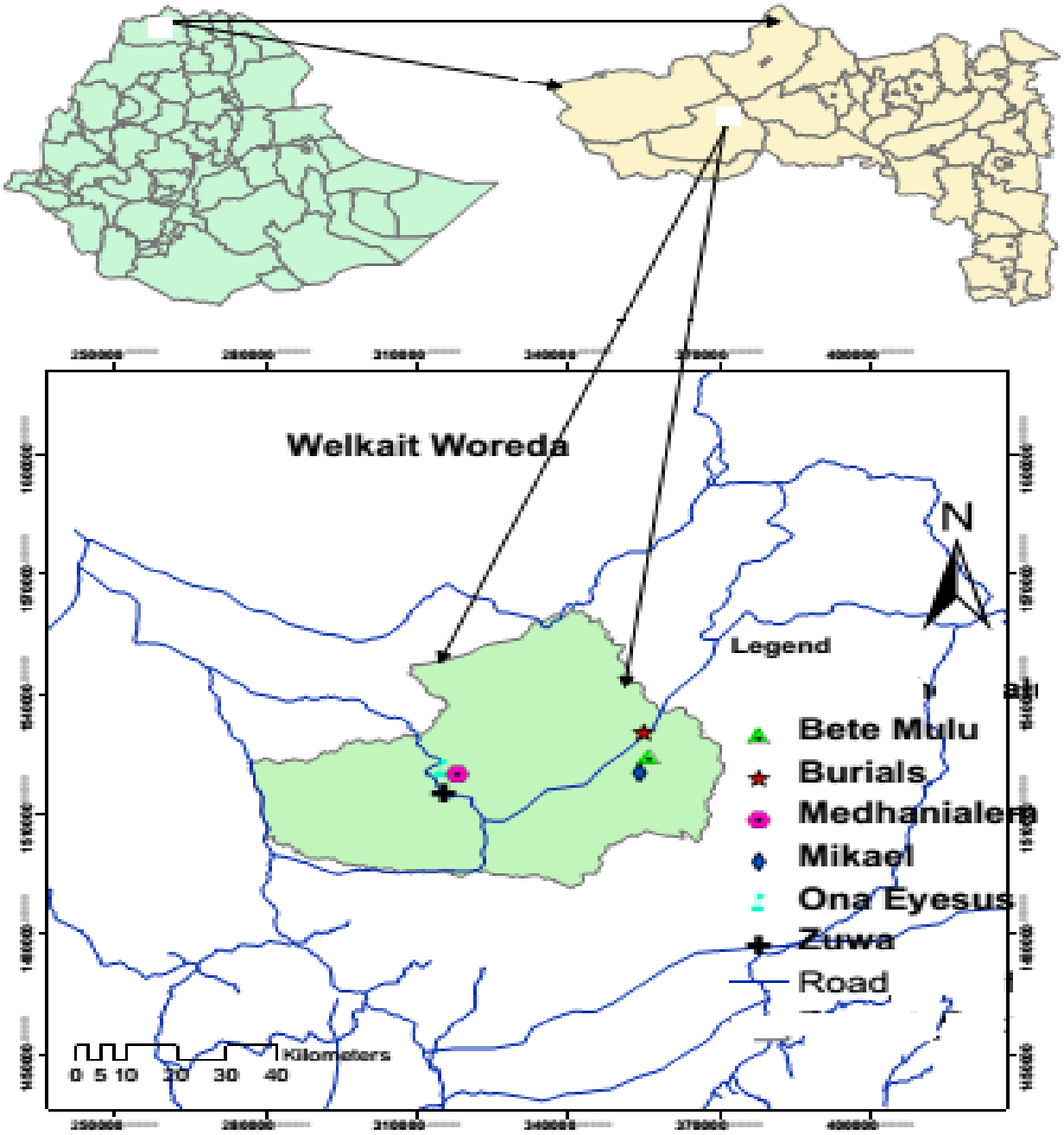

Fig: 1.1 Map of the Study area (Source: Yilikal, 2016)

1.2.2. Climate and Ecology

The Northern Horn of Africa is located approximately between 13^{o} and 18^{o} North latitude and between 36^{o} and 40^{o} East longitude. The environment encompasses variety of ecological zones, displaying sharp changes between contiguous regions (Fattovich, 2010). A study by Ethiopian Sugar Corporation (2013) indicated that the whole Tigray Region is under the influence of the Southwest Equatorial Westerly and Southerly winds from the Indian Ocean. This brings about a relatively heavier rainfall in summer. The summer rainfall has a wide coverage and all of the highlands and lowlands of the region receive rains in varying degrees starting from June up to mid-September (ESC, 2013).

According to the data acquired from Welkait Woreda Agriculture and Rural Development Office (WWARDO), 2012) in ESC, 2013, the general climatic condition of the study area, fluctuated due to the seasonal variations that occurred in different weather conditions of the year. Welkait Woreda receives highest rainfall where the maximum mean rainfall is about 1600mm. The mountainous areas received heavier rainfall as compared to the surrounding lowlands. On the other hand, the average annual temperature of the area varies from 17.5 ^{o}c to 25 ^{o}c.

The area, in general, manifests three types of ecological zones; namely: *Dega, Woina Dega* and *Kola* in which the most coverage of the area is *Kola* and *Weina Dega*. The eastern and western parts of the Woreda has *Kola* and *Weina Dega* agro-climatic conditions with its elevation ranging from 560 to 1849 meter above sea level. Of the total number, 3% of Woreda's landscape is upland (mountainous), 37% mid highland and 60% lowland (Welkait Woreda Plan and Finance Office (WWPFO, 2015).

1.2.3. Biological Environment

The western lowlands of Tigray and their surrounding escarpments account for the largest natural vegetation of the Tigray Region. Likewise, data from the local inhabitants and Welkait Woreda Agriculture and Rural Development office, shows that there are different species of trees that are used for bio diversity conservation and human consumption like for construction, fuel use, and traditional medicine to the surrounding community and beyond.

The vegetation is predominantly woodland, which is characterized by trees with fairly large deciduous leaves mixed or interspersed with small leaved trees. The dominant tree species include Anogeissus leiocarpus, Balanites aegyptica, Boswellia papyrifera, Acacia polyacantha, Zizyphus spina-christi, and Combretum sp. ('Tenkelebay'). Other common trees and shrubs include Acacia seyal, Boscia angustifolia, Combretum molle, Combretum collinum, Sterculia setigera, Dalbergia melanoxylon, Dichrostachys cinerea, Stereospermum kunthianum Lannea fruticossa, and Terminalia brownie (TWWSDSE, 2012 in ESC, 2013).

According to the information obtained from WWARDO (2012), ESC, 2013, and local residents interviewed during the field survey, the wildlife resources of Tigray region are limited to some areas in the Western Zone and to a few remnant habitats elsewhere due to the intensity of human pressure. The Tekeze Valley had been known to be historically rich in wildlife. It supported large population of elephants, ungulates, ostrich, and carnivores including lion and leopard (ESC, 2013). Many of these species are believed to have declined drastically over the past years due to civil unrest, drought, illegal hunting, expansion of cultivation and settlements.

1.2.4. Geology of the Area

During his work visit, the researcher knew that there is no any geological study that has been undertaken in the area other than the Tigray Water Works, Study and Supervision Enterprise survey 2012, conducted for Welkait Sugar Development Project. For the sake of this specific study, the researcher quoted the enterprise in describing the geological study of the area. These landscapes characterized by differently sized geological terraces, rocky terrain, and generally thin soils under intense agricultural pressure. The highland landscape is a dynamic, constantly evolving system where human activities and natural processes progressively shape and reshape the terrain and its features (ESC, 2013). Tigray Region is one of the northern most parts of modern Ethiopia.

The geology of Tigray is, for the most part, the result of volcanic activity, and the topography of the region is dominated by a broken plateau that forms a rolling upland ranging from about 1000 to more than 3500 m in altitude (Bard et al., 2000). The region is characterized by rock assemblages covering a wide geologic time span (Asfawossen, 2002).

In terms of geologic formation, the Woreda in general consists of Quaternary superficial deposits, Tertiary basalts, Paleozoic clastic sedimentary rocks and Precambrian metamorphic schists. Basaltic rocks form the main geologic framework of the area. The area is constituted by mainly Basalt and sandstone, and sometime alluvial sediments, consisting of silty to clay soil, which is black in color. The upstream part of the area is hilly and mountainous with rugged and undulating topography comprising of volcanic lava flows. The alluvial sediments distributed in the whole area over laying the basalt and sometime sandstone rocks. Within very short distance the ground surface changes with morphology, geology and porosity to percolate surface water (Natnael, 2012).

1.2.5. Soil

Welkait Woreda is endowed with fertile soils that occurred in the different landscapes of the area. The soil is suitable for the production of different commercial and mechanized farm crops used for the purpose of export as well as local farm crops for home consumptions. According to Welkait Woreda Plan and Finance office (2015), the dominant soil type found in the area categorized in to six groups listed below in the table.

No	Name of soils	Area km^2	Tabia (kebele) cover
1	Chronic soil	181.55 km^2	Western Adgaba, North Eastern Kulita
2	Cromic verti soil	277.1 km^2	Western Awrki , South Western Selam
3	Dystric combi soil	649.5 km^2	Shirela, Adiflho, Debremarim, Midre weyzero, Southern Adi jamus
4	Eutric combi soil	1492.7 km^2	Selesa Ayna, Awra, Shukda, Adigaba, May chiea, Eastern Bete Mulu, Eastern Tsebri and so on
5	Euritic nito soil	987 km^2	Kalema,Laelay May Humer, May Gaba, Tsebri and Adi remets,
6	Ortic luvi soils	225.9 km^2	Eastern Kulita, Blamba kirshi and south eastern B/kirshi

Table: 1. 1 Major Types of Soils in Welkait (Source: WWPFO, 2015)

1.2.6. Historical Background

The Western parts of Tigray especially the lowlands are historically known as home of numerous groups of populations which are diverse in origins, from both the Sudan and the Ethiopian highlands. Its location set up at the juncture of the Nile Valley, South Arabian Peninsula and

Indian Ocean has made the area as a strategic region where early complex societies developed and later flourished into powerful kingdoms and finally an expansive empire whose hegemony extended from the Ethiopian highlands to the Southern parts of Sudan and across the Red Sea (Fattovich, 2010).

Historically, Welkait is considered to be areas located in the highlands of Western Tigray with its own political entity but connected both with the rulers in Gondar and Tigray. Today, the administrative area Welkait also includes the highlands and the Tekkeze River, which are called the Mezega lowlands (Smidt, 2011). During the Aksumite period, the region as frontier territory experienced several military expeditions by the rulers of Aksum either to check the expansionist ambition of various tribes in the area as well as to implement Aksum's desire to expand its territory in the area. According to Hatke, 2013, the people of Welkait conducted military raid on the town of Aksum in the 7th century AD (Hatke, 2013).

Later, in the 8th century AD, the Inscription of Hasani Daniel found in Aksum gives an important account of the historical development in Welkait area. According to the inscription, tribesmen from the region of Welkait seem to play important role during the late Aksumite period whereby their constant raid on Aksum. It appears that among other military activities mentioned in the inscription, Welkait people (ሰብአወልቃይት, Säb'a Welkait) had attacked the land of HSL (Hasla) and then marched against Aksum. Danael claimed that they have fought and expelled to save Aksum, he added, they have killed and captured a number of men and animals (Munro-Hay, 1991:196-197). In general, the inscription of Hasani Daniel reflects a time when Aksum's importance had greatly declined, its monuments were in disarray but its former greatness was remembered. As it is read from the document, DAE 13:

> *In the name of the Father, and of the Son and of the Holy Spirit, I, Hatseni Danael, son of Debra Ferem. When the people of Welkait devastated the land of HSL, and came to Aksum, I expelled them and was harsh to them and killed them and captured 102 foals and 802 cattle. And I made the people go . . . and the equipment, and from here I made them enter the country of Ablas . . . whose name is Maya Tsaltsal, and I plundered 10,000 sheep. . 3000 cattle . . . and I went while my people were raiding and taking captive. And they returned home when I entered, day . . . our entry before . . . booty . . . we waited in the enclosure . . . I plundered it. . . . (Munro-Hay, 1991:197).*

After the fall of Aksum, for many centuries Welkait had becoming a frontier area to the Ethiopian State, but at times witnessing the inception of independent states such as the medieval Muslim State of Mezega in the 15th Century. Mezega regularly appears in sources especially since the 16th century. It was only in the 18th century that became a border province of Christian Ethiopia, although Muslim governors or sub-governors among them high-ranking refugees from Sennar, were allowed to continue to administer the lowland areas (Smidt, 2011). With its inclusion into the Christian Ethiopian State in the 18th century, the region began to have prominence in the Gondarian court. This is attributed to Ayanazgi, who was the governor of Welkait during the Gondarian period. Ayanazgi, as he is known in Welkait tradition or Dejazmach Naizgi in written source was an important personality in Gondarian court in the early 18th Century (Kolmodin, 1912).

An important historical site that was surveyed is the partly ruined Bete Mulu Castle set to have been built by Dejazmach Naizgi, who was the governor of the area during the Gondarian period. The integration of the region to Christian Ethiopian State opened the area to increase population

settlement from the Christian Highland areas of Northern Ethiopia (Smidt, 2011). As described above, throughout history, Welkait area has always been in a state of flux, it was a stage for population movement and interaction not just within Ethiopia but also Sudan and Eritrea. Various populations were attracted to the region due to the fact that the area is part of the Tekeze River basin and part of the Bigger Nile Basin (TWWWSDSE, 2012 in ESC, 2013). In general, historical evidence has indicated that there were strong population contacts in the past between the Highlands of the Horn of Africa and Eastern part of Sudan. This population contacts have played leading role in shaping the cultural and economic history of the society in Northeastern Africa.

1.2.7. Economy

Like any other parts of Ethiopia, the dominant means of living for the population in Welkait Woreda is mixed farming; cultivation of crops and rearing of animals. According to Tigray Water Works, Study, Design and Supervision Enterprise (TWWSDSE, 2012; WWPFO, 2015) in Ethiopia Sugar Corporation, 2013, it is estimated that about 92% of the population in Welkait Woreda earn its livelihood from mixed agriculture.

