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Designation of Architectural Heritage for Sustainable Conservation of old Towns in Ethiopia: the case of Enda Medhane Alem Area Adwa, Tigray

**A Thesis Submitted to the Chair of Conservation of Urban and Architectural
Heritage Presented in Partial Fulfillment of the Requirements for the Degree of
Master of Science**

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Declaration

I hereby declare and confirm that I am the sole author of this thesis titled "*Architectural Heritage and Sustainable Conservation Approaches; the case of Adwa old Town Enda Medhane Alem Area*" and it is a product of academic research as graduate student of MSc Degree program in the field of conservation of Urban and Architectural Heritage under the supervision and continuous advice of Associate Prof Fasil Giorghis.

I further declare that this work is my original work and has not been presented and submitted to any other University or Institution for the award of any degree. The nature and extent of any work carried out by, others has been specially recognized through reference.

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April, 2021

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This thesis is submitted to the Addis Ababa University The Ethiopian Institute of Architecture, Building Construction and City Development in partial fulfillment of all requirements for the MSc degree Conservation of Urban and Architectural Heritage.

Title of Thesis: *Architectural Heritage and Sustainable Conservation Approaches; the case of Adwa old Town Enda Medhane Alem Area*

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Abstract

The objective of this research is to study Adwa's old town Enda Medhane Alem area architectural heritage and sustainable conservation approaches; specifically Answering two questions of '*what is the architectural heritage value of Enda Medhane Alem area?*' and '*what are the approaches to sustainably conserve the area?*'

In the twenty-first century era of globalization, cities are progressively competing with one another both nationally and internationally. Modernization forces cities in to similarity in terms of finance, information technology and most importantly in patterns of urban development, and architecture. Urban and architectural heritage is the main aspect which always differentiates them.

Adwa with a potential to provide us with an insight into the 17th century Ethiopian towns is currently under threat of massive urban renewal and modernization. Based on a multidimensional analysis of the heritage value the thesis identifies approaches for better benefits obtained in the development process. Critical review of the representative sampled buildings, encourages viability of the proposed recommendation.

The thesis concludes; connecting cultural heritage with environmental, social and economic sustainability critically aware of the heritage value and impact of adaptive re-use. Approaches with the intent to safeguard cultural heritage and alternative heritage friendly economic endeavors are needed in order to sustain the pressure from economic interests surrounding the case area.

The study extends to recommending benefits using cultural heritage as an asset in tourism development resulting in economic revitalization. The work is based on a theoretical overview of international conventions relevant to architectural heritage and best practice to cultural heritage with respect to influences of change and development.

Key Words: Architectural Heritage and Sustainable Conservation

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General Notes

1. All the dates included in this research are in Gregorian calendar.
2. Regarding the Measurement of spaces; meter is used for length and meter square for area.
3. Distance to locate sites is measured and represented in kilometers.
4. Excluding the material which the source is specified all Charts, figures, tables, and pictures belong to the Researcher.

Chapter One

Introduction

1.1 Background

Architecture has been the center of civilization and cultures. Architectural heritage and its sustainable conservation approaches is a new phenomenon in Ethiopia in general and Adwa in particular. Urban communities, whether they have developed gradually over time or have been created deliberately, are an expression of the diversity of societies throughout history.

Heritage is almost always related to the concept of territory as both a geographical and cultural entity. Territory referring to and associated with the cultural legacy that has been passed down from generation to generation. This makes it possible for the communities to place themselves within a timelessness, which confers distinctive characteristics to a given territory and constitutes the base of the construction of a common cultural identity (Sjöholm, 2016).

Cities are centers of knowledge and cultural diversity and hubs of businesses and varied industries. They act as crucibles of change and innovation, showcasing the ways in which societies are developing and developed through time. In many ways, cities are the product of both natural and human evolution (Ron van Oers and S. Haraguchi, 2003). However, many cities throughout the world have been greatly affected by rapid urbanization and unsustainable development processes. Poorly planned and implemented urban growth has led to a deterioration of urban quality at large and heritage in particular. Population growth, excessive building density, standardized and monotonous modern developments, a loss of public spaces and facilities, improper infrastructure, social isolation, urban poverty, an unsustainable use of resources and climate change are just a of few of the issues facing a growing number of cities worldwide (Australia ICOMOS Burra Charter, 2013).

In the wake of intense globalization and an increasing demand for modernization, the local identity and visual integrity of cities, shaped by their distinctive culture and historic development, are directly impacted. Rapid uncontrolled urbanization has led to the deterioration and destruction of urban heritage, threatening the identity and local culture of

communities and the sense of place in cities. This is true for Adwa as it is for the majority of historical urban settlements all over the world.

Sustainable conservation approaches is an elegant balance to save any historic settlement and ensure economic and social development without compromising the development interests. The study of architectural heritage is the pathway leading to drawing conclusion and recommendation or interpretation to an environmentally, socially and economically sustainable future.

1.2 Problem statement

Heritage is what makes a community what it is today and essentially is one generation's inheritance from the past and its bequest to the future – each generation should act as custodian for the next. Heritage is usually associated with the past, history and the historic built environment together with traditional cultural and social aspects (“collective memory”, way of life) of a community or country. The built environment are inherited and go to make up, in Adwa's case, the town's “heritage” and as such are the subject of this paper.

Heritage serves to shape values, ground aspirations and inspire creativity and a sense of belonging within a community. It contributes to social stability, civic pride and a richer quality of life by providing a framework upon which a community, district, even a country, can continue to grow and develop socially and, economically.

Active awareness and protection of heritage assets promotes sustainability of the social framework as well as the natural and built environments and recognizes the intangible values brought by honoring the past while planning for the future.

First glance of Adwa town confirms the rich architectural heritage; this heritage requires protection and guidance to environmental, social and economic sustainability. Though architecture is highly important in the Adwa history and development it seems that it is somehow neglected through several reasons. Therefore developing a research that rises with this activity is crucial in order to preserve the architectural heritage. Adwa historic urban area; beyond the use as historical research embodies the values of traditional urban cultures.

The basic initiation for this research is Adwa's uncontrolled urban development, lack of stable local conservation strategy, and abandonment of building within the old urban area resulting in escalating number of ruin structures. The technical and social responses to the restoration and adaptive reuse of heritage buildings requires critical research and analysis.

The town is losing character defining architectural element and income that can be collected through tourism related to the cultural heritage resource. The absence of sustainable conservation approaches indicates a strong need for research to understand the architectural heritage conservation problems at hand.

Unorganized ways of construction and restoration in some cases are treacherous to the architectural heritage authenticity. In this process recommendation for the development of a strategy towards a sustainable future is crucial.

The architectural heritage of Adwa further faces complex challenges. Adwa being threatened, physically degraded, damaged and destroyed, by the impact of the urban development that follows the economic development directive. In the face of rapid development there is a tendency to value anything that is new and modern. Urban renewal and infrastructure development projects are gradually destroying the old town in an effort to raise Adwa to the standard of modern development.

Assimilating the modern development pressure with the heritage has thus emerged as a challenge of local officials. Beyond a modest gesture to designate the old town as historic; the old quarter is not seen as a potential resource worth protecting in the future development of the town. Conserving the architectural heritage requires the consideration of heritage value in the local development plan.

Despite its current state of condition, the old town of Adwa was once an important trade pathway. Preserving Adwa is highly critical to study and understand 16th century urbanization of northern Ethiopia. Analyzing the current condition of Adwa involving international charters and convention, highlighting the outstanding universal value is found to be highly critical. As a primarily stone construction, Adwa poses as the past and presents economic opportunity through tourism, but its history prompts research in indigenous architecture.

1.3 Research Question

1. What is the heritage value of Enda Medhane Alem area architecture?
2. What are the sustainable approaches to conserve the area?

1.4 Research Objective

1.4.1 General objectives

Study the architectural Heritage of Adwa Enda Medhane Alem contextualizing international charters and produce recommendation reflecting economically, socially and environmentally Sustainable Conservation Approaches.

1.4.2 Specific Objective

- Study values of architectural heritage.
- Develop standards and values to designate buildings in area as heritage.
- Identify historically and architecturally significant buildings with in the town by using the standards and values.
- Analyze documents and data collected from case area.
- Draw findings and conclusion.
- Develop recommendations on sustainable conservation approaches for the buildings and the area.

1.5 Significance and Relevance

As the general objective of this research is defining the heritage value of the case area; this is highly relevant to decide on conservation methods and further actions. This provides inputs for preparation of master plan, heritage protection regulations and conservation plan for the Enda Medhane Alem area and applicable to other parts of Adwa.

Therefore, the study provides policies recommendation and framework of heritage conservation by integrating the heritage areas within its surrounding activities to ensure authenticity. The recommendation in this research can serve as a tool and guideline for the Local Authority to approach the heritage conservation while developing the Master Plan.

This research will contribute as a foundation for the inventory and documentation of the architectural heritage of Adwa town architectural heritage specifically End Medhane Alem

area. The 42 two building surveyed and documented along with their GPS coordinate will contribute to the foundation of development of tourist map.

1.6 Scope of Research

The research is undertaken to study the Architectural heritage of Adwa Enda Medhane Alem area in detail and produce sustainable conservation approaches contributing to the adaptation of architectural heritage to the new economic pressure. The research attempts to address the heritage areas by classifying heritage, significance assessment, reviewing international practices and proposing recommendation to successfully conserve the case area.

It proposes adaptive reuse towards harmonious conservation and establishes compatibility of the surroundings with the heritage area. Based on the findings the essential conclusion and requisite recommendation are briefly discussed.

The major urban development nucleus of Adwa town are the churches. The urban blocks organically evolved around this three important churches illustrated on figure 1. The rationale behind defining the study area is the consideration of the Churches as development Nucleus. The different architectural styles visible surrounding this nucleus are basis for classification into further study of Adwa's old town.

Beyond the classification of the churches as the urban development Nucleus The physical scope of this research extends to the surrounding of Enda Medhane Alem church bounded by Gotha road from the west, Assem River from north, new Axum to Adigrat road high way from south and Piazza to the east clearly shown on the map bellow.



- Enda Medhane Alem
- Enda Selassie
- Enda Gebriel

Figure 1: Site scope

The churches of Enda Maryam, Enda Mikael, and later Enda Medhane Alem followed by Selassie formed the nucleus of much of the town's social life given the population with clustered around them. The narrow roads and alleyways of the old town radiated from the connected churches. To this day the church parishes or neighborhood are referred to as Enda Michael, Enda Gabriel, Enda Medhane Alem.

The research sampled and studied four different heritage buildings within Enda Medhane Alem area and extends to the identification of Adaptive reuse proposals. The sampling method is discussed in detail on the next chapter.



Figure 2: Case Area

1.7 Limitation

The research has faced shortage of detail written information specific to the architecture of Adwa. Besides written records; since majority of the original owners and decedents have relocated there is no oral history available to collaborate the observed data. This posed a challenge in respondents that corporate to be uncertain to give honest opinion; their lack of understanding of the questions diverge them from the target question. In order to clarify and elucidate the interviews consumed time.

Chapter Two

Literature Review

2.1 Urbanization and Urban Development

Urbanization is the gradual shift of relative populations from rural to urban areas. Levels of urbanization are measured crudely by the percentage of population residing in urban areas, and the rate of urbanization as the percentage increase in urban population (UNDESA, 2014). The sources of urban population growth include: rural to urban migration; natural increases in the population already residing in urban areas, and the urbanization of rural and peri-urban settlements. From a demographic perspective, urbanization has a people-centered focus. While urban development is the social, cultural, economic and physical development of cities, and the underlying causes of these processes (McGranahan G., and D. Satterthwaite, 2014).

Urbanization is a common and inevitable occurrence everywhere. While growth and expansion are beneficial for many people and businesses, there is a potential for loss of historical areas that are the heritage value to people. Heritage towns are frequent targets for the rapid transition to urbanization that is often accompanied by alteration of historical areas.

2.2 Modernity in the context of Heritage and Urbanization

As a concept, urban heritage is global and has a worldwide scope, but at the same time it harbors a number of notions and must be seen in relation to the different and specific contexts with which it deals. Urban heritage issues engage not only heritage managers and archaeologists but also geographers, landscape and urban planners, engineers, architects, anthropologists, and historians, among others. As cultural heritage issues in general, those concerning the urban heritage are interdisciplinary and multifaceted. The urban heritage often has a position “in between.” On one hand, it is constantly changing and under the threat of being destroyed due to the nature of urban development, and on the other hand, it is protected and conserved because of its historical values. Heritage structures are often regarded as a passive setting to the broader scope of the growing modern city. The ultimate goal is to strive for integration so that historic qualities and modern urban...

2.3 Architectural Heritage

Heritage is related to inheritance and signifies possessions and traditions that are inherited and passed on. The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines heritage broadly: ‘heritage is our legacy from the past, what we live with today, and what we pass on to future generations’. In this definition heritage is neither limited in time nor restricted to material objects, historic remains, buildings or artefacts.

Heritage is interpreted as the foundation of the present, the springboard for the future, with the present generation as its custodians and the creative link. However for many others, heritage has a different meaning, for example, ‘the culture, property, and characteristics of past times’; or, ‘today’s perception of a pattern of events in the past’. (Rodwell, 2007)

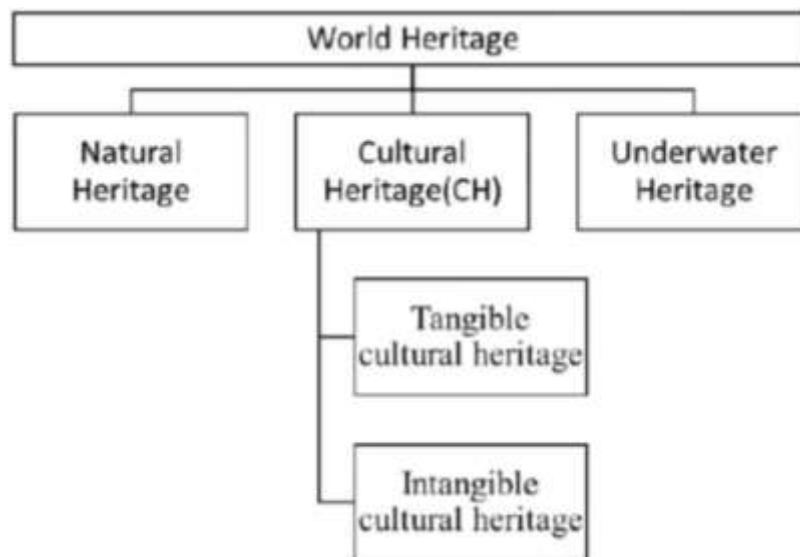


Figure 3: World heritage classification according to UNESCO

People have always had the need to refer to their history in order to ensure the continuity of a common identity that evolves over time. Heritage is a collective property which tells the history of a people, a city, or a territory, and is transmitted from one generation to the next. Heritage makes it possible for the present generations to understand their place in history and to better cope with the constant change in society.

Each city remains unique in its specific identity. An identity related to its urban configuration, the built heritage, the urban components, the urban planning, the arrangement of streets and squares. An identity linked to its history, “its intangible heritage”: its urban advancement, symbolic and sacred places and sites, to which the population attaches a

ritual/religious/social significance, and that testify to the periods in the history of the city that the populations recognize as being important, and that constitute their common identity (Rodwell, 2007).

Even though the urban development phenomenon was accelerated during the recent past centuries and was influenced by models coming from other continents, many African cities still possess visible traces of their origin as urban centers, of their immovable cultural heritage and, to a lesser extent, of their intangible cultural dimension (Christian Barillet and Thierry Joffroy, 2004). Some cities such as Timbuktu, Djenné, Kano, Bobo-Dioulasso, Abomey and even Kampala and Axum are internationally recognized as historic cities. Indeed, their present structure is still strongly related to their original configuration, the built environment all closely connected with original ritual practices which are still alive today.

The African continent comprises a large variety of architectural creations. African builders have developed construction practices that allow them to creatively respond to various requirements while taking full advantage of the available materials present in their natural environment. Their great creativity has enabled them to compensate for a number of intrinsic weaknesses through the implementation of social practices, such as the organized maintenance of buildings (Christian Barillet and Thierry Joffroy, 2004).

The traditional architecture, whether religious political or more simply residential, is usually a mixture of rich artistic accomplishments. The regular maintenance practices, which are technical, social and ritual in nature, have, in some cases, been adopted and implemented on the religious architectures. Certain architectures have a very strong character, resulting from the cleverness of the designs and construction techniques employed, which allow for an optimal use of the materials, depending upon their availability. They also take into account the needs for maintenance and program them from the beginning of the construction process, with a view to optimizing and minimizing them (Christian Barillet and Thierry Joffroy, 2004).

2.4 International Charters and Recommendations

International Charters require ratification by a certain number of Member States before they come into force. Although the recommendations are not subject to ratification, the mere fact that they have been adopted entails obligations for Member States. Ethiopia has ratified the Convention concerning the Protection of the World Cultural and Natural Heritage, which came into force in 1975. In this section it is required to provide an overview of important charters

and recommendation to establish value/significance and justify recommendation of this research.

