



ADDIS ABABA UNIVERSITY

COLLEGE OF SOCIAL SCIENCES

**DOCUMENTATION AND CONSERVATION STATUS OF BETE MULU
CASTLE IN WELKAIT, WESTERN TIGRAY**

BY

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OCTOBER, 2016

ADDIS ABABA

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CASTLE IN WELKAIT, WESTERN TIGRAY.**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF ARCHAEOLOGY
AND HERITAGE MANAGEMENT, IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN
ARCHAEOLOGY**

ADDIS ABABA, ETHIOPIA

OCTOBER, 2016

Addis Ababa University

College of Social Sciences

This is to certify that the thesis prepared by Feyissa Hailu; entitled “Documentation and Conservation Status of Bete Mulu Castle in Welkait, Western Tigray” and submitted in partial fulfillment of the requirements for the Degree of Master of Arts in Archaeology compiles in accordance of the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee

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Advisor-----Signature-----Date-----

Abstract

DOCUMENTATION AND CONSERVATION STATUS OF BETE MULU CASTLE

IN WELKAIT, WESTERN TIGRAY

By: Feyissa Hailu

Addis Ababa University, 2016

This thesis presents the documentation and conservation status of Bete Mulu in Western Tigray. This building is currently facing threats coming from various problems; natural and anthropogenic problems. Therefore, this research intended to investigate historical context, architectural design, significance and current status of Bete Mulu castle. While studying about historic buildings various approaches could be employed. Qualitative study, as one of the approaches in social sciences, was used. Major limitations of the existing building services systems were evaluated through analysis of building's architectural, safety aspects and technical facilities. In addition, documenting the original building's features by observing and measuring all about the appearance of the building was carried out. The conservation and management aspect of the study area was also carried. Finally, its historical context and values, its current condition, architectural aspect is presented after analysis and correlated with other design of building in the country. Similarly, the possible required conservation activities have been studied and possible recommendation is forwarded.

Acknowledgments

First, my special thanks goes to my university i.e. Bule Hora University which provided me with the opportunity of study leave and sponsoring me covering the needed academic cost. It is also my pleasure to thank Addis Ababa University for its financial support during my research work.

Next, this study would not have been possible without the generous assistance of many people. On the first, I would like to extend my deepest gratitude to my advisor Tekle Hagos (*Ass.prof.*) who took time to review drafts of my thesis and directing me throughout my work. In the absence of his advice, this thesis would not have come to be shaped and finalized in its present form.

Second, I am thankful to the Department of Archaeology and Heritage Management, including the whole staff member, for their academic and moral support during my two years of stay at Addis Ababa University. I would also like to thank the project committee of the same department, which my thesis is part, for provided guidance and crucial insight throughout every stage of this work.

I also wish to thank my class mates in the Department of Archaeology and Heritage Management programs at Addis Ababa University and my friends from different life, without whom I would never have had the courage to undertake this study.

Finally, I would like to thank my family, who encouraged and supported me. I wish to thank *Ato* Nega Gebresilassie, Staff of Archaeology and Heritage Management programs at Addis Ababa University, for his dedicated support and my friend Yilkal Demis for his courageous stand during field work. It is also my pleasure to thank my friend Bali Girma for he has edited this work.

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List of Acronyms

ARCCH: Authority for Research and Conservation of Cultural Heritage

DRMFS: Disaster Risk Management and Food Security Sector

EPLUAA: Environmental Protection and Land Use and Administration Authority of Tigray

ESC: Ethiopia Sugar Corporation

EWNHS: Ethiopian Wildlife and Natural History Society

GPS: Global Positioning System

IBA: Important Bird Area

ICOMOS: International Council on Monuments and Sites

IES: Institute of Ethiopian Studies

m. a. s. l: meters above sea level

UN: United Nations

UNEP: United Nations Environment Programme

UNESCO: United Nations Educational, Scientific and Cultural Organization

UTM: Universal Time Mercator

WARDO: Woreda Agricultural and Rural Development Office

WB: World Bank

WBIDA: World Bank-International Development Association

WTO: World Tourism organization

WWPRO: Welkait Woreda Public Relation Office

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

This study is concerned with the documentation and conservation of Bete Mulu Castle, located in Welkait *woreda*, Western Tigray administration zone of Tigray Regional State. Bete Mulu castle is an old building in state of serious destruction.

Building archaeology attempts to reconstruct the history of existing structures, using direct observation of the structures themselves. This helps to identify and analyse construction materials, architectural features, continuousness and gaps destruction tracks, etc. Thus, principal objective of building archaeology is to record and conserve the existing cultural asset of historical buildings for the next generation. Unlike excavation archaeology, building archaeology is non-destructive (Boato and Pittaluga, 2000, in Fikadu, 2012).

Based on this, the study dealt with building archaeology of Bete Mulu cultural heritage, which is not studied, documented, conserved, and promoted. This historical building, which is on the verge of destruction, needs further investigation on that to be preserved for the present and future generation.

One of the areas that have not got attention of governmental institutions, researchers and stakeholders is

W

elkait *woreda*, located in Western Tigray administration zone. The *woreda* has a potential in archaeological and cultural heritage resources. Bete Mulu historic building is one of the heritages

located in Welkait *woreda*. Little has been said and carried out about its conservation status. This building is currently facing threats coming from population pressure, environmental degradation and new developmental projects nearby it i.e. Welkait Sugar Factory. The project is becoming the cause for the damage of heritage building as it is used as raw material for construction and is changing the built up environment. Thus, it is essential to retain the building and to create a refined balance between the building and the new development.

According to local tradition (*Ato Nigussie Haile and Ato Nigussie Gebre, 2015*), Bete Mulu Castle is attributed to Ayanaizgi, who was the governor of Welkait during the Gondarian period of Ethiopian history. Ayanaizgi, as he is known in local Welkait traditions and *Dejazmach Naizgi* in written sources was an important personality in the Gondarian court in the early 18th century (Smidt, 2011).

The cultural heritage resources in the same *woreda* including Bete Mulu castle are not clearly identified and studied. Its study will make beneficiary for economic development of the country. The study spelled out the current status of Bete Mulu castle, its intended purpose, significances, about its construction materials, its structure, and architectural design in comparison with the Gondarian one as well as its future conservation plan. Its conservation in turn will help in the long term to be tourist destination with the opportunity of the establishment of Sugar Development Project nearby it. It was also inevitable to touch the establishment of new sugar development nearby or an extension to the castle as part of the study.

Thus, this research tried to address the conservation problems of Bete Mulu Castle and conducted detailed documentation activities in order to make the build beneficiary for the present and future generations. Ethiopia is a nation with a mosaic of people, rich cultural heritage, areas

of comprehensive geology, the origin of humankind and one of the earliest centers of civilization and place of tourist paradise (Pankhurst, 2005).

Contrarily, it is now facing contemporary challenges to its heritage. As it is evident in the country's proclamation that states the need of research and conservation of those heritages, the cultural heritage like Bete Mulu Castle should be protected and documented. The objective of this research is thus to study the conservation status and significances of the same castle.

1.2 THE STUDY AREA: NATURAL AND CULTURAL SETTING

1.2.1 Natural Setting: Welkait Woreda and The Study Area Location

Tigray, one of the nine regional states of Ethiopia, is divided into six administrative zones, which include Central, Eastern, Northwestern, Southern, Western, and Mekelle Special Zone. It has thirty four rural districts and twelve town districts. Mekelle, 783 km from the national capital Addis Ababa, is the capital city of Tigray (Tagel, 2008).

Welkait is one of the *woredas* in the Western Zone of Tigray Regional State. It is located at a distance of 1335 km from Addis Ababa. It is 552 km from Mekelle and 68 km from Humera. The absolute location of the *woreda* is 0318179 North latitude and 1520121 Easting longitude. The *woreda* is bordered to the North by Tahta Adiyabo *woreda*, to the South by Tsegede *woreda*, to the North and North-west by Kafta Humera *woreda*, and to the East by Tselemti *woreda*. Adi Remets serves as administrative town of the *woreda* (Welkait Woreda Public Relation Office (WWPRO), 2015; Informant: Mebrahetom Gebremikael, 2015).

The total area of the *woreda* is 3,811.18 square kilometers or 381,118 hectare. Topographically, the *woreda* is covered by landscapes like highlands with plains, mountains, and lowlands with various gorges, valleys and rugged land. The maximum and minimum elevation of the specific

study-Bete Mulu is 1066 m.a.s.l and 766 m.a.s.l. respectively. Whilst the maximum and minimum elevation of the nearby town-May Gaba is 1051 m.a.s.l. and 879 m.a.s.l respectively (WWPRO, 2015).

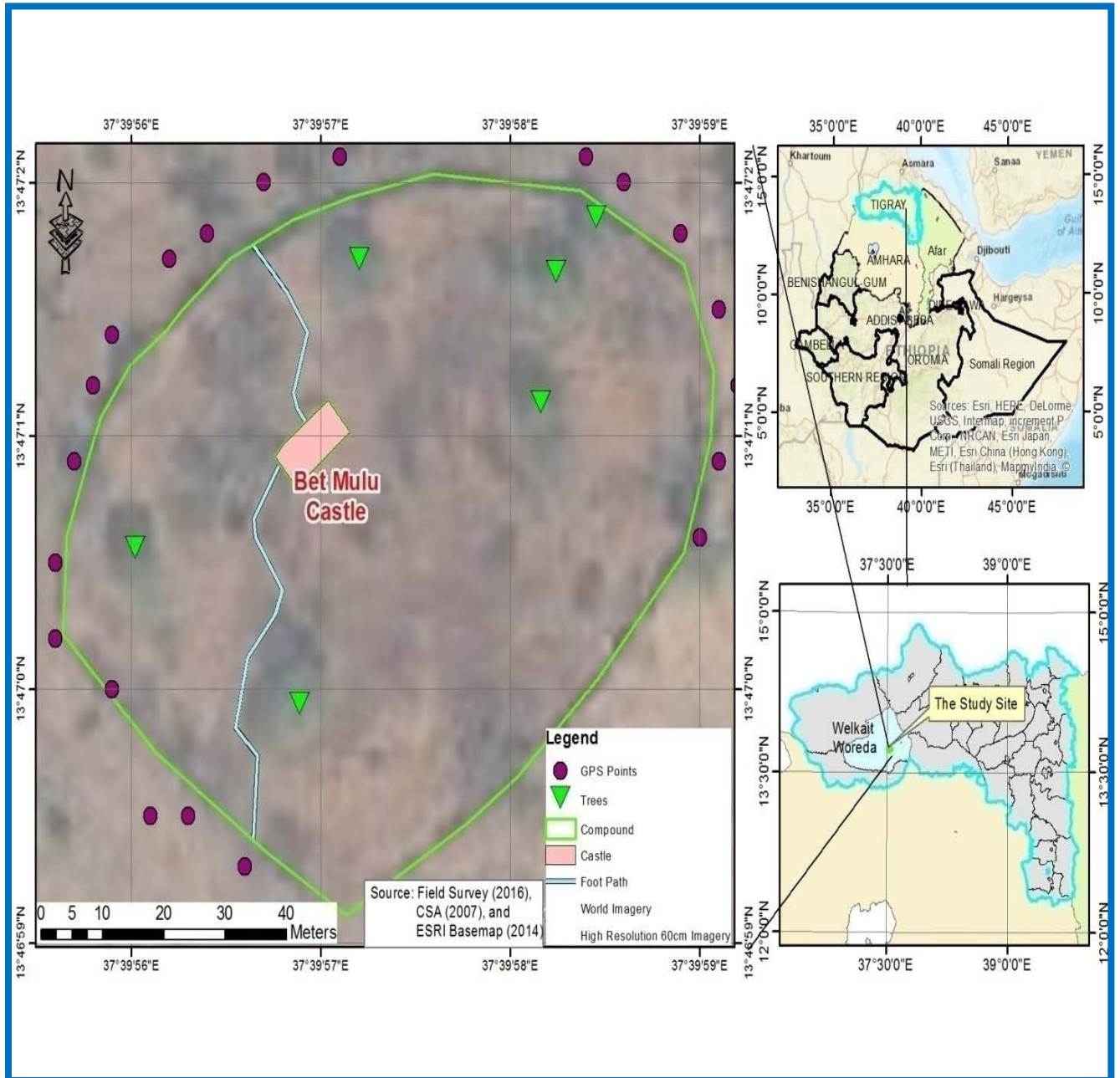


Figure 1: Location Map of the Study Site.

Traditionally, Ethiopia's climate is divided into three i.e. *Dega*, *Woina Dega* and *Kolla*. Like in other parts of Ethiopia, Welkaiat has three types of agro-ecological zones; *Dega*, *Woina Dega* and *Kolla*. The maximum annual temperature is 30 °c whilst the minimum annual temperature is 15 °c. However, the average annual temperature varies from 17.5 °c to 25 °c (*Woreda* Agricultural and Rural Development Office (WWARDO), 2012). Accordingly, looking at above set temperature zones of Ethiopia, the study area-Bete Mulu-falls within the *Kolla* agro-ecology.

Regarding rainfall distribution, because of its location in the Inter-Tropical Convergence Zone (ITCZ), the whole of Tigray is under the influence of the Southwest Equatorial Westerlies and Southerly winds from the Indian Ocean. This brings about a relatively heavier rainfall in summer. It is also inevitable for Welkaiat *woreda*, as part of Tigray, to receive summer rainfall (ESC, 2013). Welkaiat *woreda* receives highest rainfall where the maximum mean rainfall is about 1600mm. This is particularly true from June to August. The minimum and maximum annual average rainfall of the *woreda* is estimated to be 900 mm and 1800 mm respectively. However, the average rainfall varies 700 to 1000 mm yearly (ESC, 2013; WWPRO, 2015).

In geological terms, generally, the northern part of the Ethiopian plateau is composed of two main different typologies of rocks; Tertiary (Oligocene) flood basalts and Mio-Pliocene volcanoes (University of Florence Scientific Mission Final Report, 2008, in Nathanael, 2012). The region is dominated by outcrops of Tertiary volcanic rocks comprising basalt, trachyte and tuff (Nathanael, 2012).

As far as the geologic formation of the *woreda* is concerned, the area consists of Precambrian metamorphic schist, Paleozoic sedimentary rocks, Quaternary superficial deposits, and Tertiary basalts. Basaltic rocks form the main geologic framework of the area covering much of the *woreda* (ESC, 2013). Based on field observation by the researcher, the existence of those rocks

nearby the site is evidence to the existence of raw materials used to build Bete Mulu castle. It is also one possible factor that determined the structure and life of the building.

Welkait *woreda* comprises four major soil types: Vertisol, Cambisol, Nitosol and Luvisol. Cambisol is the most extensive soil type covering most parts of the *woreda* (WWPRO, 2015; Informant: *W/ro* Sehelay Getahun, 2016). Based on field observation, the land in the study site is occupied by the black cotton soils that are agriculturally productive.

The western lowland of Tigray, of which Welkait is a part and its surroundings, has the largest natural vegetation cover within the Tigray Region. There is plant species (trees, shrubs and grasses) identified in the same *woreda* (WWPFO, 2015; ESC, 2013). Informants (*Ato* Nigussie and *W/t* Sehelay Getahun, 2016) interviewed during field work suggested that, in the *woreda*, there are various types of vegetations. The lowland of the *woreda* is dominated with wood land. The dominant tree species include *Anogeissus leiocarpus*, *Balanites aegyptica*, *Boswellia papyrifera*, *Acacia polyacantha*, and *Zizyphus spina-christi*, *Acacia seyal*, *Boscia angustifolia*, *Combretum molle*, *Combretum collinum*, *Sterculia setigera*, *Dalbergia melanoxylon*, *Dichrostachys cinerea*, *Stereospermum kunthianum*, *Lannea fruticosa*, and *Terminalia brownie* (ESC, 2013).

According to WWARDO (2012), the *woreda* supports diverse species of wildlife. Local residents interviewed (*Ato* Nigussie, *Ato* Nigussie Gebre and *Ato* Mulugeta Birhanu, 2015) during the field survey stated that the *woreda* supports large population of elephants, ungulates, ostrich, and carnivores including lion and leopard. The Ethiopian Wildlife and Natural History Society (EWNHS) have identified one Important Bird Area (IBA) in the lower Tekeze Valley. Based on the identification made by EWNHS (1996), 152 bird species were recorded in the area in 1992 (ESC, 2013).

Based on WWPFO (2015), some parts of the *woreda* fall in the Tekeze river basin and the area is rich in surface water resources. Tekeze river basin drains towards the Sudan and it forms River Atbara in Sudan before it joins River Nile in Khartoum. It is found in the eastern part of the Welkait and covers an area of 48.82 km in the *woreda*. There are also major rivers in the same *woreda* including Zarima, Kalema, Ruwasa, Kaza and Minimine rivers. Numerous small streams that drain through the *woreda* include Mai Temen, Tewelombi, Tiumkalu, Mai Tsaeda, Dawlo, Mai Tire'e, Mai Berbere, Ruba Sertet, Mai Wolle, Mai Hargets, and Zenderekua. The above mentioned rivers are major tributaries of the Tekeze River.

1.3 CULTURAL SETTING

The cultural make up of the area have been studied by collecting secondary data from *woreda* offices and previous studies, and collecting primary data through visual observations and interview with key informants.

1.3.1 Historical, Demographic, and Economic Aspects

1.3.1.1 Historical Background

Tracing back historically, Welkait was an area of interaction between Ethiopia and the Sudan. Western Tigray is also identified as the historical presence of both Muslim and Christian powers at different time. In the past, Welkait was represented the highland part of western Tigray. It had relations with other political center in Tigray and Gondar. However, today, the administrative term Welkait includes both the highlands and lowlands of Welkait (Smidt, 2011).

During the time of ancient Punt, the area was seen as an extent of Land of Punt that includes areas of Kassala region to the west in Sudan and Gash Barka region in Eritrea. But it does not mean that the Land of Punt was limited only to the area mentioned here, rather, it stretched as far as Egypt. The evidence which supports this is the existence of the rock paintings from *Ba'ati*

Ga'iwa. The painting depicts the presence of wild animals as one trade item between Punt and Egypt. There were products that used as medium of trading item in between the then two states- Punt and Egypt. Such products were gold, incense and Egyptian ebony (identified to be from the Welkait area). This is due to the presence of those products, even this day, in the region-Welkait (Kitchen, 1993; Pankhurst, 1997).

The Welkait area was also mentioned in the history of the Axumite period as a military center from where the kingdom protected its empire. It also served as area from where the then Axumite king Ezana, 4th century, undertook further expansion of his empire. His empire incorporated Meroe, the political center of Kush (George, 2013).

In the inscription of Hasani Daniel, Welkait is pointed as a group-(ሰብኣ ወልቃይት/ *Säb'a Welkait*) that contributed to the downfall of the Axumite kingdom in the 8th century. Accordingly, they attacked and invaded the HSL (Hasla). They kept invasion and marched to Axum. But Daniel attributed himself as he was the one who was responsible to stop the further invasion against Axum. According to the translation of Munro-Hay (1991):

“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.”

Holding this political role, despite its location in the periphery of the country, it emerged once again as independent state during the medieval period of Ethiopia i.e. in the 15th century. It was under the muslim state of Mezega that it reappeared in the stated century (Smidt, 2011).

According to informants, (*Ato Nigussie and Gebremeskel, 2016*), the name Mezega was given and refers to the lowland in which its soil is black and fertile one. Beja groups, from Northeast Sudan-Suakin, were the founder of the Muslim state of Mezega (*Didier, 2003*).

The state reached its peak in the 16th century led by Queen Ga'iwa. She created relationships with Imam Aḥmad Ibin Ibrahim Al-ghazi (popularly known as Ahmed "Grag") against the Christian State. She continued struggling against the then Christian state even after the Muslim state of Adal, led by Ahmad "Grag", collapsed. Its territory stretched and incorporated the lowland of western Tigray, Metemma area in the south and to the north into today's southwestern Eritrea. The populations were dominantly Muslims and include the Belew Beja group, Gumuz, Nubians, Chares and Kunamas (*Smidt, 2011*).

The Muslim state of Mezega started to lose its former territories. Then, it fell under the Muslim state of Sennar. It stayed as Sennar's territory during the late 16th and 17th centuries. Despite this, it was in the 18th century that the Muslim state of Mezega, maintained its religion, incorporated into the Christian State centered its administration in Gondar (*Kolmodin, 1912; Denis, 2010*). After it was incorporated into the Christian Ethiopian State there was large flow of population into the area from the highland of Northern region of the Christian state (*Smidt, 2011*).

During the Godarian period, Welkait was represented in the political activities administrated by *Dejazmach Ayanaizgi*, Naizgi in literatures, an important personality in Gondarian court, in the early 18th century (*Kolmodin, 1912; Denis, 2010b*)

It remained with little involvement in politics again in the 19th and 20th centuries. This was due to its remoteness from political centre, inaccessible, and existence of various bandits both from Ethiopia and Sudan. Travelers of the 19th and 20th century referred Welkait was home to diverse

ethnic groups. But there is gap according to informants and written documents regarding the origin of Welkait in the last political history. So, it is open to and quests further research investigation.

1.3.1.2 Demography

According to the First Draft Results of the Population and Housing Census (2015), the total population of Welkait *woreda* and Tigray Region is 167,798 and 4,314,456 respectively. In the *woreda*, even though Tigray is identified, almost, as region with homogenous ethnicity-there are observable areas of ethnic heterogeneity. The dominant ethnic groups in the *woreda* are the Tigray and the Amhara. Béte Isra'él or “Felasha” and Eritrean minorities also inhabit in the area (Smidt, 2011). Orthodox Christianity and Islam are the dominant religions practiced in the area. The followers of Orthodox Christianity and Islamic followers are 96.75 per cent and 3.09 per cent respectively, whilst the rest are Protestant and Catholic followers (Smith, 2011).

The people in the study area live largely on hills and plains at the top of the plateau. According to (Informants: *Ato Nigussie and Gebremeskel, 2016*) the Ch'aré and the Shiro, are an ancient local origin. They dominantly inhabit in Welkait *woreda* particularly in the lowlands of May Gaba. The largest centre is Adi Remets, which is on highland, with 3000 households in 2015. Another 5000 people reside in rural towns of May Gaba and Awra. These are the lowland parts of the area (WWPFO, 2015).

According to the data obtained from the Environmental Protection and Land Use and Administration Authority of Tigray (EPLUAA), in ESC, 2013, the major land use and land cover of the Tigray Region include cultivated lands, grass lands, and natural vegetation areas (wood, bush and shrub lands). According to the Welkait *woreda* Agriculture and Rural Development Office (2012) the land cover of the *woreda* comprises 106,017 hectares of cultivated land,

88,213 hectares of mountain and rugged (unused land), 84,672 hectares of forest, wood and bush lands, 81,121 hectares of grass land and 21,095 hectares for housing purposes.

1.3.1.3 Economic Activities

As elsewhere in Ethiopia, agriculture is an economic activity commonly practiced in Welkait *woreda*. Accordingly, the study (Tigray Water Works Study, Design and Supervision Enterprise (TWWSDSE), in ESC, 2013), indicated that mixed agriculture i.e. crop production and livestock husbandry is the predominant means of economic activities in Welkait *woreda*. Livestock is one of the basic livelihood sources in the *woreda*. The types of livestock exist in the *woreda* include cattle, goats, sheep, mule, camel and donkeys. Crop production is another source of economy in the *woreda*. Crop pattern comprises of cereals, pulses, oilseeds spices, vegetables and fruits. Additionally, in Welkait *woreda*, incense trees are one of the income sources. Tourism is also one of the main bases to enhance economic development of the area.