It is subsistence agriculture in which crop production is predominant and livestock husbandry is intimately integrated with crop production. Likewise, 95% of the population depends on crop production as primary source of income and 83% depend on livestock as secondary source of income as the study prevails. Only 5% of the population depends on livestock production, petty trade or off farm activities as primary source of income. The major crops cultivated and grown in the area includes sesame (Sesamum indicum), sorghum (Sorghum bicolor), finger millet (Eleusine Coracana), maize (Zea mays) and teff (Eragnostis tef).

In addition to crop cultivation, livestock is the other important livelihood sources in Welkait Woreda. As elsewhere in the country, all types of livestock that contribute most to crop production activities and food sources of the community are reared in the area. Live animals are transported up to Sudan for marketing. All type of livestock exist in the Woreda including cattle, goats, sheep, poultry mule, camel, and donkeys are the main transport means in transporting farm product from farm to house to town center for marketing and water for drinking house hold (WWARDO, 2012).

Tourism is one of the fastest growing economies in the world at the present time that generates a large amount of income in supporting the nation's economy at large. As such there are important tourist attraction sites in the area that can be served as a destination if they are properly managed and conserved. The following table listed below shows some of the major attraction sites in the area.

NO	Heritage sites	Name of Tabia	Remark
1	Aba Wushaw	Dejena	Mixed (Natural & Cultural Value)
2	Tomb of Marta	Shirela	Cultural
3	May Gaba Mikael	May Gaba	Cultural
4	Palace of Ayanazgi	Bete Mulu	Cultural
5	"Weizazirt Mekabir"	Bete Mulu	Cultural
6	Zuwa Kidane Mihret	Zuwa	Cultural
7	Ona Eyesus	Zuwa	Cultural
8	Medihanialem Holy Water	Adi Remet	Mixed (Natural & Cultural Value)

Table 1.2: Heritage Sites in Welkait Woreda (Source: WWPFO, 2015)

1.2.8. Population

According to the 2007 Population and House Census Study (CSA, 2015), the total population of Welkait Woreda was a total of 167,798 (85,007 Men and 82,721 Women). Similar studies (TWWSDSE, 2012 and ESC, 2013) stated that the population growth rate is 4.6% and 2.1% in urban and rural areas respectively with an average growth rate of 2.4%. The demographic distribution is relatively dense (29 inhabitants per km^2) with concentration in the highlands, but is lower than elsewhere in Tigray (249 persons per km^2 in Alamata Woreda). From the total population 48% are younger than 15 years, while 47.0% fall in the active age group (15 to 64) and elders account for about 4.6% (CSA, 2015).

1.2. 9. Ethnic and Religious Composition

The Western Tigray Administrative region is the home of different ethnic groups and subgroups of very diverse origins. The area was also known for Béte Isra'él or "Felasha", as this Judaizing group was generally called in Ethiopia, with their principal settlement in Addi Agew, who were especially known as potters, a further example for the ethnic plurality of the region. At Woreda level, the two largest ethnic groups were the Tigray and the Amhara, and the remaining are other ethnic groups. According to the data from informants, other peoples like the Chare, Kunama and Gumuz were living across the different areas of the Woreda. In the Woreda 96.75% of the population said they were following Ethiopian Orthodox Christianity, and 3.09% were Muslim and the remaining 0.16 % is Protestant and Catholic which are mainly found in the towns (Smidt, 2011).

1.3 Statement of the Problem

Archaeology is drawn to explain, regulate and govern social problems that intersect with issues of identity and the past (Smith, 2004). Every cultural landscape has its own spatial structure, but it is important to study this feature in relation to socio economic influences of the given community (Agnoletti, 2008: 1). Though, there are different researches conducted in different parts of the country, Welkait is largely unknown to researchers. This situation is aggravated by different constraints such as lack of willingness or interest on the part of the professionals, its remoteness as well as harsh climatic conditions.

There are only very few publications containing ethnographical data on this area, written by writers like Wolbert G.C.Smidt (2011) concerning the ethnohistorical study of the Chare people in the region. He described about the culture and history of these peoples in line with their economic livelihoods. Other writers like Nosnitsin, 2015 described that the area of the lowland of Welkait, sometimes also called Mazega Welkait seems to have been mostly uncovered by the studies of G. Ellero, 1948 who dealt predominantly with the "highland Welkait." Moreover, in his excellent anthropological studies, he paid only small attention to the manuscript materials preserved in the churches, concentrating on the oral traditions. The information from historical sources was summarized and documented (Nosnitsin, 2015). As a whole, the area is largely unexplored archaeologically, and some of the investigations focused mainly on a few specific topics of study. Therefore, the justifications for conducting this research are listed here in below.

First, general lack of researches due to the bad image of the region, the remoteness of the area and its notoriety as "unhealthy lowlands" hindered researchers to conduct any research. Secondly, as it is well known at present, some places in the study area are taken for grand project

purposes like the Welkait Sugar Development Projects. For this, a gross irrigable area of 45,000 ha has been identified in the lowland of Welkait Woreda mainly for sugarcane production and its feasibility study is being undertaken. This activity may bring a significant alteration in the prevailing heritage sites and such alteration considerably lowers the intrinsic value of the heritages in the area. Moreover, documentation and inventory of the still extant cultural landscapes are urgent because the features that characterize the area are now transformed by the forces of developmental projects and other human impacts (TWWSDSE, 2012).

Finally, this research is intended to suggest and recommends to the concerned authorities to carry out an impact assessment of heritages before the implementation of any developmental projects in the future.

This research will attempt to answer the following questions;

- What constitutes cultural landscapes in Welkait?
- How are cultural landscapes identified and documented?
- How have cultural landscapes evolved in response to human-environment interactions?
- Is there any alteration of the landscape through human intervention?
- How can we minimize or alleviate the impacts of developmental projects on the cultural landscapes?
- How can we use cultural landscapes for a sustainable tourism development?

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of this study was to document the cultural landscape resources of the study area.

1.4.2 Specific Objectives

The Specific Objectives of this study include;

- to select those resources that have cultural heritage Value,
- to explain the spatial choice and distribution of cultural landscapes,
- to see the settlement pattern of the population,
- to identify and study the effects of development projects that alter the landscapes of the area,
- to look in to the continuity and discontinuity of the cultural practices,
- to recommend mechanisms for enhancing sustainable tourism development.

1.5 Research Methodology

With an intention of addressing the above stated objectives, the researcher used different appropriate research methodologies to analyze and discuss the data obtained from a variety of sources through interview, observation, pedestrian survey, and reference of written documents. To this effect, both qualitative and quantitative methodologies were applied.

Based on the general field observation and survey of the area as well as available written evidences, five sites were selected purposively for this research. The data were collected from different sources like written documents (books and journals), observation by the researcher, pedestrian survey and interviews with professionals and local peoples of the area. Therefore, for the implementation of this research, the following methodologies were designed.

1.5.1 Sampling and Sampling Strategy

There are different kinds of sampling techniques when doing any research and the implementation of a variety of methodologies was a crucial part of achieving the stated objectives. Thus, to conduct this research, I preferred to use purposive (judgmental) sampling (Kumer, 2011). Based on the intent of the researcher, the strategy for achieving the expected result is to select only those sites and individuals that are relevant to the study sites.

Though there are different mechanisms for selecting sites, the method that was used for the purpose of this study is pedestrian survey; that is sites are selected after conducting an extensive survey of the area. In this context, extensive survey refers to a type of field research method conducted in search of archaeological sites within the selected sites of the study area and collects the necessary information about the location, distribution and choice of past human cultures. The reason for selecting this method is due to its simplicity and accessibility in getting sufficient information on the area related to cultural landscapes. Therefore, it is after this task that the sites were selected; five sites were selected from three kebeles. The sites were selected based on their potential to yield information, cultural values and historical significance to the community.

On the other hand, to diversify the data sources for this research, informants were selected as a supplementary data sources. In order to select the appropriate informants, the researcher decided

to use Purposive Sampling Techniques (Tongco, 2007). Informants from the area were purposively selected based on their age, knowledge, profession and their willingness. Before selecting informants, I have tried different mechanisms for approaching them. The first mechanism is consultation; that is consulting experts of the Woreda office and other professionals that live in the area. Secondly, the researcher communicated with some residents who have long experiences about the sites and those who were familiar to the area for many years. A total of 17 informants (16 men and a woman) interviewed in the field season from all sites.

1.5.2. **Data Collection Methods**

There are different types of data collection methods before, during and after the fieldwork. For the purposes of this study a literature study (referring written documents from different sources, printed and electronics) and empirical research (practical field survey and observation of the sites) were used for gathering the valuable data.

Before the field**,** written documents related to the study area were collected from different sources so as to learn what has been researched so far. During the field season, a variety of data collection methods were used. The first was pedestrian survey; the archaeological technique of pedestrian survey, also called surface survey or reconnaissance survey, according to King, 1978 involves walking the surface of an archaeological site or large region in stratified patterns, and either marking the location of identified artifacts, or collecting a sample for further investigation. So, the researcher conducted an extensive survey (on foot) in search of selecting potential sites that have cultural values. The aim of the survey in this research was to identify, locate and document the cultural landscapes and to assess landscape alterations within the study area. The

survey was conducted in May 2015 and February, 2016. Based on this survey five sites were identified as part of this study.

The second method was interview, as a data collection tool begins with the assumption that the participants' perspectives are meaningful, knowable, and can be made explicit, and that their perspectives affect the success of the study. Interviews were conducted with the communities who are knowledgeable and familiar to the area. For this purpose, 17 informants were selected, 16 men and a woman, who are knowledgeable and familiar to the area (Nine of them are literate while others not) had assigned for the study. The other method is Photography, which is one of the important methods used for documenting landscape sites through capturing the necessary pictures. The selected study sites were taken and documented.

1.5.3 Data Collection Tools

Depending on the nature of the data to be gathered, different data collecting tools are used to conduct the study. One of the tools used in this research is, photo camera. This tool is used to capture the picture of the selected sites during the field survey. Another tool is GPS; this instrument is used to capture the coordinates of the selected sites that are used for the mapping of places. This is used for indicating the exact location of the sites to be studied in a map. The use and application of these coordinates in each sites using GIS software (Arc Map 10) indicates the spatial distribution of sites in the study area. Interview has also the key data collection tool that helps the researcher to collect primary information from the site residences. The researcher also implemented data description and discussion methods from collected documents in making the study more productive.

1.5.4 Data Discussion Techniques

The data obtained through a combination of pedestrian survey, interview, observation, and inventory studies were discussed qualitatively and quantitatively through description and discussion methods. Qualitative methods are employed to collect data about activities, events, occurrences and behaviors and to seek an understanding of actions, problems and processes in their social context, that is, it does not produce quantified findings or have measurement and hypothesis testing as an integral part of the research process. For example, in order to sketch a map on the selected cultural landscapes collectively, the data collected using GPS, were analyzed using the Arc GIS Software, Arch map 10. Also, other data types obtained from the selected sites like inventory and other related quantified data are discussed using table presentations.

1.6 Significance of the Study

In recent years, heritage conservation in Ethiopia has received growing attention from governmental and non-governmental agencies as well as practitioners. A necessary first step towards protection of cultural landscape sites is the identification and careful selection that have a cultural heritage values (Ahmed, 2013: 2). This means that the significance of cultural landscape as cultural heritage is dependent on the perception and value given by the community. Hence, documentation of these sites through inventory, survey, observation, and document reference is one of the motives of this research. Also, the study is aimed at in recommending the effects of development projects took place in the area before altering the cultural values of the heritages at large (TWWSDSE, 2013). Moreover, this research tried to suggest recommendations to the concerned body for the continuity and sustainability of the sites with its values. To the local communities of the area, this research intended to initiate them in managing and protecting

their heritages and in the long run benefiting from these resources. The research is a valuable contribution of the Department of Archaeology and Heritage Management, Addis Ababa University in particular and the country at large, in such field of studies that enables to invite future researchers either locally or globally. To the researcher himself, the study brought a deep understanding of the concept of cultural landscape management that enables in continuing for further and deep researches in the future career.

1.7. Delimitation of the Study

This research is confined to study the cultural landscapes of Welkait Woreda, Western Tigray. Primarily, the research is focused on identifying the features of the cultural landscapes conducted with an area of land covering a total of 3811.18 km^2 (381,118 hectare). In other words, the scope of this study is mainly focused on the sites of Bete Mulu, Zuwa Kidane Mihret Church, Ona Eyesus church, Medhanialem Holy Water and the Burial Sites of Women ("Weizazirt Mekabir").

1.8. Organization of the Thesis

This thesis is organized into five chapters. The First Chapter comprises Introduction, Geographical setting of the study area, Statement of the problem, Objectives, Research Methodology, Significance, and Delimitation of the Study as major elements. Chapter two is about Review of Related Literature. Chapter three is all about Data Presentation of the identified cultural landscapes of the study area. The Fourth Chapter focuses on Discussion and Findings of the targeted sites in light of the aspects they share with their counterpart in other parts of the country and Heritage Management of the area. Conclusion and Recommendations are given in the fifth chapter.

CHAPTER TWO

2. Review of Related Literature

2.1. Terminology and History of Cultural Landscapes

The Study of Landscape Archaeology is a vast concept of theoretical and methodological approaches to study the spatial and temporal relationships among people and places in the past and present, leading some to term it a "usefully ambiguous concept" (Clark, 2015: 61). It is because of the multifaceted nature of the subject, landscape issues are of various interests which attract different disciplines. In this case, landscapes are no longer to be separated from human experience or seen as purely visual; instead they are part of a world of movement, relationships, memories and histories (Bender, 2001).

The term cultural landscape is a combination of three separate but related terms, culture, land, and scape. As it is stated in Christine, 2007, “Culture is a kind of self actualization process, continuous, consistent, and self sustaining for any given community. It is a way of life typical of a group referring to beliefs and perceptions, values and norms, customs and behavior. They share the quality among the group in a consensual way, passing on to others through the socialization and education of a new member in the society. While land refers to the physical and tangible things that we see and feel such as trees, lakes, mountains, buildings, flower beds etc. scope refers to how these physical phenomenon are translated and perceived in the mind” (Christine, 2007: 12 - 14).