2.4.1 Athens Charter

The context for this charter was the Modern Movement in architecture and planning and the constructional techniques and design concepts that were favored by it. The 1931 Athens Charter was the first document to set out the scientific principles for the preservation and restoration of historic monuments at an international level. Focused on historic sites which are subject to strict custodial protection, it supported the use of modern materials and techniques in restoration work, favored continuity of appropriate use, recommended respect for the surroundings of monuments including in the design of new buildings, and urged increasing international cooperation. (Rodwell, 2007)

2.4.2 Venice Charter

The Venice Charter represented a revision of the 1931 Athens Charter. It again supported the use of modern techniques, emphasized the importance of authenticity based on material and documentary evidence, and extended the concept of historic monuments to include urban and rural settings. The Venice Charter stated that the aim of conservation and restoration work is to safeguard monuments both as works of art and as historical evidence. Accordingly, where components are replaced they should be integrated harmoniously but be distinguishable, and any additions to a monument should be distinct and contemporary.

This charter was adopted as the principal doctrinal document of the International Council on Monuments and Sites (ICOMOS) when it was founded the following year, 1965, and continues to be cited as the baseline document for international conservation philosophy and practice today (Rodwell, 2007).

International Council on Monuments and Sites (ICOMOS) deems it necessary to draw up an international charter for historic towns and urban areas that will complement the "International Charter for the Conservation and Restoration of Monuments and Sites". This new text defines the principles, objectives, and methods necessary for the conservation of historic towns and urban areas. It also seeks to promote the harmony of both private and community life in these areas and to encourage the preservation of those cultural properties, however modest in scale, that constitute the memory of mankind.

2.4.3 Washington Charter ‘Charter for the conservation of historic Towns and urban areas’

The Washington Charter complemented the 1964 Venice Charter. It paraphrased the conservation of historic towns and urban areas as: ‘those steps necessary for the protection, conservation and restoration of such towns and areas as well as their development and harmonious adaptation to contemporary life’.

The Washington Charter states that urban conservation should be integral with socioeconomic development and urban and regional planning policies at all levels. It represents the multi-disciplinary nature of urban conservation, emphasizes the importance of active participation by residents whom it sees as the primary stakeholders and insists that the improvement of housing be regarded as a primary objective.

This charter summarizes the important qualities that should be preserved: urban layout and grain; relationships between buildings and green and open spaces; relationships between a historic area or town and its surrounding man-made and natural settings; the diversity of functions as accumulated over time; and the exterior and interior appearance of buildings from scale, through style and materials, to color and decoration.

2.4.4 Bura Charter

In 1981 the stated aim of the Burra Charter is to provide ‘guidance for the conservation and management of places of cultural significance’. As such, it is not exclusive to historic buildings or urban areas, and encompasses, for example, landscapes modified by human activity. Its guiding principles are closely related to the various charters that preceded the publication of its first edition in 1979 and that coincide with the twenty-year period of its several revisions.

The overall principle in the Burra Charter is the importance of understanding and safeguarding significance, including through the informed unravelling of historic layers, in ways that it encloses a place’s aesthetic, historic, scientific and spiritual values; from the past, in the present, and for the future. The Charter adopts a curatorial and scientific approach one that distinguishes between old and new fabric. It also permits alterations on condition that they are considered both temporary and reversible. The charter urges continuity of historical uses wherever possible. It concludes with an important message: ‘the best conservation often involves the least work and can be inexpensive’

2.4.5 Resolution on the Conservation of Smaller Towns (1975)

Considers the potential threats to such places, which are detailed as; lack of economic activity, toward movement of population, disruption of structures due to insertion of new elements, and measures to adapt to modern activities. Methods of counteracting these threats are then considered in detail.

2.5 Heritage Conservation Approaches

"Conservation" means a general protection and preservation activity carried on a Cultural Heritage without changing its antique content; Conservation means all the processes of looking after a place so as to retain its cultural significance (Australia ICOMOS Burra Charter, 2013).

As set out in the UNESCO "Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas" and also in various other international instruments, "the conservation of historic towns and urban areas" is understood to mean those steps necessary for the protection, conservation and restoration of such towns and areas as well as their development and harmonious adaptation to contemporary life.

Within the architectural conservation fraternity conservation preservation and restoration continue to be used interchangeably. Some practitioners in the United Kingdom still use preservation, as that was the fashionable term until it was superseded by conservation in the 1980s. Many of the older conservation charters use any pair or all three of these words without attributing discrete meanings. The inter-governmental organization the International Centre for the Study of the Preservation and Restoration of Cultural Property, thereby succeeding to employ all three words at once, and in a manner that implies that preservation + restoration = conservation.

This formula is elaborated on the Burra Charter (first published in 1979, most recently revised in 1999) which offers the definitions that are favored by conservation purists:

- i. Preservation means maintaining the fabric of a place in its existing state.
- ii. Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- iii. Conservation means all the processes of looking after a place so as to retain its cultural significance.

Article 2. of (Australia ICOMOS Burra Charter, 2013) elaborates Conservation and management as follows

2.2 Places of cultural significance should be conserved.

2.2 The aim of conservation is to retain the cultural significance of a place.

2.3 Conservation is an integral part of good management of places of cultural significance.

2.4 Places of cultural significance should be safeguarded and not put at risk or left in a vulnerable state.

2.5 Traditional techniques and materials are preferred for the conservation of significant fabric. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.

2.5.1 Heritage Conservation and Sustainability

The UN Istanbul Declaration on Human Settlements and the Habitat Agenda of 1996 explored the ramifications for how to organize the global built environment. The 2003 ‘Global Plan of Action’ stated ‘Conservation, rehabilitation and culturally sensitive adaptive reuse of urban, rural and architectural heritage are also in accordance with the sustainable use of natural and human made resources. Access to culture and the cultural dimension of development is of the utmost importance and all people should be able to benefit from such access.’¹ The retention, rehabilitation and reuse of old buildings can play a pivotal role in the sustainable development. In many cases they make a positive contribution to both streetscape and sense of place².

In the wider, environmental sense, conservation and sustainability have parallel meanings and are frequently used interchangeably to express the need to manage the world’s natural resources and the biosphere. In order: first, to secure long-term harmony between man and nature; and second, to achieve continuous enhancement in the environment and in the conditions and quality of life for humans and other life forms. It is in this broad sense that sustainability is used in this research³.

The principal root is architectural conservation, whose starting points include archaeology and the geo-cultural diversity and historical evolution of architectural styles, building materials and techniques. The secondary root of urban conservation is townscape and a morphological and aesthetic approach to the management of change in historic cities. Architectural conservation has the potential to make a significant contribution to it (Rodwell, 2007).

Sustainability has three components: environmental, social, and economic; of which the environmental takes precedence as it underscores the survival of all life forms on our planet. The use of available local resources (materials, know-how, and construction management) and their adaptation to contemporary needs makes it possible to reduce the costs in terms of investment and production. Generates employment opportunities, additional profit, reduces

¹ http://www.unhabitat.org/downloads/docs/1176_6455_The_Habitat_Agenda.pdf

² Heinonen, J. Säynäjoki, A., and Junnila., S. (2011). A Longitudinal Study on the Carbon Emissions of a New Residential

³ http://www.unhabitat.org/downloads/docs/1176_6455_The_Habitat_Agenda.pdf

construction costs. This in turn will contribute to environmental Sustainability, social Sustainability and economic Sustainability⁴.

2.5.2 Built Heritage Contribution to Environmental sustainability

The conservation of the built heritage has a contribution to make to the achievement of environmental balance in human affairs, or 'sustainable development'. There are many overlaps between the building conservation and sustainable development. Whilst there is much that is straightforward, some commentators have pointed out the difficulties in applying the breadth of the concerns of the sustainability agenda to build environment conservation programs⁵.

2.5.3 Built Heritage Contribution to Economic Sustainability

The valorization of the cultural assets of a given city or territory constitutes a factor of attraction, for the tourists for investors which could contribute to boost the local economy through the implementation of new activities such as local youth entrepreneurship and development projects. Cultural heritage has today become a powerful instrument in the economic and territorial development of a community, when properly valorized and promoted, often in the context of tourism related activities.

World tourism has considerably increased over the past years, and this phenomenon will likely to continue and expand in the future. Tourism centered on heritage, both cultural and natural, represents a major potential for local and national economic development.

The preservation of heritage can generate new employment opportunities in relation of jobs in the areas of rehabilitation and maintenance of heritage sites (for local craftsmen and construction companies) its exploitation for research and management purposes (researchers, administrators, marketing and communication professionals, gardeners and guardians) hotel trade and tourism management.

⁴ Development and Sustainability www.mdpi.com/2071-1050/3/8/1170/pdf See: <http://ec.europa.eu/environment/integration/research/newsalert/pdf/263na3.pdf>

⁵ Grammenos and Russel, Building adaptability: a view from future, proceedings from the second international conference: buildings and the environment, June 9-12 1997, Paris, Vol. 2. Pp. 19-26



Figure 4: Cultural and Economic Values. Adapted from Zhang, Yan, “Rethinking Cultural Heritage,” (2009)

2.6 Identifying Heritage Value/Significance

Cultural value/significance means aesthetic, historic, scientific, social or spiritual value of the past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups (Australia ICOMOS Burra Charter, 2013).

The term cultural significance is synonymous with heritage significance and cultural heritage value. Cultural significance may change as a result of the continuing history of the place. Understanding of cultural significance may change as a result of new information.

Four factors are considered in (Australia ICOMOS Burra Charter, 2013) designating value to cultural heritage, namely aesthetic, historic, social and technological values discussed in the following points.

2.6.1 Aesthetic value

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, color, texture and material of the fabric; the smells and sounds associated with the place and its use (Australia ICOMOS Burra Charter, 2013). The aesthetic value of the buildings relates to both the location and context, and is a sensory perception for which criteria are stated. Such criteria may include consideration of the form, scale, color, texture and material of the fabric.

In the case of this research aesthetic value of architectural work is reflected in its design, style, construction techniques and material fabric.

2.6.2 Social value

Social value embraces the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a majority or minority group (Australia ICOMOS Burra Charter, 2013).

2.6.3 Scientific value

The scientific or research value of a place will depend on the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information (Australia ICOMOS Burra Charter, 2013). This particular value depends upon the rarity and quality of technology that was available at the time of construction and on the degree to which the building, structure, monument or area reflects a certain period.

2.6.4 Historic value

Historic value encompasses works representing rare contribution by a society. It encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this research. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment (Australia ICOMOS Burra Charter, 2013).

2.7 Adaptive re-use as Sustainable Conservation

(Australia ICOMOS Burra Charter, 2013) Defines Adaptation as *'modifying a place to suit the existing use or a proposed use.'* The key term in this definition is 'Use' and the charter further defines Use as: *'the functions of a place, as well as the activities and practices that may occur at the place.'* The charter further elaborates Use through defining Compatible use as: *'a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.'*

Re-using old buildings is not news it's been done for centuries for reasons of prestige and economy. Sustainable Development now deepens the ethical reasons to re-use old buildings. There is an economic value in a standing structure that encloses space, either partially or fully. This relates to the physical embodied energy expended in raising them into their standing positions. This has been established in the joint 2003 Heritage Council project with Dublin City Council *'Built to Last: the sustainable re-use of buildings'* study. It has shown that *'constructing new buildings on brown-field sites is more expensive than retaining and re-using existing buildings, except in circumstances where the extent of building repair and refurbishment required is extremely high'.*

The following are generalized advantages of adaptive re-use:

- i. Irreplaceable materials, skill and craftsmanship
- ii. Avoiding waste
- iii. Using existing buildings as a material asset
- iv. Valuing the intimate and longstanding knowledge of how places work
- v. Traditional and local craft skills
- vi. Holding onto the specialness of a building or place
- vii. Aesthetics

2.8 Practical Illustrations on Cultural Heritage as Social Regeneration tool

2.8.1 Timbuktu

Timbuktu covering an area of 21 meter square contains a protected forest and encompasses the agglomerations of Kabara and Koriom, and is home to 54,453 residents (Songhoï, Tamasheq and Arab, Bozos Somonos Bellas) living in the districts of Abaradjou, Badjindé, Bellafarandi, Hamabangou, Sankoré, Djingareiber, Kabara, Sareikeina and Koiratao. It was listed as a UNESCO world heritage site in 1988 (DIAKITE, 2016).

The city of Timbuktu was nominated for the second 'UCLG International Award - Mexico City - Culture 21' (January-May 2016). The awards jury produced a final report in June 2016 and asked the UCLG Committee on Culture to promote this project as a practical example of the implementation of Agenda 21 for Culture, and as a special mention of the second edition of the Award (DIAKITE, 2016).

The municipal action in relation to culture is part of a regional strategic development plan. The plan focuses mainly on protecting and enhancing the value of the cultural heritage (university of law, Islamic theology and medicine) and on cultural tourism and promotion of arts and crafts (jewelry, leather goods, and construction techniques). Alongside this, a cultural action with a social purpose is being carried out in response to the cultural aspirations of young people: reading, music, leisure activities and information.

By focusing on the opportunities created by decentralization, and considering the fact that culture can play a major role in sustainable development, Timbuktu acknowledges the urgency for investments. It therefore adopted a transversal approach to cultural development, in line with other policies. Despite the limited availability of financial and human resources, the city hall is building the infrastructure that will enable local cultural expression, and is collaborating with decentralized technical services and international partners for the actions. The project's main aim is to reinvigorate the socio-economic and urban fabric of the city of Timbuktu by renovating damaged houses, creating an arts and crafts map, for arts in particular, and strengthening the institutional and operational capacities of the Timbuktu city hall in terms of the management of cultural heritage. In Timbuktu's current situation, culture remains the method of resilience that allows residents to develop new strategies for survival and for harmonious and sustainable cohabitation (DIAKITE, 2016).

Specific goals	Main actions
1. To reinvigorate the socio-economic fabric of Timbuktu, using the established cultural heritage as a foundation;	1. A study into the socioeconomic reinvigoration of the city;
2. To strengthen the institutional and operational capacities of the city hall in terms of the conservation and management of cultural heritage;	2. Support for the renovation of around 30 houses; 3. Strengthening of the abilities of the city hall's employees for mobilizing financial resources, using computers, and managing cultural heritage.
3. To support the renovation of the city's architectural heritage, taking a collaborative approach to implement the Plan of Action	4. Participation by the project coordinator in the workshop on "the management of constructions and renovations in a city on the World Heritage List", 2014 Learning Project at Grand-Bassam, Côte D'Ivoire.
4. To support the promotion and economic enhancement of creators of art in Timbuktu	5. Participation by the Mayor, the activities follow-up manager and the project coordinator in the Workshop and the multi-participant Learning Project on the management of constructions and renovations in a city on the World Heritage List in June 2015 in Grand Bassam, Côte d'Ivoire 6. Creation of a city map of local artists. 7. Dialogue workshops with residents

Table 1: Timbuktu heritage regeneration goal and action
Source: (DIAKITE, 2016)

The implementation of the project led to the creation of coordinator role of cultural heritage renovation Activities. This Initiative helped to build local expertise in terms of housing Management in an unstable and urgent situation.

2.8.2 St. Louis Senegal

The historical town of Saint Louis in Senegal is a good example of a site that has increased its value as a cultural tourism center. The number of visitors to this site has doubled over the past four years, since its inscription on the UNESCO World Heritage List. Located north of Senegal, in the Senegal River delta, Saint-Louis is a settlement of more than 200,000 inhabitants. The site, consisting of a succession of islands and backwaters, is built on the sandy banks of the mouth of the river at the Atlantic Ocean. Heritage therefore became an engine for

development of the city, especially through tourism and its related activities. The unity of heritage and tourism is expected to reinforce harmonious local development.

Aware of the enormous potential of tourism and the significant contribution that could make in the local economy, the authorities and tourism professionals in the sector undertook initiatives. Tourism efforts for Saint-Louis and the surrounding area began in the early 1990th. There was a Regional Development Committee which brought together all the heads of departments and members of civil society, chaired by the Minister of tourism at the time.

This Committee concluded with the following findings: the site offers considerable but little-exploited potential. The Lille/Nord-Pas-de-Calais region sent a Cooperation expert to assess the potential of the site with the hoteliers. In 1991, the Tourist Initiatives Union was created.

The Union first findings were: lack of trained tourist guides; lack of heritage tourism routes, and even fewer proposed; existence of horse-drawn carriages but unstructured. The proposal to introduce an urban discovery route resulted in making historical plaques for the architectural heritage.

The initiatives of establishing an urban heritage tour of with the illustrated map of the city of Saint-Louis, with the preparation of brochures on « Saint-Louis du Sénégal – Ville d'Afrique, Cité magique », « Saint- Louis entre fleuve et océan », « Saint-Louis Ville d'Art et d'Histoire » (“Saint-Louis - Senegal - African city, magic city” , “Saint-Louis between river and ocean” , “Saint-Louis City of Art and history”) , training professional guides, and collection of large carriage operators in economic interest groups (I.E.G.) headed by young local entrepreneurs, all contribute to heritage preservation and development for cultural and economic revitalization of Saint-Louis. The city is favored in this tourism policy by its proximity to the nature parks of Langue de Barbarie⁶,

The tourism initiative union has also housed the Museum since October 2005, in partnership with the association “Mémoire d'Aéropostale” of Toulouse, of the Jean Mermoz Postcard Museum. It has thus revived this adventure while paying tribute to the illustrious characters who participated.