1.4 Statement of the Problem

Ethiopia is renowned for its distinctive historic buildings including churches, mosques, monasteries, palaces and fortresses and many of which date back to millennia. These buildings are essential part of the cultural heritage of Ethiopia's people and are impressive for tourists.

Recently, most heritages are threatened by both manmade and natural agents. Lack of appropriate funds and skilled personnel significantly contribute to the deterioration of cultural heritages in Ethiopia. It is timely and crucial to address these problems and look for how to preserve and maintain the heritages in which Bete Mulu castle is not at far from these problems. Despite the importance and antiquity the history of the region, very few researches were conducted to uncover its past in which Bete Mulu is part.

Most previous works on historic buildings have focused on those buildings located in towns or nearby it (see Selam, 2011; Dessalegn, 2013). However, there is limited knowledge and clear understanding about rural historic buildings in the country in general and Bete Mulu castle in particular. In addition to lack of detailed studies, this castle is currently out of range of any management supervision sight and encountering serious problem. Despite the existence of studies on buildings-in various places, little has been done in correlating its different architectural styles and integrity.

Despite the fact that it is the country's interest to conserve and document heritage resources, some peripheries like Welkait *woreda* where Bete Mulu castle found is left out of research coverage. Even though some researchers like Wolbert Smidt have tried to conduct historical and anthropological studies in Welkait, there is no evidence that shows adequate historical

description, documentation, conservation and site management plan about Bete Mulu castle. The limited knowledge we have about the same building comes from scanty of literature.

There is no detail description about its history, architecture, significance and current condition. It is seriously threatened by environmental agents such as moisture, intense solar radiation and prevailing winds which change its physical attributes. The major effects of these deterioration agents include discoloration, cracks and fungal growth which are clearly visible on the building. Not only the risk it is facing but also absence of documentation facilitate the way the heritage particularly historic buildings are losing their structures even would go for collapse.

There is no study to show whether Bete Mulu castle resembles the same method of construction and architectural similarity and differences with other buildings in the country. So, it lacked organization of architectural prototypes.

Hence, it is time to study and inform the government and stakeholders on how to conserve cultural heritages and Bete Mulu castle in particular so as to keep these resources from further damage and transfer them to the future generation.

Therefore, this research intended to investigate historical context, architectural design, significance and its current status.

1.4.1 Research Questions

This research seeks to address the following research questions:

- ❖ What was the purpose of this castle?
- ❖ What are the architectural design, characteristics, and similarities and differences with other structures?
- ❖ What is the current state or condition of the Bete Mulu castle?
- ❖ What are the possible agents causing and aggravating the deterioration of the castle?
- ❖ What heritage conservation activities need to be taken to salvage it?
- ❖ What are the possible economic and socio-cultural potentials of the castle?

1.5 Objectives of the study

1.5.1 General Objective

The grand objective of this study is to document and study the conservational status of the Bete Mulu castle as well as to suggest the possible management plan.

1.5.2 Specific Objectives

This research has the following specific objectives:

- To describe the purpose and history of the Bete Mulu castle,
- To identify the raw materials used for building the castle,
- To identify the causes of its deterioration,
- To fully document the current preservation state of the castle,
- To compare and contrast the architecture of the castle with Gondarian style, and others,
and

- To investigate the tourism role of the building, and the challenges and opportunities of the establishment of new developmental projects in the area.

1.6 Significance of the Study

This study is of great importance in introducing and promoting the castle to the general public, researchers, and governmental and nongovernmental organizations. It also helps as a feedback for various institutions for policy and decision makers. I hope, a full documentation of the castle will serve as archival document and baseline for conservation measures as well as helpful in leaving behind the architectural style.

Finally, it will also serve as a possible springboard for researches and scholars who are interested in further researches in the Welkait *woreda*.

1.7 Scope of the Study

This research is confined on the selected building of Bete Mulu which is located in the Lowland of Welkait *woreda*. However, there are other potential research sites in the same *woreda*. Since the interest of the researcher was in built up historical heritage, and Bete Mulu castle is in the state of begging immediate conservation, the study was delimited to Bete Mulu Castle.

Additionally, it is noted by Renfrew and Bahn (1996) that it is very difficult to investigate all area with limited time and finance. Therefore, it is necessary to delimit the research into the selected site of study.

1.8 Limitation of the study

One of the biggest barriers to conduct this research was the remoteness of the site from the center, Addis Ababa. Climatic condition, which is very sunny and hot, was difficult for

researcher in the course of the research. Another factor that limited the study was budget and time constraints.

1.9 Research Methodology

Qualitative research method is used for this study, which is one approach with social science research. One of the major uses of qualitative methods is to explore phenomena and experiences from the perspectives of individuals experiencing them. Thus, the subject matter of most qualitative research is how people construct their understandings of the social world and how they view them (Bhattacharjee, 2012; Creswell, 2003; Kalof, Dan, & Dietz, 2008; Marshall, 1984).

As a result, this research relied on data obtained from qualitative research method that include field observation, interview, photographing, sketching and measurement.

1.9.1 Sampling and Sampling Strategies

For this study, a purposive sampling technique was employed. Purposive sampling technique is generally applicable, precise and common in qualitative research. This is due to the fact that qualitative research focuses in a small number of participants as representatives (Phrasisombath, 2009). Purposive sampling is judgment sampling that depends on subjective judgment of the researcher. It is the person doing the sample uses his/her knowledge or experience to select the items to be sampled to meet the purposes of the study (Salant, 1994; UNESCO, 2005).

Accordingly, purposively the sampling technique was undertaken with local residents in the study area. Fourteen informants were selected for interview. Out of these about twelve interviewees were local residents and 4 (four) were professionals from different academic

background (see List of informants remark). The selection was made based on age, sex, knowledge and willingness of the interviewees.

The interview was conducted by taking into account different groups of individuals of adult age category. This was preferred adults are expected to be matured and well informed about the castle of Bete Mulu.

Semi-structured and unstructured interview was conducted with adult members of the resident to cover a wide range of issues regarding residents' views on heritage buildings, how it has come about, factors causing deterioration and its possible benefit to local people. Professionals in the field of study were also interviewed to achieve the objective of the study that states to document the castle at large.

1.9.2 Site Selection

The site was purposely selected based on the previous reports. The previous reports show as there was little study in the area. Then, lack of wide study coverage in the area (*Welkait woreda*) in general and on Bete Mulu castle in particular was another driving force to select it. Then, extensive survey was conducted to identify data for the study.

1.9.3 Research Tools

Digital camera, tape measure, tape recorder-to conduct interview and GPS-to locate the study site were employed during onsite investigation.

1.9.4 Sources of Data

Both primary and secondary sources were consulted. This was made possible during pre-field and on site investigation.

1.9.4.1 Primary Sources

Primary data from the site were collected by conducting observation, measuring, photographing and interviewing the local people.

1.9.4.2 Secondary Sources

Secondary sources were obtained from library and archival materials that include books, journals and other published materials.

1.9.5 Data Acquisition Techniques

1.9.5.1 Pre-field data collection techniques

Both published and unpublished sources such as books, journals and unpublished reports, and internet sources from various centers like Addis Ababa University, Ethiopian Sugar Corporation, Oromia Cultural Center, Institute of Ethiopian Studies (IES) and Authority for Research and Conservation of Cultural Heritage (ARCCH) were consulted in the course of the study.

1.9.5.2 Field data collection techniques

Primary data from the site was collected by conducting survey, observation and interviewing different groups of local residents in the field. Observations, measurement, photographing, and interview were critically employed to achieve the intended objectives.

1.9.5.2.1 Survey

Surveying, one of the field works, was extensively and exhaustively conducted. This was initiated to be done to search and identify historical building of the same types, which is ruined, and to understand their current status. As a result of this, Bete Mulu castle was identified as the only site to fall under the category of historic building with bad condition and requires

immediate study. It also helped to identify informants suggested to know better about the structure.

1.9.5.2.2 Interview

Creswell (2003) noted that interview is intended to be conducted for it is thought to discover and generate primary sources. It is through interviewing that volumes of data can be obtained. Schostak (2006) stated that interview helps to open up to gain an insight into original experiences, concerns, interests, beliefs, values, knowledge, and ways of seeing, thinking and acting of the other. Patton (1990) cited in Patrick (2003) has argued the fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms. So, it provides first hand sources without the researcher pre-determined answer to the question.

As a result, conducting interview, which took lion's share, was determined to be necessary to carry out this study.

Based on this, selected local residents nearby the site were interviewed. As part of the interview, after the informants were introduced with the objective of the research, oral interview questions were presented to the informants collect the data. They were asked about the historical aspects of the building, the current condition of the building, their attitude to the building, factors aggravating its deterioration, etc. The selection of the informants was dependent on their willingness, age, knowledge, and duration of their stay in the study area.

1.9.5.2.3 Observation

Observation was another method of data collection as part of this study. As noted by Patton (1990) cited in Patrick (2003), observation is one of the qualitative research techniques in which a researcher conducts first-hand activity to get access to the sources of study. Creswell (2003) further explained observation as a fundamental and highly important method in qualitative inquiry. Based on chosen setting of study, it involves the systematic noting and recording of things. This could be artifact, behavior, and events. Using it, researcher documents and describes what is under study with concrete descriptions of what has been observed. Sun (2012) has explained that any study without site investigation (observation) has no convincing.

Accordingly, after my critical observation on Bete Mulu castle, every part of the structure was investigated clearly and separately. This direct observation helped me to decide on what to be recorded and forwarded relating to the building.

1.9.5.2.4 Measurement

Sun (2012) noted that measurement together with technological development helps in traditional architecture documentation. In the process of documenting about building, measuring the existing part of construction is essential. In this study, measurement was found helpful to document the Bete Mulu castle and its surrounding evidence. In order to measure the length and width of the building tape measure was used. GPS was also used to document the coordinate of the Bete Mulu castle and its surrounding structure.

1.9.5.2.5 Photographing

Photographing is valued for its documenting and reproducing of real things. It helps to provide meaning and interpretation about certain study. It is one of the key drivers in the data collection process (Shwartz, 1989).

Accordingly, photographing with digital camera was conducted in the course of this study. This helped to take pictures of the building and its associated features.

1.10 Data Analysis Techniques

The collected data, through the data collections methods indicated above were analyzed and interpreted. Qualitative research method of investigation was mainly used. It has been stated by Hodder (2005) that explanatory approach helps in explaining and providing the all possible information, and fruitful method about elements of the study.

Again, Strauss and Corbin (1998) noted the need and preference of qualitative research method as to analysis data about human realities, cultural phenomena and their interaction with nature which cannot be collected in statistical and procedures, and other means of quantifications.

The Maps produced by Ethio-GIS, photographs and rough sketches, data collected through observation, interview, review of different literatures and documents was analyzed and interpreted. Generally, current physical status, architectural styles, functions or purposes, conservation status of the structure and its significance, and other associated studies were interpreted.

1.11 Ethical Consideration

In this study, one of the points that got emphasis was ethical issues. Creswell (2003:72) noted that research ethics is one of the very important parts in establishing trustworthiness and credibility of the study. Accordingly, during data collection, researchers are expected to respect the participants and the sites for research. This involves gaining the permission of individuals-to protect the privacy of the participants and respect research sites so that the sites are left undisturbed after a research study. It is also important for researchers to specify the sponsorship of their study.

Scholars has noted that one can deal with ethical issues by recognizing the importance of incorporating various methods of studies-like involving the use of a wide range of informants, by demonstrating objectivity in which the findings emerge from the data, not from the researcher tendency and by adhering shortcomings in the study methods and their potential effects. (Hammersley and Atkinson, 2007; Shenton, 2004; Silverman, 2000).

So, to do with the above indicated principles, permission and interest from different stakeholders and individuals was asked at their possible consent. These groups were regional bureau, zone and *woreda* offices, professionals in the related field of study, individuals selected for interview; age and sex based. As to achieve strong and fair information about the study and to constrain from subjectivity, to the maximum possible, the researcher tried to depend on objective data generating from various data acquisition techniques. Sponsor for the study and shortcomings were also stated as the study goes through. Therefore, the necessary evidence that indicates ethical issues is attached at end part of this thesis.

1.12 Organization of the Thesis

This paper is organized into five chapters. Chapter One is about Background of the study area, introduction to the study, the methodological framework; data collection methods and analyzing techniques, and other related points fall under this part. In Chapter Two, Review of related literatures is presented. Chapter Three focuses on data presentation and description; which includes overall status of the building like architecture and its status of conservation. Chapter Four deal with discussion and data implication. Finally, Chapter Five is about conclusion and recommendation.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 General Concepts of Heritage and Cultural Heritages

There is various definition of heritage. The central idea of heritage is very wide and complicated, which has relation with time, place and diversification of scope. As a result, the definition that one makes about heritage is influenced by both changes in time and space (Venice Charter, 1964, cited in Ahmed, 2006). Most commonly, it could be either natural or cultural heritage (Ashworth, 1995; Wahab, 1996; Sammeng, 1996; Smith, 2003). And, it is the value people have given to items and places through their association with those items and places (Bhawan, 2013).

Additionally, Babic (2015) states that there is an expansion [evolution] of the definition and concept of heritage over a passage of time. So, its definition takes diverse forms. Feather (2006) defined heritage as *a human creation intended to inform and meet some goals*. This means there is the driving motives behind all its definitions.

Among institutions, UNESCO (United Nations Educational, Scientific and Cultural Organization) and ICOMOS (International Council on Monuments and Sites) have been in the forefront in defining common terminology and scope of heritage (Ahmed, 2006).

The International Council on Monuments and Sites (ICOMOS, 1999: 17) defined heritage as:

"... a broad concept and includes the natural as well as the cultural environment. It encompasses landscape, historic places, sites and built environments, as well as biodiversity, collections, past and continuing cultural practices, knowledge, and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous, and local identities and is an integral part of modern life. It is a dynamic reference point and positive instrument for growth and change. The particular heritage and collective

memory of each locality or community is irreplaceable and an important foundation for development both now and in the future..."

Regarding its constituents, Bhawan (2013) argued that heritage is a wide component which comprises both natural and cultural resources. By cultural heritage meant archaeological sites, remains, ruins, monuments, and groups of buildings bearing their respective significances, whilst natural heritage encompasses features endowed with pulling potential and should include landscape structures like sacred groves, hills, hillocks, water bodies, open areas, wooded areas, etc. He continued to explain that heritage is deemed to mean those buildings, artifacts, structures and areas that are of historic, aesthetic, architectural or cultural significance.

On the Convention of 1972:12, UNESCO defined 'cultural heritage' as:

"Monuments with architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science..."

At another different time, ICOMOS (2002:5) defined cultural heritage, in its definition of heritage, as an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural heritage is often expressed as either tangible or intangible cultural heritage.

Ethiopia is one among countries with heritage potential holding in Africa. To this line, through its proclamation (No. 209/ 2000:1347), Ethiopian government has also endorsed what cultural heritage is as:

"...constitutes the imprints of a people's age-old way of life, labor and creativity...an indispensable source of information for the purpose of study and research...better understanding of nature and environment...makes contribution to the development of science and...of human knowledge generally."

In addition to stating the definition, this proclamation sets different rules concerning the research and conservation activities of the cultural heritage. This implies the current need of the country to conduct research and conservation activities on the heritages of the country.

Generally, as evident in various sources (see Ahmed, 2006; Babic, 2015; Bhawan, 2013; Feather, 2006; ICOMOS, 2002; Simon, 2005; UNESCO, 1972; Yale, 1998) until very recent period, even now a day, but having its broader definitions, there is no defined boundary to what the meaning of heritage goes. However, to this end, this does not mean that there is no attempt made to come up with the definition of heritage and its scope, which is very wide.

2.2 Historic Building Conservation and Documentation: *Definitions and Concepts*

Heritage conservation efforts in Ethiopia date back to the 18th century. Nevertheless, failure to have strong conservation efforts and the great gap between the goal of the conservation system and the actual implementation may pave the way for the deterioration of cultural heritage (Grefe, 2004).

Regarding to build up heritage, ICOMOS (1978:29) defined heritage buildings as:

“Buildings shall include all groups of separate or connected buildings and their surroundings, whether urban or rural, which, because of their architecture, their homogeneity or their place in the landscape, are of value from the historical, artistic, scientific, social or ethnological point of view.”

On the Convention of 1972:23, in its cultural heritage definition, UNESCO explained building as:

“...groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science...”

From the above mentioned ideas, generally, buildings could be viewed differently for that they are of different structures that bear multiple values and purposes.

In the proclamation No. 209/ 2000:1346, Ethiopian government stated the idea of conservation as the general protection and preservation activity carried on a cultural heritage without changing its original appearance. In the same proclamation, for instance, after categorizing tangible cultural heritage to include both movable and immovable, Article 7 of the proclamation defined immovable tangible cultural heritage as:

“Sites where cultural heritage have been discovered, palaeontological, historic and pre-historic archeological places; buildings, memorial places, monuments and palaces; remains of ancient towns, burial places, cave paintings, and inscriptions; church, monastery, mosque or any other places of worship.”

According to the proclamation, regarding to their conservation, historic buildings and other forms of identified structures found in different parts of the country are legally got umbrella under which they are looked after. Thus, it is identified to be Authority for Research and Conservation of Cultural Heritage (ARCCH) that responsible for conserving them.

Regarding to the process of conservation, especially during intervention time, managed on field work time should be allocated before starting the process, and should be pre-planned activities (World Bank-International Development Association (WBIDA), 2007).

Conservation is, primarily, a process that leads to the prolongation of the life of cultural property for its utilization now and in the future (Feilden, 2003).

According to Wagner (1996:43), conservation refers to:

“...a process that leads to the prolonged life of cultural property for its utilization now and in the future. It is consistent with the goal of sustainability and can also bring social and economic benefits to the society. In order to maintain the

usefulness of historic buildings to meet present-day needs, it is necessary to adapt the building for new uses and rehabilitate or upgrade the building to satisfy new occupants or users.”

In 2013, Bhawan gave definition of conservation as it is a process looking after a place, which involves the activity of one or the joint work of maintenance, preservation, restoration, reconstruction and adoption. Incorporating those processes together helps to retain historical and/or architectural and/or aesthetic and/or cultural significance of built up heritages.

He continues to explain what to conserve about built up heritage could be the design of a building, the material it was built from and physical remains of the place.

Documentation is something essential in which it keep providing what has been done and to be done to the building in any course action of intervention activities. Identifying and documenting the building materials plays paramount role to differentiate causes of decays and various types of deterioration. Because of the absence of documentation dramatically aggravates the destruction of the remained part of the building’s architecture. These issues are always needed to be considered as basic base to go for conservation activities (WBIDA, 2007).

Documentation is the essential activity in which it helps to provide the different aspects of building status. It gives important evidence relating to the already existing originality and what added up on built heritages (WBIDA, 2007).

2.3 Significances of Historic Building Heritages

Conservation of historic heritage building is a vital component for developmental activities. There is an impressive variety of ways to look at the many ways that the conservation of heritage buildings helps us all. Buildings are powerful, tangible bridge to look into to our past and one possible way in which people today come in touch with the past. Some of the key economic

benefits associated with the conservation of heritage buildings include businesses benefit from locating in heritage buildings and areas as means of pulling factor (Manitoba Government, 2015).

According to Baxter (2001), in Feilden (2003) one of the reason why we concern about building of any given age is that the intellectual and architectural achievement in crafts of the building would be in perception of later generation craftsmen construction. Historic building need to be studied for that they are very relevant to give lessons for modern building architects. He also forwarded the idea that historic building has artistic and human messages which could be revealed by a study of its history.

There are several reasons for the need to conserve historic heritage today. One among others is to safeguard artistic and esthetic values, maintaining environmental diversity, preserving collective and generating economic benefits (Timothy & Boyd, 2003).

The above idea concerns that heritage buildings, for various factors, demand conservation as much as possible. Because heritage buildings constructed in the past has its own values. And, these could come to appear in the form of high historical, political, economical, social, architectural, and spiritual values.

Yet it could be noticed that, very often, a heritage is presented as a self-explanatory category, in the sense it somehow possess intrinsic and unquestionable values while the main concerns are connected with its historical use(Jokilehto, 2015).

The output of conserving built up heritage is, generally perceived, to be for the benefit of the society. Its contribution could be in the form of economic, cultural, and environmental uses in which achieving one of it is inseparable. Buildings are with their distinctive architectural style

and their architecture will have a real impact on the future. Taking into account their historic significance, integrity and context, historic buildings are in its place of significance (Bhawan, 2013).

Buildings can carry the historical significance (in association with events and important persons), and architectural significance (in relation with distinctive physical design or construction form) in order to appreciate the work of art that made by designer (Bhawan, 2013; Herndon, 2007). For instance, even though the absence of building could not limit someone from valuing historical place, building like Ford's Theater may help to add value on the site. Because it is historically significant that Abraham Lincoln was assassinated there. Others visit a building because it was the site of an important event (Herndon, 2007).

Herndon (2007) clearly put that building could serve as teaching tool. By looking at all its design composition and techniques employed, lessons can be driven from it. Similarly, the existence of buildings in various places can play paramount role in correlating its different architectural styles and integrity.

Additionally, Elefante (2003) pointed out that conservation of historic buildings can teach us about sustainable design; the style of a building, owning its building systems, provides reflection on the values and circumstances that shaped it.

It is stated by Awan (2008) that the conservation of historic buildings is a means of continuity of history as it keeps alive the cultural scene of that historic period to which it belongs. It is at high degree of its essentiality that people look into the past history from various perspectives in order to add value on its current identity; with critical view of what has been changed and continued (UNESCO, 2006).

2.4 Factors Deteriorating Historic Building Heritages

Before going to step into prescribing the possible approach to safeguard built up heritage there should be identification of factors causes its deterioration (Mydin, Ramli & Awang, 2012; Bhawan, 2013).

Heritage buildings are seriously threatened by environmental agencies such as moisture, intense solar radiation and prevailing winds which change their physical attributes. Apart from exposure to weather, biochemical agencies also hasten the deterioration of heritage buildings tremendously. Natural and social factors are responsible for the deterioration of heritage buildings. Among the natural one flood, biological factors, moisture, rainstorm, ground salts and water, windstorm, air pollutant, solar radiation, temperature, vibration, whilst fire, developmental project, vandalism are social factors. These agencies could result in discoloration, abrasion, cracks, stains and fungal growth (Bhawan, 2013; Feilden, 2003).

According to WBIDA (2007), regarding to [their] project on Gondarian structures, it is stated as rain particularly heavy rainfall could result in serious damages like weathering that impact the buildings. Rain also fosters the degree of erosion happened mortars and a rapid biological growth. Additionally, the size of the stone is also essential to manage the decay status of the building. Because of small sized stone is not highly exposed to penetration of water coming as result of heavy rain.

Another possible factor that aggravates deterioration of building, particularly the ruined one, is the absence of roofs that helps as a cover to resist cracks and other different damages coming from heavy rains, air blows, and high temperature or sunlight. The absence of closely monitoring

and providing maintenance is also another possible blow to the further decay of the buildings (WBIDA, 2007).