Cultural Landscape as a term was apparently invented in the academic field around the early 20th century. Its concept is not new, although it has only relatively recently becomes a prominent part of the international cultural heritage movement (Rossler, 2006). The United Nations Educational,

Scientific and Cultural Organization (UNESCO) had expressed its concern on and interest in the area of landscape as long as forty years ago (UNESCO, 1962).

Nevertheless, the concept of cultural landscape has only been recently introduced into the ambit of the World Heritage Convention. They are first recognized and included in the world heritage convention in 1992, at its 16th session which adopted guidelines concerning their protection for maintaining both the human culture and the natural bio diversity. After a strong debate, in 1992 the World Heritage Committee (an international committee with responsibilities for implementing the World Heritage Convention, adopted in 1972, agreed that cultural landscapes could meet the criteria of "outstanding universal value" and revised the convention's guidelines accordingly (Mitchell et al., 2000).

In 1992, the World Heritage Convention included cultural landscapes as a fourth category for inscription into the World Heritage List. The "outstanding universal value" of cultural landscapes is sometimes ambiguous due to the inter-connectedness of both the cultural and natural characteristics of such sites (Didora, 2010). They are part of our collective identity (ICOMOS, 2009). In general, to reveal and sustain the great diversity of the interactions between humans and their environment, to protect living traditional cultures and preserve the traces of those which have disappeared, these sites, called cultural landscapes, have been inscribed on the World Heritage List.

2.2. Cultural Landscapes in Ethiopian Reality

The Study of Cultural Landscapes in Ethiopia is not familiar as of other researches and the debate is still proceeding slowly among different researchers. We can explain that the nature of Ethiopian ecological diversity, both in the natural and cultural sense, is marked with plenty of

historic outposts landmarked as Paleolithic cave arts, architectural monuments, paintings, scenic natural landscapes, ruined historic buildings and a variety of artifacts, fossils and intangible festive social practices. In Ethiopia, most natural environments are equally cultural landscapes that are associated with human imprints, in which their ownership and values imply particular groups of humanity (Crummey, 2009). Cultural landscape includes the community who owns and values the cultural manifestations, and thus it demands sound management in a broad sense, no matter the cost may be (Bromber et al., 2013). Some of the related cultural landscape studies in Ethiopia are the following.

The first scholar to explore human-landscape interactions through the use of aerial photographs in Ethiopia was Paolo Marcaccini (1978), in Crummey, 2009, in the rural areas of Čoqê, Gojjam. The theme of the study was focused on the nature of settlement patterns and the agricultural fields in accordance with their variation of agro ecological zones. He found that the landscape was predominantly marked by strip fields, concentrated hamlets, and only modest woody vegetation. As a result of his study, what was observed is that he contrasted with more lightly used areas in which the fields were more rectangular, settlement more dispersed, and woody vegetation more prevalent.

In this case, cultural landscape was viewed from the perspectives of the spatial distribution of settlements, agricultural lands, and vegetations in line with the ecological conditions of the area. Therefore, the researcher's principal environmental observation was that soil erosion was an impact on the alteration of the land that created varieties of strip fields (Crummey, 2009). Another related research was the reconstruction of the ancient landscape Aksum by Fattovich and his colleagues, 2003. This study suggested in providing a useful insight into the dynamics of change in human ecosystems on a local scale. For the reconstruction of the ancient landscape,

The cultural landscape of Aksum was characterized by a clear-cut hierarchy in the settlement pattern and a complex System of man-made landscape infrastructures. Settlements included the capital city at Aksum, smaller towns, villages, elite residences, residential compounds, farming hamlet s and Workshops. Agricultural terraces, wells, and traditional paths were another relevant component of the landscape (Fattovich et al., 2000). The most impressive elements of the Aksumite landscape were elite residential palaces, cult buildings, and funerary super structures. Most likely, natural features were used as cult places which includes springs, trees, and boulders as well as caves and high places.

The church of Bieta Giyorgis and its environs wera used as an example of the ancient Aksumite landscape. It provides a useful evidence for the reconstruction of the ancient Aksumite landscape as the hill encompasses all the features which characterized the territory of the capital city. Man-made landscape features at Bieta Giyorgis include agricultural terraces and fields, reservoirs, dams, roads and paths. Cultivated fields with associated terraces, grazing areas, roads and paths date to recent times (19^{th}-20^{th} centuries), but most likely maintain the basic organisation of earlier land-use patterns. The settlement pattern on the top of the hill was characterized by an elite residential settlement with evidence of at least one palace at Ona Nagast, an elite cemetery with platforms associated with stelae and rock-cut tombs at Ona Enda Aboi Zewge,and scattered compounds along the ridge of the hill.

This landscape was surely subject to transformations through time. Elite residential palaces were also a dominant component of the power landscape throughout Aksumite history. Major transformations took place in the sacral landscape and were due to ideological changes. Beginning in Proto-Aksumite times open air cult places were probably substituted with cult buildings, and in Christian times churches were erected on earlier temples and shrines.

According to the study made by Clark (2015), in Gannata Maryam church, Northern Wollo, describes the nature of the landscape and archaeological remains recovered in this site. Gannata Maryam Church was an important royal church from the 13th century onward. Though the cultural landscape around the church likely possessed a wealth of information on the role of royal churches in medieval Ethiopian society, natural and anthropogenic landscape formation processes have greatly disturbed the archaeological integrity of the region, leaving few archaeological contexts intact.

His study examines the area as a palimpsest landscape where centuries of human activity and landscape evolution have successively and cumulatively left their signatures on the terrain. He tried to analyze and describe the past and ongoing human occupation and landscape formation processes at Gannata Maryam in order to understand how the cultural and archaeological record came to its present state.

Another related study was the Konso cultural landscape, which is recognized as an example of man-nature interrelationship and was made subject of various research topics specially the terracing systems. The Konso cultural landscape is dotted with cultural properties exhibiting characters that are known in various sites worldwide (ARCCH, 2009). These terraces retain the soil from erosion and create terrace saddles that are used for agriculture. The terraces are the main features of the Konso landscape and the hills are contoured by the dry stone terraces. Beyond the existence of the terracing system; in agricultural system and conservation of the landscape for controlling soil erosion, what makes similar with the study area is the strategy of site selection.

That is the walled towns (Paleta) are selected for their strategic and defensive advantage; the Konso constructed their traditional towns fortified with multiple rings of high rising walls at locations selected for defensive strategy. The walls surrounding the towns are built using locally available basalt. The multiple dry stone walled towns and their principal gates, major cultural spaces (Mora), major foot paths, wards (Kanta) organization, burials, new structures outside the traditional towns are characterized by extensive dry stone terraces.

In general, the Konso cultural landscape is forged by a strong tradition which is based on common values that have resulted in the creation of the Konso cultural and socio-economic fabrics. These persistent struggles of the population to harness the hard and dry environment clearly resulted in an impressive cultural landscape of the area (ARCCH, 2009).

One of the studies conducted in the study area was made by the Ethio-SPARS project in collaboration with the University of Mekele, Department of History and Cultural studies in the lowlands parts of Welkait, Mezega, 2015. The main objective of the study was conducting further archaeological survey of the area, identifying more historical sites of importance that is to make a survey of manuscripts in the ecclesiastic libraries of at least some of the main churches of the area. Among the most important findings of the project was the systematic documentation of the Bet Mulu Castle (Nosnitsin, 2015).

The monastic site of the Waldeba churches and monasteries are reportedly extremely rich but have never been explored, and this area has been hardly accessible to the scholars. The field research produced clear indications that the area was rich in manuscripts. As a result, it is important to start the systematic exploration and reconnaissance at least in the neighboring districts, which were also under the strong influence of Waldeba, to approach the latter in

the future. It is equally important that the authorized institutions and scholars will start elaborating the strategy as to how this very specific cultural area can be recorded and protected, in view of the ongoing development projects and the overall deep changes taking place in the local physical and cultural landscape.

The other related study in the area was the Ethno historical Research made by Wolbert G.C.Smidt (2011) among the Ch'aré People, a hidden ethnic group in the lowlands of Welkait, Western Tigray. There are only very few publications containing ethnographical data on that region, and most of them date from the late 19th century and from the 1930s. Usually, they define themselves as a separate group under the denomination Tsellim Bét.

Economically they lived from hunting and gathering, fishing, and, at least partially, from agriculture. Their former language, apparently one of the most endangered of Ethiopia, is still remembered by a few Chare elders. Both the linguistic and ethnographic observations strongly suggest a link of the Chare with the diverse Gumuz groups in western Ethiopia, even if they are rather far from the Chare. The present research was territorially very limited, therefore a further ethnological study following this one should survey the areas from the adjacent is needed.

2.3. Review summary on previous works

From this brief survey of the previous research works, it is understood that the works of different researcher's in the above stated areas were different approaches and methodologies in perceiving and interpreting cultural landscapes. That is previous few research works conducted in the area and other sites were very selective and the way cultural landscape seen is quite different.

This is a clear indication that the way cultural landscape interpreted is quite different from one researcher from the other and at the same time the perception to give meaning is also differ from community to community.

Therefore, most of the researches conducted in the area were also fragmentary and not addressed even the particular fields that the study was entitled. This research is quite different from the previous researches is that the main focus of the study is mainly on documentation of the existing cultural heritage sites of the area specially the tangible immovable heritage sites for the purpose of sustainable tourism development.

Also this study gives due attention to cultural sites that were continuously used by the given community that are strong attachment to the community. Finally, this research is quite different from previous studies is that it focused on the cultural properties which include churches, castles, burial and holy water sites. Generally, cultural landscapes can be read on many levels; that is landscapes as artifacts, buildings, castles, habitats, or other forms of properties depending on the perception and attachment to the nearby communities.

CHAPTER THREE

3. Data Presentation on Cultural Landscapes

3.1. General Presentation of the Sites

The cultural landscape of the study area, Welkait woreda, includes historical buildings, religious sites and burial markers. A total of six sites were identified of which three sites (Zuwa, Ona Eyesus and Medhanialen Holy Water) are located in the highland parts of Welkait, while the rest three; Bete Mule, May Gaba Mikael, and the Burial Sites of Women ("Weyzazirt Mekabir") and the "Commons" are located in the lowland parts. This chapter, therefore, provides some of the selected characteristics of these observed landscape resources.

The study sites were selected through pedestrian survey and observation. The first criterion for identification is based on their cultural and religious values and attachment as well as its historical significance to the community. This has to do with social values which embrace the qualities for which a place has become a focus of spiritual, historical or other cultural sentiments to the society (Ndoro, 2005). Equally frequently, places with a religious or traditional value may have great social significance sustained primarily by the knowledge of the community rather than by any visible mark, such places derive their value from these intangible associations. Thus, cultural landscapes had heritage value because of the need for human attachment to the past (Armstrong, 2001).

Secondly, some sites in the area are highly affected by the impacts of development projects, like the welkait sugar development project. As a result, to recommend and protect from a total destruction, an immediate documentation and conservation is needed. This creates an opportunity to inform the issue to the concerned authorities for future conservation and management of the site.

Lastly, some of the sites were selected based on their potential of yielding information about the culture and history of the region. This creates an advantage of maintaining sites and for understanding a place for educational purposes and to memorize of the past areas history (Jones, 2007).

3.2. Geographical Distribution of the sites

Archaeological sites are part of landscapes that once were an integral part of a human ecosystem (Renfrew et al., 2008). Landscapes were transformed from natural to man-made, as for instances, trees gave place to cereal crops, towns and villages formed on farm land and leaders built massive artificial hills, temples and palaces as a foundations on various landscapes. This means archaeological sites are integral parts of an environment in which past humans left their cultural signatures resulted from human-resource competition within the landscape for survival (Kifle, 2014). Geographically, the selected cultural landscapes are located both in the highland and low lands of Welkait.

3.3. Settlement Pattern

The study of Settlement archaeology includes both permanent and temporary sites and the interaction of humans with their landscape in order to understand how they adapted to it. In order to understand the impact of human being on the landscape, there shall be a need to identify and explain the spatial distribution of past human activities. This might mean understanding the location of sites within a landscape or the placing of structures or other features within a settlement. Artifacts, ecofacts, and features are the key evidence base in studying of distribution of ancient activities (Grant et al., 2002).

Thus, according to the data obtained from Welkait Woreda Plan and Finance Office (2015), currently about 92% of people lived on mixed rain fed farming lived in homesteads surrounded by farm plots. The largest centre is Adi Remet; 3000 households in 2015, and 5000 people reside in rural towns of May Gaba and Awra. These areas are relatively the densely populated sites of the area in contrast to others.

From my observation in the field work, in the lowlands of Welkait there is a sparsely populated area inhabited by peoples like the Chare, Tigreans, the Amhara and others coming through villagization program. Traditional houses made from grass and tin are located there. But, in the highland regions the populations are relatively dense and lived in through mixed agriculture. The variation of population distribution is primarily emanates from the presence of different climatic conditions as well as the topographic nature of the area. The following picture below shows the current distribution of settlements in the study area.