⁶ Abdoul, S. (2017): “Saint-Louis, Senegal: from heritage to tourism. Compromised local development?”, *methadodos.revista de ciencias sociales*, 5 (1): 84-99. <http://dx.doi.org/10.17502/m.rcs.v5i1.156>

2.9 Main Challenges of Architectural Heritage

2.9.1 Functional obsolescence

Functional obsolescence of buildings and public spaces arises when these structures become inadequate for the functions for which they were originally designed. Examples of this problem are the traditional houses of high income families in the historic centers, which were abandoned by their wealthy occupants when changes in fashion and the desire for modern amenities made new buildings become more desirable. The houses were turned into slum dwellings occupied by low-income families, a change of use that although destructive of the asset, is welcomed by the poor families who benefit from the central location of the housing and by the landlords who extract rental income is close to zero.

A similar pattern of obsolescence affects other types of historic buildings, such as old hospital buildings that become obsolete as a result of new medical technologies, old libraries that are incapable of accommodating modern sized book stocks or new information technologies, railway stations no longer used, or convents or churches that communities can no longer support (Rojas, 2002).

2.9.2 Physical obsolescence

Refers to the deterioration of the structure, installations, or façade of buildings to the point of turning them incapable of accommodating the functions they house. Usually the outcome of poor maintenance, physical obsolescence may also result from natural disasters (earthquakes or floods) or the unstained effect of the weather or urban activities (for instance, Vibrations generated by vehicles).

2.9.3 Economic obsolescence

Economic obsolescence occurs when it is no longer profitable to continue using a building for its original purposes because the land on which it sits has increased in value, resulting in increasing pressures to tear it down and put the land to the market's "best and highest use." This process affects historic districts, particularly in large cities that continue to experience pressure for commercial development and services.

2.10 Old towns, Heritage and Conservation in Ethiopia

The concept of "area conservation" has been adopted in international conventions and recommendations concerning the preservation of the cultural heritage, which provide for such measures as legal protection, zoning, regulations, subsidization, technical assistance, etc. Ethiopia's historic sites threatened by urban development may be protected in various ways, there are specific recommendations for individual sites (Aalund, 1985).

The Government of Ethiopia has nominated a number of outstanding cultural and natural sites for inclusion on the World Heritage List. Ethiopia has ratified the Convention concerning the Protection of the World Cultural and Natural Heritage, which came into force in 1975.

International assistance for the preservation and presentation of Ethiopia's cultural heritage goes back to 1967 when UNESCO sent an expert to advice on the organization of the Ethiopian Antiquities Administration. Later consultancy missions concentrated on the restoration of sites and monuments likely to attract tourists from other countries and thus contribute to Ethiopia's economic development. (Aalund, 1985)

In selecting sites and monuments for restoration, priority was given to those easily accessible from tourists' places of arrival, or included on the "Historic Route", assuming that they would be among the first to be provided with hotel facilities of an international standard. The report prepared by Sandro Angelini in 1971, entitled "The Historical Route Monuments" concentrated on the main tourist attraction areas of Aksum, Lalibela, Gondar, and Lake Tana.

2.10.1 Overview of Proclamation for Heritage Conservation

Proclamation No.229 of 1966 provides for the protection and preservation of antiquities in Ethiopia. It defines "antiquity" as "any construction or any product of human activity, or any object of historical or archaeological interest, having its origin prior to 1850 E.C.5". The antiquities so defined were declared to be "property of the State" to be administered by the Head of the Office of Archaeology.

Proclamation No. 839/2014: A proclamation to provide for the Classification of Cultural Heritage in to National and Regional Cultural Heritage defines the role of federal and regional organs in the administration of cultural heritages to void responsibility overlaps and waste of resource and to establish speedy administrative and procedural system.

2.10.2 Heritage Terminologies in Proclamation No. 839/2014

- i. **"Cultural Heritage"** means anything tangible or intangible which is the product of creativity and labor of man in the pre-history and history times, that describes and witnesses to the evolution of nature and which has a major value in its scientific, historical, cultural, artistic and handicraft content;
- ii. **"Tangible Cultural Heritage"** means cultural Heritage that can be seen and felt and includes immovable or moveable historical, and manmade cultural heritage;
- iii. **"Immovable Cultural Heritage"** means Cultural Heritage attached to the ground with foundation and which can be moved only by dismantling and shall include:
 - Sites where Cultural heritage have been discovered, paleontological 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.
- iv. **"Cultural Heritage Registration"** means registration in the form prepared to collect wide information of Cultural Heritage, which shall include photographing, recording in film or video, as appropriate, so as to put in place the means to catalogue, inspect, study, protect and conservation cultural heritage and facilitate utilization of same for the purpose of recreation and education;
- v. **"Conservation"** means a general protection and preservation activity carried on a Cultural Heritage without changing its antique content;

Chapter Three

Research Methodology

This chapter describes the criteria that were used for selecting the four case studies. It then provides background information on the study area of the Enda Medhane Alem Area, and more specifically the selected case studies.

3.1 Research Design

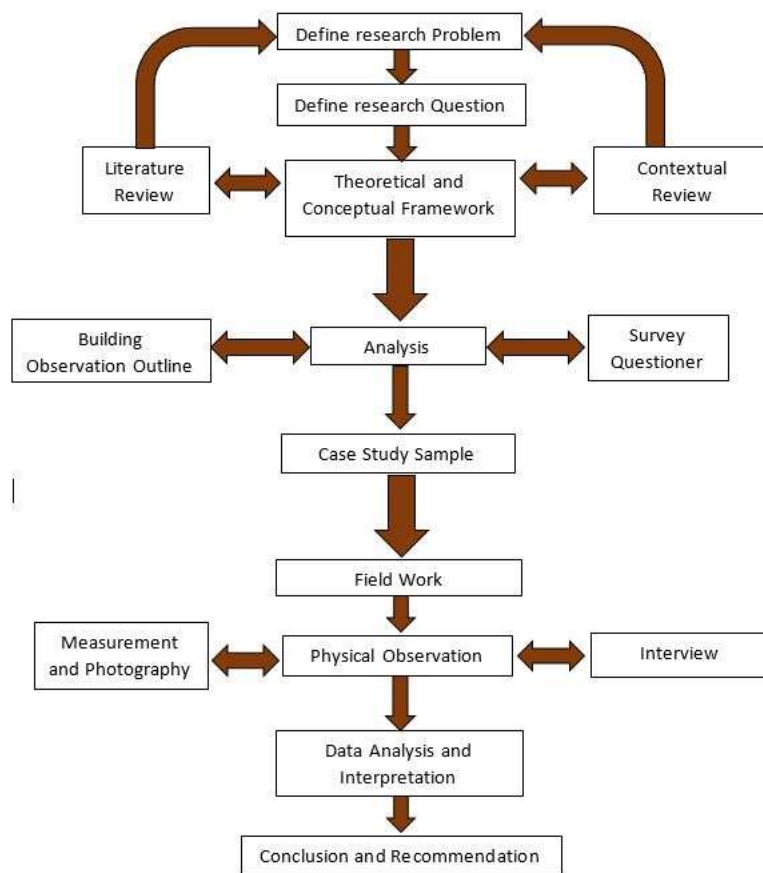


Figure 5: Research Design

3.2 Research Approach

In the instance of this research, the case study is of particular value. Generally speaking, the value of the case study approach “is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” Schramm (1971, cited in Yin 2003: p.12). More specifically, this approach is found useful for understanding a particular situation in depth, and identifying cases that are rich in information. It is useful in situations

where a great deal can be learned from a few examples, and particular patterns or themes can then be found across cases.

A case study approach is intended to study a contemporary phenomenon in its real life context (Yin, 1997). This approach relies on multiple sources of evidence. As such, it depends on the researcher's ability to create a comprehensive research strategy by integrating and triangulating information from these sources of evidence (Yin, 2003). In this way, the case study approach provides an in-depth, multifaceted analysis of a selected phenomenon.

As is discussed in the next part 3.3 case study selection criterion of this research, two buildings are selected to comprehensively answer the research question. Then the research process is directed to generalize the results of the case study analysis. This being said, it can be difficult to generalize from one case to another as circumstances often fluctuate based on various conditions and situations. While these specificities must be recognized and acknowledged, the findings should ultimately be generalized through strategically selecting case studies to cover the broad aspect of the research. While facilitating generalization, the case study method also grounds observations and concepts found in natural settings that can be studied closely.

3.3 Case Selection Criteria

According to Yin (2003), the goal of a case study research approach should be to have at least two case studies. As such, it was determined by the researcher that two case studies would provide sufficient information given the research approach as well as considering the diversity of structures with the research site.

The following criteria's were determined to guide the selection of the two cases.

- i. The case study should be located within Enda Medhane Alem area defined in the scope of this research. This consideration was predominantly based on research objective and scope.
- ii. The buildings should contribute a public and private component individually.
- iii. Feasibility of application of the adaptive reuse approach. This is important since from the 42 building surveyed within the site majority of the buildings are entertaining multiple tenants.
- iv. Must contribute to represent diverse story level; in this case the story level range from one to two.

- v. Must contribute to understanding Architectural feature of the site.

Case	From	Up to
Case 1	Dec 14, 2019	Dec 19, 2019
Case 2	Dec 20, 2019	Dec 24, 2019

Table 2: Case study observation timeline

3.4 Data Type

Both Qualitative and Quantitative data are gathered and used as an input to undertake this research. The qualitative and quantitative data simultaneously used is intended to produce sounder and better quality research. Since the research is concerned entirely with the evaluation of the architectural aspects of heritage; the research is based more on qualitative data. The validation of this approach can be explained with the perception of qualitative data better represent rate of quality.

Qualitative data is gathered through observation of building by the assessment frame line and qualitative question about the building. Quantitative data is used to understand the age of the building, number of occupants and area of the building. Also the analysis of the questioners is partially conducted quantitatively.

3.5 Data Source

- i. Primary data is collected first hand from the case area by the researcher. Field surveys were used for the collection of primary data. Primary data is also used for the confirmation of the secondary data. The research area was observed frequently to check the functional aspects. Also questionnaire interviews and random discussion is used to gather primary data.
- ii. Secondary data is existing data recognized previously by other researchers; found in different documents and records. Secondary data is gathered from appropriate organizations such as UNESCO, ICOMOS and data concerned with historical background and previous research. Also different articles, journals, pervious researches, and the web are used as a source of secondary data.

3.6 Data Collection Methods

To study the architectural Heritage of Enda Medhane Alem and produce recommendation reflecting Sustainable Conservation Approaches; requires contextualization of international charters more specifically Burra charter. In this context to discuss the data collection it is important to review the rationale behind the selection of data collection methods.

Studying the architectural heritage starts with identifying the value; with this understanding (Australia ICOMOS Burra Charter, 2013) is cited to the assessment of cultural significance the method of data collection as follows:

- i. the developmental sequence of the place and its relationship to the surviving fabric;
- ii. the existence and nature of lost or obliterated fabric;
- iii. the rarity and/or technical interest of all or any part of the place;
- iv. the functions of the place and its parts;
- v. the relationship of the place and its parts with its setting;
- vi. the cultural influences which have affected the form and fabric of the place;
- vii. the significance of the place to people who use or have used the place, or descendants of such people;
- viii. the historical content of the place with particular reference to the ways in which its fabric has been influenced by historical forces or has itself influenced the course of history ;
- ix. the scientific or research potential of the place;
- x. the relationship of the place to other places, for example in respect of design, technology, use, locality or origin;
- xi. Any other factor relevant to an understanding of the place.

3.6.1 Desktop Research

Different document written with regards to Adwa town history, international charters, best practice heritage conservation case studies and local conservation proclamations are reviewed and researched to produce a sounder result.

3.6.2 Community Surveys and Interview

Heritage has a distinct value for the various social actors involved, so in order to place a realistic value on it one must take into account a broad range of factors and consider the opinions of all interested groups. This means building into the appraisal process not only the viewpoints of the researcher but also the viewpoints of the community, made known through collecting stockholders opinion.

Interviews, particularly those that are open-ended, are said to be an essential component of case study evidence (Yin, 2003). The purpose of interviewing is to find out things that cannot be directly observed (Hughes, 2002). Before undertaking the interview process, it was important to understand the structure and guidelines of the interview as well as its strengths and weaknesses. (See Appendix B for interview summaries).

While the interview questions are important, the structure in which they are framed must were also considered. It is assured that all interviews should ask the same basic questions in the same order, thereby increasing the comparability of responses. Essentially, it can be said that interviews are used to explore a situation and attain defined answers to defined questions while being able to further develop and explore those answers during the interview process.

3.6.3 Observation and Documentation

Conducting architectural heritage research is a process of answering questions, and good research is a product of good questions. For every structure, there are some basic questions common to all structures and others common to structures of its type. The characteristic of a particular site should provoke additional questions that suggest other avenues of inquiry.

When documenting a structure, specific questions relevant to that structure, were answered. Even if a structure is more significant for the people associated with it than for its architecture, is explained and identified. The structure is after all, the object of documentation.

Basic questions about a structure that occur to this research include the following:

1. Who built it?
2. When was it built, altered, demolished?
3. What was it originally, what is it now, what was it meant to be?
4. Why was it built, why does it look the way it does?

5. How was it built, how has it been altered, how did it function?

Answering questions confronting historical aspects requires a multitude of primary and secondary source. To set the historical context of buildings of historical interest some of the reference books cited in the Bibliography was helpful. For buildings of local historical interest, secondary source material is often scarce and primary research was the only course.

3.6.4 Observation

Researcher observation was used as a method of data collection and was based on visual survey and assessment. In this case, the researcher was an outsider observing the architecture. Researcher observation in the field provides a simple and efficient method of recording information, and relevant variables were determined ahead of time.

Researcher observation is valuable as it allows for the up-close examination of a phenomenon in a dynamic setting. Observational fieldwork is a central activity of qualitative inquiry that allows the researcher to “get close to the situation in order to increase understanding” (Patton, 1990, p.47). During each site visit, the researcher travelled the study area to observe characteristics of the built environment, the use of built and natural spaces, and deterioration of each building.

3.6.5 Photography and Measurement

Observations were noted through photographs taken to further understand and represent the case studies under investigation. Photographs are considered an important component of the research process as they can be used to “convey important case characteristics to outside observers”. Nikon D3500 model camera is used to take all the pictures.

In order to provide a complete documentation of each selected building for case study; each building is measured and drafted producing layout drawings, sections and elevations.

3.7 Data Digitalization Method

The entire data collected during the field survey was digitalized with suitable computer software. Notes were transcribed by Microsoft Word 2013, drawings were drafted with a combination of AutoCAD 2018 and ArchiCAD 22. Hand sketched Plans were digitalized with ArchiCAD 22 and AutoCAD 2019.

3.8 Data analysis method

The assessment of cultural significance is the basic objective of this research and follows the collection of information. The validity of the judgments will depend upon the care with which the data is collected and the reasoning applied to it. In order to produce a sound research all the data is analyzed and used for the discussion of the findings.

<p>Part I: General Building Information</p> <ol style="list-style-type: none"> 1. Building Name 2. Location GPS 3. Present Owner 4. Present Use 5. Significance <p>Part II: Historical Information</p> <ol style="list-style-type: none"> 1. Physical History <ol style="list-style-type: none"> i. Date of Erection ii. Original and Subsequent Owners iii. Original Plans and Constructions iv. Alteration and Additions 2. Historical Context <p>Part III: Architectural Information</p> <ol style="list-style-type: none"> 1. General Statement <ol style="list-style-type: none"> i. Architectural Character ii. Condition of Fabric 	<ol style="list-style-type: none"> 2. Description of Exterior <ol style="list-style-type: none"> i. Overall Dimension ii. Foundation and Structural Systems iii. Walls iv. Distinctive Features v. Openings vi. Roof 3. Description of Interior <ol style="list-style-type: none"> i. Floor Plans ii. Elevation iii. Distinctive Features iv. Openings
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Table 3: building analysis frame work

Chapter Four

The Case Studies

4.1 Overview of the case study context

There are varying opinions and information regarding the etymology of Adwa. To provide a comprehensive explanation, both written and oral sources are equally important. The first written source regarding the term “Adwa” is found in the Adulis Inscription of the 4th century A.D. The unknown Axumite king of the period mentioned the name “Aua” (possibly the present Adwa) as one of his conquered territories of the period (FEDERAL URBAN PLANNING COORDINATING BUREAU, 2008).

“Adwa” is mentioned by the 18th century (1769-72) Scottish traveler, James Bruce. According to him, Adwa is located along the caravan trade route that runs between Gondar and Massawa and thus the name “Adwa” could possibly be associated with the term “passage” because it is a place through which everybody travels.

Oral traditions also give clues regarding the etymology of Adwa. According to informants, the Nine Saints who came to Ethiopia in the 5th century A.D. first stationed at Mount Soloda. Eventually, they dispersed to various places after having left the present settlement area of Adwa by crossing river Assem. In line with this, the term “Adwa” is believed to have been given to the process of blessing of the area by the Nine Saints. In this regard, the term “oduwa” in Geez language means “they blessed”.

Oral sources and some written records also note that the Nine Saints that came to Ethiopia for apostolic mission in the 5th century A.D. are reported to have camped at mount Soloda, for some time, from where they dispersed to the various corners of the country to preach the teachings of Christ (Hiluf, 2007).

Generally, one thing evident from the given explanations is that the term “Adwa” or “Aua” has existed since the early 4th – 5th century A.D. which eventually sustains as the name of the present day Adwa town and its environs (Richard Pankhurst and Leila Ingrams). Thus, one can safely say that the etymology of “Adwa”, no matter the exact origin of the naming, goes back to the early Axumite period.