The local topography is also one possible agent for built up heritage deterioration. It is responsible for whether the building is receiving highest temperature or not. Biological agents like surface growth (fungi, bacteria, algae and mosses) and plant agents-those which growing on building are contributing to its deterioration (Mydin et al, 2012; Singh, 2000).

2.5 Principles and Approaches on Heritage Conservation: Trends on Historic Building

As mentioned by World Bank-International Development Association (2007), in order to undertake conservation activities it should be supported by principles, which is to be inline of international principles.

Since the adoption of the Venice Charter in 1964, there have been many conservation guidelines in the form of charters, recommendations and resolutions that have been introduced and adopted by international organizations such as UNESCO and ICOMOS. According to Ahmed (2006) the need to formulate specific national principles had already been recognized by the Venice Charter of 1964 in its preamble.

As a result, it is essential that the principles guiding the preservation and restoration of ancient buildings should be agreed and laid down on an international basis, by which each country is being responsible for applying the plan within the framework of its own culture and traditions.

Conservation involves making interventions at various scales and levels of intensity which are determined by the physical condition, causes of deterioration and anticipated future environment of the cultural property under treatment. Each case must be considered as a whole, and individually, taking all factors into account (Feilden, 2003).

According to Feilden (2003) the first step in conservation is preventive maintenance and repair. By Preventive he meant protecting cultural property by controlling its environment, thus preventing agents of decay and damage from becoming active. Neglect must also be prevented by sound maintenance procedures based on regular inspections. Therefore, prevention includes control of internal humidity, temperature and light, as well as measures to prevent fire, arson, theft and vandalism, and to provide for cleaning and good overall housekeeping. In order to repair or restoration of decayed parts, we can use materials and traditional skills unbaked bricks and wood.

As it was explained by Fitria, Yahaya Ahmad and Ahmad (2014), as also stated by many other authors since mid-1990s, theories and protection aspects of heritage conservation is surprisingly changing over the passage of time. This is further explained that the change in conservation method is due to the issue of scope and categories of heritage, ranging from single monument to groups, tangible to the intangible, and movable to immovable objects.

The current new trend in heritage conservation is to make it a shared responsibility. This could be made possible by linking with various stakeholders. Among others is public involvement at large. Accordingly, as stated in the Declaration of Amsterdam (1975) cited in Ahmad et al. (2014), the concept of public involvement in conservation efforts were initiated in Europe in the mid-1970s, which is “the architectural heritage will survive only if it would be valued by the public, especially the younger generation.” This idea made clear that with having community involvement, there is no much further means to impose and attribute government body as main actor in the process of heritage conservation.

Ahmad (2006) stated that one of the benchmark principle to develop conservation of historic building is the application of modern technology in conservation works, international cooperation and, most important of all, has provided the need of principles for the protection of architectural heritage and sites. This should be in absence of physical alteration of the building.

Elefante (2003) pointed out that conservation of historic buildings can teach us about sustainable design, because they were built with nature in mind using traditional building systems. As a result of this, conservation of the building requires respecting the original design and materials applicable while maintaining it.

It is generally recognized that the best method of conserving a historic building is to keep it in active use. Where a structure is of great quality, every effort should be made to find a solution which will allow it to be adapted to a new use without unacceptable damage to its character. However, where a protected structure is a ruin and does not have an active use, it may nonetheless be of special interest. Then, in such cases, it may be more appropriate to allow it to continue to stand in a ruined state and be repaired or consolidated where necessary (Manitoba Government, 2015).

According to Archaeological Survey of India (2014) documentation should be an essential pre-requisite before conserving buildings. Documentation aids in understanding the nature of the fabric of a building and its value as well as its current condition that should be used as basis by which its conservation plan should be prepared.

Feilden (2003) noted that detail documentation about the building is the first before going for any conservation intervention. Raw materials utilized for erecting the building and its current condition needs to be part of the documentation. Documentation is essential because it must be

remembered that the building or work of art will outlive the individuals who perform the interventions. Any historical attachments, and any internal or external peculiarities and the environmental context of the surroundings of the building are all relevant matters to the building. And, those parts shouldn't be missed in the process that conservation follows. Identifying and knowing the material object or raw materials used for the construction of the building is an essential one before taking any conservation action.

Additionally, Kassaye (2009) states prioritization of documentation as first step towards conservation before heritages undergo rapid destruction.

From the beginning of the 1950s, from a typological and geographical point of view, there was an expansion of the basic concepts in the need of international documents regarding the conservation of heritage (Vecco, 2010).

2.6 A History of Architectural Developments of Buildings in Ethiopia

Historically, the tradition of building and its architecture in Ethiopia dates back to since Pre-Axumite time (9th B.C), with the construction of the Almaqah Temple of Wukro and the grand Temple of Yeha. This can be evidenced from the subsequent structure of Yeha (Asfawossen, 2009), and continued to be practiced during Axumite times (Lindahl, 1969a).

A good example to emphasize in this presentation is about the grand temple of yeha, which was built in what is now Tigray regional state in the beginning of the first Millennium B.C. This temple is rectangular in shape with five aisles and monolithic pillar (De Contenson, 1963; Anfray 1997, in Phillipson, 2007). Such types of construction styles were practiced in many parts of Northern Ethiopia up to the first Millennium A.D. as discussed in what follows (Robin and De Maigret, 1998, in Phillipson, 2007).

According to Lindahl (1969a:3) the architectural continuity is elaborated in the following paragraph:

It should be underlined that building traditions in Ethiopia were remarkably stable and that the ancient traditions lasted over a thousand years, through Pre-Axumite and Axumite time and well into the Christian medieval period. In the perspective of time, it now looks as the oldest Ethiopian architecture was particularly excellent in the field of stone masonry. Remembering, however, that the practically everything of wood has vanished but that stele decorations at Axum illustrate plenty of carpentry in windows and doors, it must be so that only our lack of knowledge about Axumite carpentry prevents us from appreciating it as it probably deserved.

Likewise, in the subsequent periods during the Zagwe period and the whole medieval periods, the earliest architectural traditions of Ethiopia-architectural elements of built up structures of the pre-Christian and Christian Axum- such as capitals, arches, domes, wall structure like monkey headed wall, and ceilings were imitated again on the structure of rock hewn churches of Lalibela. Considering at structural aspects of the Rock-hewn churches of Lalibela, architectural styles like full arches, bracket capitals, and domes are the commonly observable one. These types of structures are also visible on churches in Tigre. Nevertheless, the major difference is that the one in Lalibela is rock-hewn-monolithic building, while stone and mortar were employed for Tigre one (Buxton, 1986).

Further, this implies the spatial and temporal move of architectural styles south wards from Pre-Axumite and Axumite to Medieval period (rock hewn churches) which in turn implies diverse and rich architectural cultural of Ethiopia. The practice of lime mortar and arches, and stone masonry that was dominantly used during the Axumite times also continued during the Gondarian period (Buxton 1963; Fasil, 2004).

In pre-Gondarian period, there were the use of raw materials like lime mortar, bricks, iron, stones, woods, and other materials. These raw materials were important to develop structures of rectangular and arched shape (Fikadu, 2012).

Long after the decline of the Axumite and the Zagwe dynasty, another political and cultural center, Gondar, was emerged in the history of Ethiopia. It was during the reign of Emperor Fasiledes (r. 1632-1637); that several building including palaces and various structures were built designated as ‘Gondar-Style’ architecture (Fasil, 2004).

It is inevitable to address as to when and how mortar was used as a construction materials in Ethiopian history. For instance, there is a debate on when fined lime mortar was started to be used in Ethiopia. Jesuit missionaries, in the 17th century i.e. 1624, claimed that they were the one responsible for the introduction of well designed lime mortar (Merid, 1984). Likewise, Buxton (1986) argued as there was no use of lime mortar for about millennium particularly in the northern part of Ethiopia.

Contrary, this argument was contested by the Spanish archaeologists who carried out archaeological test excavation at the church of Gannat Iyasus, North Gondar. The church was said to be built from 1621-1623. The excavation resulted that lime mortar was used to bond the building foundation (Fernandez et al., 2006, in Fikadu, 2012). This evidence is against the claim of Jesuits since the date of Gannat Iyasus church preceded the supposed introduction of mortar from abroad i.e. 1624.

In same way, since Axumite time to Gondarian period, there was the use of stone masonry, lime mortar, timber and others long before the coming of Jesuits. Excavation at Axum provided us that lime mortar was used to build structures like the Tombs of Brick Arches and the

Mausoleum. This was during the Axumite period at least dating to the 4th century A.D. (Phillipson, 1995; Fasil, 2004).

The architectural style of Gondarian buildings has its own clearly defined characteristics. One of the features that identify Gondar-styles is that it has its own clearly different architectural styles. Both ecclesiastical and secular aspects of architectural styles were part of the buildings of the then period. Contrary to the rock-hewn churches of Lalibela and Tigray, Gondarian buildings were built up structures (Buxton, 1986).

During Gondarian period, there were various raw materials used to build Gondarian structures. Some of these materials were stone, lime mortar and wood-used for roofing, flooring, and balconies. Buxton (1986:125) further explains about the raw materials of Gondarian period as follows:

The stone employed was brown basalt, quite common in the Gondar area, roughly shaped into brick-sized pieces that could be handled and fitted together easily to form solid walls. This basalt together with white mortar produced the brown mottled appearance so characteristic Gondar-style buildings. External facades were left in the rough, but at least some interior walls were covered with a thick coat of plaster, especially in the castles. Floor plans are rectangular or circular in churches, in all cases are rectangular.

Furthermore, regarding to raw materials, basaltic stone and a red volcanic is used for masonry and decorations purposes. A red volcanic one is also employed in floors, ceilings, architectural details. The use of bricks is evident from the site of Debzan. Some parts of the walls hold the plastering form from both its internal and external parts. Plastering was applied to the walls using mortar. The advantage of using mortar is also helpful in withstanding problems coming from weathering and compactness. As a result of this, identifying raw materials is significant to confront various deterioration aspects (World-Bank International Development Association-WBIDA, 2007).

Another important point about Gondarian buildings is its time perspective i.e. when the so called particular architecture of Gondar-style was established. It was the period dates from the second half of the 16th up to the second half of 18th centuries. Specifically, it was possibly from 1540 up to 1750-when the last possible constructed building came into existence (Buxton, 1986).

Buxton (1986) further tried to explain the extension of Gondarian structural styles. Accordingly, Gondarian styles have been identified around Lake Tana Basin that includes distance between 60 km to the northern part of Gondar and 70 km to its south part as far as Gojjam. Here, one should notice that my study area is found beyond the indicated distance to the north direction. However, it has Gondarian types of architectural style-which is going to be discussed in next coming chapters.

According to Buxton (1986) Gondar architectural styles are also characterized by constituents of various styles. Some of the common architectural styles are visible on palaces and churches. The architecture of palaces is identified with rectangular ground plans. However, there are churches built with the circular architectural styles.

Generally, Buxton (1986:124) put architectures that feature Gondar-styles as follow:

“... domed angle towers with slight batter; square observation towers on palace roofs; round and square domed towers in compound walls which serve as storage buildings and entrance gates; roof terraces with battlements; fully arched doors and windows, the arches being decorated with colored stone; monumental external stone staircases; barrel vaulting; string courses; bracket capitals, sometimes doubled; and wooden balconies.”

Here, it is also very essential to address who was responsible for the foundation of such technology of different architectural styles during the Gondarian period. According to Buxton (1986) and WBIDA (2007), such technology is attributed to foreigners, which means the design of the architecture was foreign origin, and was introduced in the second half of the 16th century.

The Portuguese missionaries, Turks and Arabs were said to been responsible to develop architectural styles and to build different castles and churches in Gondar. According to Coulon (1970s), in WBIDA (2007), Italians were imported mortar to Ethiopia which was lime based one. However, the human resources used in the construction process were local laborers including some mixed Greeks nationality.

Despite the above given idea, an individual envoy from Yemen-Hasan ben Ahmed El-Haimi in 1648, mentioned Indians as one of the role taker to build Gondarian structures. He argued in support of Indians to how designed Fasiledes' castle. In addition to this, WBIDA (2007), support the idea that the Indians were involved in developing architectural styles. This suggestion came, most probably, because of the long history of relation-based either of cultural or commercial with peoples living around Red sea and southwest of India (Buxton, 1986: 125).

Lindahl (1969a) also provided supplementary idea that the Portuguese missionaries, even though they were from India, were not the only one to be engaged in developing the Gondarian-styles of architectural work. Rather some Indians, who were traders in the region were said to been involved in the architectural work of Gondarian-styles.

Regarding the implication of the architecture of the then period i.e. Gondarian buildings, Buxton (1986:126) analyzed the architecture aspects as follows:

“... seeming military aspects of the palaces and their compounds: they are sited on high ground with wide vistas in all directions, and they have battlements and in some cases embrasures, reinforcing towers, observation towers, and high compound walls with both reinforcing towers and entrance gates. They give the appearance of being meant as defensive strongholds, yet their military characteristics do not withstand close scrutiny, compound walls may be several meters high but are not heavy enough to withstand determined battering, entrance gates were not designed to house strong wooden or iron gates let alone portcullises, the merlons of the battlemented parapets are too narrow and too widely spaced to offer meaningful protection to defenders, doors and windows are

large and exposed, and so forth. Further, there is no evidence that the castles represented an advance in military technology, for the tactics of warfare throughout the Gondar period continued in the tried and true pattern of pitched battles rather than developing along lines of siege warfare. No important battles or sieges occurred in or around the Gondar palace compound before the mid-18th century except once, in 1732, when the enclosure wall was, indeed, used to enormous advantage in fending off the sustained attack. Despite the successful defence, the compound suffered major damage. On the bases of architectural analysis and historical record, one soon concludes that battlements, domed towers, etc., were intended essentially as decorative, not military, features and that the castles, while impressive in their time and place, functioned as something other than fortified camps.”

The implication of the castles of Gondar-styles architecture is that it was intended to claim the continuation of the Solomonic monarchs as special quality to get recognition as well as to glorify [their] kingships as part of Solomonic family (Buxton, 1986).

Another very important point that needs to be mentioned here is factors that contribute to the deterioration of previously existing buildings. In the Gondarian case, according to James Bruce (1770-71), in Buxton (1986), which is true for the residence of king Iyasu II (r.1730-1755) there is the traditional practice of attitude of dislike and disregard to the buildings built by [their] predecessors. This kind of thinking is commonly seen among the Amhara-Tigre social structure. This further fosters the deterioration of the buildings which could include other monuments.

There are various researches that have been carried out on buildings (historic buildings, monuments, churches, mosques, etc.) (see Dawit, 2009; Dessalegn, 2013; Fasil, 2004; Selam, 2011). Despite valuing these works, however, most of them were conducted to study selected urban areas of Ethiopia like in Addis Ababa, Gondar and its environs.

In spite to some of the investigation by some scholars on architecture (Gondarian buildings), in which this itself is not enough, no consideration have been given to the function and what meaning in their historical context (Buxton, 1986).

Therefore, most of the previous works gave little attention to study, describe, analyze and show relationships of buildings found in the periphery and harsh climatic condition of the country. There has been no research carried out to show similarities and differences of different structures in chronological framework. There is no historic information known pertinent to the building Bete Mulu castle. Those studies mentioned above, however, provide a clue as to where and what has been done on historic buildings.

Thus, this research is interested to address the limitation that has been mentioned above in the following consecutive chapters.

CHAPTER THREE

3. DATA PRESENTATION AND DOCUMENTATION

This chapter presents description and documentation of the current condition of Bete Mulu castle. Considering at what to mean by documentation of historic building we are to incorporate the idea of recording the clearly visible part, its decayed part, and its current status which includes recording of any intervention made (WBIDA, 2007). It also discusses similarities and differences with other buildings in the country.

Bete Mulu castle is located in the town of May Gaba on the top hill comparing to its surrounding landscapes. It is located at about 2.5km to the west of the town of May Gaba. The average elevation of the castle is 934m.a.s.l. which is slightly higher than the town of May Gaba (908m.a.s.l) with the coordinate of 134700.0⁰ Latitude and 0373955.9⁰ Longitude.



Figure 2: Distance view of Bete Mulu castle to the west of May Gaba town (Photo by Feyissa H, 2016).



Figure 3: The hill where the Bete Mulu castle is located (a), and the road leading to Bete Mulu castle from May Gaba town (b) (Photo by Feyissa H, 2016).

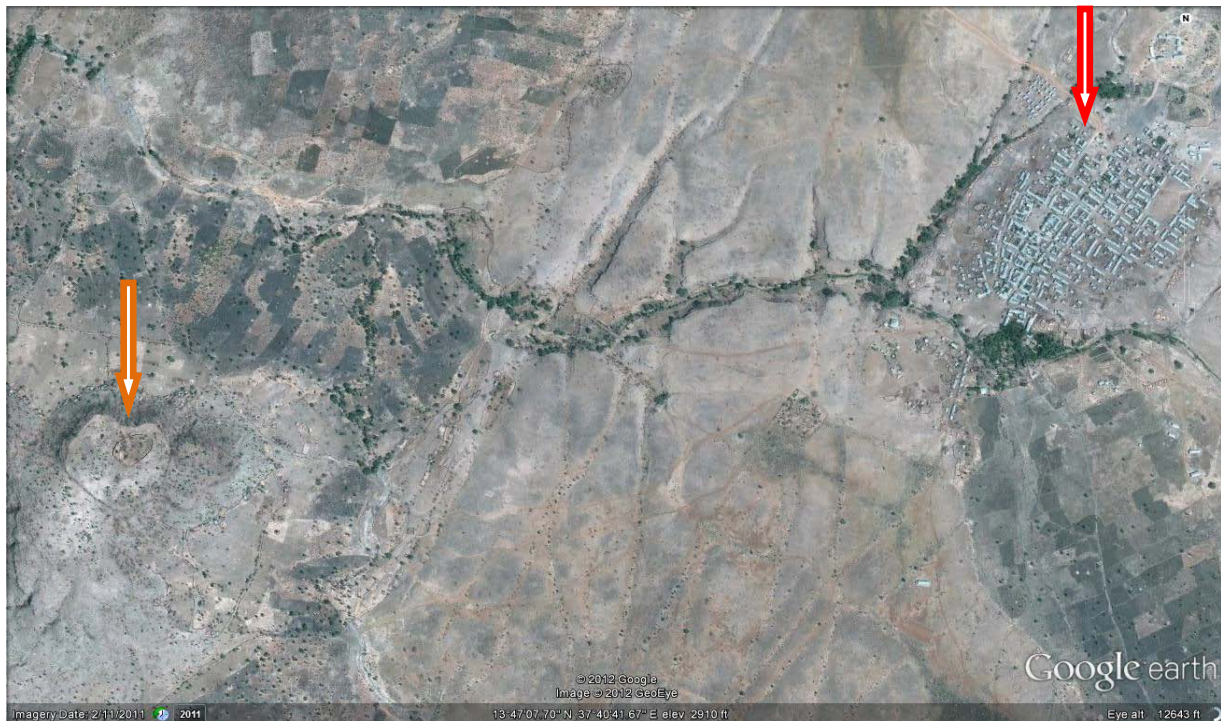


Figure 4: Google image of Bete Mulu castle; arrow shows the castle and May Gaba left to right respectively (Google earth, 2011).

3.1 A History of Bete Mulu Castle

3.1.1 Who was Ayanaizgi or Naizgi?

There is little documentary evidence that tell us how Bete Mulu castle was constructed for king Ayanaizgi. The old castle of Bete Mulu is, situated on hill to the West of the town of May Gaba, overlooking the wide plain area reaching the gorge of Zarema River.

According to oral information obtained from local residents (*Ato Shokoli Birara, Ato Nigussie, and Ato Mulugeta, 2016*), Bete Mulu castle is attributed to Ayanaizgi, who was the governor of Welkait during the Gondarian period of Ethiopian history. Ayanaizgi, as he is known in local Welkait tradition or *Dejazmach Naizgi* in written sources (Smidt, 2011; Kolmodin, 1912) was an important personality in Gondarian court in the early 18th century. Originally, it is believed that he came from the area of Hamassien, and later on became governor of lowland of Welkait.

His father was called Ze Michael and his mother was Zihelet Gember Gedo. He was born in Dejene Village in a place called Emba Qeta. Local oral traditions state that he grew up as a good warrior and hunter (Informants: *Ato Nigussie, Ato Gebremeskel, and Ato Mulugeta, 2016*).

It is said that in the early 18th century, king Bakaffa of Gondar came to the area where the Bete Mulu castle is currently located. The same king asked the local people to look for someone to train him how to hunt. Accordingly, Ayanaizgi was identified to train the king. He showed the king how to hunt elephants. In addition, Ayanaizgi gave him food and brought him water from river Kelema with due respect and sympathy (*Dejena, 2002; Ato Nigussie, 2016*). Finally, the king was impressed by his ability. It was this characteristic that secured him for the appointment as a governor of Welkait by *Atse Bakaffa*. His close and good relation with several Gondarian

period rulers lead him as one of the influential governor of the then Gondarian court (Kolmodin, 1912).

As a result of this, the king asked Ayanaizgi what he wanted. Based on Ayanaizgi's interest the king appointed him as governor of the lowland of Welkait-Mezega. He was interested to rule the lowland of Welkait-Mezega as his father was already in charge of the highland Welkait. It was after this that he was given the rank of *Dejazmach* by the king (*Dejena*, 2002; *Ato Nigussie*, 2016).

Additionally, the king was interested to construct a castle from where Ayanaizgi could administer his territory. As a result, the king helped Ayanaizgi in the construction of Bete Mulu castle. According to some local informants (*Ato Demoze Gebeye*, 2015; *Ato Nigussie G*, 2016) the castle was built by foreigners who were ordered by the then king of Gondar. The local people say that the *missionaries* who built the castle were on the way to expel from Gondar by the order of the king. The foreigners were probably the Portuguese missionaries. However, it appears that there were local laborers who engaged in the construction of the castle by supplying raw materials used in the construction process.

The presence of *Dejazmach* Naizgi can be confirmed from the work of French version of Kolmodin (1912) (see appendix V). It said that different regional chiefs used to bring tribute to the house of the king. On the occasion *Dejazmach* Naizgi and *Dejazmach* Mamo did not agree on the amount of the tribute to be provided to the king, the government of Welkait *Dejach* Naizgi entered into quarrel with *Dejach* Mamo during their discussion.

Dejazmach Naizgi said, "Poor man, eater of bread of pop ax flour", who is going to provide the largest tribute; you or me? In this way *Dejazmach* Naizgi provoked Mamo in front of all people

at court. Naizgi said that let us set a date and show who could provide large amount of tribute. After hearing their argument, the king asked them how long it would take them you to bring the tributes (Kolmodin, 1912).

Accordingly, Naizgi and Mamo responded six month and a year respectively. The king told them to bring the tribute in accordance with their words and both went back to their localities. Six months after, Naizgi brought eggs, cotton, coat, gums, silver coins, white, black, and red cattle and axes to the king (Kolmodin, 1912).

After he saw what Naizgi has offered, Mamo went back to his locality and ordered his people to bring anything value to be presented to the king. While Mamo was traveling on a horse he found a hole where he collected a lot of gold in his locality. He took the gold to the court and exhibited to the noblemen. The king proclaimed that Mamo was the winner (Kolmodin, 1912).