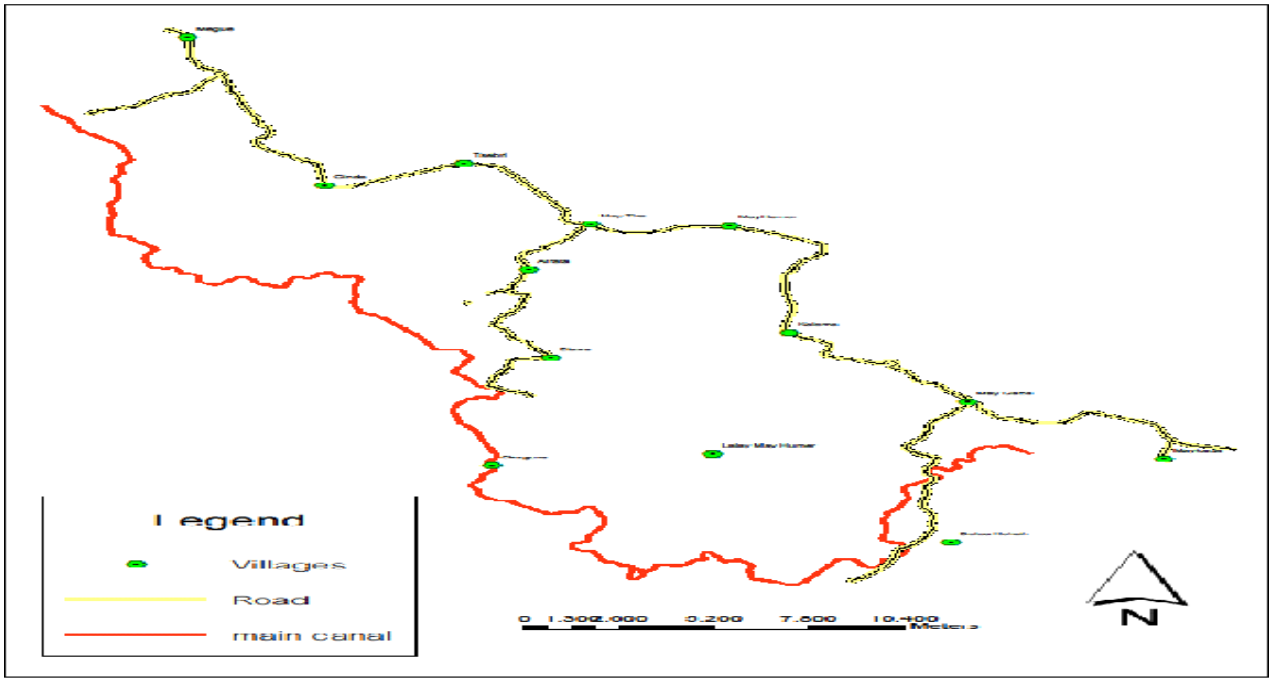

Fig: 3.1 Maps of Existing Settlements of the Study Area (TWWSDSE, 2013)

3.4. Site Characteristics

The main purpose of studying Archaeology is for identifying and evaluating the evidence of past human activities. For instance, sites are a product of human activities, which have been altered over the succeeding years by the effects of both physical and human threats. This process eventually reduces the unique values of the landscape unless a proper management system was designed (Jones, 2007). One of the most important aspects to know is that every area shows its own dynamic pattern and each landscape has its own value, depending on the local context (Agnoletti, 2006).

Generally, important characteristics of cultural landscapes are diversity, character and rarity. Time determines the value, often indirectly by determining rarity: the older a cultural landscape and the elements within, the more rarely that this type of landscape is likely to be found. Though, there are many sites in the area, the following are selected as part of this study.

3.4.1. Landscape of Bete Mulu Castle

The Castle of Bete Mulu is located at the hilltops of the lowlands of May Gaba with its geographical coordinates of 0355768 North latitude and 1524161 East longitude and an elevation of 939 meter above sea level. According to the information from informants (Nigussie Haile, 2016) and written literatures (Hatke, 2013), Bete Mulu Castle is attributed to Ayanazgi, who was the governor of Welkait during the 18^{th} century.

The architectural design of the castle is rectangular in shape with one storey building, but many parts of it are missing due to destruction. Most of the architectural design as well as materials used to build the Castle resemble very much of the castles found in Gondar and its vicinity. The material that was used for the construction consists of rough pieces of basalt rocks with white

lime mortar in the same fashion with that of the Gondarian Castles. We find no decoration that we come across at the other Gondarian Castles on Bet Mulu. They might not have been incorporated or they might have come off as result of neglect and old age.

Fig: 3.2: Bete Mulu Castle (Photo by Yilikal, 2016)

3.4.2. Landscape of Burial Sites

The study of human burials has always been a major concern of archaeologists. In the archaeological record this may be manifested by burial in elaborate tombs or with rich grave goods (Hill, 1987). Burials and burial grounds from the distant past, or from distant lands, are frequently the subject of great attention, both among the general public and among scholars. Burial evidence was used to construct chronological sequences and changes in burial customs were generally interpreted in terms of changes in religious beliefs brought about by invading

newcomers. There are two distinct burial sites in the study area, the tumuli of the **"**commons**"** and the women ("Weizazirt Mekabir").

The burial sites of the "commons" are located close to the castle of Bete Mulu, in the south western direction with a distance of 50 meter away and 80 meter to the east of the former church, St. Mikael covering an area of 15m by 2m. The Coordinate of the central location of the site is 0355183 North latitude and 1524231 East longitudes with an elevation of 929 meter above sea level. The pattern of distribution is set in horizontally and it is rectangular in shape consists a total of 42 in number covered with basalt stones. A total number of 10 visible sherds were found in the site and the redware fragments are the dominant ones. These sherds might be an indication of the use of the ceremony for the dead annually or in any other date where ritual is conducted.

Fig: 3.3: Burial sites of the **"Commons"** (Photo by Yilikal, 2016)

At the foothills of Bete Mulu and the south west of the settlement area of May Gaba town, there is a large area allocated as a burial site for women, the burial Sites of Women ("Weizazirt Mekabir"). At present what is visible are scattered stones. The raw materials of the stone are of granite and basalt. The distribution of the burial covers an area between 20m by 50m. Geographically, the central location lies between coordinates of 1550371 North latitude and 374194 East longitudes with an elevation of 880 meter above sea level. This burial site is particularly related with the commemoration of the Castle of Ayanazgi in the 18th century. That is after the building of his castle, Bete Mulu, he is entitled to conduct an inaguration ceremony for his palace by calling the surrounding communities and the 40 Ladies ("Weizazirt") from the highland parts of Welkait.

According to the data obtained from informants, Ayanazgi prepares accommodations for the incoming guests with drinking like Tej, Tella and others. In terms of food, the meat of cows and oxen were served to his relatives while the meat of goats for the invited Ladies. Because of the harsh climatic condition of the area which easily damages the meat of goats as well as the continuous tradition of the society, eating of goats' meat caused severe health problems. Thus, all the invited guests; "40 women" who ate the goat meat died immediately. As a result of this, they were buried there and the site is named as the burial sites of Women ("Weizazirt Mekabir") (Wolde Tesfaye, 2016). Some of the tumuli found in the sites are the following:

3.4.2.1. Shina Abagaja site 1

This name is derived from two terms; Shina means strait or narrow pavement of roads while Abagaja is the name of the burial site found in Bete Mulu kebele. The geographical coordinates of the site is 1524480 North latitude and 371695 East longitudes with an elevation of 878 meters above sea level. There is a huge deposition of basaltic stones (stone deposition) in the site. The total area of the deposition is measured to be 3.8m by 3.9m. According to the data obtained from informant (Demoze Gebeye, 2016) the deposition of the stone is an indicator of previous presence of the church. During the field observation, I have seen it and also reached to the same conclusion.

Fig: 3.4: Stone Accumulation Shina Abagaja Site 1 (Photo by Yilikal, 2016)

3.4.2.2. Gobo Ayanazgi site 2

It is one of the burial sites of women ("Weyzazerit Mekabir") found in the western sides of Bete Mulu, with coordinates of 0355122 North latitude and 1524192 East longitudes of elevation 882 meter a.s.l. It has a length of 3.70 meter and rectangular in shape. The site is disturbed because of terracing, erosion and may be war. Different literatures stated that in pre Aksumite and Aksumite sites burial indicators are positioned at foot hills and as such we see a similar pattern here. There is basalt stone; natural, crude and non dressed stones are found. There is settlement at the hill sides of the burial site.

Fig: 3.5: Gobo Ayanazgi site 2 (Photo by Yilikal, 2016)

3.4.2.3. Gobo Ayanazgi site 3

The site is found adjacent with site 2 in a coordinate of 1552220 North latitude and 373033 East longitudes with an elevation of 882 meters a.s.l. It is an eroded burial marker with a length of 4.5 meter and circular in shape or rounded. At present the stones are cut, piled and collected for the construction of terraces.

Fig: 3.6: Gobo Ayanazgi site 3 (Photo by Yilikal, 2016)

3.4.2.4. Gobo Ayanazgi site 4

The site is located near to site 3 with a coordinate of 1550371 North latitude and 374014 East longitudes and an elevation of 880 meters a.s.l. It is an uplifted tumulis with irregular and non dressed stones (basalt stone); rough and circular in shape with diameter of 3.10 meter. The site is at present disturbed by fresh digging and quarrying.

Fig: 3.7 Gobo Ayanazgi site 4 (Photo by Yilikal, 2016)

3.4.2.5. Gobo Ayanazgi site 5

It has a geographical coordinates of 1550061 North latitude and 374583 East longitudes with an elevation of 884 meters a.s.l. This is an old burial site indicator because the stones are weathered. It is an extension of the women burial site which is irregular, non dressed granite and basalt stones found in an area of 4.5 meter.

Fig: 3.8: Gobo Ayanazgi site 5 (Photo by Yilikal, 2016)

3.4.2.6. Gobo Ayanazgi site 6

A large burial marker covering a diameter of 4.5 meter at the center of which there is a dry tree. It has a coordinate of 1549691 North latitude and 374971 East longitudes with an elevation of 885 meter a.s.l. The stones are not shaped, not dressed belonging to granite and basalt in character. Pottery fragments are collected on the surface of the tumulus; a reddish pot fragments probably belonging to a griddle; it might be connecting with the annual ceremony for commemorating of the dead. The thickness of the sherds is one cm; one of the two sherds is a rim and the other is a body sherd.

Fig: 3.9: Gobo Ayanazgi site 6 (Photo by Yilikal, 2016)

3.4.2.7. Gobo Ayanazgi site 7

A larger tumulus made of an irregular, non dressed phrols of stones at the center of which there is a dry tree with limited branches covering with a diameter of 5 meter. What is different here is the presence of fragments of Cherts, Quartez, and Quartizite other than basalt and granite. There are also fragments of Schist. This site is comparable with the tumuli described by **Goitom** (MA Thesis in preparation) and in eastern desert of the Sudan (Manzo et al., 2010). This indicates the presence of similar tradition both eastwards and westwards. It has a coordinate of 1548713 North latitude and 373856 East longitudes with an elevation of 880 meter a.s.l.

Fig: 3.10: Gobo Ayanazgi site 7 (Photo by Yilikal, 2016)

3.4.2.8. Gobo Ayanazgi site 8

It is a large tumulus in the center of which is a tree with small branches. The leaves are smaller, a type of succulent plant. Unlike the other burial sites, here there is dominantly one type of stone, granite, weathered. The diameter of the site is 5 meter and lies within the coordinates of 1547076 North latitude and 375588 East longitudes with an elevation of 884 meters a.s.l.

Fig: 3.11: Gobo Ayanazgi site 8 (Photo by Yilikal, 2016)

Although, there is a large concentration of tumulus in the lowlands of Welkait called May Gaba area, the site is highly affected by digging, terracing, construction, anthropogenic disturbance and erosion. We have surveyed the whole area at the bottom hill of Bete Mulu including the settlement sites and part of the burial sites of the women ("Weizazirt Mekabir").

3.4.3. Religious Sites

Religion is expressed in the landscape through houses of worship (meeting halls, churches, mosques, temples and others), burial grounds (like public cemeteries), private and public shrines, signs, and place names (Vogeler, 2010). A religious site is an area of special spiritual significance to peoples and communities. The religious or cultural designation of an area as sacred, especially those which are relatively natural, may either intentionally or coincidentally promote the conservation of its associated biodiversity (Anderson et al., 2003). Many sacred areas in nature are associated with indigenous cultures (Hadley, 2002 in Uganda Wildlife Authority (UWA), 2012). There are three religious sites selected for this study which is listed below.

3.4.3.1. Landscape of Ona Eyesus Church

This is one of the selected sites in the study area and estimated to be 7 to 8 kms away from the woreda capital, Adi Remet. It is located in the highland parts of Welkait; at the plateau landscapes of Adi Gaba kebele encircled by settlements and agricultural farmlands. The original Kidane Mihret church is positioned some 2 kms to the south west of the present day church, it is known as Ona Debre Eyesus (Ona means abandoned, Debre means church, Eyesus means of Jesus). What we see in this area is an old structure. At the center we observed a structure belonging to the old church. Surrounding this church there is a compound, some 20 meters from the main church. The structure is basically of basalt stones. All over the compound there are different species of trees like Juniperus, Ecaalyptus and Podocarpus. Most of the stones found in the church are irregular, non- dressed with tremendous fragments of pottery and other associated materials.

Fig: 3.12: The structure of Ona Eyesus church (western side; photo by Yilikal, 2016)

3.4.3.2. Landscape of Zuwa Kidane Mihret Church

Zuwa Kidane Mihret is one of the earliest churches established in the medieval periods of Ethiopia. The presence of different church materials like the cross, drum, sistrum, manuscripts as well as the internal paintings of the saints has an indication of medieval establishments. It was built after the deterioration of the nearby church, Ona Eyesus and located in the highland parts of welkait closer to settlement and agricultural farmland areas of Adi Gaba kebele. The church is serving as a center of religious activities with its annual celebration twice a year, February and August 16. According to the information acquired from church leaders, all the contributions of the ceremony (either in kind or in cash) are covered by the residents of the area themselves. In addition, the church also serves as a center of cultural practices especially in the case of resolving disputes raised by certain groups of peoples. According to the church leaders and the

local communities, when two conflicting parties came to the church and give their will, the church provides a solution within the first seven consecutive days.

As a result, the one who makes a fault or lie is punished, exhibits sickness or other forms of disability. The informants said that they are an eyewitness account for many disabled individuals who were punished because of lying. Apart from this, the church has a unique history of surviving from the Mahdists attack during the 19th century where almost the whole religious sites in the area were burnt. According to the narrations of the informants, when the Derbuish approaches the church a white Snake and groups of Bees attacked them severely as a result they retreat to the other sites without making causalities.

Fig: 3.13: Zuwa Kidane Mihret Church (photo by Yilikal, 2016)

Fig: 3.14: Religious Paintings inside the church (photo by Yilikal, 2016)

Fig: 3.15: Votive offerings during the annual ceremony of the church (Yilikal, 2016)

3.4.3.3. Landscape of Medhanealem Holy Water

This sit is found at the western parts of the woreda capital, Adi Remet, with a distance of 3 kms. It is an abandoned structure and what are visible currently in the site is thick irregular and non dressed piles of stones. The raw materials for the piles of stones are basalt. The maximum height of the structure is 1.4 meter and the thickness is 1 meter. The radius is about 55 meters.

It is a circular structure; it is currently used as a place of worship where people come in search of the Holy water and commemorating, votive offerings like birr, coins, candles, match, and incense. The total area of the structure is estimated to be 600 square meter. The compound is full of different plant species ranging from Ficus vasta, Ecaalyptus, Weyra to bush forests. The site

also serves as a place of conflict resolution, especially in the case of marriage cases, for the surrounding communities through the intermediary of the leader of the site. During the survey in the fieldwork, I have seen also a marriage reconciliation arbitrated by priests and local elders.