Ephrem W/Giorgis on his research notes: the name Adwa was first mentioned in the 16th c AD in the land charters as a gult of the most nearby monastery of Dabra Abba Garima however the town of Adwa was first stated around the middle of the 17th century by the Ethiopian monk, Abba Grigorious and was written by the German scholar Hiob Ludolf on his map.

4.1.1 History of Adwa

The district and the town of Adwa is so old and has been of great political and economic importance and is one of the most celebrated places in Ethiopia; due to this it rarely failed to attract the attention of modern travelers and scholars (Ephrem, 1986). According to Doctor Marid W/Aragay, the history of Adwa is like of Harar and Gondar and its genesis is similar to Gendabalo and Wasel. The town originated as a market center inhabited by crafts men and traders.

Adwa is located where ancient civilization of Ethiopia flourished with proximity to the two ancient pre-Axumite and Axumite states of Yeha (c.5th century B.C.) and Axum (c.1st -2nd century A.D.) respectively makes what is today Adwa and its environs part of these ancient civilizations.

Adwa (Aua) first mentioned in the Adulis inscription which is assumed to have been written sometime between the 1st and 2nd century A.D (Huntingford, 1989:40). The inscription notes that Adwa was part of the Axumite Empire which then encompasses a huge territory. Thus, from the given statement we can safely say that settlement in what is today Adwa town and its environs existed at least since the Axumite era. (Pankhurst, 1985)

Later in the 6th century A.D. Adwa and its environs is reported to have been declared by Emperor Gebre Mesqel (523 A.D) as a domain of the monastery of Abba Gerima which is situated some 9 kms away from Adwa (Huntingford, 1965). Likewise, Emperor Lebne Dengil 1523 is also reported to have confirmed the Adwa area to be the possession of the Church. In this regard, Alvarez who visited Adwa in the 1520th , points out in his travel records that the town was referred to as “the House of St. Michael” (Pankhurst,1982).

All the above historical statements indicate Adwa area has strongly been linked with the churches and monasteries that have existed in and around the town of Adwa since the Christian era .This in turn indicates the fact that settlements in the present day Adwa town and its environs have existed since long ago.

One of the major factors behind the establishment of the town of Adwa is its location along the major caravan trade route that was running between Gondar and the port of Massawa. According to Huntingford (1989), the trade route was stretched from the Gibe region of southern Ethiopia to Gondar, Adwa and thereby to Massawa. The writer further notes Adwa to be a converging point of two caravan routes: the longer one follows the “Massawa – Godofelassi - Adi kuala - Gundet- Mereb- Mihitsab allabu – Daero Teklay – Adwa” route. On the other hand the other route runs between Rebbi - Arieni (Gendebta) and Adwa (Salt, 1816).

Due to its geographical location at the main trade route, the market of Adwa has become one of the largest trade centers of the region particularly since the 17th century. The extent of trade that was transacted in the market of Adwa was very great that by the end of the 17th century the annual tax collected from this market is reported to have amounted to 1000 ounce (waqet) of gold (Pankhrust, 1982). In this regard, many European travelers of 18th and 19th century also noted in their travel accounts that the Saturday market of Adwa was one of the busiest and the most principal commercial center of the region, north of river Tekeze (Bruce, 1813; Salt, 1814; Pankhrust, 1968).

According to Ferret and Galinier, the two French travelers of the 1840th, the weekly market of Adwa is one of the largest markets of the country which was attended by some 5000-6000 marketers. The other traveler, Dimotheos who visited Adwa in the 1860th witnessed the availability of variety of import and export merchandises in that market. Likewise, Wylde also visited Adwa in the 1880th and noted that at the market of Adwa abundant items were transacted that were brought both from the nearby as well as distant places (Pankhrust, 1968; Pankhrust, 1964; Wylde, 1888).

Besides its commercial importance, Adwa has become an important place of craftsmanship. During the 19th century, Adwa is reported to have been one of the centers of craft products in the country. It is stated by different European writers that varieties of products were produced including jewelry, basketry, embroidery, cotton products, leather products, iron products, (Salt, 1967; Bent ,1896; Wylde, 1888).Thus, this was also a stimulus to the development of urbanization in the region in general and Adwa in particular.

4.1.2 Development of Adwa

Though settlements in what is today Adwa town existed since the earliest times, it is, however, since the 18th century that urbanization took visible shape mainly because of the growing political and economic significance of the town which in turn created the concentration of significant number of population who were engaged in non-agricultural activities. As has been mentioned above, by the 18th century the town was an important center of commerce as well as craftworks which were in fact indicators of an urban character.

Collection of houses and people in the town went on growing as the urbanization process went on gathering momentum. Bruce, who visited the town in 1769, estimated the existence of about 300 houses and a population of about 1900. On the other hand Salt who came to Adwa in the early 19th century estimated the number of houses to be 800 with an estimated population of 8000. Likewise, other European visitors of 19th and 20th century also described the urban character of Adwa taking into account the commercial, political and social significance of the town.

Since the end of the 19th century the urbanization process of Adwa was adversely affected by various natural as well as man-made factors specifically due to the impact of the prevailing war, famine and pestilence. The 1896 war in particular had devastating effect on the overall development of the town; and in this respect Wylde, who visited Adwa twice in 1884 and 1897, described the town by drawing comparisons of his former experience with that of the aftermath of the war as follows:

I could hardly believe that the heap of ruins and the nearly deserted houses was the same place that I had spent so many pleasant days in. With the exception of few of the churches and some few large houses, the place seemed to be a mass of ruins and broken down enclosures (Wylde, 1901).

Generally, Adwa developed as commercial, craftworks and political center particularly since the 18th century and its growth, as witnessed by different travelers, was smooth and dramatic until the end of the 19th century. Since then, however, various factors affected its pace of growth, as has been stated above. Yet, the urbanization process continued assuming other trends of development particularly after the Italian invasion of the 1930th.

As has been mentioned above, during the last quarter of the 19th century, due to the great famine, the war and social anarchy quite a number of inhabitants of Adwa deserted the town which made the urban atmosphere bleak. Starting from the 20 century, however, most of the migrants returned home and engaged in their respective activities to up keep their livelihoods. Thus, by the 1920th the town once again revived as a commercial center (Ephrem, 1986).

Adwa was occupied by the fascist force on October 3, 1935. During their five years of occupation, Adwa served as a district administration under the administrative division of Governorate del Eritrea with its capital at Asmara (Ibid). The Italian occupation brought about new urban structure in the town, as was experienced in other colonial towns that were geared merely towards the attainment of colonial interest.

The topographic feature of the town and its environs in particular gives the town magnificent view, and for many visitors this condition provided impressive scenic view. In fact, many visitors described the morphology of Adwa in different ways and in this regard the 19th century traveler, Bent, described Adwa saying that “I do not think I ever saw a prettier spot than Adoua, with its rocky mountains encircling it, with peaks as fantastic as any in the world” (Bent, 1896).

The earliest settlement place of the town, according to Merid (1984), is said to be the parish of Enda Medhane Alem particularly in what was known as the Slange (probably the corrupted version of Islange) area. Of course, when Adwa is divided on the basis of river Assem, the area to the south of the river, i.e. the parishes of Enda Medhane Alem, Siyon, Silassie and Gabriel are reported to be the oldest sections of the town; and this is also confirmed by different 18th – 19th century European travelers as well as by elders of the town. Later on, the Italians established their quarter the other side of river Assam, and thus the river served as a dividing line of the indigenous and the Italian settlements.

One apparent feature of the town of Adwa that has been exhibited since the earliest time is that it was naturally endowed with wanza (*cardia Africana*) trees which according to travelers were “thickly planted in the enclosures around houses”. Other 19 century European writers, like Salt, also noted that there were a lot of gardens in the town some of which were cultivated with due attention (Pankhrust, 1982).

4.1.3 Decline of Adwa

Adwa's strategic importance as a military base continued throughout the 20th century and as a result during the fascist occupation of 1930th it served them as an important military base. Even after liberation, it has been playing significant role as a military base and thus the Ethiopian government has also established military camp in what is known the Bloko (Adi-Abun) area since 1943 by stationing the 10th Battalion.

Since then, the town has been playing similar role as a seat of the army. From the early 19th century, the political importance of Adwa went on declining because of the domination of the province by some regional lords that established their seat mainly at Hintalo (Ras W/Selassie Kifleyesus 1780-1816) and Adigrat (Dejamach Sebagadis Woldu 1822-31). Despite this, however, Adwa remained the principal commercial center of the region until the late 19th century (Ephrem, 1986).

Since the late 19th century, Adwa experienced sharp decline due to various reasons and some of which are: the legacy of social anarchy of the Zemene Mesafint, the establishment of the Italian colony in Eritrea, the great Ethiopian Famine, the political shift from Tigray to Shewa and constrained relationship between the Italians and that of Menilk II and the subsequent Ethio- Italian conflict of 1896 (Ibid).

4.2 Outline of Housing Typology of the Case area

As far as housing typology and morphology of the town is concerned, many 18th century European travelers tried to describe the town by looking at the various features of the town. Originally the housing typology of the town consisted of two types some of which were conical form with thatched roofs (locally known as seqella) and the others were also of rectangular shape with flat roofs which are locally known as hudmo.

In fact, the pattern of settlement in the early times was that the houses were irregularly built as many of the 19th century travelers noted. The description given as "irregularly built" must be understood with western perspective in this case. "irregularly built" is put under a citation because the definition of regularity depends on perspective and the observant background. There is a notion of defining African settlements as "irregular" but this settlements have evolved over time organically and must be observed and understood as such.

The following are architectural elements of Adwa architecture.

- i. Tebehi: Display house hold material Shelf
- ii. Deberi: Storage and Master Bedroom
- iii. Guwada: Kids Sleeping, Cooking
- iv. Bete Madi: Dining room
- v. Adarash: Living Room
- vi. Hidmo: Storage secured/master bed room
- vii. Hademe means Zega in Amharic which signifies closing
- viii. Eka Bete : storage

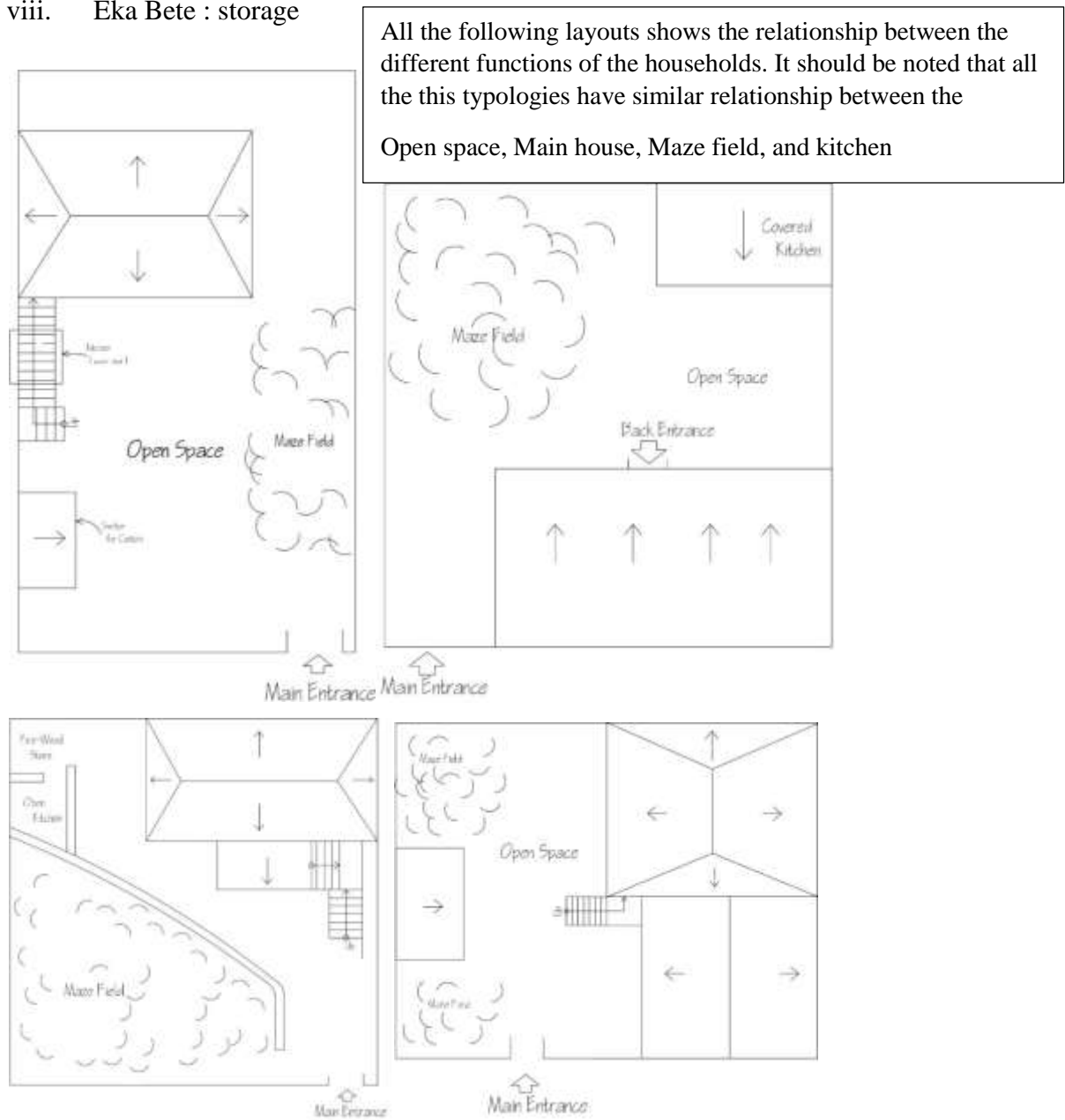


Figure 6: Different Residential Layouts

4.2.1 Foundation, Walls and Structural System

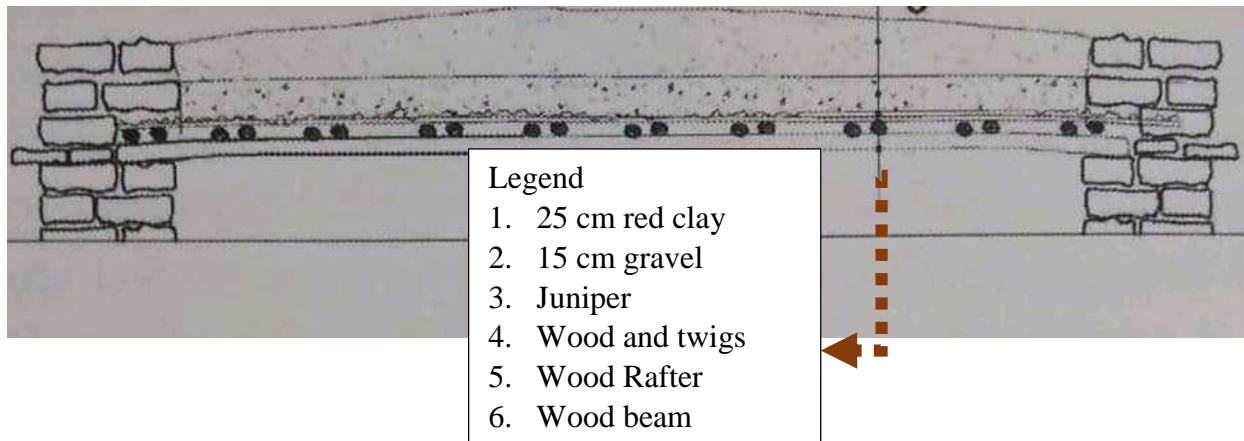


Figure 7: Roof Structural System

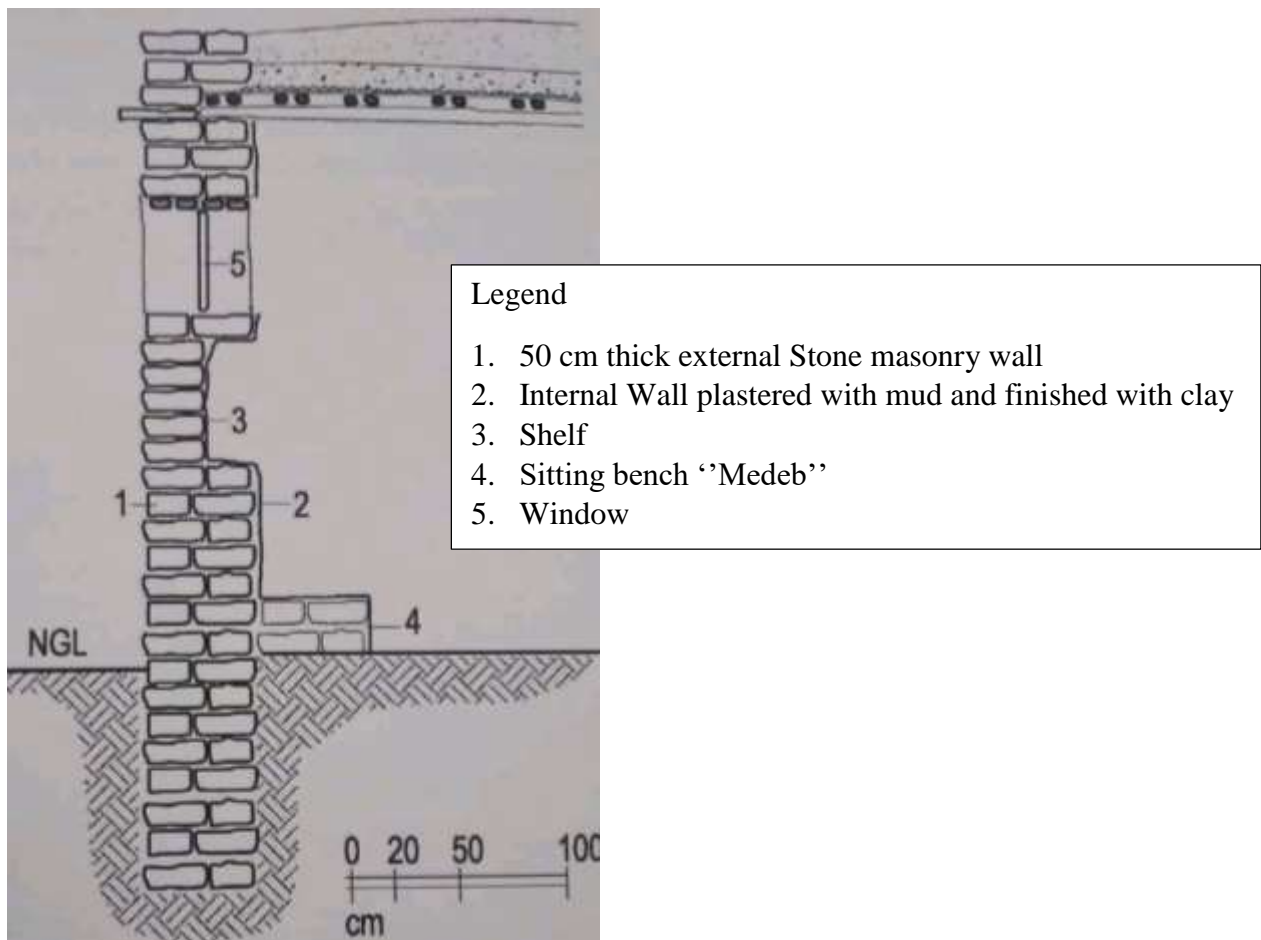


Figure 8: Foundation and wall

4.3 Case Study Location Introduction



Figure 9: Case study Location Map

4.4 Case Study 1: Dejazmach Tesfa Yohanese Residence



Figure 10: Dejazmach Tesfa Yohanese Residence Exterior

Part I: General Information

Location:	14950.1 N, 385355.3 E
Current Owner:	Dejazmach Tesfa Yohanese descendants
Current Use:	Rental (Currently empty)
Significance:	Architectural, historical, and social