Naizgi became angry and asked Mamo to face him in a battle. Then, Naizgi and Mamo fought at Tsegheda where Mamo became victorious. Naizgi was caught and imprisoned at Addi-Abeto. As a result Mamo became administrator of Welkait for seven years (Kolmodin, 1912).

Later on the then king at Gonder (Kolmodin, 1912; Denis, 2010b) asked Mamo to release Naizgi. Mamo released Naizgi to the king who gave the liberty. Accordingly, Naizgi was released and began to rule over lowland of Welkait. Furthermore, the daughter of Mamo married with the son of Naizgi, Azmach Ze-Michael (Kolmodin, 1912).

His territory extended up to Tekezze river in the north, Lowland of Wegera and Tikil Dingay in the south, Tekezze in the east, and Gederif in Sudan in the west. He ruled nine *Awurejas* for 40 years. Finally, he was succeeded by his sons Sirahe Kiristos and Qale Kiristos (*Dejene*, 2002).

He collected tribute from his territories in a form of grain and alcohol (*arage*). He also paid tribute to the king at Gondar. The tradition of bringing *arage* to Bete Mulu castle continued up to recent time in the form of rituals. This was practice to ensure the prevalence of peace in the locality (Smidt, 2011; Informants: *Ato Fekadu Gebre* and *Ato Nigussie*, 2016).

3.2 Description of Bete Mulu Castle: Physical Aspects

3.2.1 Documentation: Current Conditions of the Castle

The authentic documentation of this castle i.e. Bete Mulu had already been amply watered down in those years-past times. It is suffering from destruction due to natural and manmade factors as discussed in the following chapters. The surviving wall of the same castle is found without roof in a very worst condition. The upper portion of the wall is mostly collapsed. It is said to have been built during the period when the royal court was located in Gondar.

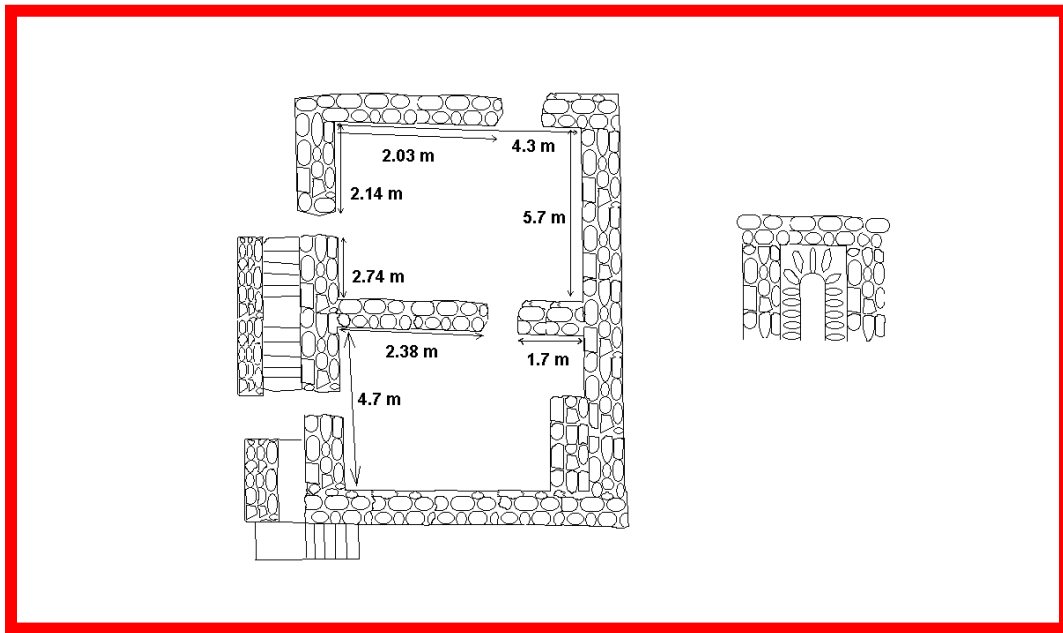
The most important parts of the building are the castle and its surrounding enclosure. Based on researcher observation, currently, the castle encompasses one storey building with rectangular shape (See fig.4 below). The building had at least one upper storey. The clues could be found from the presences of stairway. The top part of the castle has collapsed except some visible part from the southern and northern directions. The ground length and width of the castle is 12.65m and 6.33m respectively whilst its height is 6m. It was built on an area of 1.5 hectares. It is believed that the castle took about one year and six months to complete its construction. However, today, the castle is out of radar from any governmental or non-governmental bodies that do conservation work. It also seems to be crumbling due to old age.



a)



b)



c)

Figure 5: Bete Mulu Castle: showing its rectangular shape without its enclosure (a and b), and its floor rough sketch (c-photo after Hiruy, 2012), (Photo by Feyissa H, 2016).

3.2.2 Description of the Exterior Part of the Castle

3.2.2.1 The Southern Façade

This side of the castle is almost intact as compared to the other sides of the same castle. It has width and height of 6.33m and 6.75m respectively. The thickness of this wall is 80cm. This part of the building is on the side of the main gate of the enclosure from the outside. Even though most part of it is intact, however, some part of it is collapsing with crack on the surviving wall.



Figure 6: Southern façade of the castle (a), cracking (b), and collapsed (c) (Photo by Feyissa H, 2016).

The main gate of the castle, which is arch shaped is found on the southern façade. The gate has width of 1.15m and thickness of 80cm. The height of this gate cannot be measured due to its upper limit is destroyed.



Figure 7: Main gate of the castle on the southern wall (Photo by Feyissa H, 2016).

3.2.2.2 The Eastern Façade

The visible height of this eastern façade is 2.55m while its length is 12.65m. The first floor of this part of the castle is totally demolished. The castle seems to have been one storey building as it can be understood from the surviving two stairways/passageway on the eastern side of the building. The stairways show that there was a passage to the castle on the first floor, at the middle of the east side. There are two an arch shaped small gate from this direction which may have been used as entrance/door, and window. The upper part on the eastern wall of the castle is totally demolished while the ground is intact.

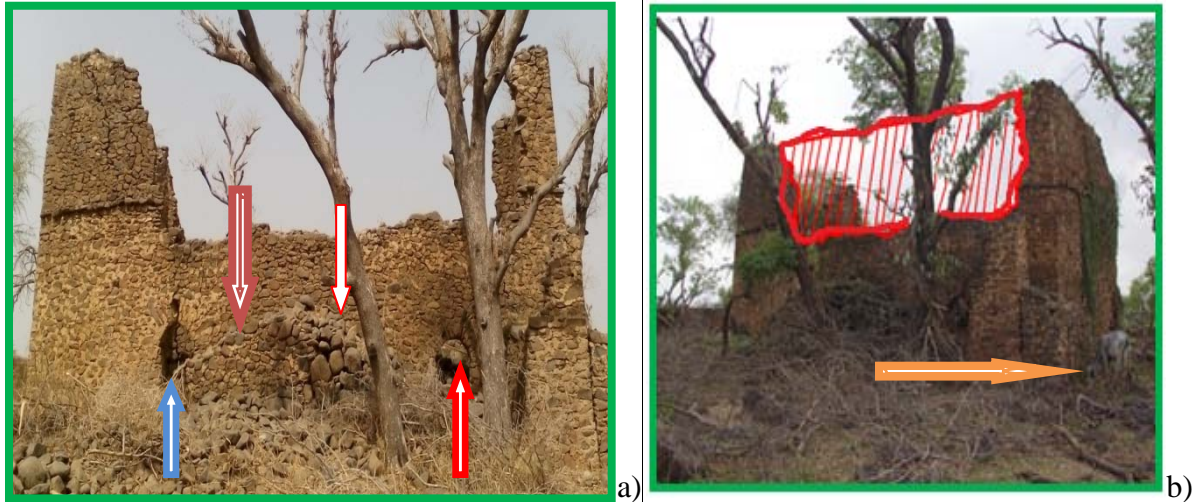


Figure 8: Eastern side of the castle with two arched doors/windows (arrow up) and two stairways (arrow down) indicated (a), and the lost part and arrow showing cattle disturbing the castle (b) (Photo by Feyissa H, 2016).

3.2.2.3 The Northern Façade

The visible height of this wall is 5.94m. There are no doors and windows on this wall. There is also no architecture visible on it. Most part of this wall is still standing except with minor wall collapsed on its northwest. The edge of the western part of the same wall is collapsed along with wall on the western part of the castle. The roots grown on this part are affecting the preservation of the wall.

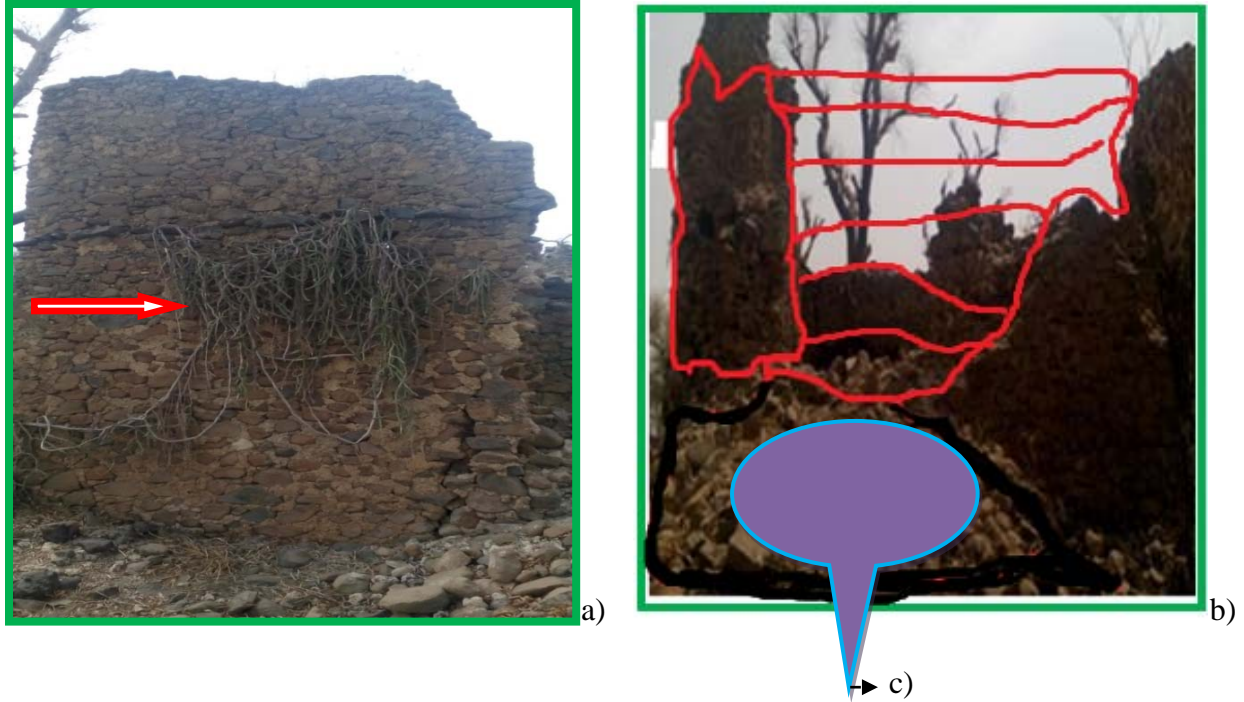


Figure 9: Northern façade of the castle and vegetation grown (a), destroyed section on northwestern edge (b), and mounted of destroyed part (c) (Photo by Feyissa H, 2016).

3.2.2.4 The Western Façade

This part of the castle is almost demolished and has lost its features. Most of the wall on this side is not surviving. The reason as to why this part of the wall is compared to the other wall might have been the result of direct hit by sunlight coming after mid day. This part of the wall is used sheltering cattle during rainy season. There is pile of stones next to the castle, further indicating that the wall was destroyed recently. Based on consecutive observation of the researcher there is an increase on the size of the pile of the stone showing that the destruction of the wall is continuing.

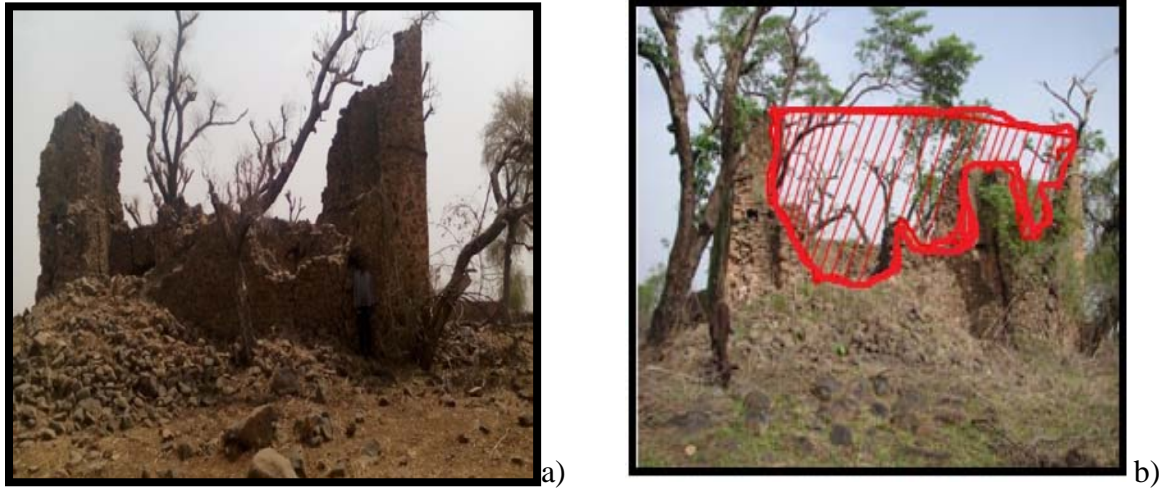


Figure 10: Western façade of the castle (a) and destroyed section (b) (Photo by Feyissa H, 2016).

3.3 Description of the Rooms

The ground floor of the castle is divided into two roughly equivalent sets of rooms each with their own structure. According to the available source (*Dejena, 2002*) the castle has four rooms; two at the ground and two others on the first storey. The rooms on the ground floor are connected by a door gate. The first room is found parallel to the main gate of the enclosure. It measures 4.38m wide and 6.4m long. There are three possible entrances to this part of the castle. One is the main gate from the southern direction whilst the second one is small arched gate from the eastern direction of the castle. The third one could be an entrance from the first room to the second one or vice versa. The floor is not clearly known since it is covered with fallen piles of stones.



Figure 11: The first room-from southern direction (Photo by Feyissa H, 2016).

The second room is located on the northern façade of the castle i.e. to the north wall. It has two small gates; one from the east and another one from the first room- which also serve as transit from one room to the other one i.e. from the first to the second room. The width and length of this room is 4.65 and 5.43meters respectively. There is an entrance that takes to the second room and the block that separate the first room from the second room. Some part of the block, that separate the two rooms, is almost demolished. Two Small false windows are also found in this room (see fig.11b).



Figure 12: The second room (a), the wall that separates the two rooms and its entrance (b), and destroyed part (c) (Photo by Feyissa H, 2016).

Additionally, three niches are found on the second room of the northern wall. The first one is located on the eastern direction with a width and thickness of 40cm and 30cm respectively (see fig.12a). However, it is difficult to take its height as it is disturbed.

The second niche is found on the central part of the northern wall. It has the height, width, and thickness of 70cm, 40cm, and 40cm respectively (fig.12b) whilst the third niche is found at the western direction of the northern wall. Its height, width, and thickness are 54cm, 35cm, and 55cm respectively (fig. 12c). Again on the same wall, on the first storey, there are two visible niches which are too difficult to measure them due to their collapse.

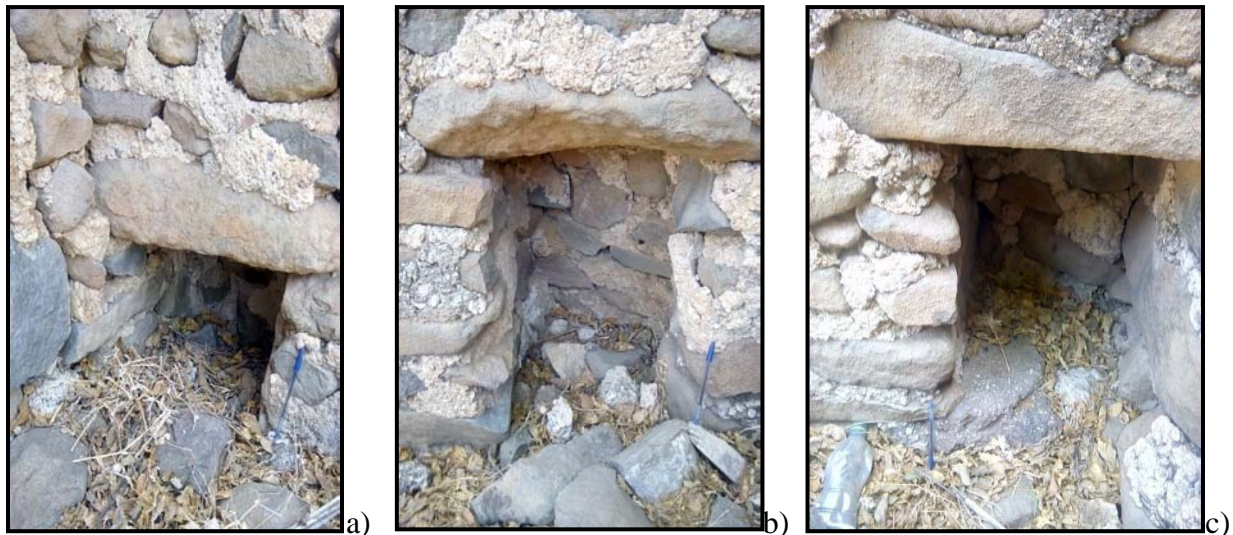


Figure 13: Niches on the northern wall showing the eastern (a), central (b) and western (c) (Photo by Feyissa H, 2016).

3.4 The Enclosure

The Bete Mulu castle is encircled by big enclosure. There are two walls encircling the castle as enclosure. The first wall enclosure is well built and most part of it is still well preserved.



Figure 14: Collective view the first enclosure- best preserved (a), destroyed (b), and inside view of the main gate (c) (Photo by Feyissa H, 2016).

The second wall enclosure is completely destroyed and is marked by piles of stones. The stones of the second enclosure are used for constructions by different individuals. The best evidence to

this threat is that, in fact, a crushing machine has been installed near the wall to crash piles of stones mounted over there.



Figure 15: Enclosure of Bete Mulu from the outside (the second wall and much destructed part)

(Photo by Feyissa H, 2016).

In order to evaluate the current condition of the main enclosure, it is important to divide and view from four directions. The first part of it is the southern wall. It is the enclosure where main gate is entered from the town of May Gaba. The width and visible height of this entrance is 2.5m and 2.9m respectively, while its average thickness is 70cm.



a)



b)



c)



d)

Figure 16: Southern view of the enclosure (a), visible height from the entrance (b), thickness (c), and auxiliary of the main gate (d) (Photo by Feyissa H, 2016).

Looking at the status of the main gate of enclosure, from both side, the eastern side of the entrance is intact, while its western side partly demolished.



Figure 17: Main gate-intact from eastern side (a) and partly demolished on the western side (b) (Photo by Feyissa H, 2016).

Following the main gate to the eastern direction of the enclosure, there is a partly demolished section with a maximum height of 1.5m. The wall on the western side of the enclosure is better preserved than the eastern one. However, it is also suffering from tree grown from the inside of the enclosure which is affecting the wall by creating cracks. The maximum height of the wall from this side is 2.5m.



Figure 18: View of the destroyed wall (a), maximum height of the wall to the east (b), and trees grown from the inside of the enclosure (c) (Photo by Feyissa H, 2016).

The northern side of the enclosure is well preserved as compared with the other side of the enclosure. But small section of this side is completely destroyed. This demolished section is used as another gate to the castle. The highest height of the wall from this direction is 2.42m. This can be proved that the height cannot go more than the indicated height, because of its upper part is in the plastered form.

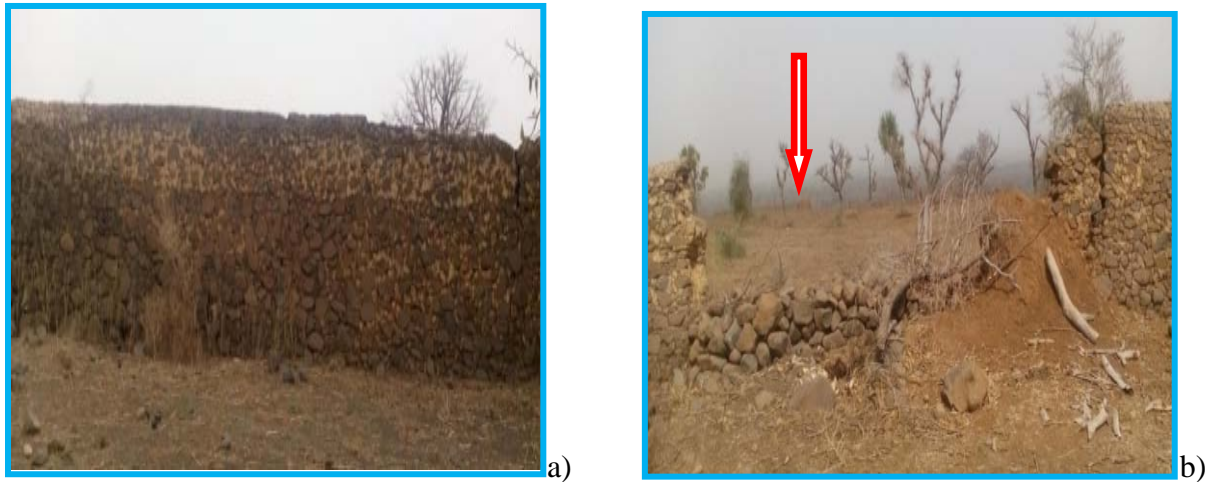


Figure 19: Well preserved wall (a) and demolished section (b) (Photo by Feyissa H, 2016).

There is also another small gate on the northern side of the enclosure. The indication of the existence of the gate is, even though not completely visible, the presence of arched structure (see fig. 20a) with totally plastered beginning from the floor to the top part of the wall. We could not measure the width of this entrance as it is demolished. Next to this small main gate on the east side of the northern enclosure, part of the wall is demolished (see fig. 20b).



Figure 20: Small gate (a) and damaged part (b) of northern enclosure (Photo by Feyissa H, 2016).

The other part of the enclosure is the one found on the eastern direction. This side is the completely standing part of the enclosure. But there is also some part of it, where it is on state of destruction. The maximum height of the eastern wall is 2.65m. Generally, the height of the enclosure varies across different directions.



Figure 21: Eastern enclosure well preserved (a) and destroyed section (b) (Photo by Feyissa H, 2016).

There are windows and false windows on the different parts of the enclosure. However, there is no visible window on the southern part of the enclosure. The average distance between windows is 11.6m. The width, height and thickness of one of the window that is found on the eastern enclosure are 5cm, 70cm and 50cm respectively (see fig. 22a). The northern window has a width, height and thickness of 30cm, 40cm and 50cm respectively. It is almost at the middle of the enclosure and measures 1.05m height from the ground (see fig. 22b). There are also false windows on the western and northern side of the enclosure. The window on the western side of the enclosure has width, height and thickness of 40cm, 41cm, and 30cm respectively (see fig. 22c). Generally, there are total number of twenty four windows and two false windows. There is large concentration of windows on the northern direction of the enclosure.