Fig: 3.16 The Holy Water of Medhanialem (photo by Yilikal, 2016)

3.4.3.4. Landscape of May Gaba Mikael

The church of May Gaba Mikael is located at the lowland parts of Welkait particularly close to the town of May Gaba. The church was primarily built at the hilly sites of Bete Muly Kebele, close to Ayanazgi Castle, but later it was moved from the hill of castle down in 1953 by Fitawrari Yelma, administrator of the area.

With the foundation of the town of May Gaba in 1971, the church was re built in the urban area, the circumstance which will endanger the local ecclesiastic collection. The picture found below is the church of May Gaba Mikael, currently serving the surrounding communities of religious function.

Fig: 3.17 Church of May Gaba Mikael (Nosnitsin, 2015)

Chapter Four

4. Discussion and Findings of the study

4.1 Discussions

There are many ways of studying and interpreting a landscape. Every cultural landscape has its own spatial structure, but it is important to study this feature in relation to socioeconomic influences in order to identify the cultural identity represented by the spatial structure (Agnoletti, 2006). This chapter, therefore, deals with the discussion and findings of data which was collected using different data collection tools such as interview, archival study, pedestrian survey and field observations. Accordingly, the detail discussion and findings of the sites are presented here in below.

4.1.1. Bete Mulu Castle

4.1.1.1 Architecture and Raw Materials

In terms of topographic view, the site is situated in the hilly mountains of Bete Mulu kebele, in the lowland parts of Welkait. It is strategically selected since it is located at the center of the lowland parts that enables to control the surrounding areas and beyond. It is surrounded by the presence of scattered settlement villages, agricultural farmlands and a variety of plant species and trees.

With a near distance (2 km) there is a town called May Gaba, a center of administration and trade activities of the woreda next to Adi Remet, woreda capital. According to the information obtained from informants (Nigussie Gebre) the history of its establishment is traced back to around the 18th century attributed to Ayanazgi, the governor of Welkait during the Gondarian

period. This castle is, therefore, one of the results of medieval achievements which provide an excellent starting point for the study of medieval history in the area.

The building of Castles in any place influenced the landscape and its impact on the natural environment manifested itself in a number of ways. One fruitful avenue of recent research has been the recognition that at some castles the surrounding landscape had been modified for different human purposes (Liddiard, 2010). According to the field observation of the researcher and the data acquired from informants and different literatures, much of the architectural design, art (includes the wall, window, storey and others) as well as the raw materials (like white lime mortar) used to build this castle is resemble very much of the castles found in Gondar and its vicinity. It is one storey building with rectangular in shape like that of the Castles in Gondar (Etege Mentewab Complex, Atse Bekaffa Palace, Atse Eyasu palace etc).

In terms of architectural design, it is difficult to compare in detail with Gondarian sites since much of its walls and upper floors are missing. Nevertheless, we find the same style of design on the windows and doors in the form of arches and barrel-vaulting. We find no decoration that we come across at the other Gondarian Castles on Bete Mulu. They might not have been incorporated or they might have come off as result of neglect and old age (Ethiopian Cultural Heritage Project (ECHP), 2007).

The material that was used for the construction consists of rough uncoursed pieces of basalt rocks with white lime mortar in the same fashion with that of the Gondarian Castles. The source of the white lime mortar is located approximately 1 km away from the castle. That is the white mortar, the stone and wood, and other building materials are collected from the nearby sites. Despite this, the use of lime in Ethiopia was quite exceptional at that time (17^{th}-18^{th} century) and

was not particularly diffuse afterwards, and especially outside the area of Gondar and Lake Tana (ECHP, 2007). That is why we see a similar architectural design and structure in both sites. With regard to technology and manpower, the local inhabitants said that the castle was built by foreigners who were involved in the building of the Gondarian Castles. But, this data requires further investigation.

In general, what we have seen from this castle is that there is a similar style in the field of architecture in most of the northern parts of Ethiopia especially with Gondarian castles.

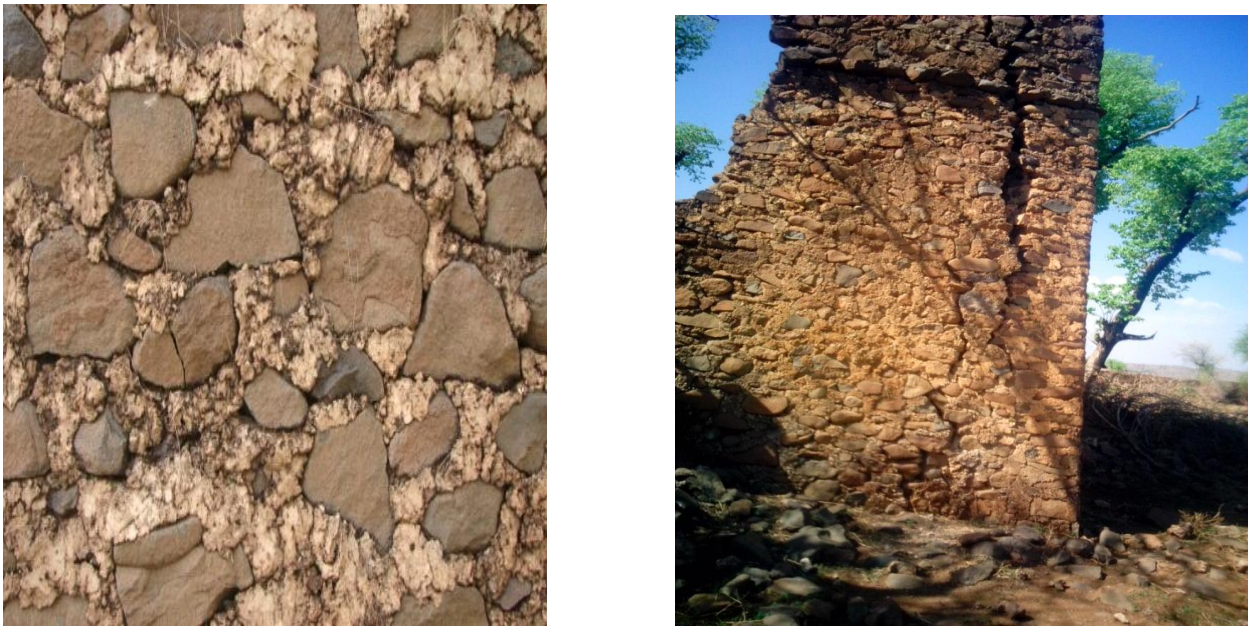

Fig 4.1: Rough Uncoursed Basalt Rocks with White Lime Mortar (Bete Mule, Welkait)

ECHP, 2010

Fig 4.2: Structures of Gondarian Castles (Source: ECHP, 2010)

4.1.1.2. Selection of the Site

A place is important or special to individuals or groups since it carries certain characters, feelings, and memories that matter in their perceptions. Therefore, to design a meaningful place is to design a place that is able to engage the senses that record experiences of the past events. This relationship makes it easy to recall the memories and achieve emotional feelings within the landscape (Yue, 2013). Schulz thinks that "human identity presupposes the identity of place" (Hardesty et al., 2009). He further illustrates as; man-made places are related to nature in three basic ways: they visualize, complement, and symbolize. By these, humans show their understanding of nature through structures, add what we need that nature doesn't have, and finally make it a meaningful place in which to dwell (Yue, 2013).

Accordingly, there are a number of reasons for the selection of the landscape of the Castle. The first explanation is because of the presence of vast and extensive lands that used for the production of different types of crops. This resource enables to sustain the existing governors,

their followers and the societies inhabited in the area. In other words, this asset is a source of revenue for the governors. Secondly, the availability of water resources in the area; that is the presence of major river basins likes Tekeze, Zarema and others highly attracted the governors and other local communities to settle there (Demoze Gebeye, Beza Abreha, 2016).

Lastly, the site is located at the center of which different links, connections and interdependence for diversified groups of populations coming from the different corners of the nations including the neighboring countries (like the Sudan) are found . This makes the area as a center of an outlet to the different directions either locally or regionally to the different populations even now a day (Smidt, 2011).

4.1.1.3. Function of the Castle

Archaeological sites are usually categorized by function. Generally this is a matter of determining the primary function since most sites have several purposes. A castle is primarily defensive but may also have a domestic, economic and political function as well as being a status symbol (Grant et al., 2002). In other words, castles had a multiplicity of roles in the medieval period, and according to the demands of the existing situation; to provide a secure aristocratic residence and a military headquarters. That is to control the surrounding territory including border and key transportation hubs. Located in a defensible position, the castle provided a center from which the governor administer justice and also a symbol of authority and the high social status of the family that owned it.

According to the data obtained from informants of the area (Nigussie Haile, Woldie Tesfaye, Tekleab Nega, 2016), the castle of Bete Mulu is serving primarily for the purpose of administration and residence for the dignitaries and their families. Alongside their familiar role

as military fortress, castles also provide potential for the study of topics as various as the household, attitudes to authority, lordly lifestyles, landscape design and spirituality. Because of the absence of protection and conservation on the part of the community or concerned authorities, the castle was left to be in a very poor condition. It is currently exposed to deterioration due to absence of proper management and conservation on the part of the concerned body. Most of the doors, windows, walls and other parts of the castle are heavily damaged; as a result it needs immediate conservation on the part of the concerned body.

4.1.2 Burial Sites

4.1.2.1 Nature and Patterns of Burials

Burials may take place in a formal or informal cemetery or burial ground or they may be placed randomly as a matter of its particular tradition (Spars, 2010). Archaeologists examine the remains of burials in order to determine meaning associated with body alignment, grave goods, and spatial patterns within the cemetery and the cemetery's placement in a settlement at large (Francis et al., 2002).

The burial sites of the study area are located in the lowland parts of Welkait in two distinct sites. As it is stated in chapter three, the burial sites that are included in this study are the sites of women ("Weyzazirt Mekabir") and the "commons" (Local Residents). What distinguishes in the two sites is that in the case of the former no sex classification since all of them are in the same sex groups while in the latter there is differentiation of sex as male or female. In the burial sites of women ("Weyzazirt Mekabir"), it is distinct in that only the women were buried at the same time in the same place during the inauguration ceremony of Ayanagzi Castle (18^{th} Century). These sites considered to be medieval burial sites located close to the castle of Ayanazgi. From

this site, a total of 8 tumuli were selected based on its visibility and existence through survey and observation. There are different surface collections found in the site includes pottery sherd fragments, quartz, quartzite, schist, and dominantly basalt and granite stones.

According to the data acquired from informants, these sites are Christian burials where in each year there was an annual ceremony by the families of the dead through different practices. Now such kinds of ceremony ceased to exist and most of the burials are highly affected by erosion, terracing and other developmental activities. With regard to the pattern of the burials, it is horizontally arranged with an area of covering 100m by 100m beneath the Castle of Ayanagzi surrounded by settlements and agricultural lands.

4.1.2.2. Comparative Analysis to other Burial Sites

The identification of burial sites is made based on a combination of different variables such as age, sex, and the presence of markers in the form of specific types of clothing and other indicators (Spars, 2010). For the purpose of this discussion, one related tumulus site is selected at the national level and two tumuli sites at regional scale. The comparison is based on their similarities in shape, raw material composition and the spatial coverage of the area.

The tumulus site located at the national level is found in the Northern parts of Afar region, named, Ab'ala woreda, 55 km east of Mekele town. Thus, a similar tumulus site is located in the sites of Abraha Barri (Goitom, (MA Thesis in preparation). This tumulus site is built by layer of stones and found everywhere in the Ab'ala plains. They are found associated together with the other tumuli and sometimes overlapped to each other. Stone platforms are found in concentration in Ab'ala area, particularly in the site of Abraha Barri. The orientation of the circular tumuli is ambiguous to notice. This tumulus is similar to Gobo Ayanazzgi site 2 of the burials of womwn.

What we see in the two burial sites is that, there is a dominant of basalt and granite stones used as as a shelter of the burials. The tumuli looks like a circular or ring in shape encircled by stones and the size of the coverage area is also seems similar. Above all, there is no clear indication to identify of distinctive orientation or particular direction of the tumuli as well as the absence of any burial goods except some fragments of pottery especially in Gobo sites.

Fig: 4.3 Gobo Ayanazgi Site 2, Welkait

(Photo by Yilikal, 2016)

Fig: 4.4 Mound tumulus; Abraha Barri, Afar

(Goitom, (MA in Preparation)

Regionally, one of the tumulus sites is located in the neighboring country, Eastern Sudan, an archaeological site led by Manzo et al., 2010. The selected tumulus is located in the sites of Jebel Qoqay / Romeladid, structure of type 6. Elongated tumulus ca. 4 m in length with East-West main axis and stelae erected at the eastern and western sides. This site was thought that it could contribute to investigating the possible relationships between the cultures of Eastern Sudan on one side and the Red Sea coast via the Eastern Desert on the other. It looks like an oval in

structure dominated by high concentration of basaltic stones which is gray in color all round the tumulus. Thus, a relatively similar site in the study area for this comparison is Gobo Ayanagzi 4. It is dominantly marked by the presence of tremendous amounts of basaltic and granite stones with reddish- grey in color and other different small fragments. It looks like circular in shape encircled by different tree species.

Dominantly, basaltic and granite stones are located in both sites with nearly a circular in shape and the size of coverage of areas is more or less similar. In general, the whole observation of the site clearly indicates that there is relatively similar structure of the tumuli including the material composition, its shape and spatial coverage.