Part II: Background

i. Date of Erection

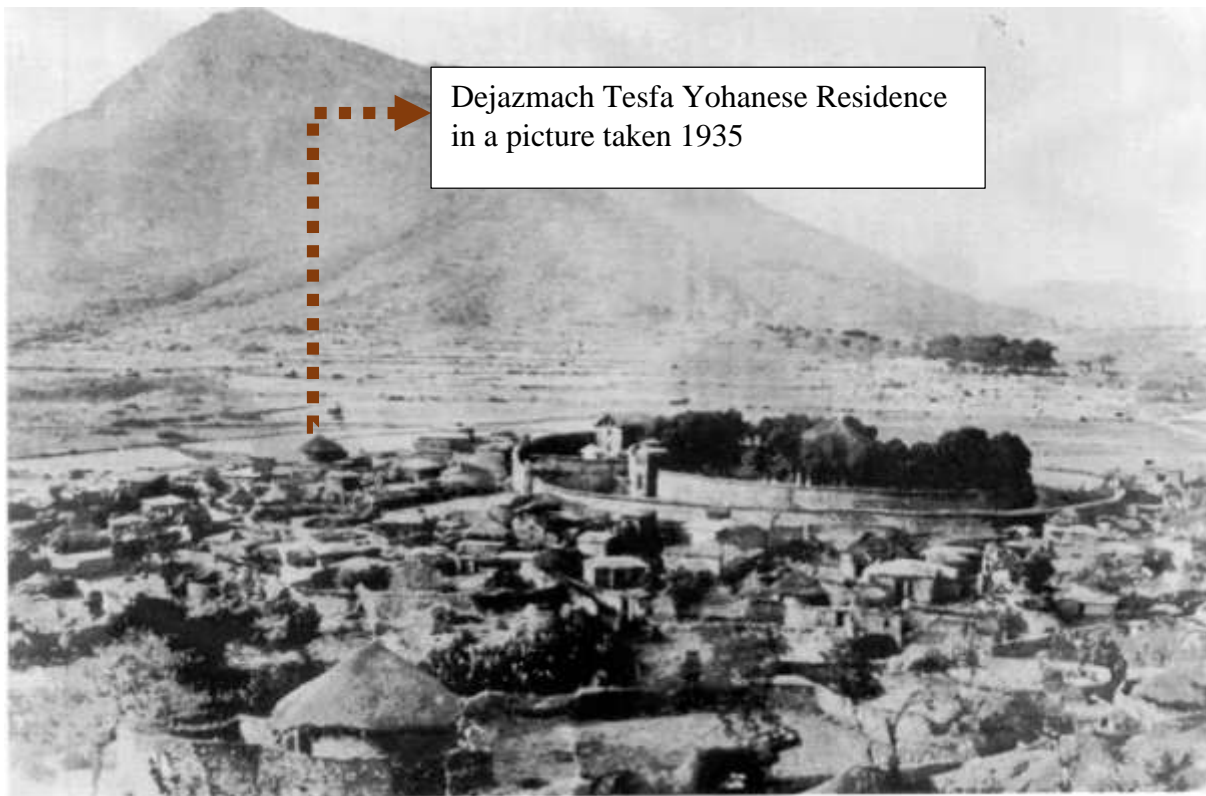


Figure 11: Dejazmach Tesfa Yohanese Residence on 1935 picture (Richard Pankhurst and Leila Ingrams)

ii. Original and Subsequent Owners

There is a written record at the Enda Medhane Alem church that confirms the house was owned by Ato Mohamend a trader residing in Adwa. After Ato Mohamend Dejazmach Tesfa Yohanese owned the house. Till the data collection the house is referred to as Dejazmach Tesfa Yohanese residence.

i. Alteration and Additions

The building has retained most of the structural elements intact. The descendant of the Dejazmach Tesfa Yohanese has claimed there were silk canvas painting on the walls supporting the roof.



Figure 12: Silk canvas painting location

The above image shows the ceiling of the building with traces of silk fabric as both decorative and structural purpose. This can serve as confirmation of claim by current owners of existence of Silk canvas painting.

Because the building was rented for multiple tenants at the same time; they segregated their access by introducing new doors in to the building



Figure 13: Wall altered to introduce a new door

Part III: Architectural Character

i. Distinctive Features

One of the most distinctive feature of the area architecture is the compound entrance; illustrated on the first picture marked 1. Compound entrances range from a simple one door opening, to wider entrance with a cover extending to two story compound entrance.

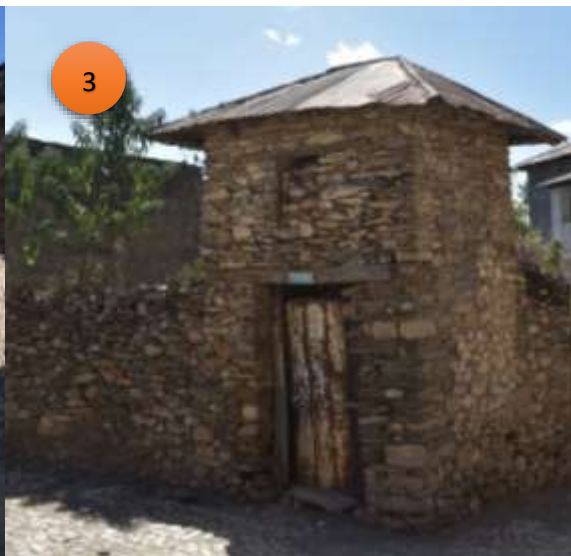
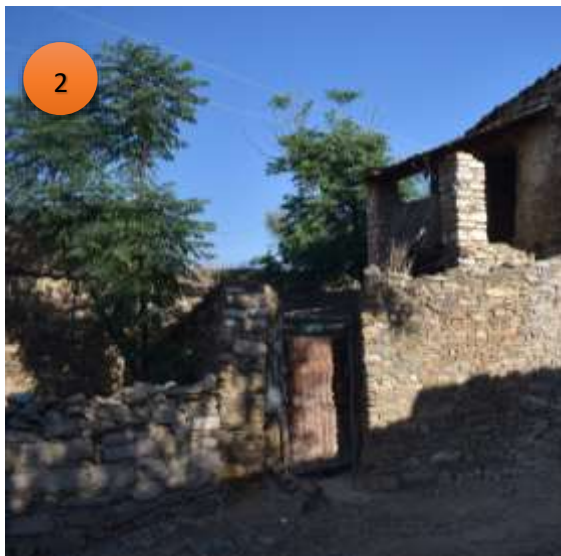


Figure 14: Compound Entrance

In addition to the case study entrance extra entrance types are elaborated.



This one of the unique features of this building where there is a shelter for horses and mules. From all the surveyed buildings in this case area this is the only building with this feature.

vii. Floor Plans

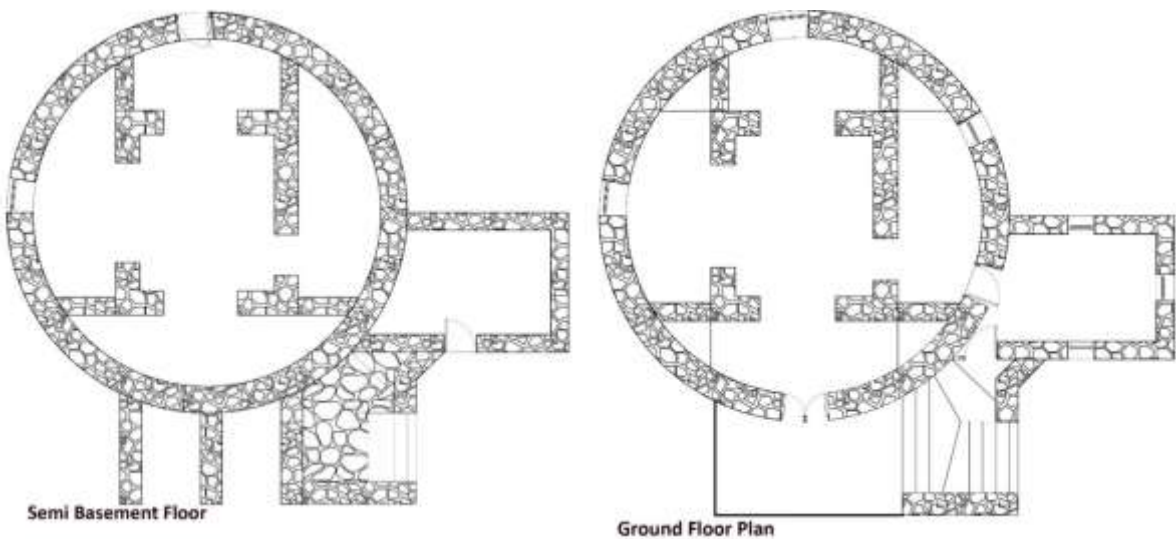


Figure 15:Dejasmach Tesfa Yohanese floor plan

viii. Openings

- a) Doors
- b) Windows are constructed with wood and have not been altered.



Figure 16: Double and single opening wooden windows with decorations

4.5 Case Study 2: Enda Medhane Alem Eka Bete (Church Store)



Figure 17: Enda Medhane Alem artifact storage "Eka Bete"

Part I: General Information

Location:	14948.8 N, 385356.4 E
Current Owner:	Enda Medhane Alem Church
Current Use:	Storage for Artifacts
Significance:	Architectural, historical, and social
Date of Erection:	1720

Part II: Historical Information

i. Date of Erection

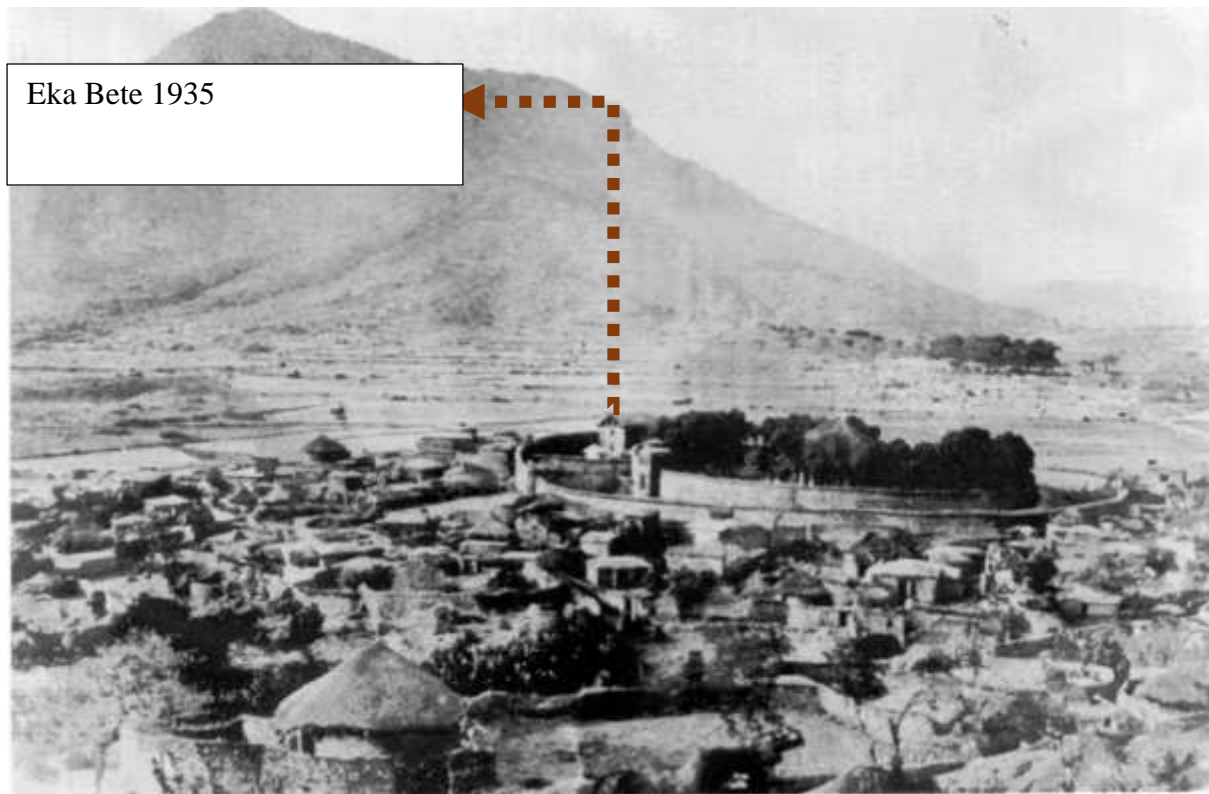


Figure 18: Enda Medhane Alem artifact storage "Eka Bete" in 1935

ii. Original and Subsequent Owners

The church was and still is the original and current owner of this building. Dejazmach Sebagadas constructed the building in 1740 to serve as a storage for Enada Medhane Alem church.

iii. Alteration and Additions

The Roof is one of the important alteration of this building.