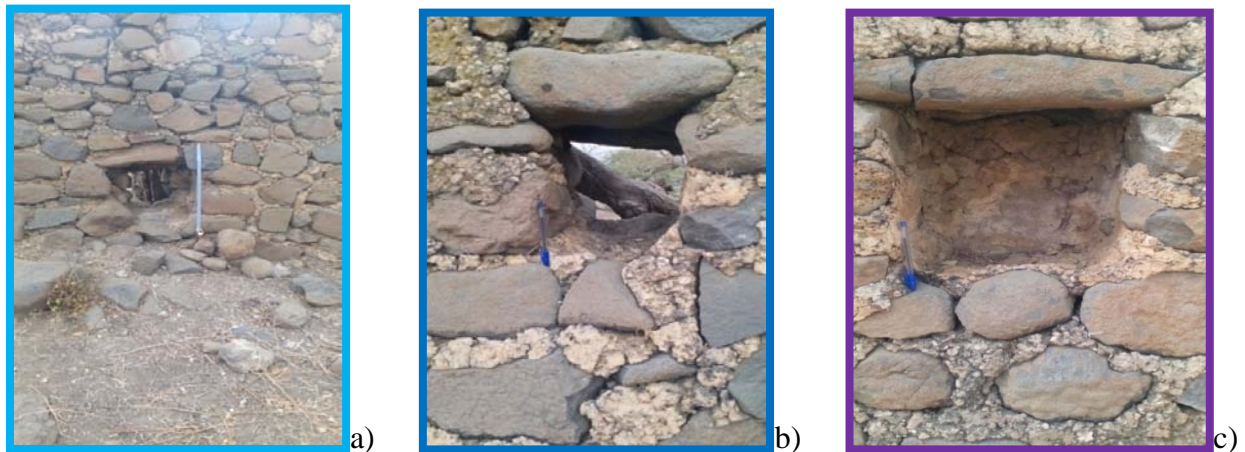


Figure 22: Sample view of windows on the eastern and northern enclosure (a and b), and sample of false window on the western enclosure (c) (Photo by Feyissa H, 2016).

3.5 Technology: Architecture and Raw Materials

3.5.1 Architecture

The type of structural part of the building has effects to determine the load damage that any given building could incur (Feilden, 2003). As to this, it is very essential to identify the visible structure of Bete Mulu castle. The architectural designs of the castle have similarity with the castles built in the Gondarian period. The materials used to build the Bete Mulu castle resemble to those castles found at the town of Gondar and its vicinity. The similarities is analyzed and presented in chapter four of this paper.

The castle is rectangular whilst its enclosure is circular. There are different arches on the castle. We find the same style of design on the windows and doors in the form of arches and barrel-vaulting. There are small size windows on the enclosure which are square shaped.



Figure 23: The square architecture on the enclosure of Bete Mulu (Photo by Feyissa H, 2016).

In addition to the structures on the enclosure, there are also different arch styles on the building itself. These are clearly observable from the windows of the different façade of the building. There are two arched windows on the Eastern façade of the castle. In between these two arched windows, there is also one stairway-takes to first floor (see fig. 24).

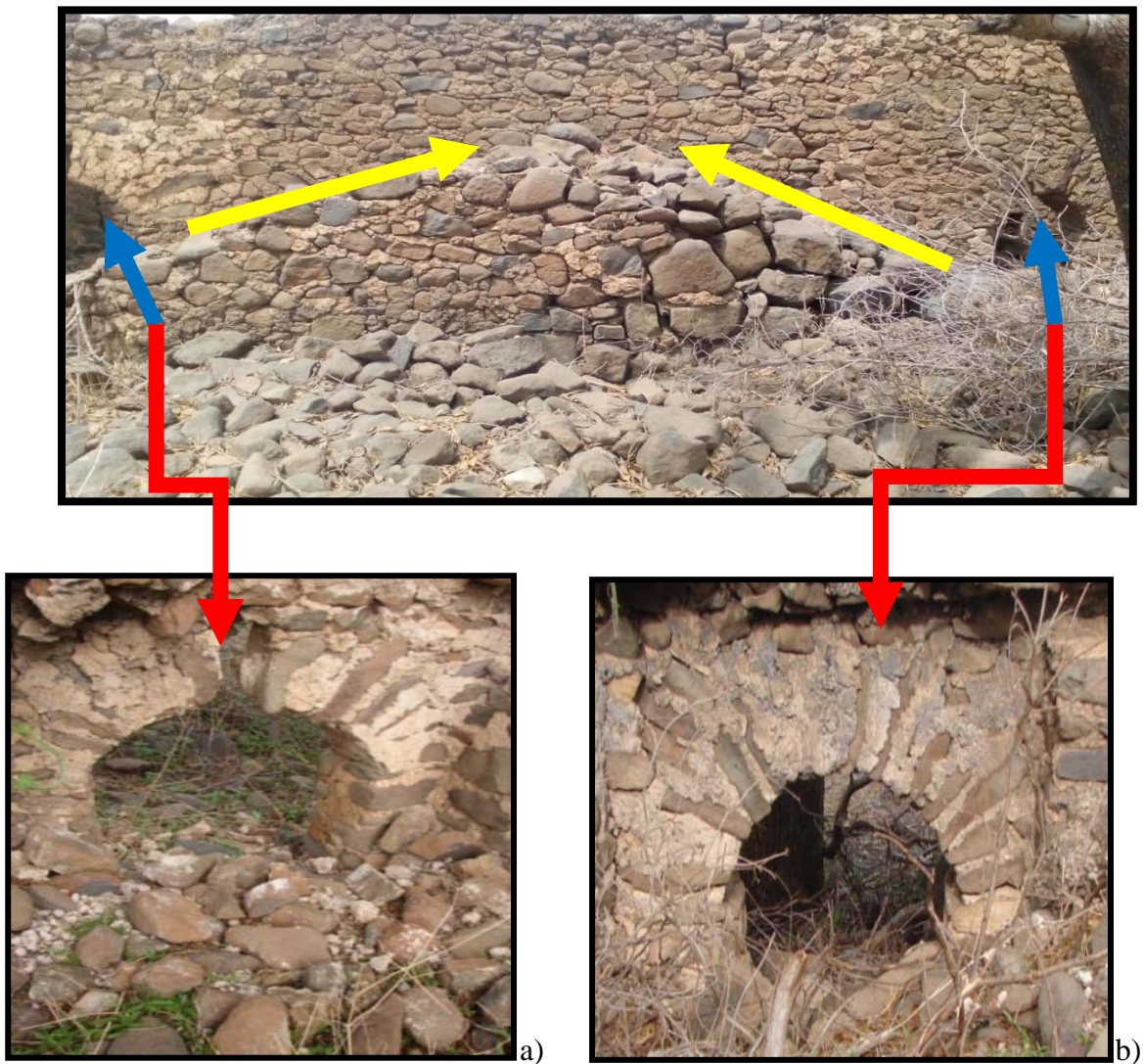


Figure 24: Windows with arch design (a and b) on the eastern façade of the castle (Photo by Feyissa H, 2016).

On the Southern part of the castle, there is an arch door on the ground of the first floor. There are rivet that holds together the ground with the first floor.

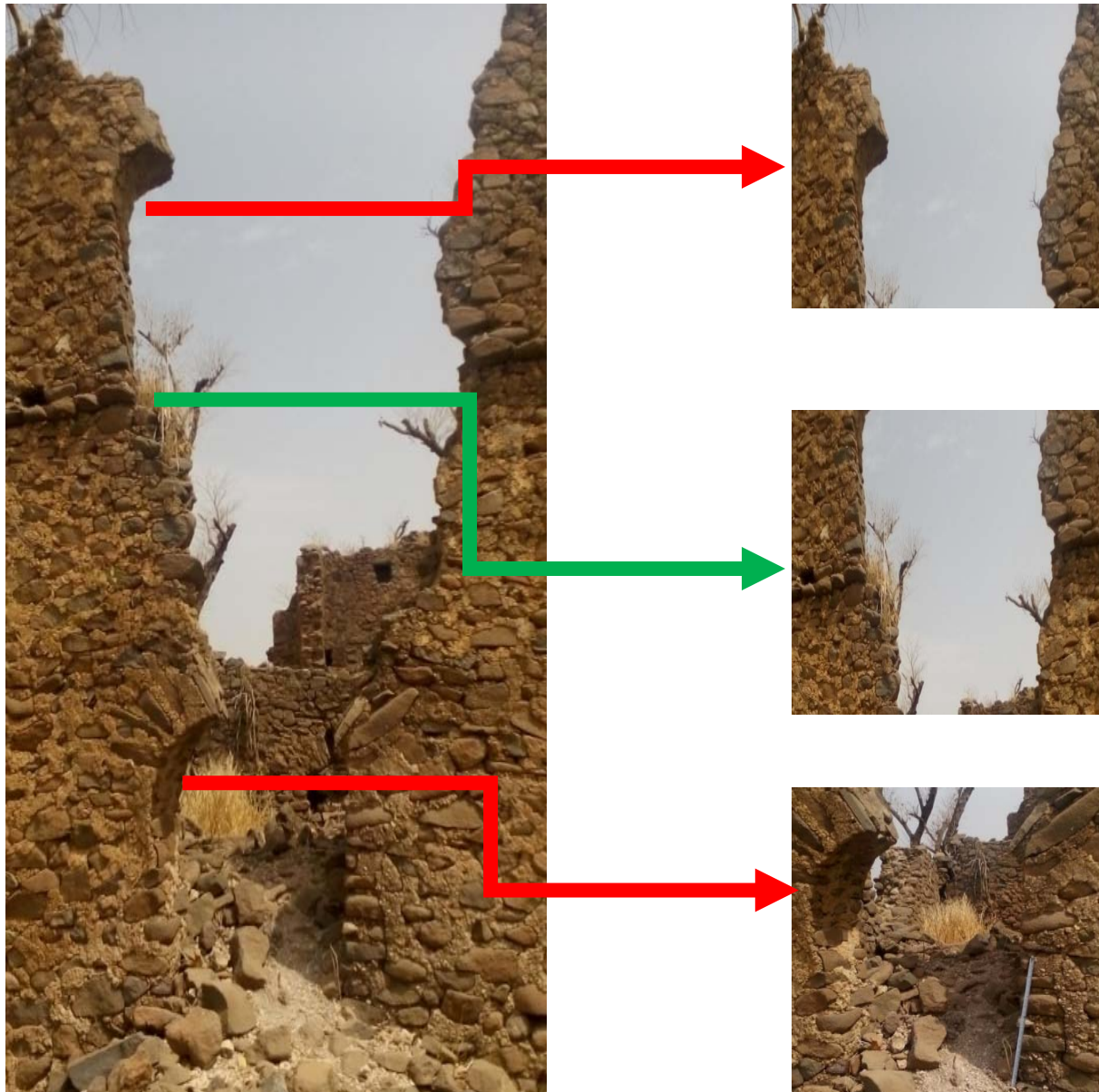


Figure 25: The arched structure and rivet on the southern wall (Photo by Feyissa H, 2016).

Inside part of the castle's room, consists of arched entrance from the first to the second room, and three small false windows of square design (see fig. 26).

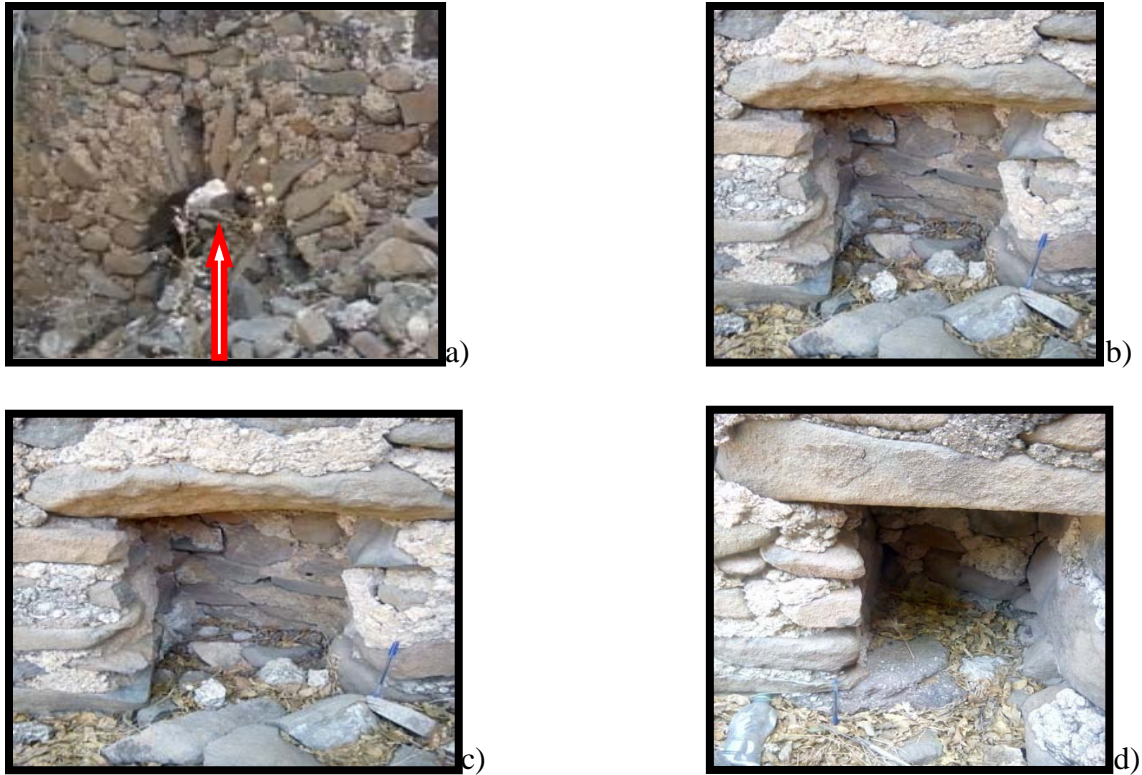


Figure 26: The arch designs (a), and small square false windows (b, c and d) (Photo by Feyissa H, 2016).

3.5.2 Construction Materials

Based on field observation, the materials that were used for the construction of the castle consist of basalt rocks with white lime mortar (see fig. 27) similar to the Gondarian castles. The stones are rough with differing sizes. As a result, it is difficult to take the size of each stones. Looking at the technology of the building, castle's exterior part is almost seems plastered. According to *Dejena* (2002), raw materials like mortar and stones were used in the process of the construction.

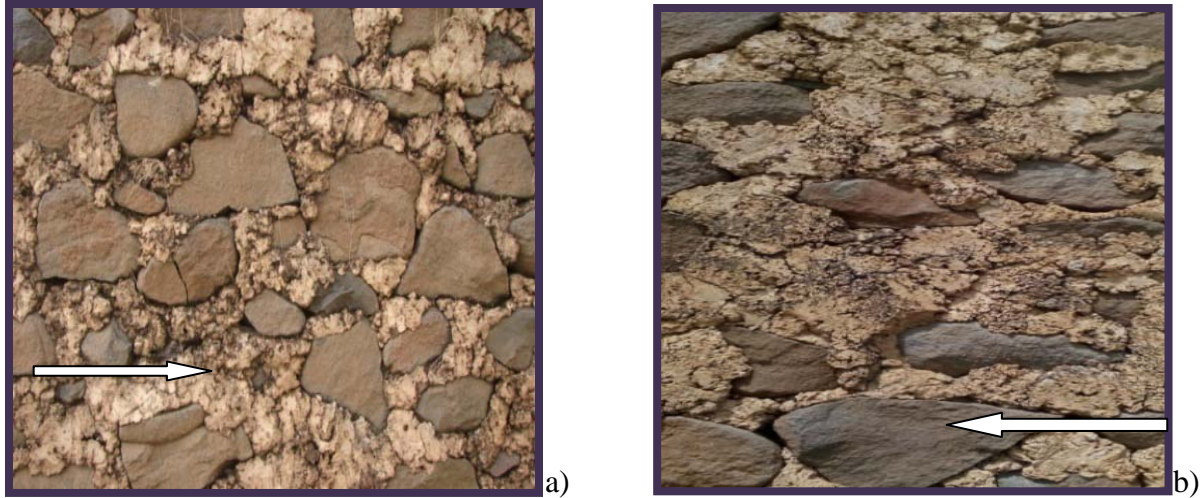


Figure 27: Rough uncovered basalt rocks with white lime mortar (a and b) (Photo by Feyissa H, 2016).

3.6 Associated Findings: Artifacts

In the compound of the Bete Mulu castle, there are large numbers of grindstones and discarded pottery remains. In the area of 1x2m the discarded 280(two hundred eighty) pottery remains were counted. Even though it is difficult to date and associate with the time of Ayanaizgi, based on the local evidence (Informants: *Ato Tsehaye Ambaye* and *Ato Nigussie*, 2016), today, there is no such pottery making practices in the locality. Which means it was activity that dated to the time of King Ayanaizgi. The informant, additionally, hinted that it was to meet the need and to respect the king's interests that the servants engaged in such activities. Servants make pottery not to catch their interest rather to increase the moral of the king. It is due to this that most of the discarded pottery remains reveals as it was purposely produced for luxurious purpose. Informant (*Ato Gebremeskel* and *Ato Nigussie G*, 2016), who accessed to the better remains of pottery-justified that most remains of pottery are much decorated one.



Figure 28: The discarded pottery remains (a), and grindstones (b, c, d and e) (Photo by Feyissa H, 2016).

Another important recovery from the nearby site of the castle is the sites of *Mekabir Weizazirt* which literally mean the burial site of beauty ladies. According to local informants (*Ato Nigussie and Ato Gebremeskel, 2016*), *Dejazmach Ayanazgi* invited peoples from different areas to officially declare the accomplishment for the construction of Bete Mulu during the month of October, and many where availed themselves to celebrate the day. In this proposed event Ayanazgi determined to revenge the people who came from the highland. The intended revenge targeted against the highland peoples opposed the construction of such castle in the lowland Welkait. The highlanders called Ayanazgi as ‘king of the lowland’ to show their disrespect and disregard to him.

Goat meat and *tej* was prepared for the ceremony. After the ceremony most of the peoples from the highland died. The possible cause of their death was-one, the harsh climatic conditions since they were from highland. The second reason for their death was that the attack from mosquito-bloodsucking insect-that transmits malaria. This was further aggravated by the feeding of goat meat on the ceremony. Traditionally, it is thought that eating goat meat facilitate mosquito to suck human blood Thus, those mentioned causes were the main reasons for the death of peoples who came to celebrate ceremony. The informants stated that *Dejazmach* Ayanaizgi did this deliberately to counter attack peoples of the highland (*Ato* Nigussie and *Ato* Mulugeta, 2016).

Most of the dead were females and buried on the site nearby the castle. The burial site is called *Mekabir Weizazirt*-since most of them were beauty females. Actually, those burials are known as *tumuli* in the archaeological literatures.



Figure 29: *Mekabir Weizazirt* (Photo by Feyissa H, 2016).

Some of those tumuli are disturbed by erosion, land slide and terracing. There are also human activities that currently disturbing those unprotected tumuli. They are also disturbed by construction purposes. On the other tumuli there are fragment of pottery remains and small rocks of different types and structures. Despite the presence of the tumuli-it is difficult to define and associate it with other tumuli from other areas and different periods. To do this was also not part of this research objective and open to further investigation (see fig. 30).



a)



b)



c)



d)



e)



f)

Figure 30: View of tumuli (a and c) and threats affecting it-erosion (e) and human activity (f)
(Photo by Feyissa H, 2016).

CHAPTER FOUR

4. DISCUSSION AND DATA IMPLICATION

This chapter deals with the discussion and data implication/results based on different works of previously studied on historic buildings documentation, conservation and their cultural significances.

4.1 Implication of the Geographical Location

4.1.1 Site Selection Implication

Bete Mulu castle is located in the Welkait-Mezaga lowland. However, it was built on relatively elevated hill compared to topography of the area. According to informants (*Ato Nigussie and Ato Gebremeskel, 2016*) the selection of the site was driven based on the interest of the *Dejachmach* Ayanaizgi. He preferred to rule over a very extensive and fertile soil of Mezega lowland, which was not controlled by the local administration. Secondly, he was not interested to compete with the highland of Welkait that was ruled by his father.

As already stated above, the castle was built over elevated hill. This is strategically significant to closely monitor from distant view of what was going on in its surrounding environment. Likewise, it may however perceived by the rulers or owners of the building to rectify their autonomy and prestige. Selecting the castle construction on top of the hill is also cultural type and practices of previously built structures in Ethiopia. This could be evidenced and proved by looking at pre-Gondarian and Gondarian buildings either of religious or secular buildings (*Dawit, 2009; Fikadu, 2012*). Its strategic location i.e. on the top of the hill is one possible similarity that pushes one to categorize the castle-Bete Mulu-as a type of one of the Gondarian style.

It is also very common that most of the time, the Emperors personal servants and those of his court were living in humbler buildings and principal nobilities were located near the compound on the hilltops with their servants (Pankhurst, 1996).



Figure 31: The hill on which Bete Mulu castle is located (Photo by Feyissa H, 2016).

Therefore, the site selection of Bete Mulu castle was determined by the *Dejazmach* himself as the area was resourceful and fertile endowed with various forests and rivers (Informants: *Ato Desalegn Fissiha* and *Ato Nigussie* , 2016).

4.2 Implication of the Structures of the Castle

4.2.1 Technology: Architectural Implication and Construction Materials

Based on field observation, the architecture of Bete Mulu castle is clearly visible and identifiable except for its lost part. The enclosure of the castle is circular whilst the shape of the castle itself is rectangular. This is also the common architectural practice that is visible on the buildings of the Gondarian style, which is rectangular in form.

Buxton (1986) states that Gondar architectural styles are characterized by constituents of identified rectangular ground plans. However, it does not mean that this type of structure is only confined to the Gondar-Style. But similar style is also observed from the time of Pre-Axumite i.e. the Grand Temple of Yeha, which has rectangular shape (Asfawossen, 2009).

Thus, further, this implies the spatial and temporal move of architectural styles south wards from Pre-Axumite and Axumite to Medieval period (rock hewn churches) which shows continuity through time. This, in turn, implies diverse and rich architectural cultures have been practiced in Ethiopia history (Buxton, 1963).

But what differs the Gondarian buildings, particularly, from that of Axumite and Lalibela is that most of the buildings were built up unlike that of Axumite and Lalibela-in which most of them are rock-hewn. This is one possible area as where Bete Mulu castle is to fall within the Gondarian buildings-since it is built up.

On the enclosure of Bete Mulu castle there are small windows with design of square watching towers. These windows are largely concentrated on the northern direction of the enclosure. It was due to the high suspicion of enemies coming from this direction. This feature can be also assured from Gondar architectural styles. Buxton (1986:124) stated that “... *domed angle towers with slight batter; square observation towers on palace roofs; round and square domed towers in compound walls...*” is elements that features Gondarian architectures. This is one similarity where Bete Mulu castle overlaps with that of Gondarian type.