Fig: 4.5 Gobo Ayanazgi site 4, Welkait (Photo by Yilikal, 2016)

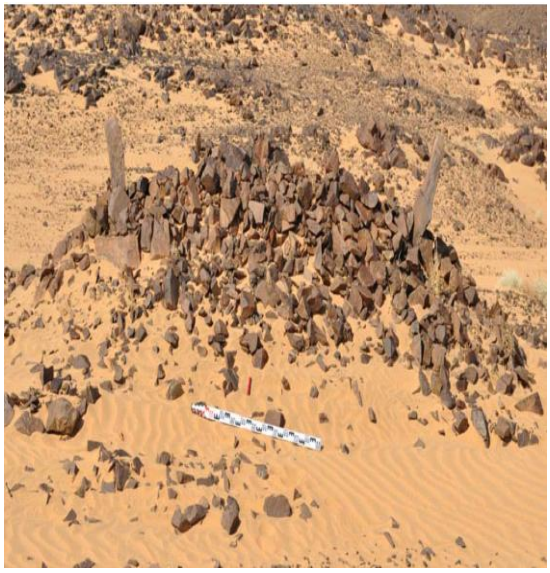

Fig: 4.6 Jebel Qoqay /Romeladid site 6, East Sudan (From Manzo et al., 2010)

The second comparative site of the tumulus is found in Suakin, Sudan. The tumulus is covered with predominantly basalt stones and it looks circular in shape. The stones became scattered may be due to erosion, wind or human activity. It is located near to farmland areas. Likewise, the site

of Gobo Ayanazgi site 6 is covered with a deposition of basalt stones, at the center there is a tree with limited branches. The shape is circular and there is a discovery of pottery fragments in the site. Here we see a similar tumulus structure in terms of materials composition except the color of the stones. The shape of the tumulus in both cases is almost similar but difficult to differentiate its type since no indicator in both sites.

Fig: 4.7 Gobo Ayanazgi site 6, Welkait

(Photo by Yilikal, 2015)

Fig: 4.8 Burial sites in Suakin, Sudan

(Courtesy by Alemseged, 2016)

4.1.3. Zuwa Kidane Mihret Church

4.1.3.1 Establishment

Zuwa kidane Mihret church is located in Adi Gaba kebele, Welkait Woreda, Tigray. According to the data acquired from informants, it was established in the 15th century by the forerunner of Tseble, governor of the area, under the command of Atse Baeda Maryam. The church is found in

the extensive vast plain lands of Adi Gaba kebele, in the highland parts of Welkait. It was built by Ethiopian architects and now it is restructured and rebuilt with new mode of building styles and raw materials (Woldie Tesfaye, Tsehayeye Ambaye).

The shape of the church seems rectangular and the walls are made from cement and both its internal and external parts are painted. Especially, the internal parts of the church are highly decorated with symbols of different religious saints including the known church educators St Yared. The style of painting is relatively similar to the decoration styles of Debre Birhan Selassie church in Gondar, but quite different. This might be one of the influences of Godarian kings and rulers in the area in spreading their ideology, Christianity.

4.1.3.2 Site selection

In association with the importance of archaeological sites, the additional thing that can be consider is the value we place on them through the ways we commemorate (Hardesty et al., 2009). According to Hardesty et al., 2009 stated that there is a need of discussion at worldwide perspectives on values and the intersection between value and significance of sites. According to informants of the area, the site of the church in particular and the landscape of the area in general selected for religious purposes. It is an area free of disease, especially malaria, being located in the highland parts of Welkait. There is also a tradition believed by many of the local communities that the site is selected because of religious prediction (Kesete Girmaye, Tekleab Nega, 2016). But, it is difficult to check this tradition with review literatures.

4.1.3.2 Ritual Practices

A sacred site is defined as an area of special spiritual significance to peoples and communities. Participation in ceremonies enables people to relate to higher forces; it is religion in action.

Ritual involves repeated performance of religious activities, usually at a particular place. It can reinforce the social bonds of a group and reduce tensions. The church has a spiritual ceremony twice a year as it is stated in chapter 3. I have seen the ceremonial practice when I was in the fieldwork which is a clear indication of the continuity of the religious practices.

According to informants, about 2000 to 3000 local inhabitants and others coming from the different areas participated in the ceremony. The church is also a center of cultural practices especially in resolving conflicts arises from different issues like marriage, theft and other customary cases for the surrounding community. Consequently, what the researcher observes from the field study is that there is a continuation of the spiritual and cultural practice of the church.

4.1.4. Ona Eyesus Church

4.1.4.1 Establishment

The site of Ona Eyesus is located in the highland parts of Welkait Woreda, in particular Adi Gaba kebele. The topographic feature of the landscape is plateau and there is a diversified type of plant species that encircles the church. It was established as a religious site in the beginning of the 15th century (c.1410). It was primarily built for serving religious purposes to the nearby communities.

4.1.4.2. Site selection

The site was selected for religious reasons since it is located at the centre of the settlement areas and due to the presence of diversified types of plant species. Because there is a strong belief that churches are built in places where there is abundant species of trees and they are considered as the heritage bestowed for present and future generations as a legacy of the national traditions,

customs, history, and culture passed on from the ancestors. The importance of sacred sites lies in that they are not only benefiting the ecology of a particular country but of the whole world.

4.1.4.3 Ritual Practices

Sacred sites may contain sacred items or objects, such as sacred trees, sculptures or images of god, religious buildings and instruments. In other words, sacred sites are cultural landscape fragments and an ecosystem type that maintains material and energy exchanges with the outside environment through natural ecological processes and related cultural practices. What we see in this site is only the existence of a ruin structure encircled by different species of trees. All the religious materials and the church's building are destroyed and its function ceased to exist.

4.1.5. Medhanialem Holy Water

4.1.5.1 Establishment

This Holy water is one of the "famous" sites of the area that many of the populations that follow Christianity are coming everyday in seeking blessing and curing. The communities did not give a clear date of its foundation except they stated that it has serving them for a long time. Though, the church has lasted so long, the existence of the holy water was recognized recently. One hermit who is now responsible for administrating the site discovered the holy water. It is said that the hermit had a revelation and it had taken him two years to locate and identify the exact place of the holy water. Since the time of its discovery the holy water is becoming famous for its curing power from various health ailments.

The hermit, the founder, has serving at the site for the last several years till now a day as a head and service provider. In the site, the leader is acted not only the spiritual activities but also a

known mediator for the cultural practices. Especially conflicts arise due to marriage cases of the wife and the husband are coming to the site in order to mediate by the spiritual leader. After taking a long time discussion with the parties, he compromise and convinced them and finally they agreed either to lead their life or divorce. In most cases the disputes are settled peacefully and at least three cases are coming in the site every day.

4.1.5.2. Site selection

Natural sacred sites occur in a variety of ecosystems and landscapes: in many cultures of the world, mountains are considered as sacred, as are the sources of water; rivers and lakes. With no doubt that the site is naturally emerged with the force of supernatural power as a religious reason. The network should consider sacred natural sites in different environmental settings so as to learn more about culture-nature relationships. The potential for well-managed (and preserved) sacred sites to act as models may be important for improved land-resources management and biodiversity conservation, both at sites adjacent to sacred sites and further afield.

4.1.5.3 Ritual Practices

Archaeologists are more interested in how religion affected the people practicing it rather than whether a particular religion accomplished what its believers hoped. All religions cater to basic human social and psychological needs due to the fact that much of the value of religion comes from religious activities. The Holy water of Medhanialem is serving thousands of people who came from every direction of the woreda and beyond. The number of the service attendants varies from season to season. According to the head of the site, this Holy Water is serving a spiritual purpose for those sicknesses' coming from different areas. Culturally, the head of the site, a priest, works as a negotiator for any conflicts arise between the surrounding communities

especially most of the cases coming are marriages. During the field observation, I have seen such mediation by the priest.

4.1.6 May Gaba Mikael

The current structure of the church is a recent building, but the time of its original establishment was formerly located in another place, at the Bet Mulu Castle, which was the foundation of Ayanazgi, the local governor in the first half of the 18th century. However, the monks could not tell the name of the founder and an approximate foundation time. The head of May Gaba Mikael only stated that the local community is closely connected with the Bete Minas of Waldeba. It is a monastic community with around 20 monks and 5 nuns. A traditional school is run at the monastery, offering teaching up to the level of liturgy, qeddase (Nosnitsin, 2015).

The collection of May Gaba Mikael has scores of interesting books, and shows a few typical for the monastic library. As in the case before, there are some books marked with the sing of the "House of Minas" (Bete Minas). A sizable 17th century manuscript of Tamra Maryam "Miracles of Mary", written in several hands, was donated, according to a note, by "communities of Abrantant to Kasad Aga Maryam". The church possesses a late 16th or 17th century Targwame mälaktä Ṗawlos. There is also a manuscript of Mäṣḥafä ganzät, book of the funeral ritual, datable to the 17th century at least, appears to be an exceptionally well preserved example of the service book and which is intensively used for funeral services. Some of the manuscripts found in the church are listed here in below.

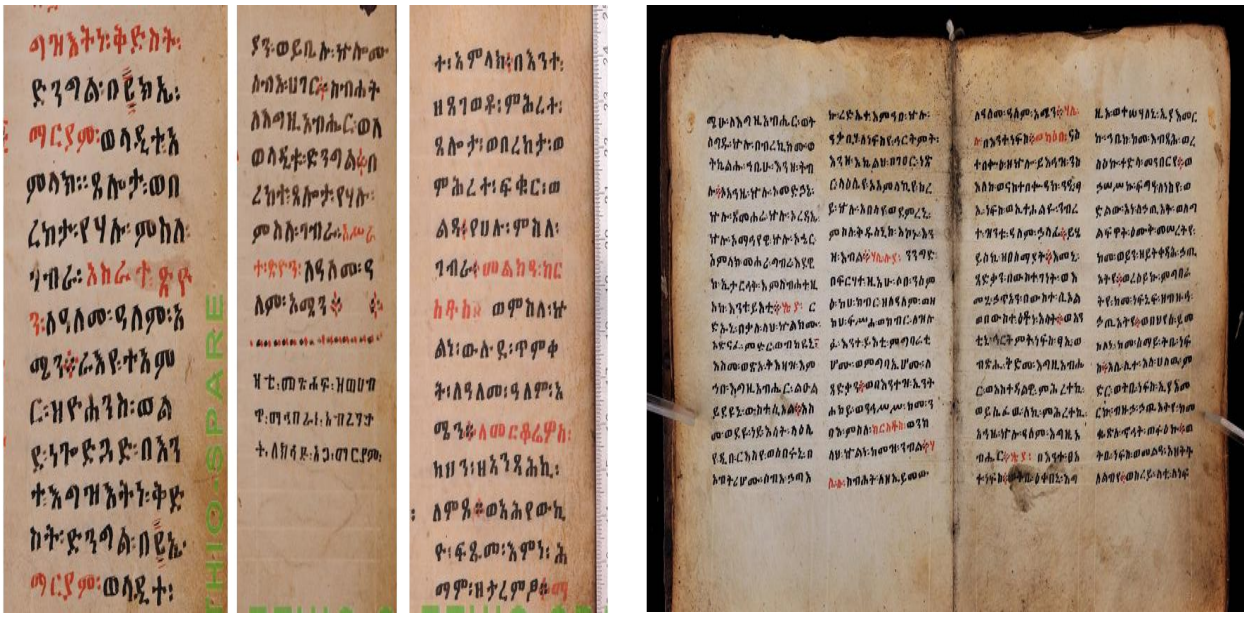

Fig: 4.9 Miracles of St. Mary (Left) and Book of the Funeral Ritual (right)

(Source: Nosnitsin, 2015)

4.1.7. Cultural Remains Collected from the different Sites

Material culture remains in their broadest sense are objects that people made and what they signified (Grant et al., 2002). According to Gamble (2001), artifact is classified by the attribute they possess: shape, color, material, decoration, etc. At a higher level of classification we will encounter archaeological cultures, culture groups and techno complexes (Gamble, 2001). The presences of these cultural remains indicate that the sites were inhabited by the peoples for long periods of time as a permanent settlement. Some of the artifacts collected from the different sites in the area are listed below:

No	Site Name	Materials	Quantity	Site	Remark
1	Bete Mulu	Pottery	6	Ayanagzi Castle	
2	Burial Sites	Pottery, schist, quartz, etc	10	"Weyzazirt Mekabir"	
3	Zuwa & May Gaba Mikael	Religious church materials (Manuscripts, drums, Cross, Sistrum...)		Zuwa Kidane Mihret	

Table: 4.1 Artifacts collected from the study area **(**Yilikal, 2016**)**

In Ethiopia, pottery is a widely practiced artisanal occupation and still has a fundamental role in particular in the everyday life of Ethiopian farmers. There are different artifacts found in the surface of the different sites of the study area with its varieties. But the dominant ones found in many sites are pottery fragments. Most of the fragments are reddish in color and for the purpose of this discussion two pottery fragments are used as a representative of all since they are selected based on their availability, its intactness, and concentration types.

As it is shown in the figure below, the pottery fragments are collected from the sites of Bete Mule Castle and Burial sites. As we infer from the pictures below, the burial sites of women ("Weizazirt Mekabir"), there are pottery fragments that are collected on the surface of the tumulus; a reddish pot fragments probably belonging to a griddle; it might be connecting with the annual ceremony commemorating the dead. One of the two shreds is a rim and the other is a body shred. They are reddish in color made of clay soil with mixing sands. It might be used for the purpose of cooking or any other uses by the time and needs further research.

In general, what the researcher observed from all the pottery products is that, the population lived in these sites used widely these materials and still continuing in a sedentary ways of life in the area. In other words, there is a permanent settlement of the population.

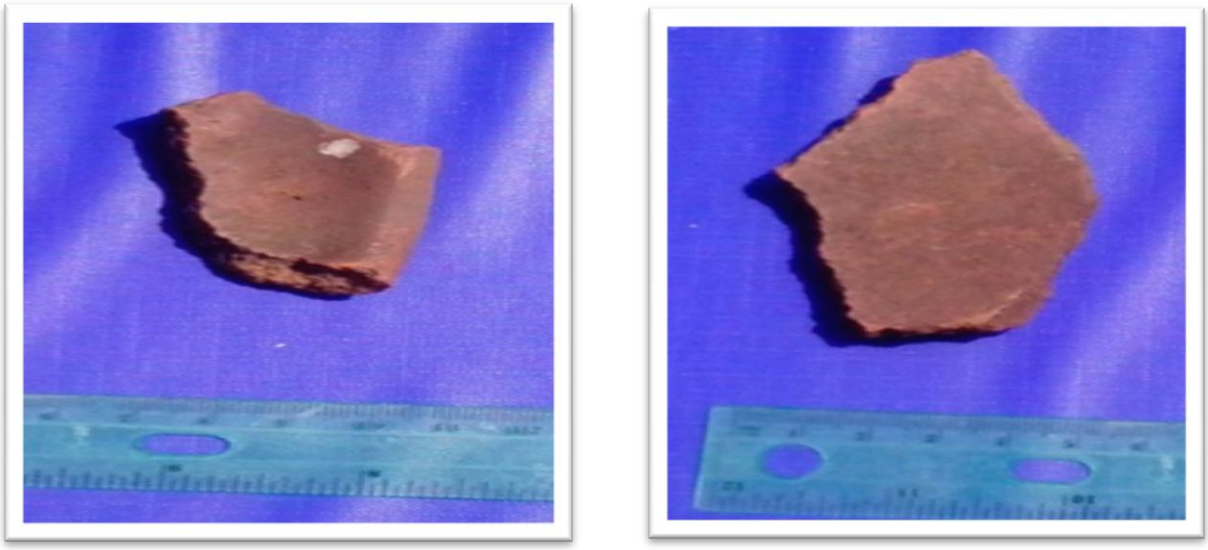

Fig: 4.10 Pottery Sherds from Bete Mule and Burial sites.