- a) Original Roof Shape, Covering
- b) Current Roof Shape and cover

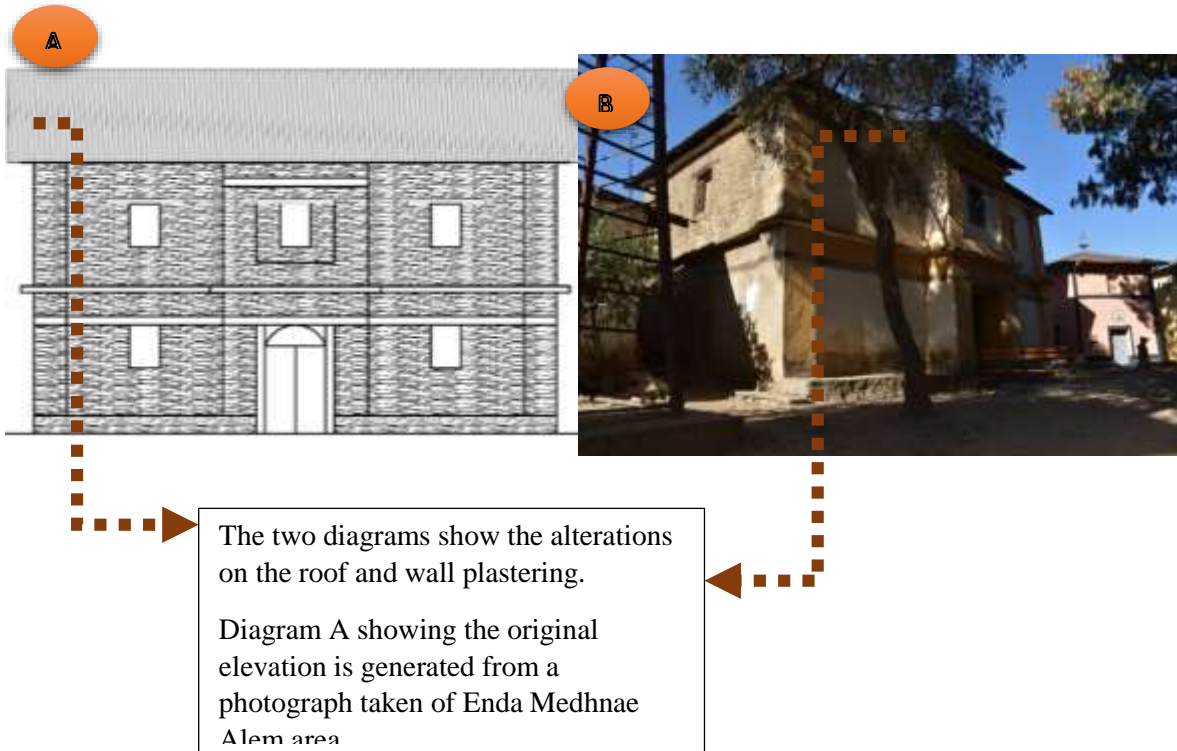


Figure 19: Enda Medhane Alem artifact storage "Eka Bete" roof alteration

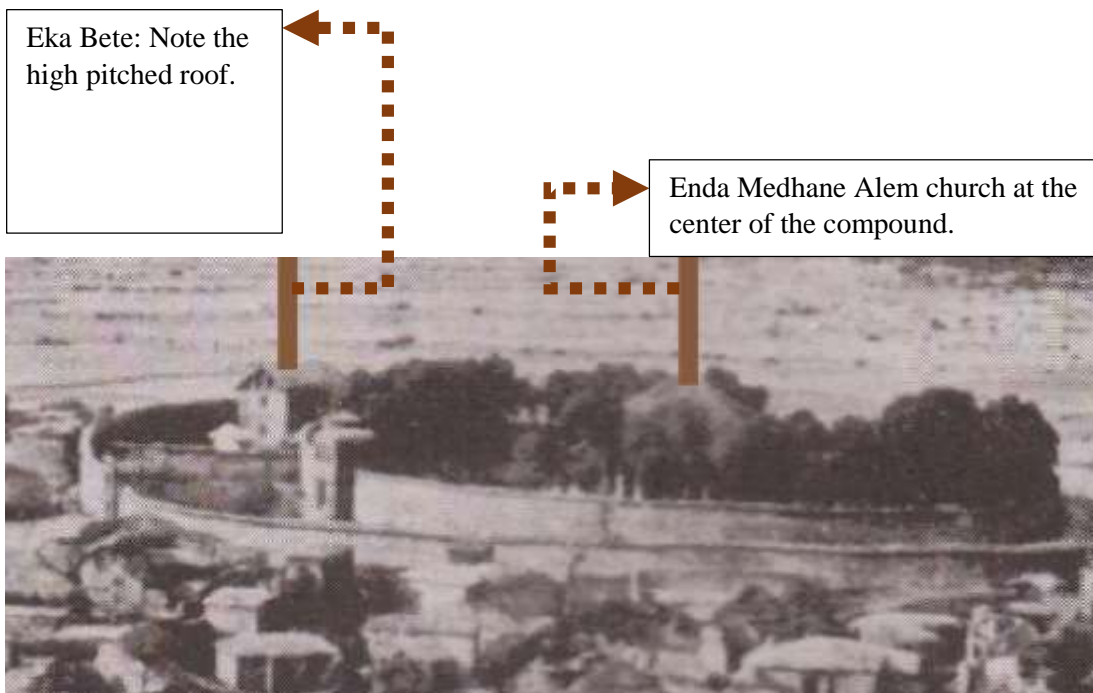


Figure 20: Enda Medhane ALem Eka Bete Roof alteration on urban setting

The second important alterations are the following.

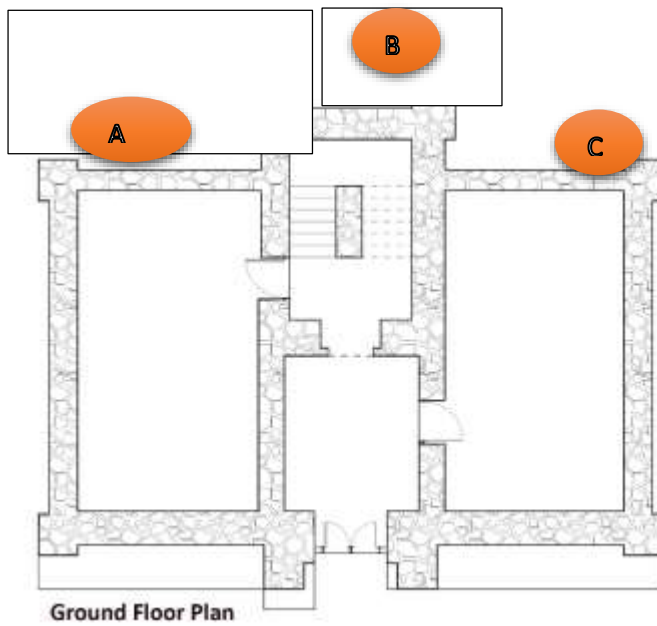


Figure 21: Enda Medhane Alem artifact storage "Eka Bete" surrounding structures

- A. Extended storage
- B. Enda Medhane Alem church toilet
- C. Enda Medhane Alem church Water tap

Part III: Architectural Character

i. Distinctive Features

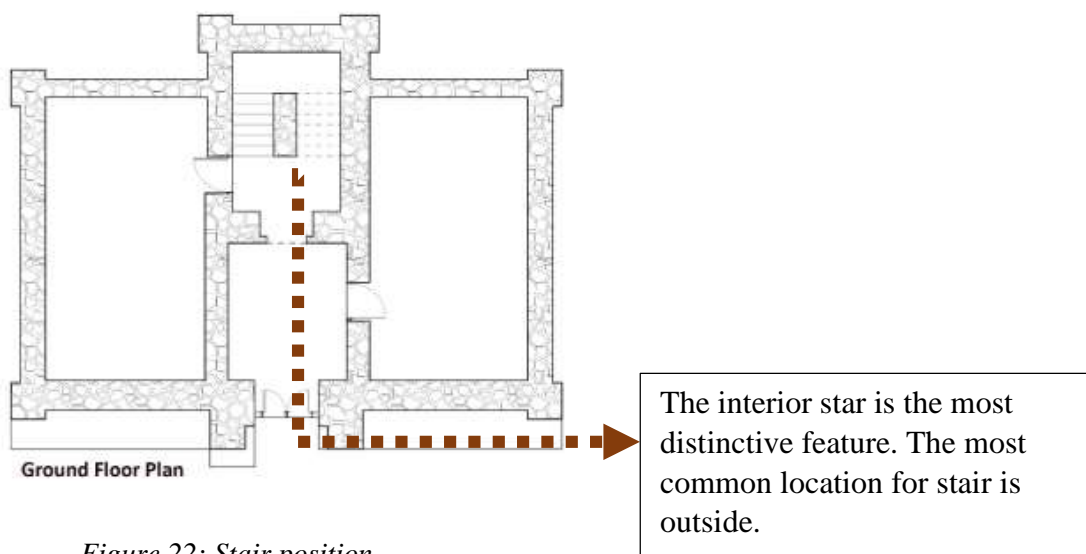


Figure 22: Stair position

ii. Architectural Character and Condition of Fabric

This building is an exact replica of a storage in Jerusalem visited by Dejach Sebagadas.

The plastering of the wall has affected the material fabric of the stone masonry wall.

iii. Floor Plans

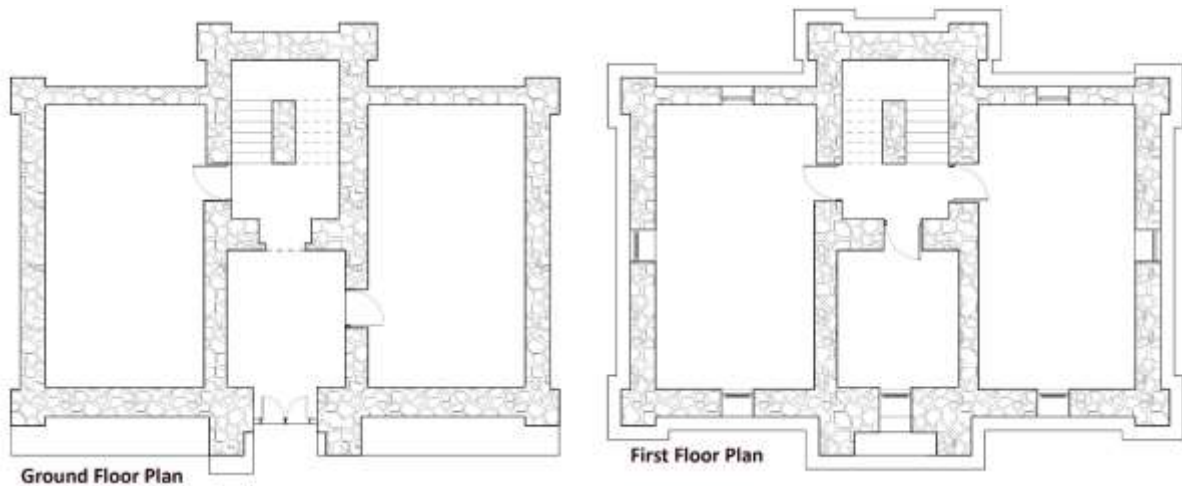


Figure 23: Enda Medhane Alem artifact storage "Eka Bete" floor plan

iv. Openings

- a) Doorways and door
- b) Original wooden Windows are removed and replaced by steel window for safety purpose.
- c) Ground floor windows are removed and closed up by stone wall for added security.



Figure 24: Window alteration

Chapter Five

Discussions of Finding, Conclusion and Recommendations

5.1 Quantitative Data Discussion

Ownership

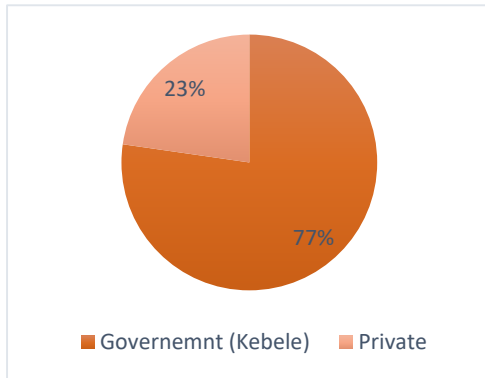


Figure 25: Ownership chart

Space Use and Occupancy

This chart refers to how the buildings are occupied compared to their original design. Further reflected in the next chart all the buildings occupancy has drastically transformed to multiple family units

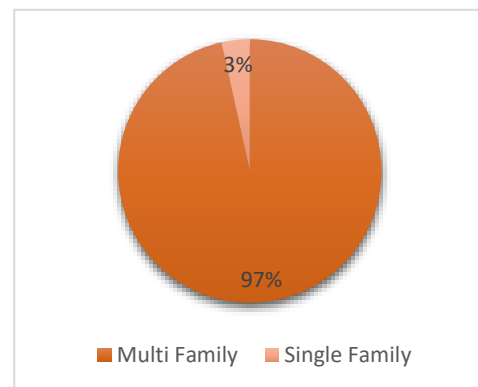


Figure 26: Occupancy chart

Building Alteration

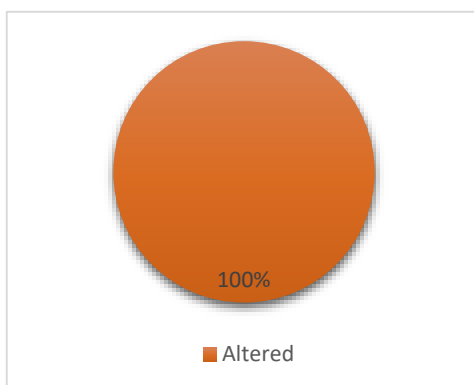


Figure 27: Building Alteration chart

Building alteration in regards to research refers to functional, structural and material alterations.

Functional alteration in all the surveyed buildings is the change of building function from a single family unit to multiple residence. This is observed ranging from the compound to the single building.

Structural alteration refers to the extension of different elements extending to construction of new doors.

Material alteration refers directly to the roofing of all surveyed buildings. Because of lack of awareness on the construction techniques.

Building Condition

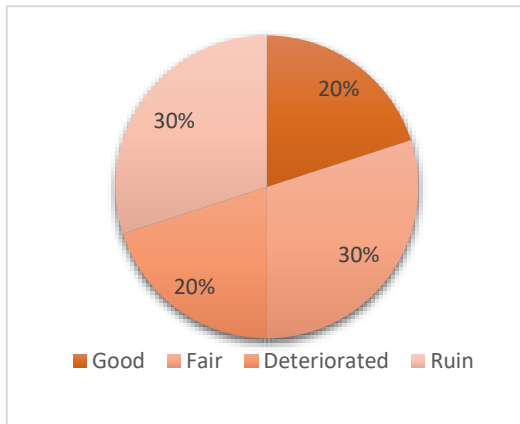


Figure 28: Building condition char

5.2 Historical Significance of Adwa Enda Medhane Alem

As far as the commercial significance of Adwa is concerned, some of the travelers who came to Adwa, towards the last quarter of the 19th century, witnessed that the town was indeed an important commercial center of the period. Wylde who visited Adwa in 1884 described the town saying that the town was a busy trade center, and he further went on saying that “everything that the country produces can be found in Adwa on market day” (Bruce, 1883; Salt, 1967; Wylde, 1888; Ephrem, 1986).

Adwa, with its striking and majestic scenery has existed since Axumite Times. Until the seventeenth century it was a small sprawling regional village. When the Gondar became the capital of the empire, one of the principal trade routes from the Red sea to Gondar passed through Adwa. Soon thereafter Adwa began to flourish as a commercial and trading center. For many traders and foreign visitors it was the ‘de facto’ gateway from the Red sea to Gondar or wherever the political power resided. In the eighteenth century Adwa rose to particular importance under the rule of Ras Micheal Sheul. IN the nineteenth century, however, Adwa was overshadowed politically first by Antalo and later Adigrat. Nevertheless it remained a major commercial center and emporium and a prize for which several warring nobles fought.

Dr. Richard Pankhurst notes in his book on the “History of Ethiopian Towns” that many foreign observers of the 18th and 19th centuries produced description of the towns, far more detailed in the fact of than available for any other settlement in Tigray. He notes that the Englishman, Henry Salt, who visited Adwa in 1805 and again in 1810, observed that the place “presented a striking appearance on the Account of the multitude of Wanza trees which were thickly planted

in the enclosure around the houses”. Another pleasant features of Adwa, Salt also noted was the existence of many “small gardens” “cultivated with considerable care; the town itself being plentiful supplied with water from tree streams, which take their course through the valley below”.

Due to its commercial importance, Adwa and its surrounding region was an area of importance for the ruling circles of the period. Thus, before the 17th century there had been military regiments (also known as the chewas) that garrisoned along the trade route to safeguard the caravan traders from raiders. Eventually, the names of such chewas became the names of some localities like Shahagana and Adi-chewa (Ephrem, 1986). Adwa assumed strong political importance particularly since the 17 century as it became the capital of the Tigre province. According to the chronicle of Emperor Yohannes I, in 1680 the town was the seat of Dejamach Ze Mariam who was governor of the province. Likewise, in 1700 the French traveler, Poncet, visited Adwa and clearly noted the political significance of the town saying that the governor of "Adwa was one of the seven prime ministers of the empire." (Poncet, 1709).

With the assumption of power by Ras Michael Sehul in the 1760th, the political role of Adwa boosted because Michael was one of the known political figures of the period who strongly influenced the political realm of Gondar. Michael established his base in Adwa and managed to aggrandize a huge wealth because of the taxes collected from the import- export trade. Defining Architectural Heritage of Adwa; as (Australia ICOMOS Burra Charter, 2013) States on Statement of cultural significance: “The practitioner should prepare a succinct statement of cultural significance, supported by, or cross referenced to, sufficient graphic material to help identify the fabric of cultural significance. It is essential that the statement be clear and pithy, expressing simply why the place is of value but not restating the physical or documentary evidence.”



Figure 29: Designation of Adwa Enda Medhane Alem Area as a historic quarter

5.2.1 Historical Value

Contemporary Adwa and more specifically Enda Medhane Alem area visually represents the following important capitals of Ethiopia. The correspondence is clear in the adaptation to the topography and the hierarchy of buildings.