The position of the watching towers windows are labeled differently. According to (Informants: Ato Gebremeskel and Ato Nigussie, 2016), the function of the windows on the enclosure was for security purpose-to watch and safeguard any suspected enemies coming from different direction

particularly during night time. The presence of security problem could be strongly understood from the political competition of the then period. Historically, it was also the time of political competitions among different regional lords. A good example of this was the conflict between Ayanaizgi and Mamo-as competitors to pay much tribute to the king so as to get extensive territory and hegemony over it. The watch tower found on the northern direction outnumbered of the other directions. Informants (Ato Nigussie and Ato Nigussie G, 2016) explained that high suspected enemies would come from this direction i.e. northern direction.

Buxton (1986:126) writes his observation about observation towers on the Gondarian buildings as follows:

“...they give the appearance of being meant as defensive strongholds, yet their military characteristics do not withstand close scrutiny, compound walls may be several meters high but are not heavy enough to withstand determined battering, entrance gates were not designed to house strong wooden or iron gates let alone portcullises...for the tactics of warfare throughout the Gondar period continued in the tried and true pattern of pitched battles rather than developing along lines of siege warfare...”



a) b) Figure 32: View of square tower on Bete Mulu castle (a) and Fasil Ghinb (b) (Photo by Feyissa H, 2016).

Therefore, the presence of observation towers on the enclosure in the form of window was the simple tactic of the day to defend and withstand possible enemies coming from different sides. Something impressive is that the positions of those observation towers on the enclosure are different. Some of the observation towers are at the middle of the enclosure whilst the other ones are at the bottom. This is meaningful for that the landscape surrounding the enclosure is not in an equally flat and plain. The observation tower is at the top when the landscape out of the enclosure is at its mounted/elevated level whilst at the bottom when the landscape out of the compound is lowered. This is very essential to closely monitor the situation over the outside environment (*Ato Nigussie and Ato Nigussie G, 2016*).

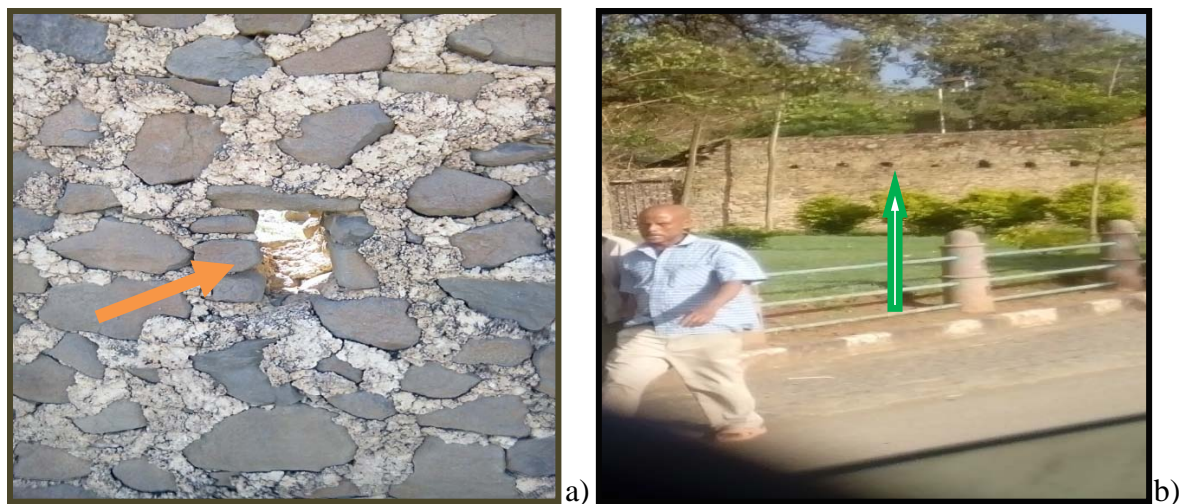


Figure 33: Windows as watch tower on Bete Mulu's enclosure (a) and watch tower on Fasil's *Ghinb* of Gondar (b) (Photo by Feyissa H, 2016).

Another important architectural element that is visible on the different parts of the castle is an arched windows/doors, small squared niches and stairways. Such architectural styles are the major features of Gondarian architectural styles (Buxton, 1986; Dawit, 2009).

Another big question that one could raise here is about the raw materials used to build the castle of Bete Mulu. Identification of raw materials is significant to confront various deterioration aspects (World-Bank International Development Association-WBIDA, 2007).

Like elsewhere, raw materials like lime mortar, basaltic rock-quite common in the May Gaba area (Ato Nigussie, 2016) were used to construct Bete Mulu castle. The advantage of using mortar is also helpful in withstanding problems coming from weathering and compactness (WBIDA, 2007). As stated above, arched design is visible on the different parts of the castle. The design and the other parts of the building are plastered with lime mortar.



Figure 34: Arch on Bete Mulu castle (a) and on Fasil *Ghinb* (b), and plastered view of the castle and *Ghinb* with lime mortar (c) and (d) respectively (Photo by Feyissa H, 2016).

Who was responsible for such types of architectural design and who introduced of lime mortar into Ethiopia requires critical arguments and investigation. There are different arguments and hypothesis suggested by various scholars.

The first argument is that the uses of mortar as a raw material in supplementing construction of different architectural design like arch technology was attributed to foreigners. Which means the design of the architecture was foreign origin, and was introduced in the second half of the 16th century. The Portuguese missionaries, Turks and Arabs were said to been responsible to develop architectural styles and to build different castles and churches including the churches in Gondar (Buxton, 1986; WBIDA, 2007). Lindahl (1969a) supported the idea that the Portuguese were involved in developing such architectural styles in which some Indians were also part of it.

The use of mortar as raw material for construction, and who and when it was practiced in Ethiopia is a heated debate. For instance, Jesuit missionaries, in the 17th century i.e. 1624, claimed that they were responsible for the introduction of well designed lime mortar and other architectural design in Ethiopia (Merid, 1984; Anfray, 1988, in Fernandez et al. 2006). Another counterpart with this idea is Buxton (1986) who argued as there was no use of lime mortar for about millennium particularly in the northern part of Ethiopia before the time of Gondarian period.

Contrary, this argument was contested by the Spanish archaeologists. They carried out archaeological test excavation at the church of Gannat Iyasus, North Gondar. The church was said to have been built from 1621-1623. The excavation resulted that lime mortar was used to bond the building foundation (Fikadu, 2012). This evidence is against the claim of Jesuits since

the date of Gannat Iyasus church preceded the supposed introduction of mortar from abroad i.e. 1624.

In same way, since Axumite time to Gondarian period, there was the use of stone masonry, lime mortar, timber and others long before the coming of Jesuits. Excavation at Axum shows that lime mortar was used to build structures like the Tombs of Brick Arches and the Mausoleum dating to the 4th century A.D. (Phillipson, 1995; Fasil, 2004).

Based on field observation it is justifiable that white lime mortar was one of the raw materials employed to construct Bete Mulu castle. Employing lime mortar as a raw material in Ethiopia in general and Bete Mulu castle in particular, therefore, can be better explained as an evidence indicating continuity from the existing traditional knowledge rather than supporting the personal whim of the diffusion of lime mortar from abroad into Ethiopia.

One possible reason to categorize the Bete Mulu castle to the Gondarian type is that its time perspective, which is contemporary to the Gondarian civilization. Accordingly, Gondarian style lasted from the second half of the 16th up to the second half of 18th centuries (Buxton, 1986). Local informants (*Ato Nigussie, 2016*) mentioned the name *Atse kaffa*. They say that Ayanazgi had good relation with *Atse kaffa*. *Atse Bakaffa (1921-1929)* was one of the kings who appeared during the Gondarian period. From this point of view it is possible to say that Bete Mulu castle was built during the Gondarian period. However, this date requires further investigation since the researcher had no potential to conduct absolute dating to indicate the exact time of Bete Mulu castle.

4.3 Significances of the Castle: Cultural Heritage and Tourism Values

Cultural heritage site can generate various values. It could hold a role as component for developmental activities. They can be sources of valuable historical and scientific information. Historical, economic and socio-cultural values are issues that not separately treated, and need to be associated and discussed together with heritages and its conservation aspects. Historical buildings should be appreciated in respective of the time context it came to appear (Bhawan, 2013; Manitoba Government, 2015).

This in turn would help and match with the country's plan of making tourism industry as one of basic sustainable economic development without ignoring the historical building belongs to our country. We bother for a good conservation of historic buildings due to their role of preserving collective and generating economic benefits (Timothy & Boyd, 2003).

As a result, Bete Mulu castle has of high historical, political, economical, social, architectural, and spiritual values, which are discussed below.

4.3.1 Historic Values

As already stated by scholars, tracing back historically, Welkait was an area of interaction between Ethiopia and the Sudan. Not only between these two countries, even it is historically mentioned as a center of interaction in the area of Horn of Africa. It was pass way to Sudan where population movement was witnessed from eastern part of Sudan into the area. By the movement cultural interaction is certain to come practical (Smidt, 2011).

Buildings are very important and powerful, tangible bridge to look into to our past and one possible way in which people today comes in touch with the past and even with one another. We appreciate and pushed to conserve Bete Mulu castle because of events happened relating to it. It

could tell the political and territorial expansion of the then ruler from the central court, Gondar. The site and castle at large should be valued for that it comes into existence due to skillful personality provided by Ayanaizgi to the then king. As stated by Herndon (2007) buildings can carry the historical significance (in association with events and important persons), and architectural values.

The appearance of such events regarding to Bete Mulu castle (presented in chapter 3) is, stated by Awan (2008), that the conservation of historic buildings is a means of continuity of history as it keeps alive the cultural scene of that historic period to which it belongs. It is at high degree of its essentiality that people look into the past history from various perspectives in order to add value on its current identity; with critical view of what has been happened (UNESCO, 2006).

Historic building of such kind could also tell as the existence of the then political relation of Ethiopia with the outside world particularly with those who were directly involved in the construction of various buildings. Portuguese were the one who characterized under this relation for that catholic missionaries were played their part in designing some architecture.

Politically speaking, one can also understand that, taking into account its time context, it could imply the potential of the political power. By this we mean that without having strong political and economic power it is very challenging to organize and monopolize society to make them participate in the construction of the castle. Therefore, it is very essential to remark here that the political and economic power of the ruler was economically powerful to complete the intended castle. The implication of the castles of Gondar-styles architecture is that it was intended to claim the continuation of the Solomonic monarchs as special quality to get recognition as well as

to glorify [their] kingships as part of Solomonic family (Buxton, 1986). Thus, having such building like Bete Mulu castle could serve as political symbol to ascertain their kingship.

4.3.2 Economic Values: Tourism potential of the castle

The castle in particular and the Welkait *woreda* at large-have many tourist pulling sites. If they are properly managed and promoted they can attract tourist that generate income to the local communities.

Additionally, the natural and historical setting of the Welkait *woreda*, geographical location, the castle has potential to become important tourism attraction centres. The potential advantages from the site as a tourism destination could be economic value-in generating income for the country in general and for the local community in particular. This opportunity is also enhanced with the construction of the new Sugar Factory on close range to the castle. There is also small town of May Gaba at a distance of 2.5km. The employees of the sugar factor who will reside at the town of May Gaba may get the chance to visit the Bete Mulu castle

Foreigners who are engaging in production of the sugar product and cooperators who come to visit the ongoing process of the factory, during the time of their stay over the area, may visit the site. In addition, it should be planned to make the Bete Mulu castle as tourist destination area to generate income.

Side by side if promotion is carried out together with other tourist potential areas in the *woreda* large number of tourist may flow to the area. By this, local community can supply and sell their locally available important materials like cultural clothes, traditional foods and other products- which could become source of their income. Since the site is very near to Humera-one of the hot

trading market and good supplier of sesame-it is possible to associate the population flows with the castle to get accessibility to visitors.

As a social value, the site may hold great significance in promoting the cultural heritages practicing in the area. To this day, according to my informant *Ato Nigussie*, there is annual ritual ceremony conducting in the site. The local community collects and brought foods and drinks like *areqe*. The fundamental reason of this ceremony is to uphold respect for the site as it offer them good luck, giving them prosperity, peace and security. It also strengthens social harmony by creating common understanding to protect traditional practices against modernization.

Generally, accounting and considering this as one of the factor of enhancing development of tourism, based on the site, would have significant contributions in the protection of natural and historical environment of the areas. As a result, conservation and keeping historic buildings in use by transforming it into tourist attraction is one possibility where it get accessible to general public.

4.3.3 Architectural, Aesthetic and Educational Values

There are various purposes why we need study and concern about building of any given age.

“...understanding the basic characteristics of architectural styles is a useful way to begin seeing buildings more critically. Such an understanding also helps in describing a building, in determining its age, or in assessing its architectural value when compared with other buildings of the same style” (Manitoba Government, 2015:1).

Based on the above argument, buildings with its historical context of the day could contribute to aesthetic values. The other thing is that its intellectual and architectural achievement in crafts of the building would be continued to alive in the later generation craftsmen construction. The central idea is that historic building has artistic and human messages by which it reveals its

history. As well as distinctive architectural style and their architecture will have a real impact on the future (Baxter 2001, in Feilden, 2003; Timothy & Boyd, 2003). As a result of this, viewing at Bete Mulu castle, there are architectural designs that we like to conserve for better survival to the next coming developments of architectural design on buildings. Arches and small square designs inside the rooms-which we cannot observe today has its role to maintain architectures once appeared in the past.

Historic buildings are, at their maximum possible, could serve as Academic center. Herndon (2007) clearly put that building could serve as teaching tool. In the case of Bete Mulu castle, we can teach by looking at all its design composition and techniques employed its historical aspects, and how it came about-as to drive lessons from it. Therefore, it can serve as spring board to be centre for another further study relating to the site at large. Similarly, the existence of buildings in various places can play paramount role in correlating its different architectural styles and integrity. This helps for the need to study buildings for that they are very relevant to give lessons for modern building architects.

4.4 Conservation and Management Status of the Castle

4.4.1 Current Physical State of the Building

Many studies have identified what has to be done before rushing into prescribing the possible approaches to safeguard any given historic buildings. The procedure that has to come first is that there should be identification of factors that causes its deterioration (Bhawan, 2013; et al, 2012).

Most part of the Bete Mulu castle is destroyed and is in a bad state of preservation. Its enclosure is still at an average of good condition. This can be clearly observed from its lost part. Based on

researcher field observation, even within a difference of one year, there is high degree of deterioration of the castle (see fig. 35).



Figure 35: Small destruction before a year (a) and after a year (b) (Photo by Feyissa H, 2016).

Generally, based on field observation and informants (*Ato Nigussie and Ato Mebrahetom, 2016*) the building is encountering serious problems due to lack of conservation and promotion from the concerned body. Both natural and manmade causes are the major factors aggravating historic buildings state of conditions (*Bhawan, 2013; Feilden, 2003*). Thus, it is presented as follows.

4.4.1.1 Natural Causes of Deterioration

Buildings could be damaged due to deterioration agents coming from natural factors such as rainfall, temperature, wind blowing, wall-climbing plant life and humidity. These factors are not happening at a time rather with the passage of time-added to the increment destruction of the building (El-Gohary & Al-Shorman, 2009, in Fikadu, 2012; Feilden, 2004).

Accordingly, based on field observation, the researcher has identified that the above mentioned factors are big blows to the further deterioration of the building. One of the natural causes is the environment itself, harsh climatic condition, in which the lowland of May Gaba in general and Bete Mulu site in particular is characterized by hot and sunny sunlight. Climate, in all its aspects, is one of the fundamental causes for the decay of buildings, through failure of its materials which in turn affects the structure (Feilden, 2004).

Likewise, based on field observation and interviews (*Ato Birhanu, Ato Nigussie and Ato Mebrahetom, 2016*), the active component of climatic condition that affects Bete Mulu castle are, particularly, radiation from the sun, seasonal temperature changes, rainfall and wind blows.

Based on researcher field work and interview with local resident reveals that natural factor like heavy solar radiation (since it is located in one of the hottest part of the country), is the most threat to the castle and its enclosure. Sun light as prime causes of decay of building (Feilden, 2003) result in expand of materials used in construction like stones. It expands when heated and contracts again when cooled. This expansion and contraction being called thermal movement is a major cause of decay in buildings. The usual outcome of sunny sunlight on building is, as a whole, cracking and loosening of the stones in their joints. This is, in fact, an adverse effect clearly visible on Bete Mulu castle (see fig. 36).



a)



b)

Figure 36: Sunlight cracking view on enclosure (a) and lost stones on joint part of the castle (b) (Photo by Feyissa H, 2016).

From researcher's observation, evidence that is clearly visible on Bete Mulu castle is that its western and eastern walls are almost destroyed. Such affection is happened and visible because of most extreme straight line sunlight exposure than the rest of the wall of the same castle (see fig. 37).



a)



b)

Figure 37: Comparison showing destroyed western wall-direct sunlight exposed (a) *versus* better saved of northern wall (b) (Photo by Feyissa H, 2016).

Wind exacerbates the general external erosion of most building materials that weaken by other factors (Fielden, 2003). He has pointed that the structure of building must be strong enough to resist wind pressures; it might well be assumed that because historic building has succeeded in resisting all probable strengths of winds during its lifetime, and it will be strong enough to resist all future wind forces. However, this does not always follow as the structure may have deteriorated. Therefore, as there is speedy wind flows over the study site, it is inevitable that Bete Mulu cannot escape of this. Since there is heavy sunlight resulting crack and rainfall over the site, wind pressure causes serious penetrates it is possible to argue that cracks and internal decay is another threat to Bete Mulu castle.

Rain, as one of natural causes, is damaging factor of buildings by penetrating to the interior of a building and causes various kinds of decay. Rain fall, in all its forms, is the agent that promotes chemical actions and gradual deterioration of building materials and actively damages buildings when heavy rainfall overflows (WBIDA, 2007). Rainfall causes lime mortar to dissolve, broken into pieces and discoloration (Esra Yaldiz, 2010, in Fikadu, 2012). This is practical on Bete Mulu castle where rain hits the surface directly or indirectly. It could be justifiable from eroded plaster and lime mortar (see fig. 38). Once the surface of stone is washed down-it erode and expose for wind pressure. Wind pressure forces this affected through cracking.

It also results in the growth of different types of vegetation on the building. This in turn results in alteration of original color of the building i.e. darkening (see fig. 38).

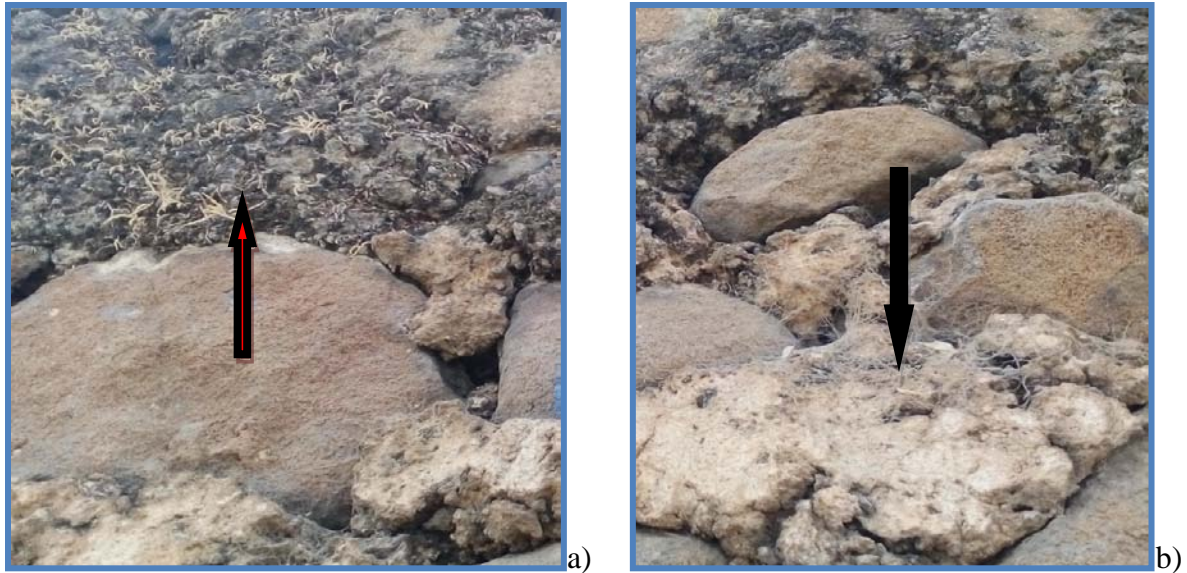


Figure 38: Blacken parts of the wall due to rain hits and plants grown (a) and eroded section (b) (Photo by Feyissa H, 2016).

Biological growth is one of the natural causes that threaten historic buildings. There are plants grown on the Bete Mulu castle which aggravates its instability. As a result of this, this factor itself is also another contributor to the happening of another cause of damage to the castle i.e. it become host for fungi, bacteria, algae and mosses. Biological growth of plants and various roots hosts agents on building like fungi, bacteria, algae and mosses which are micro-organisms accelerating decays (Mydin et al, 2012; Singh, 2000).

Not only this, because of grasses and plant grown in and around the building animals like cattle and goats are serious threat to the building. They feed on plants grown on the castle (Informant: *Ato Nigussie and Ato Gebremeskel*, 2016). During the rainy season, since there is a grass in the compound, the people of the area graze their cattle and stay there within the compound till the grass is gone. There is a case where cattle are in physical contact with castle's wall and its

enclosure (*Ato Nigussie and Ato Gebremeskel, 2016*). By doing this they result damage on the castle (see fig. 39).

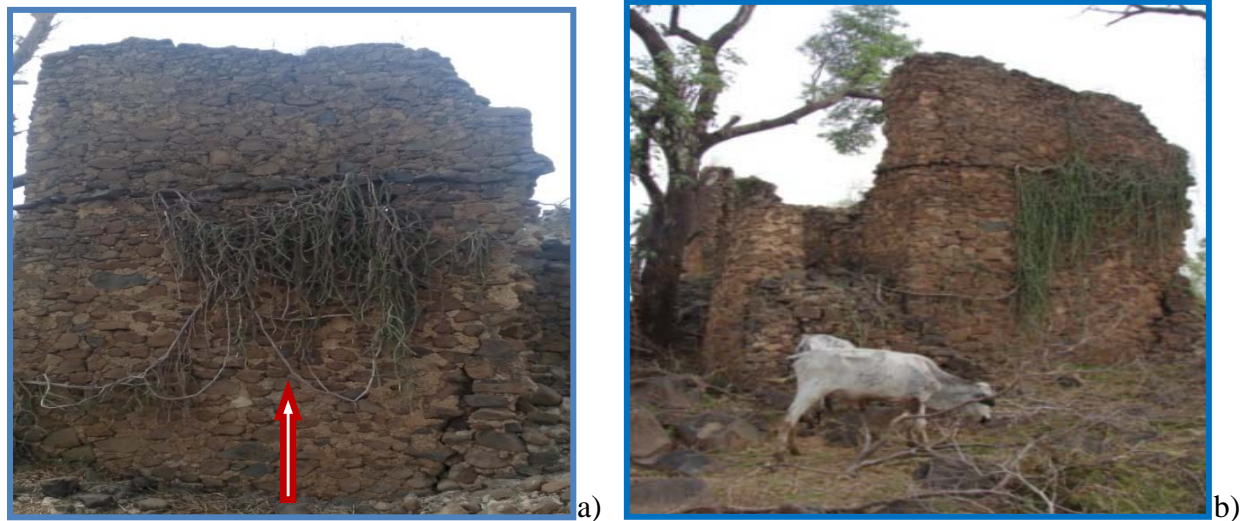


Figure 39: Biological causes of deterioration-plants and grasses grown (a) and cattle grazing (b) (Photo by Feyissa H, 2016).