There are also other artifact materials are found in the burial sites of Gobo Ayanazgi site 7 which is a different site due to the presence of fragments of Charts, quartz, quartzite, and schist other than basalt and granite. The schist is gray in color with some small lines drawn in its center. The quartz is almost white in color with red at the tip of the two sides. Moreover, it is difficult to interpret the nature, content and use of the materials since there is no clear indication on it so it needs further research.

Flake of Schist Flake of Quartz

Fig: 4.11 Flake Collections from Bete Mulu site

4.2. Findings of the Study

The findings presented in this chapter are derived from analyzing the data on the selected sites which are clearly stated in the objective parts of this study. The findings are explained based on the following justifications stated below.

4.2.1. Reasons of Space Choice of sites

With regard to this issue different questions are raised in relation to the rationale behind in choosing such sites by the population. These questions include:

Why would people construct these cultural landscape sites in such areas from the surrounding landscape?

Why would they go and build their sites in such challenging spaces?

In this case, different researches related to place attachment has highlighted how people value is attached to places for a range of reasons (Armstrong, 2001). According to the explanations of the local residents of the area, the main reasons for the selection of the different sites are the following;

First, the landscape of the castle of Bete Mulu selected primarily for three reasons; Administration, Residence and Economy. This means that the then governor, Ayanazgi, choose the site because of its strategic location found in the hilly mountains of Bete Mulu Kebele. The other motive is in order to control the vast lands and trade items transacted across the different directions.

Second, the burial sites of Women are selected simply because there is a church around there that makes the ceremony activities easy and there is a strong tradition in the area in particular and Ethiopia context in general that burial sites were selected closely or within the religious sites. Third, the four sites namely Zuwa, Ona Eyesus, May Gaba Mikael, and Medhanialem were selected first for religious or spiritual purposes. Still now a day the main purpose of the sites are serving spiritual services with the exception of Ona Eyesus. To sum up, the general motives behind the selection of the sites are generally categorized as religious, economic, residential and administrative reasons.

4.2.2. Spatial Distribution of Sites

The nature of the landscape represents a fundamental framework to determine the character and pattern of distribution of the population (Roberts, 1996). As it is clearly stated in the earlier discussions; the topographic nature of the study area is characterized by rugged topography especially in the highland parts and vast and extensive plain areas in the lowlands.

The first three sites, Bête Mule, May Gaba Mikael and the Burial sites are located in the lowland parts of welkait in particular May Gaba area. The sites are found within the same kebele in a distance of 500m in between encircled by settlements. On the other hand, the three sites, Zuwa, Ona Eyesus, and Medhanialem Holy water are found in the highland parts of Welkait. There is high population density in the highland than the lowland but still there are large barren lands covered with bushes and other different plant species without settlements.

4.2.3. Alteration of the Landscape

There are different human and natural factors that accelerate the continuous alteration of the landscapes of any area. Human alteration of the landscape, however, became much clearer after the advent of agriculture. One of the main challenges that might caused the alteration of the landscape in the study area is the creation of an artificial lake and extensive farmlands to build a dam, Welkait Sugar Development Project, along the Zarema River. This is because such projects caused the alteration of the intrinsic values of the heritages (TWWSDSE, 2013).

Therefore, from the field observation of the researcher and the data acquired from informants and some literature studies; some of the forested areas became cleared and converted in to high plantation farms and transformed into resettlement sites and urban towns. in addition to rural settlements. Also some of the cultural and religious heritage sites were relocated to other areas. In addition, some of the hilly and mountains areas especially in the highland parts are highly affected by erosion and terracing.

4.2.4. Proximity to settlement areas

In archaeology, the main theme of settlement ranges from assessing the spatial distribution of material culture and anthropogenic modifications visible in the contemporary landscape to an understanding of the dynamic cultural and environmental processes of human settlement systems (Bevan et al., 2006). This means that the study of archaeological settlement pattern examines how traces of human activity including castles, historical and burial sites, and landform modifications attributable to man are distributed over the landscape through time with the aim of shedding light on the nature of past interactions among humans, as well as between humans and the environment (Volta, 2007).

In this case the main focus of the researcher in this study is to show whether these sites are found closer to settlements or away from it. Cultural landscapes are the byproducts of the interaction between human and nature, all the selected sites are located in the central parts of the settlement sites of the study area even though the nature and its distribution is vary in the highland and lowland parts. That is in the highlands, these sites are encircled by settlements and found at its center; but in the lowlands, sites are a bit distance further from settlements since it is sparse in nature.

4.2.5. Cultural Continuity or Rupture?

According to the definition given by Wan Salleh (1991) in Christine 2007, “Culture is a kind of self actualization process, continuous, consistent, and self sustaining for any given community. It is a way of life typical of a group referring to beliefs and perceptions, values and norms, customs and behavior. They share the quality among the group in a consensual way, passing on to others through the socialization and education of a new member in the society (Christine, 2007: 14).”

Moreover, out of the six selected study sites, it is only in Zuwa Kidne Mihret, May Gaba Mikael and Medhanialem sites that both the spiritual and cultural practices continuing till a days. The rest sites ceased to function due to absence of protection and management by the communities, the stakeholders as well as the effect developmental projects took place in and around the site. This is a clear indication that unless the existing community or authority protects the cultural properties, the consequence is total termination of the cultural practices as well as its properties.

4.2.6. Heritage Inventory

One of the fundamental means of managing and safeguarding heritages to the general public and academic community is the use of heritage inventory. It can be described as:

> *Inventories constitute primary resource databases for scientific study and research. The compilation of inventories should therefore be regarded as a continuous, dynamic process. It follows that inventories should comprise information at various levels of significance and reliability, since even superficial knowledge can form the starting point for protection measures (ICOMOS, 1990: 4).*

There are two findings in the study area in relation to heritage inventory of the sites. First, there was no any inventory in the area before due to absence of any responsible body to carry out such tasks. Second, the absence of culture and tourism office at woreda level is a challenge not only for inventory but also for the whole management of heritages in the area. As a result, to protect and conserve the heritages for sustainable use, a responsible body is an urgent need at the current conditions. The document of the inventory of sites is attached in the appendix 1 at the back of this document.

4.2.7. Principal Actors

There is no clear, direct and tangible evidence either from the literature or informants that brings to know the principal actors in the area. Accordingly, some writers like Fattovich (2012) stated that the Northern Horn of Africa (present-day Northern Ethiopia and Eritrea) was the core of the Ethio-Semitic Christian state, which progressively dominated most of the Horn of Africa in the 1st and 2nd millennia CE, and laid the foundation for the modern national states of Ethiopia and Eritrea (Fattovich, 2012).

On the whole, the modern people of the Northern Ethio-Sudan borderland are very composite. It includes semi-nomadic, mixed farmers and farmers speaking Semitic (Tigrégna, Arabic, Amharic), Cushitic (Beja, Agaw), and Nilo-Sahelian (Nera, Kunama) language (Fattovich, 1990). The region is presently inhabited by peoples speaking Semitic (Tigregna, Amharic, and Arabic), Cushitic (Beja, Agaw, Saho), and Nilo-Sahelian (Kunama, Nera, Gumuz) languages (Fattovich, 2000). Probably these groups of population might be the principal actors that involved in the formation and emergence of Welkait areas in particular and Northern Ethiopia in general, but it requires further study in the future.

4.3. Heritage Management of the Area

Heritage Management is recognized as an increasingly complex and controversial domain. Because the concept itself appears ambiguous and the perceptions of it are varied, depending on the interests of the local communities and authorities, stakeholders involved, heritage managers, and visitors that have different views. As a result, the research on heritage management has tended to look at the values, motivations and expectations of the societies that are found close to the heritage sites (Rahman, 2013). The intention in conserving cultural landscapes is to

safeguard them, not just as historical evidence, but as living systems and possible future templates for cultural development. Working landscapes should continue to be economically viable within the framework of authenticity. In this case, the main focuses of discussions include how the heritages in the area are managed in line with the impacts of human and natural agents. Some of the Tangible and Intangible heritages of the area and their counterpart impacts are also discussed.

4.3.1. Roles of the community

It is advantageous that understanding the intentions of local residents attitudes and perceptions towards cultural landscape conservation and incorporating them in the planning process is an important step in achieving sustainability. Communities residing near or among the locations of heritage sites have important, sometimes critical, influences on the protection of these resources. Local populations are always in the vicinity of the cultural resources. Community members protect and maintain these resources when they regard them as their own. The actions of local officials and local communities increasingly are of importance in cultural resource management, protection and conservation. Opportunities for local communities to learn about cultural landscapes and how they are studied and conserved help to maintain a constituency that will support these activities, even to build larger and stronger public support (Temesgen, 2013).

But the major constraints that are observed in the study area is the absence of cultural institutions and professionals in taking responsibility for the protection of sites as well as in creating awareness and training for the local communities and authorities for heritage protection. Therefore, there shall be a continuous support of the community through arranging different

programs and cooperating with concerned stakeholders. Such regular programs and activities might be accomplished most readily by local efforts applied carefully and systematically (McManamon et al., 2000).

4.3.2. Roles of Culture and Tourism Office

It is clear that the government is the primary responsible body for both protecting as well as conserving all the country's cultural heritages. The government should take a leading role in both sectors through its legislative and policy frameworks. Though, the responsibility for heritage management often rests with different institutions, it is the culture and tourism office at different structural arrangements that led first in managing the heritages and secondly rests to different stakeholders. So, what was observed in the study area is that there is no culture and tourism office; that is all issues related to heritages have been done by the Woreda Public Relation Office. Thus, the researcher recommends the concerned authorities especially the regional government should give due attention in opening offices especially at woreda level.

4.3.3. Different Policies and Strategies

Ethiopia, with thousands of years of history, has many cultural heritage sites, many of which are religious. It can be said that religious sites played a vital role in conserving cultural heritage prior to a modern conservation proclamation. Today the country has clear cultural policy guidelines and heritage proclamation which seems to meet general international standards (Temesgen, 2013). This enables to ensure the protection and management of the cultural landscape sites in the area. Currently there are different laws and policies enacted for managing heritages like proclamation No. 209/2000, 839/2013, the FDRE Constitution and other regulation and directives at the national and regional governments. Policies and procedures require all regional

and federal culture and tourism offices to take cultural management concerns into account in the programs and projects for which they are responsible.

The system involves cooperation among federal, state, and local governments and between the public and private sectors. Therefore, for the effective implementation and enforcing of the existing laws and policies; it is not only the cultural sectors but also the other stakeholder is a crucial element in the sustainability of heritages conservation. This is due to the fact that heritage management in the 21st century is a collaborative, partnership, shared and delegated in nature (Temesgen, 2013).

4.3.4. Cultural Heritages of the area

4.3.4.1. Tangible Heritages

According to the proclamation No 209/2000; 3(6) of ARCCH, tangible heritages are defined as follows,

"Tangible heritages are cultural heritages that can be seen and felt and includes immovable or movable historical or manmade cultural heritage."

Some of the tangible immovable heritages found in the area include Castles, churches, different structures and buildings. The tangible moveable heritages consists of church materials like the Cross, St. Books, Manuscripts, Tsinatsil (sistrum), Mekuamia, Kebero (Drum), gifts from different people of differing ranks and many others. Most of the musical instruments in the churches employed in spiritual songs are also used for secular ceremonies.

4.3.4.2. Intangible Heritages

According to the Convention for the Safeguarding of the intangible cultural heritage, 2003; article 2

The intangible cultural heritage is manifestation of inter alia in the following domains: (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship.

The different secular and spiritual annual ceremonies and practices, spiritual songs performed in ritual ceremonies and the whole ritual practices (like annual ceremony of Zuwa Kidane Mihret, February &August), secular local music, festive events, oral traditions regarding establishment of the churches, festivals and other aspects which are directly or indirectly related to the churches. The presence of these elements justifies the very existence of the continuing practices of these heritages in the area.

4.3.5. Challenges

With the pace of development across the globe, huge numbers of cultural landscapes, archaeological sites and others are lost each year. Few countries have the resources to record what is lost and, for many, archaeology comes an understandable second to feeding and housing their people (Grant et al., 2002). The major human threats affected the selected cultural landscapes of the study area are discussed in below.

4.3.5.1 Deterioration of Sites

The deterioration of the cultural landscapes of the area is caused by the combining factors of human and natural agents. These include deforestation, grand developmental projects like extensive irrigation and farmland projects, severe soil erosion, digging, quarrying, settlements and disturbance of the hydrology of the area. Thus, it is crucial to propose a short and long term strategies to the various cultural landscapes that are worthwhile for national protection, and that such protection is actually urgent because of the high level of threat to all valuable cultural landscapes in the area.

4.3.5.2 Lack of Heritage inventory

Heritage management requires accurate and up to date inventories. However, for many places in Ethiopia in general and the study area in particular a comprehensive picture of heritage is still incomplete as there are few inventories of heritage sites and monuments, thus rendering effective management impossible. Because of the absence of culture and tourism office in the woreda, no inventory is made and no documentation related to heritages. Thus, absence of heritage inventory is one of the causes for the expansion of illicit trafficking and illegal transfer of heritages in the area especially for movable heritages since the area is a peripheral one in which so many transactions were passed through.