Figure 30: Debra Tabor, the old capital of Bagemder, with its church on the hill top

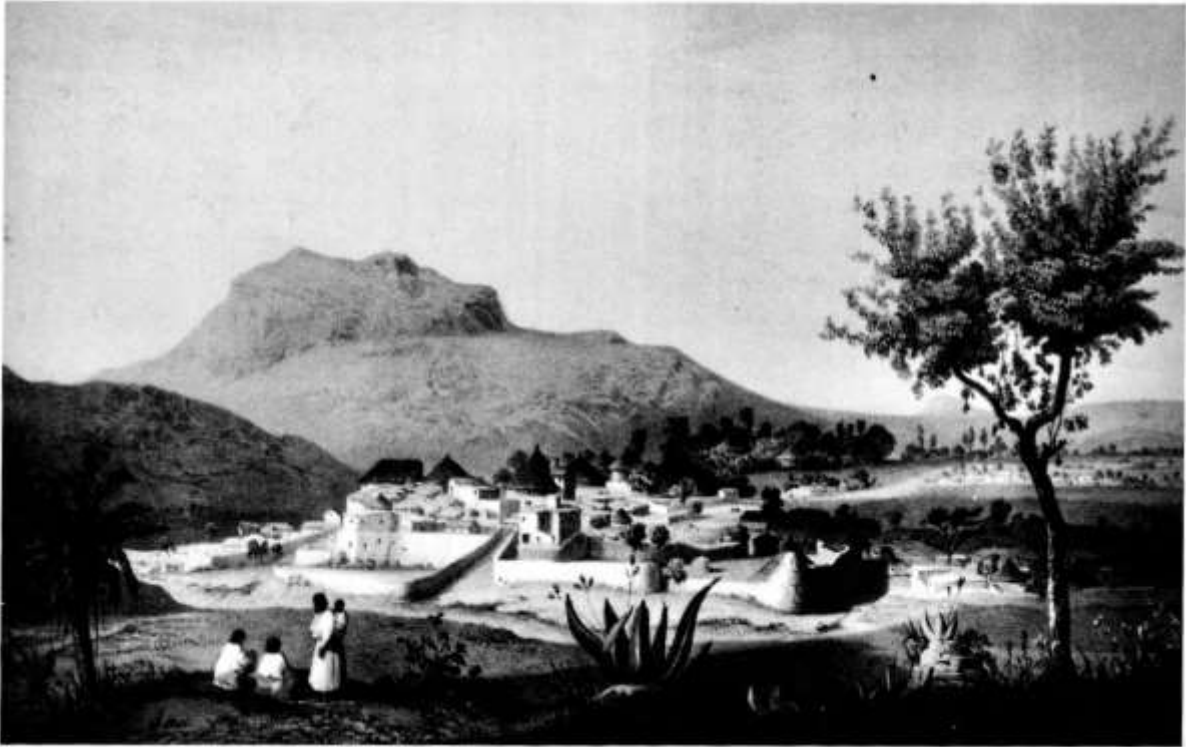


Figure 31: Adwa in the early 19th century source: *Lefebvre, Atlas I, page*



Figure 32: Enda Medhane Alem Area 1935 Source

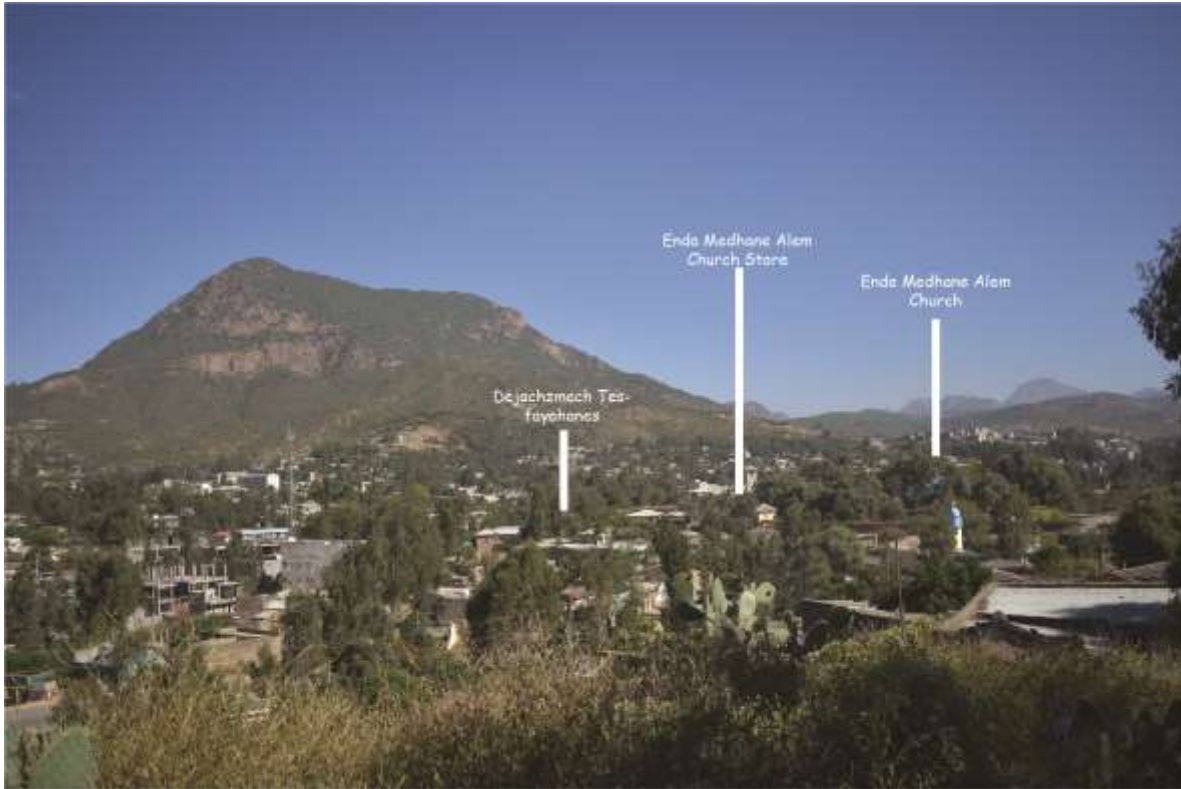


Figure 33: Enda Medhane Alem Church Area 2020

5.2.2 Social Value

- The overall interaction of the community revolving around the architecture.
- An insight in to the social fabric of the area in particular and the majority of the northern part of Ethiopia in particular.

5.2.3 Scientific Value

- Cultural Anthropology study.
- Culture shaping architecture an insight to northern construction techniques of Ethiopia.
- Answer questions of how the architecture evolved in to what is today.
- Building Development: in regards to space layout.
- Construction Materials of Heritage buildings and diverse indigenous construction techniques.

5.3 Conclusion

The general objective of this research is to Study the architectural Heritage of Adwa Enda Medhane Alem contextualizing international charters and produce recommendation reflecting economically, socially and environmentally Sustainable Conservation Approaches.

With this objective in as a guiding principle this research attempted to answer two questions which are *'what is the architectural heritage value of Enda Medhane Alem area?'* and *'what are the approaches to sustainably conserve Enda Medhane Alem area?'*

As discussed in previous chapters more specifically on the literature review; the governing principle of this research is sustainable conservation approaches. With high level of urbanization and development pressures it is highly critical to compensate this fast moving force with revenue generating endeavors requiring minimum investment resource. The future defining idea in this case is sustainability.

This questions were investigated through two buildings selected as case studies focused on the identification of significance contextualizing international charters and conventions. Through the analysis of the research area architectural heritage international charter defining value and significance are discussed briefly.

One of the main conclusions from the Enda Medhane Alem architectural heritage case study research is; the area is undeniably exceptional testimony of this culture at its height and represents the expression of this civilization's creativity during this highly productive phase in architectural and urban development.

The current development motivation highly favors the new construction and urbanization. The small gesture designation Enda Medhane Alem as historical does not have the expected impact. Suggestion for Conservation will definitely have a positive environmental, social and impact on the surrounding area.

Cultural Heritage as economic, social and environmental asset is a phenomena that must be understood and further exercised for Adwa Enda Medhane Alem area extending to the different nucleus identified within this research.

Patterns of Obsolescence is the gravest threat for the architectural heritage. Patterns of obsolescence as discussed in detail Chapter two literature review of this study define a path

towards the complete loss of architecture in any particular area. In this regard functional, physical and economic obsolescence is observed in the majority of the buildings surveyed.

Adwa has special standings within the Ethiopian political, social, religious and cultural history. The settlement pattern and the picturesque townscape also make old Adwa unique example of northern historic towns. The two hundred year old core of the old towns with its church, mosque and residential quarter is requires immediate attention.

The need for Physical, Economic, and Social Revitalization is critical at this point in time in order to conserve the area architectural value. Reduce, Re-use and Recycle must be adapted for Enda Medhane Alem area. Reusing buildings within the local community case point Dejach Tesfa Yohanece residence.

5.4 Recommendations

UNESCO defends the case of indivisibility of culture and development, understood not simply in terms of economic growth, but also as a means of achieving a satisfactory intellectual, emotional, moral and spiritual existence. This development may be defined as that set of capacities that allows groups, communities and nations to define their futures in an integrated manner.⁷

While the conclusion of this research is discussed in detail supporting and aligning with the finding discussion of this research; the researcher prefers to list out the recommendation in short and precise manner.

6.2.1 Building on Existing Urban Fabric

Based on the existing urban and architectural fabric a new building code should be developed to protect and build on the existing fabric. Dialogue workshops with residents is the path way to understand the needs and aspiration of the community for the future of the town.

⁷ [Closed: UNESCO Culture Sector](#)

6.2.2 Socio Economic

Revival of traditional crafts and skills handicraft Production are essential to realize the of socially and economically revived small town urban tourism development. A further study into the socioeconomic reinvigoration of the city is required. The financial support for the renovation of 40+ houses is and added budget requirement on behalf of the city administration.

6.2.3 Restoration and Adaptive reuse Development

Restoration of Dejach Tesfa Yohance as a cultural center and rearranging the Enda Medhane Alem church store building in to the church antique museum are one of the first steps towards demonstrating the feasibility of adaptive re-used within the Adwa old town.

6.2.4 Interpretation panels ruined and abandoned buildings

30% of the buildings surveyed in this research are ruins. The elders describe them vividly as jewels of the old town. This ruins play an important character defining role in the old town. This ruins can be a tourist attraction and part of the city tour itinerary for future tourism development.

6.4 Suggestions for Future Research in Adwa

This research has identified the difference between the different urban nucleuses of Adwa old town in the previous chapters of this research. This central elements have been the basis for the designation of research area. This will systematically allow future researchers to pursue the study of architectural heritage in other parts of the old town clearly illustrated in the diagram on page 05.

As already discussed above this research focused on the buildings excluding religious buildings. The religious building as a center of development for the different part of the town serve a crucial role in understanding aspects of architectural heritage. With this understanding it is imperative future researchers pursue detail study of religious buildings in regards to architectural heritage.

This research has collected overall data for 42 heritage building within the Enda Medhane Alem area. This data digitalized can be used to prepare a Tourist Map.

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Annex

ii) Building Survey Format

Building Types:

Code	Building Name	Picture Number	GPS	Story Level	Floor	Wall	Column	Beam	Stair Material		Roof		Window		Door		Entrance	Fence	Remark		
									Internal	External	Shape	Material	Shape	Material	Shape	Material					

iii) Surveyed Building List and coordinate

Building Name	N	E
Kegn Azemach Gebremeskel Meshesha	14945.9	385355.4
Basha Ahemend Feyelom	14945.4	385355.5
Ato Geberemeskel Guwangul	14945.6	385356.5
Eseye Abrha Family	14944.4	385358.1
Memehar Meseret Gebermariam	14944.4	385358.1
Ato Geberemariam Asefaw (Murchant)	14944.1	385358.8
Belata Tesfaye Beyene	14943.9	385358.9
Aleka Gebermedhen Guwangul	14943.8	385358.8
Kegn Azemach Mengestu	14945.8	385359.5
Fitawrari Yehuwalashet Abera	14946.1	385359.2
Fetawrari Seyom	14945.9	385358.4
Kegn Azemach Germay Gezahagn	14946.8	385359.5
Kegn Azemach Teferi Kasay	14946.8	385359.9
Kegn Azemach Gereme Goshu	14948	385359.8
Kegnazemach Asegedom	14948	385359.8
Kegnazemach Abrha Beru	14948.9	385355.8
Belata Gerenchel	14949.5	385354.7
Dejazemach Tesefa Yohanes Berhane	14950.1	385355.3
Kegnazemach Gereme Goshu	14951.1	385358.8
Wro Zemam Berhane	14951.3	385359.2
Ato Kelemework Wase	14950.8	385859.4
Dejazemach Germay	14950.8	385359.4
Ato Berhane Weldu	14949.5	38541.4
Terfetahun Demoz	14950	38544.6
Kegnazemach Abrha Gebru	14949.5	38544.4
Debere Menkol Gedam	14951.3	38546
Bitewelegn Gebre	14948	38545.6
Belata Bitewelen Fantahun	14947.4	38544.2
Wro Tebere Kasa	14946.8	38543.9
Ruin	14945.6	38541.5
Ato Kasay Guma	14945.9	38540.8
K/a Kidanemariam Temanew	14946	38540.6
Ato Binega Aleme	14945.3	385360
Geberchristos Geberegiabher	14946.5	38540.8
Kentiba Haregot	14946.7	385409.2
Shewanesh Berhane	14946.7	385409.5
Reese Gebere Beyene Tedla	14946.9	385409.6
Ruin	14948.2	38541.7
K/a Geberemeskel Meshesha 1	14952.8	385355.8
K/a Geberemeskel Meshesha 2	14952.8	385355.3
Ruin	14948.3	385354.6
Ruin	14948.7	385355.2
Wood Market Partial	14948.3	385352.4
Bokolo Ersha	14944.7	385349.6
Ato Berhe Gebremariam	14944.7	385349..6

Mosque		
Reese Gebere Beyene Tedla	14942.6	385358.7
Sega Bete Leke Diyakonat	14942.7	385358.5
Tela Bete	14943.6	385359.6
Ruin	14948.5	385359.3

Table 4: Surveyed bulding list with coordinate

iv) Surveyed Heritage buildings Map

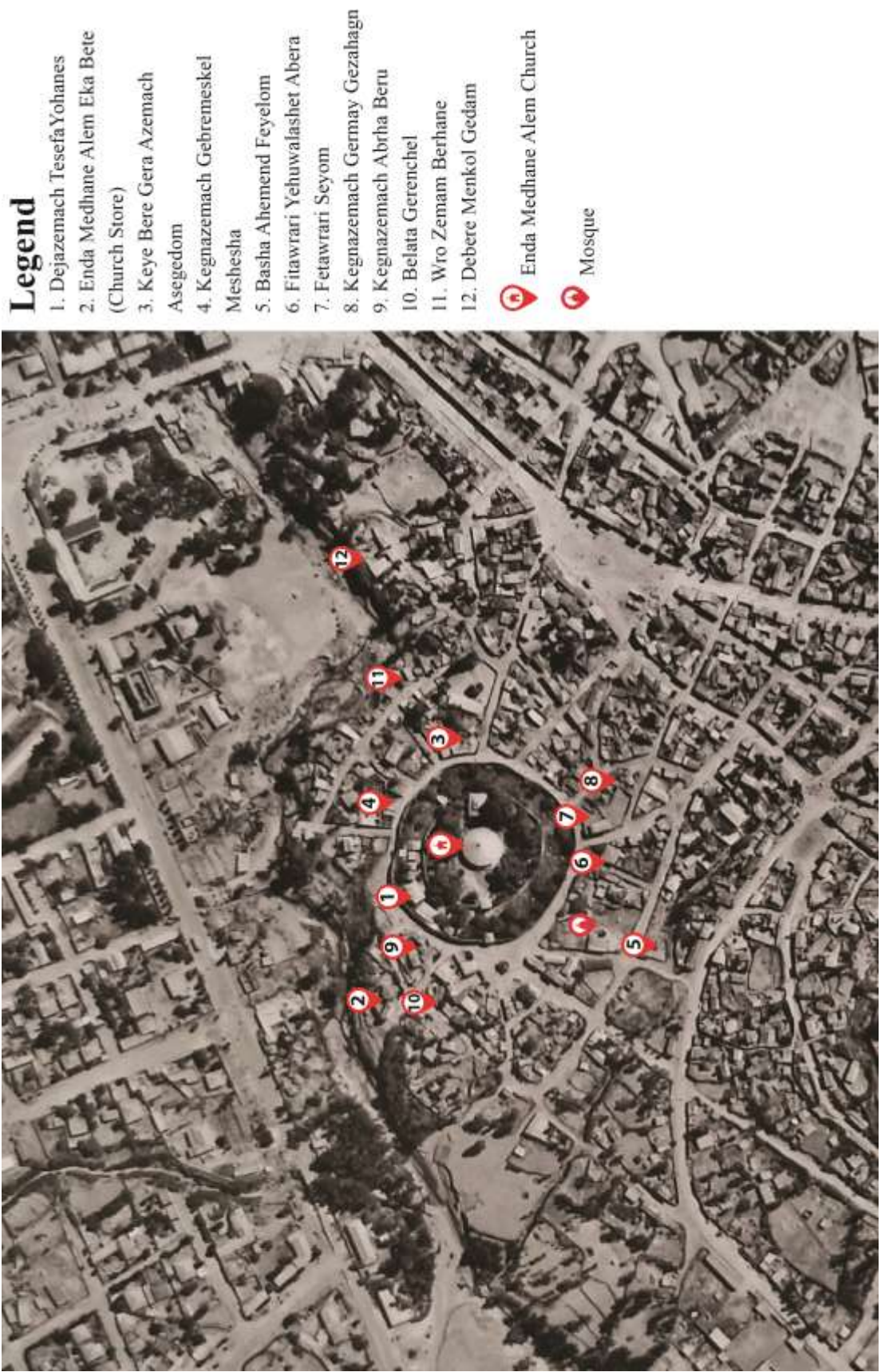


Figure 34: Surveyed Heritage buildings Map

v) Survey Questionner Interview Questions Format

Adwa Old town Enda Medhane Alem Area Architectural Heritage research Questionnaire

1. How long have you lived in Adwa?

2. As a local resident are you able to sense a difference between the old town of Adwa and the rest of the town or any other town? Please clarify.

3. In the Adwa old town own/rent

Residence

None

Business

Other

Both

4. What do you think is/are the most noticeable or important heritage features in Adwa? Please clarify.

Residential Buildings Characters

Market area character

Specific Building Character _____

Specific Structures _____

Specific Architectural feature _____

General streetscape or landscape features

Cultural History

Construction materials

Other (please specify)

5. How important do you think it is to help protect those features?

6. Is there any unique feature of the old town of Adwa that you think is different from other parts of the town?

Extremely Important

Very Important

Important

Not Important

7. Is there a certain part of Adwa that you feel would be more appropriate for designating as Heritage? If yes please specify and clarify.