4.4.1.2 Anthropogenic Problems

Like that of natural causes of deterioration, anthropogenic causes are also other factors that contribute to further damage of the Bete Mulu castle. According to informants (*Ato Gebremeskel and Ato Birhanu, 2016*) the important elements of the building and material used by the king were stolen. The informants added that woods were also part of the raw materials used in constructing the castle, but not available today. Local peoples also use stones for terracing and other services. This result in loses of parts of the castle. Therefore, thieving is one major challenge to the castle.

It is due to lack of heritage management that resulted to the local community awareness about the cultural heritage values. Lack of trained man power in the field of study, absence of conservation, promotion and lack of involving stakeholders is a serious issue. This emanates

from weakness of cultural and tourism bureaus at different level in the region (*Ato Birhanu, 2016*).

Local people also use the site for grazing cattle and build fence inside the enclosure for keeping their cattle. Grasses and plants grew during rainy season. Animals like cattle and goats are serious threat to the building. They feed on grasses and plants grown on the castle (see fig. 40) (*Ato Nigussie and Ato Gebremeskel, 2016*).

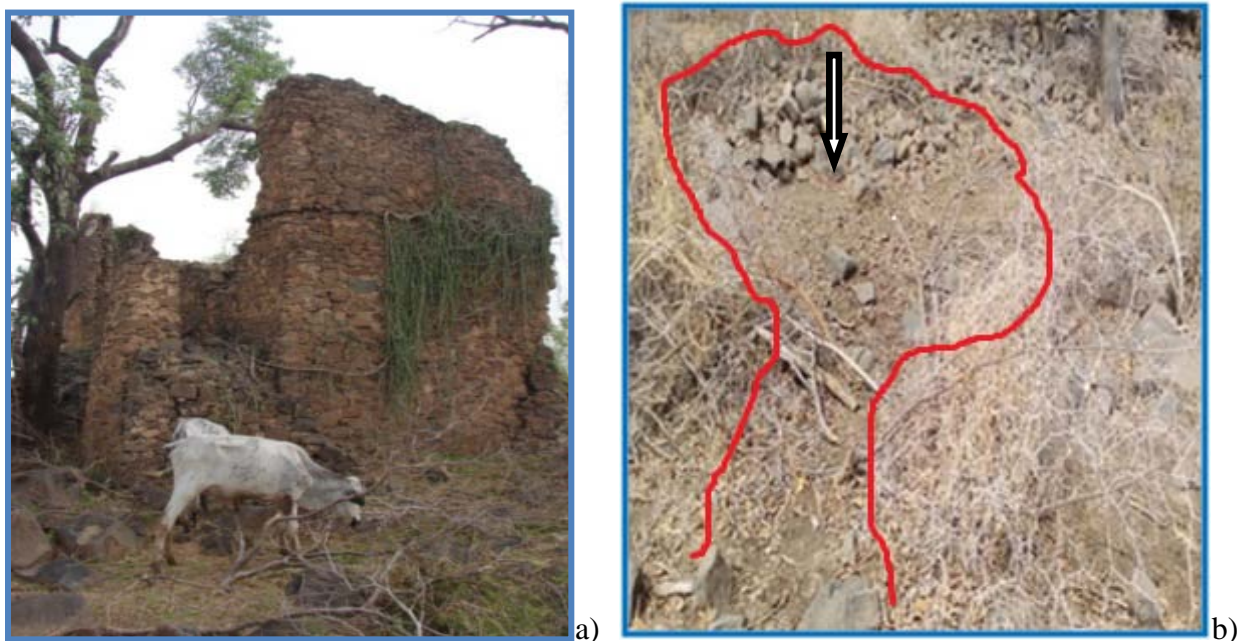


Figure 40: Cow grazing in the enclosure (a) and its fence (b) (Photo by Feyissa H, 2016).

Currently, sugar factory which is on very nearby to the castle is becoming visible critical threat for the castle. The installed cracking machine is collecting and crushing stones for construction purposes (*Ato Nigussie and Ato Gebremeskel, 2016*).

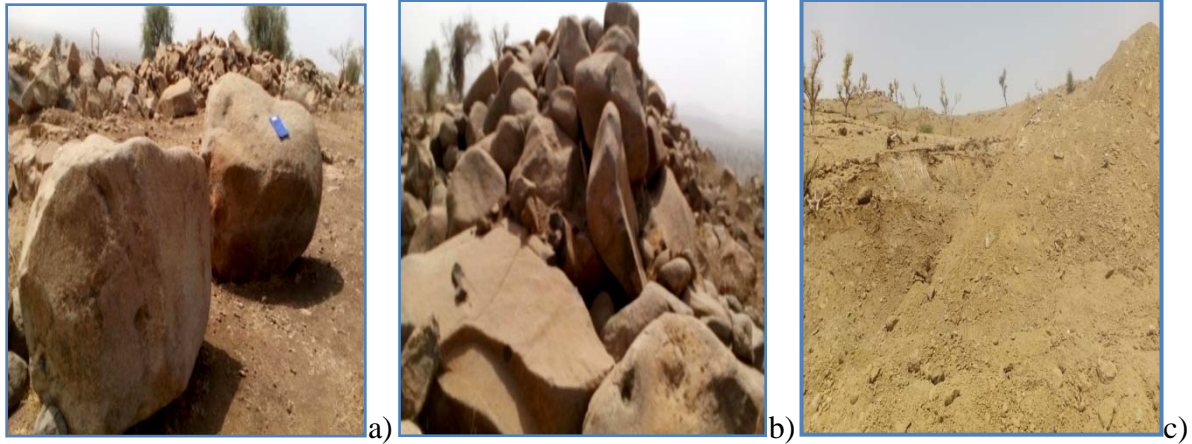


Figure 41: Stored stones ready to be cracked into pieces over the site (a and b) and site part under digging for construction purposes (c) (Photo by Feyissa H, 2016).

4.5 Management Status of the Castle

4.5.1 Development of Conservation Plan

Philosophy regarding restoration and conservation of heritage sites has changed over the year and has basically two pronged approach. The first approach prescribes that restoration of heritage sites does entail limited intervention whereby the focus of restoration is not to ‘rebuild’ the heritage as it was once was in the past, but to prevent further deterioration. The second approach in conservation is not just conduct restoration work for the sake of it, but to restore and conserve heritage site by taking into account their reusability. For the contemporary society to continuously conserve and maintain heritage sites, ways should be found so that they continue to be relevant and beneficial to the surrounding community (Jokilehto, 2015).

In order to develop conservation plan for the castle of Bete Mulu, the two conservation approach should be taken into consideration. There should be minimum intervention during the restoration by focusing on preventing and removing elements that leads further deterioration of the heritage site. Example of intervention suggestions are;

- Removal of vegetation and biological stains with biocide and herbicide treatment from masonry and plasters. Further, closely monitoring and maintenance should be considered crucial for the preservation of the same building as a ruin. Only through the constant observation of the surfaces, development of decay and traces of structural problems can be swiftly recognized and measures taken.



Figure 43: Vegetation and biological grown (Photo by Feyissa H, 2016).

- Masonry works such as re-pointing and capping should be performed where needed, especially at the base of walls and on the top of uncompleted walls respectively.



Re-pointing



Capping



Figure 44: Masonry works-re-pointing and capping (Photo by Feyissa H, 2016).

- Moreover, the increased use of the area around the site as residential should be considered improper in view of transforming of the site as an attractive pole for tourism and other aspects of tourism.



Figure 45: Settlement surrounding the Bete Mulu castle (Photo by Feyissa H, 2016).

- Wooden materials, without changing its originality, should be applied in order to avoid any biological growth and to reduce the micro-movements of the wood. As well it helps to support parts verges falling as examples has been done for some building in Ethiopia.

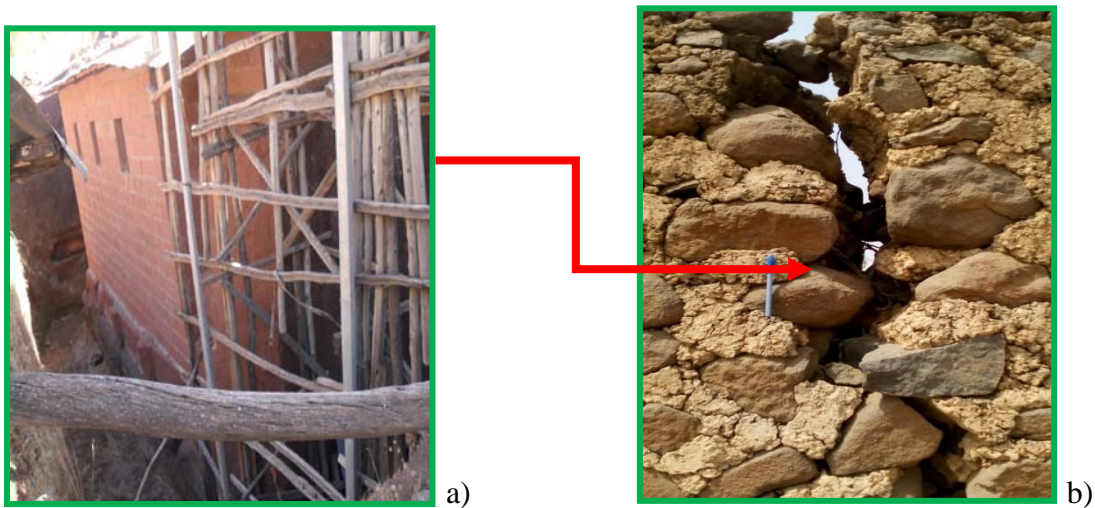


Figure 46: Sarzina Mikael-renewed part of its eastern façade (a)(Photo after Nathanael, 2012) and cracking part of Bete Mulu castle (b)(Photo by Feyissa H, 2016).

- There is rainy season as well as increasing sunny time which could result in pollution in the area. As could be observable from other examples like Genete Maryam, therefore, shelter in roofing form is very crucial for Bete Mulu Castle.

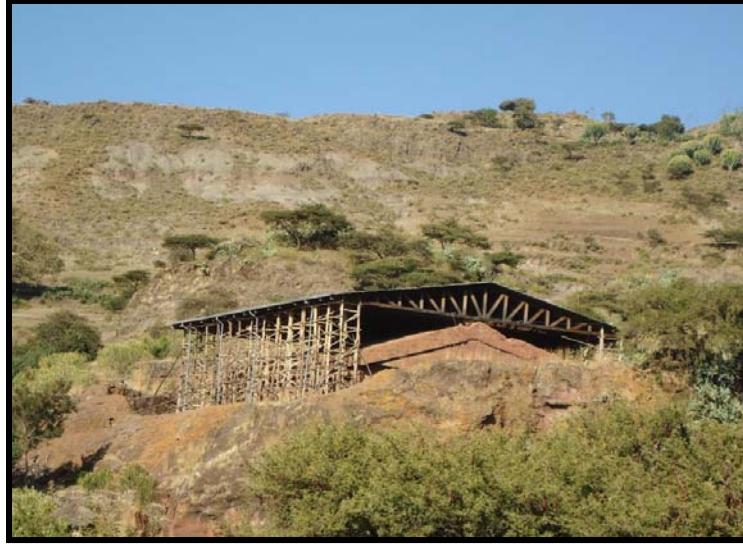


Figure 47: Sheltered Monolithic Church of Genete Maryam (photo after Nathanael, 2012).

This heritage management plan is essential to better manage the threats and challenges the site is encountering as well ensure that the site will continue to be relevant and beneficial to the surrounding community by becoming tourist attraction.

However, still, lack of documentation and of careful studies on the historical and stylistic evolution of the same castle should in fact be considered a deterrent and discourage any restoration activity, preferring works of consolidation and protection.

The difficult location of the site has until now influenced its protection and preservation. The situation can be defined of great structural risk and danger of losing the heritage. The site is undoubtedly necessary and urgent to plan some measures to avoid the total loss of the heritage.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The main aim of this study was to document the status and identify conservation measures needs to be carried out after identifying the causes of deterioration of the Bete Mulu Castle using various methods. Modern long-term conservation policy must concentrate on fighting the agents of deterioration. As cultural heritage resource its current status as well as its historical context was illustrated. The study was timely and justified by the fact that cultural heritages have historical, economical and social contributions to the country's development.

In this regard, the potentials for using this cultural heritage site as an instrument for economic growth and development are quite enormous. Additionally, with some developments that have been currently going on near the site will be one part of the tourist destination in the country.

Apart looking from architectural and other important aspects, the castle could show political extension of the then period i.e. to the north direction from Gondar, the then political center.

Therefore, there should be willingness to pay attention to conserve and protect the heritage site to make it everlasting. Built up heritage are the most important and representative of architectural styles. However, little has been done on historic building in particular regarding to research and its development, and in the sector of cultural heritage in general. And, it is found in state of destruction unless the necessary and timely measures are undertaken. The conservation of our historic buildings demands wise management of resources, sound judgment and aesthetic sensitivity and a clear sense of promotion. Perhaps, above all, it demands the desire and dedication to ensure that our cultural heritage is documented and conserved.

Generally, the legend-oral tradition has been investigated and, therefore, the overlapping of too many information is significant one to relate it to the so called Gondarian architectural extension. In which informants pronounced *Atse* Bakaffa as *Atse* Kaffa and could be very close to relate together. Moreover, the identification of the composition of the building materials is still matched, especially for mortars, with Gondarian type.

Thus, the results of this study can be summarized as follows:

- ❖ The current status and historical context of Bete Mulu castle was illustrated and documented,
- ❖ The raw materials employed in building the castle were identified,
- ❖ Major challenges and causes of deterioration affecting the castle was identified,
- ❖ Cultural heritage values and possible tourism potential of the castle was presented,
- ❖ Architectural contrasts and comparison of the Bete Mulu castle with other Ethiopian buildings was analyzed and presented, and
- ❖ Possible management plan was proposed.

5.2 Recommendation

It is clearly stated that the castle of Bete Mulu is in its state of rapid deterioration. In order to protect and exploit it as tourism resource, and to keep its historical and architectural continuity for next generation consumption, the following measures are recommended:

- First, efforts should be made to improve monitoring of the site by local authorities and make the site capturing profits in the future. This could be done and achieved through developing common sense of participation from government officials particularly those in field of heritage management and tourism development sectors,
- It is also advisable if community participation and awareness is conducted at each level of administrative structure. Because communities are the first, of all other, to be a good neighbor and friends of those types of important heritages,
- Second, there is a need to improve the facilities around the site to make it accessible to tourists. The town administration should protect and make the site clean as well upgrade the road to the castle. The creation of new infrastructures, especially water management and sewer systems, has to be considered primary in the area, and should be addressed before the development of the consequent rising of population essential needs,
- The problem of safety for visitors also needs crucial attention,
- Guards should be assigned to settle the safety of the building for that there are individuals who are trying to take away the stones for their own construction. This should be supplemented with drafting legal issues that bid individual from doing so,

- Growth of trees in the area surrounding the building should be avoided in order to limit the interactions between the building and the roots,
- Biocides and herbicides should be applied periodically in order to avoid the growth of vegetation and the movement of the slabs and fragments because of the growth of roots,
- Shelters should be built in order to protect the building from rainfall and sunlight,
- Above mentioned interventions should be taken as soon as possible, and concerned bodies should monitor the conservation status of the castle on regular base,
- Sufficient funds should be allocated to facilitate conservation measures, and
- Finally, future research is necessary to fully examine and develop values derived from the site as to be used for tourism and management decision in the long run. This study also suggests that further study is needed from different field of study. There are important plant species in the locality-May Gaba- which their medical importance is very important and currently in use by community particularly to treat themselves against malaria disease.

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III. List of Informants

No	Informant Status						Remark
	Name	Sex	Age	Date of Interview	Place of Interview	Residence	
1	Beza Abreha(<i>Ato</i>)	Male	85	February 21, 2016	Adi Remets	Adi Remets	Previously He is a farmer as well as a merchant, now he is too old and sits in the house.
2	Demoze Gebeye(<i>Ato</i>)	Male	70	May 14, 2015	May Gaba	Mezega	He is farmer and also work as a security guard in the same <i>woreda</i> .
3	Desalegn Fissiha (<i>Ato</i>)	Male	80	February 22, 2016	Zuwa	Zuwa	He is serving in zuwa kidane mihret church and lived there.
4	Fanta Tekuye(<i>Ato</i>)	Male	42	February 22, 2016	Adi Remets	Adi Remets	He is chairman of Teachers Association in the <i>woreda</i> .
5	Fekadu Gebre(<i>Ato</i>)	Male	60	February 23, 2016	Zuwa	Zuwa	He is farmer and lived in the area from birth
6	Gebremeskel Tsehaye (<i>Ato</i>)	M	60	February 21, 2016	May Gaba	May Gaba	He is farmer and lived in the area for about 55 years. He knows about the biography of Ayanaizgi.
7	Mebrahetom Gebremikael (<i>Ato</i>)	Male	46	May 14, 2015	Adi Remets	Adi Remets	He is vice administrator of the <i>woreda</i> at the time.
8	Mulugeta Birhanu (<i>Ato</i>)	M	32	February 22, 2016	May Gaba	May Gaba	He is currently Director of

							May Gaba Comprehensive Secondary school.
9	Nigussie Gebre (<i>Ato</i>)	M	64	May 16, 2008	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.
10	Nigussie Hailu (<i>Ato</i>)	M	65	May 14, 2015	May Gaba	May Gaba	He is farmer and lived in the area since 1968 E.C. He is very knowledgeable and church educated.
11	Sehelay Getahun(<i>W/ro</i>)	Female	—	February 22, 2016	Adi Remets	Adi Remets	Expert in the office of Agriculture and Rural Development office in the <i>woreda</i> .
12	Shokoli Birara (<i>Ato</i>)	M	95	February 21, 2016	May Gaba	May Gaba	He is monk and too old He is member of Bete Tselemti.
13	Tsehay Ambaye(<i>Ato</i>)	Male	48	February 22, 2016	Zuwa	Zuwa	He is farmer and lived in zuwa <i>kebele</i> .

IV. Appendices

Appendix-I- Archaeological Survey Documentation Sheet

Addis Ababa University

Department of Archaeology and Heritage Management

Archaeological Survey Documentation Sheet

1. Address

Region: _____

Zone: _____

Woreda: _____

Kebele: _____

House No: _____

Locality: _____

Site: _____

Site Code: _____

GPS coordinate: Northing: _____

Easting: _____

Elevation: _____

2. Site dimension: _____

3. Local landmarks: _____

4. Monuments name: _____

4.1 Amharic: _____ Local name: _____ English: _____

4.2 Ownership: _____ Owners: _____

5. Topography

5.1 Terrain Setting: _____

5.2 Profile Position: _____

6. Vegetation: _____

7. Land use: _____

8. Soil type and color: _____

9. Cultural Affiliation: _____

9.1 Absolute: _____

9.2 Relative: _____

10. Date of discovery: _____

11. Function

11.1 Previous: _____

11.2 Current: _____

12. Description of finds (observed materials) quantities and associated features

13. Overall length of monuments/buildings

Width: _____

Height: _____

Thickness: _____

Circumference: _____

14. Photograph number: _____

15. Present condition (insitu, disturbed): _____

16. Threats: _____

17. Sketch plan or drawing: _____

18. Additional notes (remarks) or comments: _____

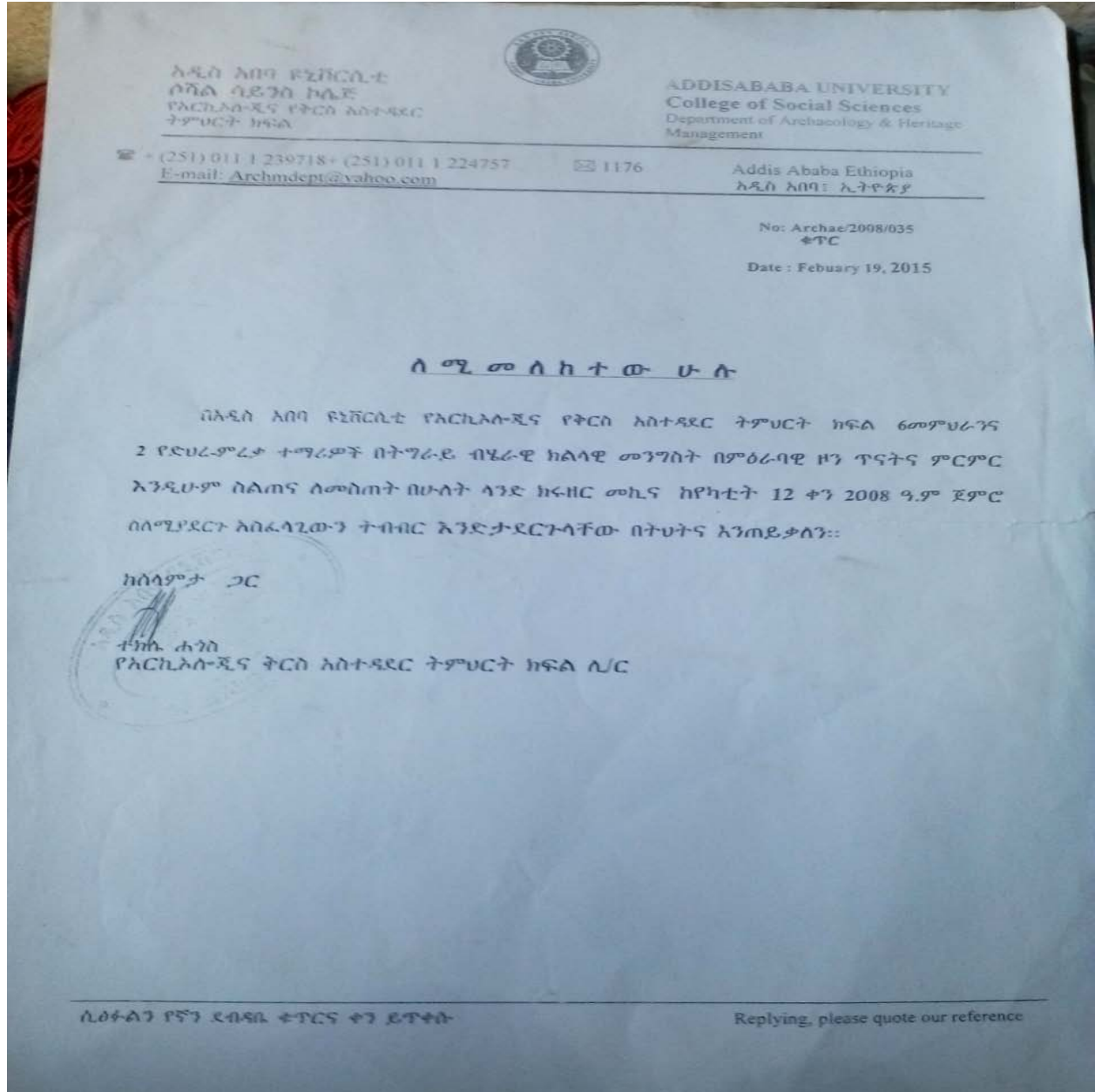
19. Means of Transportation: _____

20. Recommendation: _____

21. Inventoried by: _____

22. Date: _____

Appendix-II-Field work permission request



Appendix-III-Interview Questions

1. Interviewee details:

a. Name_____ Age____ Sex_____

b. Social Position_____

c. Place of interview_____

d. Data of interview_____

2. Questions:

1. When was the castle built/constructed?

2. Who was it constructed by? For whom?

-Why was this site selected?