4.3.5.3 Impacts of Development projects

It must be pointed out that development and heritage conservation are not necessary antagonistic. Indeed, economic development and the protection of heritages can be mutually reinforcing. However, monitoring and environmental impact assessment needs now to be part of

development activities within the context of integrated conservation and sustainable development (Ndoro, 2008).

This rapid development has affected adversely the cultural landscape environment of any area unless such measures taken (Ariffin, 2007). One of the best examples of such events in the study is the Welkait Sugar development project which is stated below.

4.3.5.3.1 Welkait Sugar Development Project

The Welkait sugar development project is located in the Tekeze River basin, one of the big Ethiopian rivers. Administratively, the project and reservoir area is located in Welkait Woreda, whereas the proposed Zerama Welkait dam is found in Welkait and Tselemti Woredas of Tigray. A total of 10,720 ha area of land at full reservoir level proposed to build a dam and 45,000 ha for creation of the reservoir and irrigated farmland of the project. This resulted in the creation of an artificial lake and extensive farmlands that brings major changes to the cultural as well as the natural landscape of the impact areas of the region.

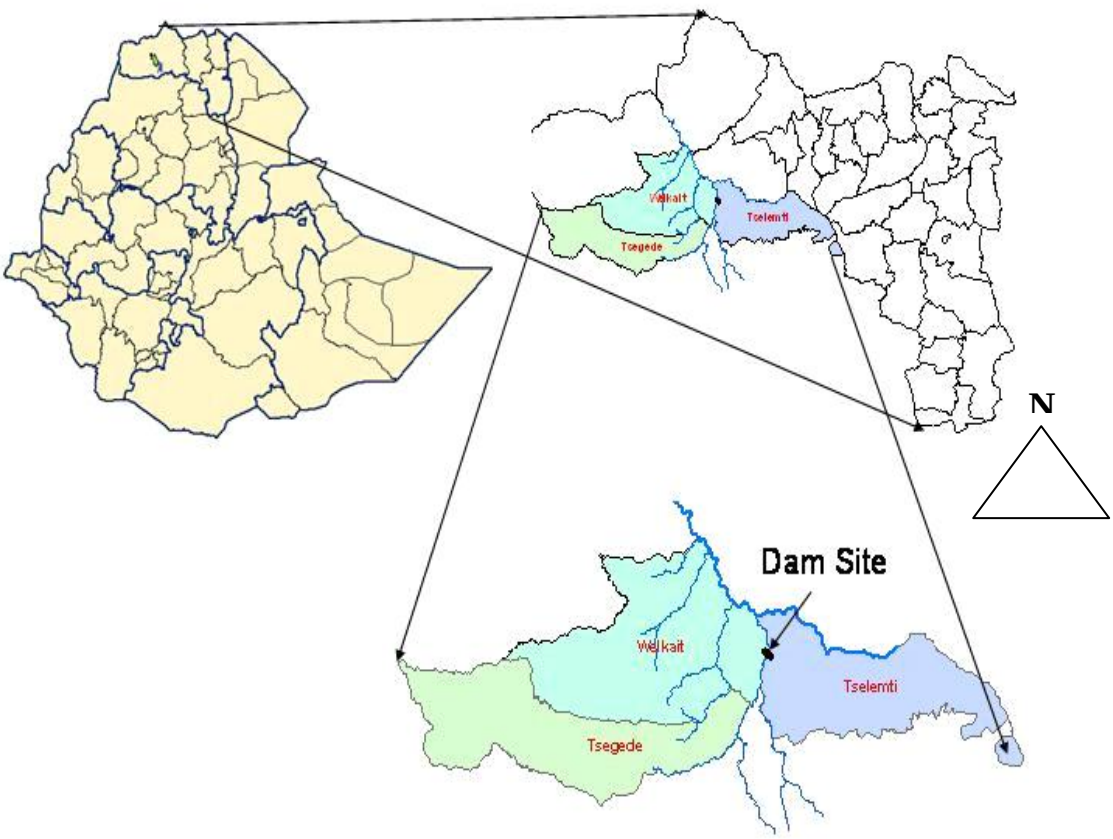

Fig: 4. 12: Map of the project area (Source: TWWDSSE, 2013)

4.3.5.4 Low Infrastructures

Since much of the Western Tigray region has been considered to be remote area up to now, there was a dearth of information about the major cultural landscapes of the area. Because of the isolation of the area, the facilities left to be in very poor condition. Currently Western Tigray is being opened up to developments as a result of establishment of commercial plantation of sugar and oil seed. This brings opportunities to the conservation of historical and archaeological heritage sites in the area. The expansion of infrastructure in the area while enables cultural

bureaus to better document and monitor the heritage sites and at the same time there is threat that they could be made to make way for the development endeavors in the area.

4.3.5.5 Lack of Clear Legislation and Policies

Even though, there are different laws regarding the management and protection of heritages, most of them are failed to meet contemporary realities of integrated development, customary and community rights and value systems. There is either legislation without a policy or regulation or directive basis or policies without legislative backing. As such, most of the legislations tend to address limited areas by neglecting of other types of heritage such as cultural landscapes and others.

4.3.6. Prospects

In order to protect and manage the existing cultural landscapes of the area; cooperation, partnership and increased involvement of all stakeholders including governmental and non-governmental organizations as well as private sectors are mandatory. Researches which have increased in recent years are also promising in terms of their contribution in indicating damages and recommendations of possible solution for ever increasing destruction on the heritages.

The role of researches also extends to promotion and conservation of heritages to achieve sustainable development. Researches by higher education centers like Addis Ababa University, Department of Archaeology and Heritage Management and other higher institutions are also expected to involve in such cultural landscape affairs. Thus, increasing research on cultural landscapes in the future can initiate researchers to conduct the untouched fields of study that ultimately contributed for the sustainability of the landscape itself.

4.3.7. Contribution of the study

It recognizes that the current cultural landscapes of the study area are the product of long-term and complex interrelationships between people and the environment. One of the major contributions of this study is the documentation of the cultural heritage sites of the area. That is it creates at least an introduction of this field of study which is not familiar to many researchers in the area in particular domestic studies. Comparative studies of related sites have been done between the various landscape studies at the national and regional levels which show regional differences about the idea and perception behind the study of cultural landscapes. Thus, it enables to serve as a springboard for future researchers in conducting extensive researches in knowing both the cultural and natural landscape of the area in particular and the national level in general. Also, this study may serve as a reference to other studies.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

5.1. CONCLUSION

This chapter provides with some concluding remarks on the cultural landscape studies conducted in Welkait Woreda, Western Tigray. Six cultural landscape sites are selected and discussed for the purpose of this study. Those includes Bete Mulu Castle, the Burial Sites, Zuwa Kidane Mihret church, May Gaba Mikael, Ona Eyesus church, and Medhanialem Holy Water. Thus, based on the data available, the landscapes of these sites are identified, located and documented accordingly. The sites characteristics and the material cultures recovered from the different sites of the study area presented using pictorial and table formats. Each selected sites were discussed in detail and the major findings of the study are also identified based on the research evidence.

As it has discussed in the previous chapters, the formulation and development of the concept of cultural landscape reflects an increasing formal awareness in minds of what constitutes cultural and natural heritages. It is undergoing a rapid and fundamental transformation across the world, mainly as a result of an ongoing polarization of land use on the one hand, and intensification and urbanization on the other (Rossler, 2006).

Most of the researches conducted in the area were limited to one or two areas of study like ethno historical study of a particular group of people despite its immense potentials. For instance there is no efficient effort exerted to promote the area for both domestic and foreign researchers. Lack of the necessary knowledge, resources and above all responsible institutions are difficulties encountered in the attempts made to study these sites by few Ethiopian researchers.

Generally, based on the data collected and discussed from the field observation and respondents of the study, the researcher strongly believed that the current status of the overall protection and management of the cultural heritage sites were in general and the specific sites studied in particular are highly exposed to both anthropogenic and natural threats. When we see the current conditions of the sites, with the exception of Zuwa, May Gaba Mikael and Medhanialem Holy water, the rest three sites needed an immediate protection on the part of the responsible authorities. For instance, around the Castle of Bete Mulu and the Burial sites, there are threats of digging, fencing (Quarrying), erosion and ploughing by the residences and beyond. I have never seen any efforts made either to protect or to made at least a temporary conservation on the part of anybody except the sites of Zuwa, May Gaba Mikael and Medhanialem Holy water where they are well protected by the nearby communities and others living in abroad (like planting of trees, conservation of the sites) at current conditions.

5.2. RECOMMENDATIONS

Understanding the concepts of cultural landscapes reflects human activity and landscape, as it is already mentioned at the beginning of this chapter. It is a cultural expression which does not happen by chance rather created by design as a result of human ideologies. As a result, it needs an immediate and long term protection and management.

However, not only the selected sites of these studies but also other heritage sites which are not mentioned for part of this study are currently threatened by the negative effects of both natural and human activities. Therefore, in order to protect and pass to the future generation for sustainable development, the following measures are recommended by the researcher.

- There shall be a strong cooperation and partnership among the different stakeholders and the community in creating awareness program for the protection, conservation and management of the whole cultural landscapes of the area from present and future human and natural destructions

- For protecting the cultural landscapes of the area, from illegal trafficking and other forms of destruction, there shall be a heritage inventory by the responsible organs and stakeholders of the region

- There shall be a multi disciplinary research consisting archaeologists, historians and cultural anthropologists to survey and analyze the untouched values of the area since it is a settlement for multi cultural communities coming from the different corners of the country and abroad.

- There shall be adequate and continuous promotional activity of the area using different communication channels, including print and broadcasting Medias by the government, private sectors or any other supporting institutions.

- Before conducting any development projects, a rescue archaeology must be carried out in order to save the invaluable assets of heritages

- There shall be an adequate budget, well qualified and trained manpower in the fields of Archaeology, Heritage Management or any other related fields relevant to cultural landscape studies

- Consult the local community for ideas on management and conservation of these landscape resources.

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Informants

No	Name	Sex	Age	Date of Interview	Place of Interview	Residence	Remark
1	Beza Abreha	Male	85	15/06/2008	Adi Remet	Adi Remet	Previously he is a farmer as well as a merchant, now he is too old and sit in the house
2	Desalegn Fissiha	Male	80	15/06/2008	Zuwa	Zuwa	He is serving in zuwa kidane mihret church and lived there
3	Demoze Gebeye	Male	70	06/09/2007	May Gaba	Mezega	He is farmer and also work as a security guard
4	Fanta Tekuye	Male		14/06/2008	Adi Remet	Adi Remet	He is chairman of Teachers Association in the wereda
5	Fekadu	Male	60	17/06/2008	Zuwa	zuwa	He is farmer and lived in the area till from birth
6	Gebremeskel Tsehaye	Male	60	14/06/2008	May Gaba	May Gaba	He is farmer and lived in the area for about 55 years He knows about the biography of Ayanazgi
7	Kesete Girmaye	Male	45	16/06/2008	Zuwa	Zuwa	He is a priest in zuwa kidne mihret church
8	Kibrom Haduish	Male	40	06/09/2007	Bete Mulu	Bete Mulu	He is farmer and also work as a security guard
9	Mebrahetom G/Mikael	Male		07/09/2007	Adi Remet	Adi Remet	He is vice administrator of the woreda at the time
10	Mulugeta Birhanu	Male	32	15/06/2008	May Gaba	May Gaba	He is currently Director of May Gaba

							Comprehensive Secondary school
11	Nigussie Gebre	Male	54	08/09/2007	Bete Mulu	Bete Mulu	He is farmer and lived in the area for 15 years Who helped us moving around the site of the study
12	Nigussie Haile	Male	65	06/09/2007	May Gaba	May Gaba	He is farmer and lived in the area since 1968 E.C He is very knowledgable and church educated
13	Sehelay Getahun	Female		16/06/2008	Adi Remet	Adi Remet	Expert in the office of Agriculture and Rural development office in the woreda
14	Shokoli Birara	Male	95	14/06/2008	May Gaba	May Gaba	He is monk and too old He is member of Bete Tselemiti
15	Tekleab Nega	Male	56	16/06/2008	Zuwa	Zuwa	He is a priest in zuwa kidne mihret church
16	Tsehayeye Ambaye	Male	48	16/06/2008	Zuwa	Zuwa	He is farmer and lived in zuwa kebele
17	Woldie Tesfaye	Male	70	15/06/2008	Zuwa	Zuwa	He is church teacher(Merigeta) in zuwa kidne mihret church

Appendices

Appendix 1 - Site Inventory Format

No	Site Name	Site Code	Heritage Code	Date	Coordinate		Elevation	Height (m)	Physical Characteristics of the Heritage	Remark
					Northing	Easting				
1	Bete Mulu	BM1WT	C1	February 2016	37P 0355768	1524161	939	5.26m✕ 3.95m	-the structure dealt with rough &undressed stone with white mortar - the room consists rebet in both internal and outside parts -rectangular in shape	
2	May Gaba Mikael	MM2WT	C2	February 2016	-	-	-		-Well maintained and managed - Like rectangular in shape - Recently rebuilt	
3	Medhaniale m Holy Water	MHW3 WT	CN3	February 2016	37P 0318179	1520121	2051	-	- the site is well protected and managed and different species of trees around the site -it is a center of both religious and cultural practices -the fence of the site is made of basalt and granite stones	

4	Ona Eyesus Church	OE4WT	C4	Feb 2016	37P 0314844	1521651	2104		-The site is not functional now and becomes ruin - it is encircled by different species of trees - dominantly basalt stones	
5	"Weyzazirt Mekabir"	WM5WT	C5	Feb 2016	37P 0355122	1524192	878	-	- Large concentration of tumulus, but highly affected by digging, terracing, and erosion. -basalt, natural, crude ,and non dressed stones found	
6	Zuwa Kidane Mihret Church	ZK6WT	CR6	Feb 2016	37P 0315395	1515513	2070	-	- well maintained and protected religious site - still serving for both religious and cultural practices surrounded by different trees	

Declaration

I, Yilikal Demis, declare that this work entitled Documentation of Cultural Landscapes in Welkait Woreda: Western Tigray, North Ethiopia, is my own work and all sources of material used for the thesis were duly acknowledged, and has not been submitted before for any other degree or examination at any other university. It is being submitted for the degree of Masters of Arts in Archaeology in Addis Ababa University.

Name: Yilikal Demis

Signature: _____

Date: November 2016

Addis Ababa University