3. Is there something you know about Ayanaizgi?

4. What was the purpose of building it?

- Its original function?

5. Where did the raw materials come from?

-Any quarry site you know?

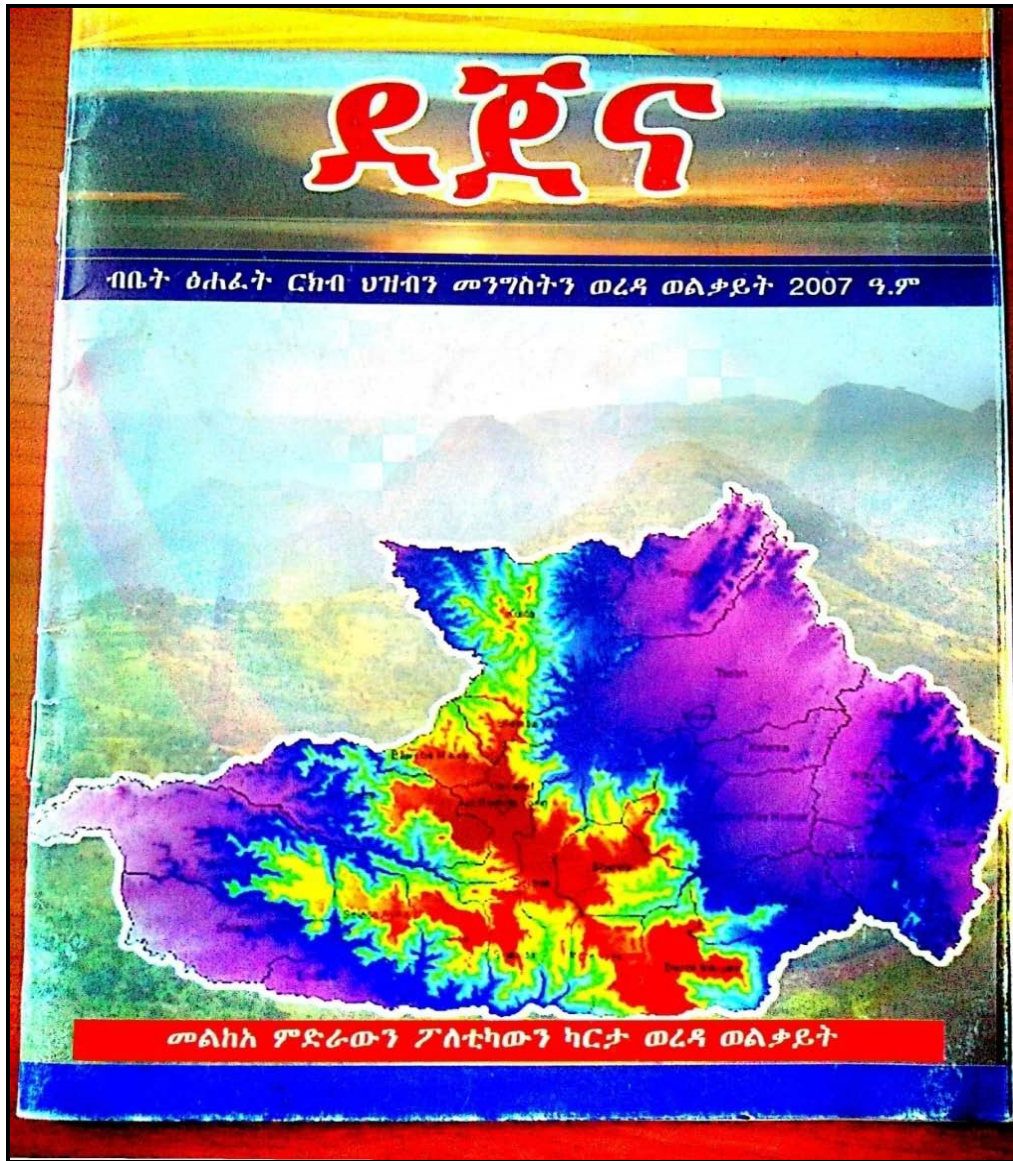
6. What were/are the major factors contributing to its deterioration?

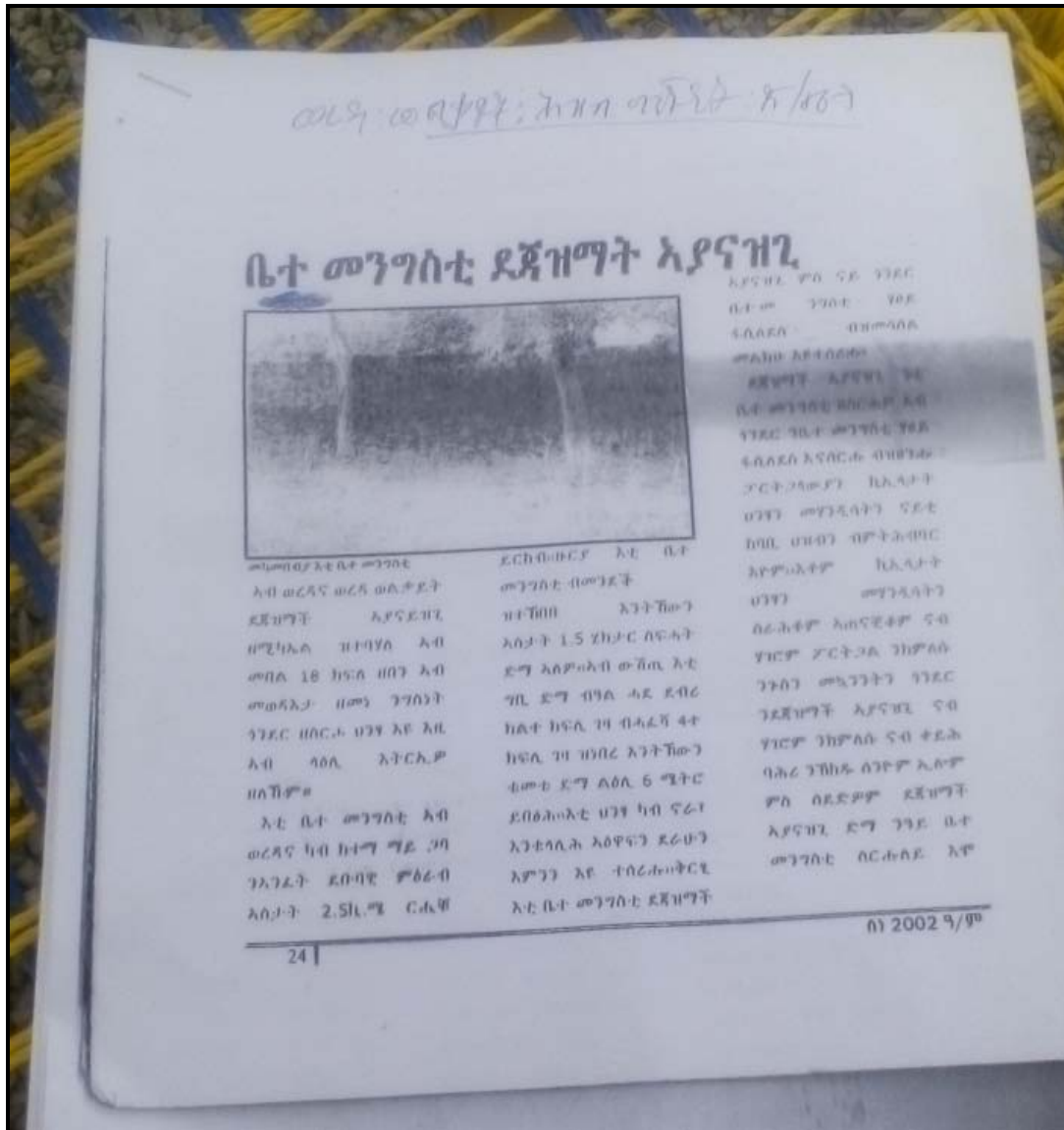
7. Is there any attempt made to conserve the castle? If there, mention it!

8. What is the pottery remains inside and side by building?

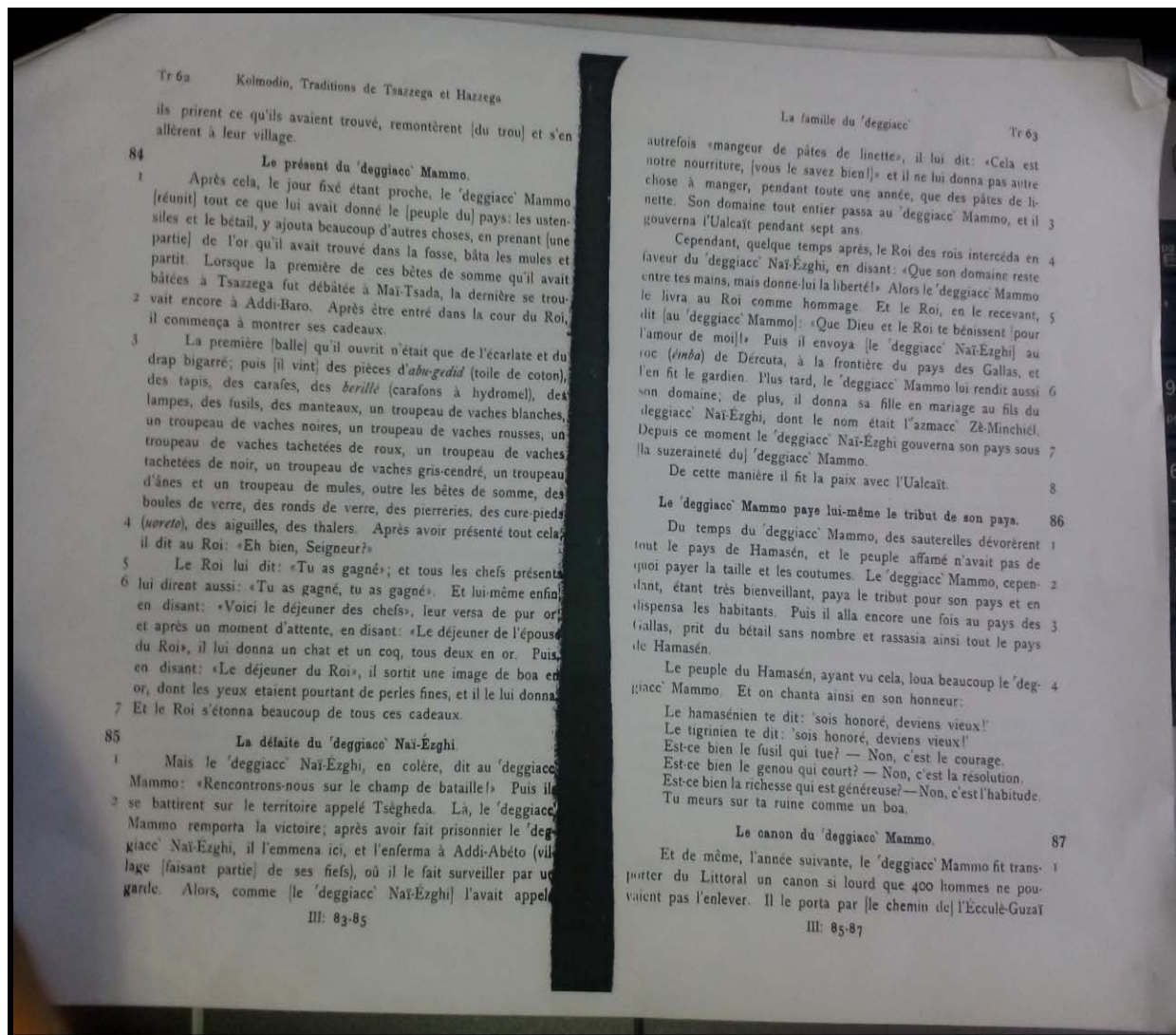
-Where they come from?

-Do the people engaged in making pottery? What about today?





Appendix-VI-French Version on Ayanaizgi/Naizgi



ils prirent ce qu'ils avaient trouvé, remontèrent [du trou] et s'en allèrent à leur village.

84 Le présent du 'deggiaoc' Mammo.

1 Après cela, le jour fixé étant proche, le 'deggiaoc' Mammo [réunit] tout ce que lui avait donné le [peuple du] pays: les ustensiles et le bétail, y ajouta beaucoup d'autres choses, en prenant [une partie] de l'or qu'il avait trouvé dans la fosse, bâta les mules et partit. Lorsque la première de ces bêtes de somme qu'il avait bâties à Tsazzege fut débâtie à Mai-Tsada, la dernière se trouvait encore à Addi-Baro. Après être entré dans la cour du Roi, il commença à montrer ses cadeaux.

3 La première [balle] qu'il ouvrit n'était que de l'écarlate et du drap bigarré; puis [il vint] des pièces d'*abu-gedid* (toile de coton), des tapis, des carafes, des *berillé* (carafons à hydromel), des lampes, des fusils, des manteaux, un troupeau de vaches blanches, un troupeau de vaches noires, un troupeau de vaches rousses, un troupeau de vaches tachetées de roux, un troupeau de vaches tachetées de noir, un troupeau de vaches gris-cendré, un troupeau d'ânes et un troupeau de mules, outre les bêtes de somme, des boules de verre, des ronds de verre, des pierreries, des cure-pieds

4 (*uoreté*), des aiguilles, des thalers. Après avoir présenté tout cela, il dit au Roi: «Eh bien, Seigneur?»

5 Le Roi lui dit: «Tu as gagné»; et tous les chefs présents
6 lui dirent aussi: «Tu as gagné, tu as gagné». Et lui-même enfin en disant: «Voici le déjeuner des chefs», leur versa de pur or, et après un moment d'attente, en disant: «Le déjeuner de l'épouse du Roi», il lui donna un chat et un coq, tous deux en or. Puis, en disant: «Le déjeuner du Roi», il sortit une image de boa en or, dont les yeux étaient pourtant de perles fines, et il le lui donna.
7 Et le Roi s'étonna beaucoup de tous ces cadeaux.

85 La défaite du 'deggiaoc' Naï-Ezghi.

1 Mais le 'deggiaoc' Naï-Ezghi, en colère, dit au 'deggiaoc' Mammo: «Rencontrons-nous sur le champ de bataille!» Puis ils se battirent sur le territoire appelé Tségheda. Là, le 'deggiaoc' Mammo remporta la victoire; après avoir fait prisonnier le 'deggiaoc' Naï-Ezghi, il l'emmena ici, et l'enferma à Addi-Abéto (village [faisant partie] de ses fiels), où il le fait surveiller par un garde. Alors, comme [le 'deggiaoc' Naï-Ezghi] l'avait appelé

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autrefois «mangeur de pâtes de linette», il lui dit: «Cela est notre nourriture, [vous le savez bien!]; et il ne lui donna pas autre chose à manger, pendant toute une année, que des pâtes de linette. Son domaine tout entier passa au 'deggiaoc' Mammo, et il gouverna l'Ualcaï pendant sept ans.

Cependant, quelque temps après, le Roi des rois intercédâ en faveur du 'deggiaoc' Naï-Ezghi, en disant: «Que son domaine reste entre tes mains, mais donne-lui la liberté!» Alors le 'deggiaoc' Mammo le livra au Roi comme hommage. Et le Roi, en le recevant, dit [au 'deggiaoc' Mammo]: «Que Dieu et le Roi te bénissent [pour l'amour de moi]!» Puis il envoya [le 'deggiaoc' Naï-Ezghi] au roc (*imba*) de Dercuta, à la frontière du pays des Gallas, et l'en fit le gardien. Plus tard, le 'deggiaoc' Mammo lui rendit aussi son domaine; de plus, il donna sa fille en mariage au fils du 'deggiaoc' Naï-Ezghi, dont le nom était l'*azmac* Zé-Minchiél. Depuis ce moment le 'deggiaoc' Naï-Ezghi gouverna son pays sous [la suzeraineté] du 'deggiaoc' Mammo.

8 De cette manière il fit la paix avec l'Ualcaï.

Le 'deggiaoc' Mammo paye lui-même le tribut de son pays. 86

Du temps du 'deggiaoc' Mammo, des sauterelles dévorèrent tout le pays de Hamasén, et le peuple affamé n'avait pas de quoi payer la taille et les coutumes. Le 'deggiaoc' Mammo, cependant, étant très bienveillant, paya le tribut pour son pays et en dispensa les habitants. Puis il alla encore une fois au pays des Gallas, prit du bétail sans nombre et rassasia ainsi tout le pays de Hamasén.

4 Le peuple du Hamasén, ayant vu cela, loua beaucoup le 'deggiaoc' Mammo. Et on chanta ainsi en son honneur:

Le hamasénien te dit: 'sois honoré, deviens vieux!'
Le tiginien te dit: 'sois honoré, deviens vieux!'
Est-ce bien le fusil qui tue? — Non, c'est le courage.
Est-ce bien le genou qui court? — Non, c'est la résolution.
Est-ce bien la richesse qui est généreuse? — Non, c'est l'habitude.
Tu meurs sur ta ruine comme un boa.

Le canon du 'deggiaoc' Mammo. 87

Et de même, l'année suivante, le 'deggiaoc' Mammo fit transporter du Littoral un canon si lourd que 400 hommes ne pouvaient pas l'enlever. Il le porta par [le chemin de] l'Écculé-Guzāī

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jusqu'à l'Amara et l'offrit au Roi en présent d'honneur. Aussi le Roi se réjouit-il beaucoup de ce présent.

Et le 'deggiacc' Mammo voyant que le Roi s'en réjouissait, se leva en se ceignant [respectueusement], et dit: «Seigneur, je veux parler». [Donc] le Roi lui dit: «Parle!» Alors: «Voici, ce canon est à moi, mais c'est à l'aide de mon peuple que je l'ai acquis; et maintenant, si mon cadeau vous a vraiment fait plaisir, je vous prie de me réjouir aussi moi par une chose», dit-il au Roi. Et le Roi lui dit: «Bon». Alors le 'deggiacc' Mammo lui dit: «Seigneur, mon pays est tout à fait dévoré par les sauterelles; donc loin d'avoir de quoi payer la taille et les coutumes, il n'a pas même assez de nourriture pour lui-même. Pour cette raison je vous supplie de lui en faire grâce [pour l'amour de moi]». Ce fut avec joie que le Roi en fit grâce à [son pays].

88 L'extermination du «quartier de la garde».

Dame Sébenè-Gherghisc' avait reçu 1500 esclaves de son père, le Roi des rois Alaf-Segghed. Ceux-ci, en qualité de suite de la «famille du 'deggiacc'», avaient été établis la plupart à Tsazzeza dans le «haut quartier», les autres par ci par là dans quelques autres villages.

Plus tard, pendant que le 'deggiacc' Mammo se trouvait chez le Roi des rois David dans le pays d'Amara, les hommes du «quartier de la garde», dédaignant le lieutenant [du 'deggiacc'] l'asellaf Calè-Chistos, refusèrent de se laisser gouverner par lui, en disant:

«En quoi ce [drôle] nous est-il supérieur?» Alors lui, envoyant un messenger chez son frère au pays d'Amara, l'interrogea en disant: «Que faut-il faire?» Et le 'deggiacc' Mammo, au lieu d'une lettre,

lui envoya dans un sac des roseaux coupés et un couteau. L'asellaf ayant reçu cette réponse, fit ériger une immense tonnelle; puis affectant d'avoir de bonnes intentions, il fit venir tous les esclaves dans sa cour. Il les introduisit dans la tonnelle et leur donna de l'hydromel à boire. Puis dans la nuit, tous s'étant enivrés, il cerna la tonnelle et les fit égorger par des hommes de l'Uogerat, porteurs de sabres courts.

De cette manière, le «quartier de la garde» fut anéanti.

89 Rébellion du 'deggiacc' Diblié.

Les Adchemè-Meligga se rappelant cette rancune, qu'ils gardaient depuis longtemps, ne laissèrent pas reposer leur haine

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voilà pourquoi ils faisaient toujours la guerre aux Deccatèsim. Ayant choisi pour «porte-branche» un certain Derui le Rieur de Addi-Bari et, après lui, 'Johannès le Paresseux natif de Addi-Mongunti, [puis] aussi un certain aité Ar'adom de Chesad Daro, ils leur livraient des combats [coup sur coup].

Or, le 'deggiacc' Diblié, fils de l'atè Ar'adom, épousa la fille de Tesfaï (natif de) Ghèreb au Mèdebaï, enfantée par la petite-fille du Roi Mèlec-Segghed. Le 'deggiacc' Diblié, [du reste,] avait aussi quarante quatre fiefs; et être tributaire, avec tout cela, du 'deggiacc' Mammo, lui parut une grande humiliation. Donc, une fois que le lieutenant du 'deggiacc' Mammo commandait [à sa place] à Tsazzeza, le 'deggiacc' Diblié se révolta en disant: «Sauf le Roi des rois, je n'ai pas de maître [au dessus de moi]». Et les 'Sèrac dans leur ensemble prirent parti pour lui.

L'asellaf, ayant appris cela, envoya à l'instant même des messagers chez le 'deggiacc' Mammo. Et le 'deggiacc' Mammo, après avoir eu les plein-pouvoirs du Roi des rois Macaffa, envoya des troupes vers le 'Sèrac, le dévasta du haut jusqu'en bas et l'anéantit. Quant au 'deggiacc' Diblié, il mourut en combattant contre l'asellaf.

Depuis ce jour les Adchemè-Meligga restèrent tranquilles sous le gouvernement du 'deggiacc' Mammo.

Mort du 'deggiacc' Mammo.

90

Pour ce qui est du gouvernement du 'deggiacc' Mammo, [il y a d'abord] douze ans, pendant lesquels il ne régna que sur le pays des Gallas; puis, après avoir ajouté le pays de Bambolo-Méllasc', il régna neuf ans, et ensuite, après avoir ajouté l'Ualcaïr, sept ans; donc la durée de son gouvernement fut de vingt-huit ans environ.

Le 'deggiacc' Mammo mourut dans le camp du Roi à un endroit appelé Caha. Et le Roi le fit enterrer, tambours [battant] et enseignes [déployées], au milieu d'une grande affluence de monde. Après lui, le quatrième des frères, appelé le ras Andè-Haïmanot, fut nommé gouverneur du Bambolo-Méllasc'.

Construction de Adoa.

91

Or, le ras Andè-Haïmanot, ayant reçu la dignité de ras, alla vivre dans un autre pays, au Tigraï. L'endroit où il fixa sa demeure, le 'deggiacc' Hab-Séllus avait autrefois pensé à s'y établir,

ArchOr. Kolmodin.

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DECLARATION

I, the undersigned, declare that this thesis is my work and all sources of materials used for the thesis have been duly acknowledged.

Name: Feyissa Hailu

Signature: _____

Date: October, 2016

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