8. What do you think are the perceived risks to the conservation of the heritage character in Adwa?

9. . What kind of information, programs or guidelines do you think would help preserve Adwa heritage assets?

10. If you have information related to the history of your house, street or the community, or any other sources of information (for example – knowledgeable people, letters, photos, diaries, letters, photos, etc.) that would help this study with respect to Adwa architecture, historical events or people please elaborate in the space below and provide your name, phone number and / or address below to contact you for further details.



EiABC

Ethiopian Institute of Architecture,
Building Construction and City Development
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Designation of Architectural Heritage for Sustainable Conservation of Enda Medhane Alem Area Adwa, Ethiopia

Addis Ababa University, EiABC

Addis Ababa, Ethiopia

April, 2021

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Advisor: Fasil Giorghis

Abstract

The objective of this research is to study Adwa's old town Enda Medhane Alem area architectural heritage and sustainable conservation approaches. Answering two questions of *'what is the architectural heritage value of Enda Medhane Alem area?'* and *'what are the approaches to sustainably conserve the area?'*

This paper aims at the analysis of designation of Architectural Heritage for Sustainable Conservation old Towns of Ethiopia: the case of Enda Medhane Alem Area Adwa. Due to rapid development and population growth, Adwa has experienced great change in recent years and is now seriously endangered by this problem. Especially in the historical area of the Enda Medhane Alem Area, the situation is deteriorating. In this study, careful observation and research was carried in the area from both architectural and social point of view.

The study extends to recommending benefits using cultural heritage as an asset in tourism development resulting in economic revitalization. The work is based on a theoretical overview of international conventions relevant for architectural heritage and best practice to cultural heritage with respect to influences of change and development.

Key Words: Architectural Heritage and Sustainable Conservation

1. Introduction

1.1 Background

Heritage is what makes a community what it is today and essentially is one generation's inheritance from the past and its bequest to the future – each generation should act as custodian for the next. Heritage is usually associated with the past, history and the historic built environment together with traditional cultural and social aspects (“collective memory”, way of life) of a community or country. The built environment are inherited and go to make up, in Adwa's case, the town's “heritage” and as such are the subject of this paper.

Heritage serves to shape values, ground aspirations and inspire creativity and a sense of belonging within a community. It contributes to social stability, civic pride and a richer quality of life by providing a framework upon which a community, district, even a country, can continue to grow and develop socially and, economically. Active awareness and protection of heritage assets promotes sustainability of the social framework as well as the natural and built

environments and recognizes the intangible values brought by honoring the past while planning for the future.

First glance of Adwa town confirms the rich architectural heritage; this heritage requires protection and guidance to environmental, social and economic sustainability. Though architecture is highly important in the Adwa history and development it seems that it is somehow neglected through several reasons. Therefore developing a research that rises with this activity is crucial in order to preserve the architectural heritage. Adwa historic urban area; beyond the use as historical research embodies the values of traditional urban cultures. Unorganized ways of construction and restoration in some cases are treacherous to the architectural heritage authenticity. In this process recommendation for the development of a strategy towards a sustainable future is crucial.

The architectural heritage of Adwa further faces complex challenges. Adwa being threatened, physically degraded, damaged and destroyed, by the impact of the urban development that follows the economic development directive. In the face of rapid development there is a tendency to value anything that is new and modern. Urban renewal and infrastructure development projects are gradually destroying the old town in an effort to raise Adwa to the standard of modern development.

Assimilating the modern development pressure with the heritage has thus emerged as a challenge of local officials. Beyond a modest gesture to designate the old town as historic; the old quarter is not seen as a potential resource worth protecting in the future development of the town. Conserving the architectural heritage requires the consideration of heritage value in the local development plan.

1.2 History of Target Area

The district and the town of Adwa is so old and has been of great political and economic importance and is one of the most celebrated places in Ethiopia; due to this it rarely failed to attract the attention of modern travelers and scholars (Ephrem, 1986). According to Doctor Marid W/Aragay, the history of Adwa is like of Harar and Gondar and its genesis is similar to Gendabalo and Wasel. The town originated as a market center inhabited by crafts men and traders.

Adwa is located where ancient civilization of Ethiopia flourished with proximity to the two ancient pre-Axumite and Axumite states of Yeha (c.5th century B.C.) and Axum (c.1st -2nd century A.D.) respectively makes what is today Adwa and its environs part of these ancient civilizations.

Collection of houses and people in the town went on growing as the urbanization process went on gathering momentum. Bruce, who visited the town in 1769, estimated the existence of about 300 houses and a population of about 1900. On the other hand Salt who came to Adwa in the early 19th century estimated the number of houses to be 800 with an estimated population of 8000. Likewise, other European visitors of 19th and 20th century also described the urban character of Adwa taking into account the commercial, political and social significance of the town.

Generally, Adwa developed as commercial, craftworks and political center particularly since the 18th century and its growth, as witnessed by different travelers, was smooth and dramatic until the end of the 19th century. Since then, however, various factors affected its pace of growth, as has been stated above. Yet, the urbanization process continued assuming other trends of development particularly after the Italian invasion of the 1930th.



- Enda Medhane Alem
- Enda Selassie
- Enda Gebriel

Figure 1: Map showing the urbanization of Adwa around the three churches

The churches of Enda Maryam, Enda Mikael, and later Enda Medhane Alem followed by Selassie formed the nucleus of much of the towns social life given the population with clustered around them. The narrow roads and alleyways of the old town radiated from the connected the churches. To this day the church parishes or neighborhood are referred to as Enda Michael, Enda Gabriel, Enda Medhane Alem.

The research sampled and studied four different heritage buildings within Enda Medhane Alem area and extends to the identification of Adaptive reuse proposals. The sampling method is discussed in detail on the next chapter.

The earliest settlement place of the town, according to Merid (1984), is said to be the parish of Enda Medhane Alem particularly in what was known as the Slange (probably the corrupted version of Islamge) area. Of course, when Adwa is divided on the basis of river Assem, the area to the south of the river, i.e. the parishes of Enda Medhane Alem, Siyon, Silassie and Gabriel are reported to be the oldest sections of the town; and this is also confirmed by different 18th – 19th century European travelers as well as by elders of the town. Later on, the Italians established their quarter the other side of river Assam, and thus the river served as a dividing line of the indigenous and the Italian settlements.

One apparent feature of the town of Adwa that has been exhibited since the earliest time is that it was naturally endowed with wanza (*cardia Africana*) trees which according to travelers were “thickly planted in the enclosures around houses”. Other 19 century European writers, like Salt, also noted that there were a lot of gardens in the town some of which were cultivated with due attention (Pankhrust, 1982).

All the above historical statements indicate Adwa area has strongly been linked with the churches and monasteries that have existed in and around the town of Adwa since the Christian era .This in turn indicates the fact that settlements in the present day Adwa town and its environs have existed since long ago.

1.3 Methodology

In the instance of this research, the case study is of particular value. Generally speaking, the value of the case study approach “is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” Schramm (1971, cited in Yin 2003: p.12). More specifically, this approach is found useful for understanding a particular

situation in depth, and identifying cases that are rich in information. It is useful in situations where a great deal can be learned from a few examples, and particular patterns or themes can then be found across cases.

A case study approach is intended to study a contemporary phenomenon in its real life context (Yin, 1997). This approach relies on multiple sources of evidence. As such, it depends on the researcher's ability to create a comprehensive research strategy by integrating and triangulating information from these sources of evidence (Yin, 2003). In this way, the case study approach provides an in-depth, multifaceted analysis of a selected phenomenon.

As is discussed in the next part 3.3 case study selection criterion of this research, two buildings are selected to comprehensively answer the research question. Then the research process is directed to generalize the results of the case study analysis. This being said, it can be difficult to generalize from one case to another as circumstances often fluctuate based on various conditions and situations. While these specificities must be recognized and acknowledged, the findings should ultimately be generalized through strategically selecting case studies to cover the broad aspect of the research. While facilitating generalization, the case study method also grounds observations and concepts found in natural settings that can be studied closely.

The following criteria's were determined to guide the selection of the two cases.

- i. The case study should be located within Enda Medhane Alem area defined in the scope of this research. This consideration was predominantly based on research objective and scope.
- ii. The buildings should contribute a public and private component individually.
- iii. Feasibility of application of the adaptive reuse approach. This is important since from the 42 building surveyed within the site majority of the buildings are entertaining multiple tenants.
- iv. Must contribute to represent diverse story level; in this case the story level range from one to two.
- v. Must contribute to understanding Architectural feature of the site.

To study the architectural Heritage of Enda Medhane Alem and produce recommendation reflecting Sustainable Conservation Approaches; requires contextualization of international charters more specifically Burra charter. In this context to discuss the data collection it is important to review the rationale behind the selection of data collection methods.

Studying the architectural heritage starts with identifying the value; with this understanding (Australia ICOMOS Burra Charter, 2013) is cited to the assessment of cultural significance the method of data collection as follows:

- i. the developmental sequence of the place and its relationship to the surviving fabric;
- ii. the existence and nature of lost or obliterated fabric;
- iii. the rarity and/or technical interest of all or any part of the place;
- iv. the functions of the place and its parts;
- v. the relationship of the place and its parts with its setting;
- vi. the cultural influences which have affected the form and fabric of the place;
- vii. the significance of the place to people who use or have used the place, or descendants of such people;
- viii. the historical content of the place with particular reference to the ways in which its fabric has been influenced by historical forces or has itself influenced the course of history ;
- ix. the scientific or research potential of the place;
- x. the relationship of the place to other places, for example in respect of design, technology, use, locality or origin;
- xi. Any other factor relevant to an understanding of the place.

Basic questions about a structure that occur to this research include the following:

1. Who built it?
2. When was it built, altered, demolished?
3. What was it originally, what is it now, what was it meant to be?
4. Why was it built, why does it look the way it does?
5. How was it built, how has it been altered, how did it function?

Answering questions confronting historical aspects requires a multitude of primary and secondary source. To set the historical context of buildings of historical interest some of the reference books cited in the Bibliography was helpful. For buildings of local historical interest, secondary source material is often scarce and primary research was the only course.

The assessment of cultural significance is the basic objective of this research and follows the collection of information. The validity of the judgments will depend upon the care with which

the data is collected and the reasoning applied to it. In order to produce a sound research all the data is analyzed and used for the discussion of the findings.

<p>Part I: General Building Information</p> <ol style="list-style-type: none"> 1. Building Name 2. Location GPS 3. Present Owner 4. Present Use 5. Significance <p>Part II: Historical Information</p> <ol style="list-style-type: none"> 1. Physical History <ol style="list-style-type: none"> i. Date of Erection ii. Original and Subsequent Owners iii. Original Plans and Constructions iv. Alteration and Additions 2. Historical Context <p>Part III: Architectural Information</p> <ol style="list-style-type: none"> 1. General Statement <ol style="list-style-type: none"> i. Architectural Character ii. Condition of Fabric 	<ol style="list-style-type: none"> 2. Description of Exterior <ol style="list-style-type: none"> i. Overall Dimension ii. Foundation and Structural Systems iii. Walls iv. Distinctive Features v. Openings vi. Roof 3. Description of Interior <ol style="list-style-type: none"> i. Floor Plans ii. Elevation iii. Distinctive Features iv. Openings
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Table 1: building analysis frame work

2. Architectural Heritage

2.1 Heritage

Heritage is related to inheritance and signifies possessions and traditions that are inherited and passed on. The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines heritage broadly: ‘heritage is our legacy from the past, what we live with today, and what we pass on to future generations’. In this definition heritage is neither limited in time nor restricted to material objects, historic remains, buildings or artefacts.

Heritage is interpreted as the foundation of the present, the springboard for the future, with the present generation as its custodians and the creative link. However for many others, heritage has a different meaning, for example, ‘the culture, property, and characteristics of past times’; or, ‘today’s perception of a pattern of events in the past’. (Rodwell, 2007)

People have always had the need to refer to their history in order to ensure the continuity of a common identity that evolves over time. Heritage is a collective property which tells the history of a people, a city, or a territory, and is transmitted from one generation

to the next. Heritage makes it possible for the present generations to understand their place in history and to better cope with the constant change in society.

Each city remains unique in its specific identity. An identity related to its urban configuration, the built heritage, the urban components, the urban planning, the arrangement of streets and squares. An identity linked to its history, “its intangible heritage”: its urban advancement, symbolic and sacred places and sites, to which the population attaches a ritual/religious/social significance, and that testify to the periods in the history of the city that the populations recognize as being important, and that constitute their common identity (Rodwell, 2007).

Even though the urban development phenomenon was accelerated during the recent past centuries and was influenced by models coming from other continents, many African cities still possess visible traces of their origin as urban centers, of their immovable cultural heritage and, to a lesser extent, of their intangible cultural dimension (Christian Barillet and Thierry Joffroy, 2004). Some cities such as Timbuktu, Djenne, Kano, Bobo-Dioulasso, Abomey and even Kampala and Axum are internationally recognized as historic cities. Indeed, their present structure is still strongly related to their original configuration, the built environment all closely connected with original ritual practices which are still alive today. The Ethiopia comprises a large variety of architectural creations. Ethiopians have developed construction practices that allow them to creatively respond to various requirements while taking full advantage of the available materials present in their natural environment.

The traditional architecture, whether religious political or more simply residential, is usually a mixture of rich artistic accomplishments. The regular maintenance practices, which are technical, social and ritual in nature, have, in some cases, been adopted and implemented on the religious architectures. Certain architectures have a very strong character, resulting from the cleverness of the designs and construction techniques employed, which allow for an optimal use of the materials, depending upon their availability. They also take into account the needs for maintenance and program them from the beginning of the construction process, with a view to optimizing and minimizing them (Christian Barillet and Thierry Joffroy, 2004).

2.2 Old towns, Heritage and Conservation in Ethiopia

The concept of "area conservation" has been adopted in international conventions and recommendations concerning the preservation of the cultural heritage, which provide for such

measures as legal protection, zoning, regulations, subsidization, technical assistance, etc. Ethiopia's historic sites threatened by urban development may be protected in various ways, there are specific recommendations for individual sites (Aalund, 1985).

The Government of Ethiopia has nominated a number of outstanding cultural and natural sites for inclusion on the World Heritage List. Ethiopia has ratified the Convention concerning the Protection of the World Cultural and Natural Heritage, which came into force in 1975.

International assistance for the preservation and presentation of Ethiopia's cultural heritage goes back to 1967 when UNESCO sent an expert to advice on the organization of the Ethiopian Antiquities Administration. Later consultancy missions concentrated on the restoration of sites and monuments likely to attract tourists from other countries and thus contribute to Ethiopia's economic development. (Aalund, 1985)

In selecting sites and monuments for restoration, priority was given to those easily accessible from tourists' places of arrival, or included on the "Historic Route", assuming that they would be among the first to be provided with hotel facilities of an international standard. The report prepared by Sandro Angelini in 1971, entitled "The Historical Route Monuments" concentrated on the main tourist attraction areas of Aksum, Lalibela, Gondar, and Lake Tana.

Proclamation No.229 of 1966 provides for the protection and preservation of antiquities in Ethiopia. It defines "antiquity" as "any construction or any product of human activity, or any object of historical or archaeological interest, having its origin prior to 1850 E.C.5". The antiquities so defined were declared to be "property of the State" to be administered by the Head of the Office of Archaeology.

Proclamation No. 839/2014: A proclamation to provide for the Classification of Cultural Heritage in to National and Regional Cultural Heritage defines the role of federal and regional organs in the administration of cultural heritages to void responsibility overlaps and waste of resource and to establish speedy administrative and procedural system.

2.3 Urbanization and Urban Development

Urbanization is the gradual shift of relative populations from rural to urban areas. Levels of urbanization are measured crudely by the percentage of population residing in urban areas, and the rate of urbanization as the percentage increase in urban population (UNDESA, 2014). The

sources of urban population growth include: rural to urban migration; natural increases in the population already residing in urban areas, and the urbanization of rural and peri-urban settlements. From a demographic perspective, urbanization has a people-centered focus. While urban development is the social, cultural, economic and physical development of cities, and the underlying causes of these processes (McGranahan G., and D. Satterthwaite, 2014).

Urbanization is a common and inevitable occurrence everywhere. While growth and expansion are beneficial for many people and businesses, there is a potential for loss of historical areas that are the heritage value to people. Heritage towns are frequent targets for the rapid transition to urbanization that is often accompanied by alteration of historical areas.

2.4 Modernity in the context of Heritage and Urbanization

As a concept, urban heritage is global and has a worldwide scope, but at the same time it harbors a number of notions and must be seen in relation to the different and specific contexts with which it deals. Urban heritage issues engage not only heritage managers and archaeologists but also geographers, landscape and urban planners, engineers, architects, anthropologists, and historians, among others. As cultural heritage issues in general, those concerning the urban heritage are interdisciplinary and multifaceted. The urban heritage often has a position “in between.” On one hand, it is constantly changing and under the threat of being destroyed due to the nature of urban development, and on the other hand, it is protected and conserved because of its historical values. Heritage structures are often regarded as a passive setting to the broader scope of the growing modern city. The ultimate goal is to strive for integration so that historic qualities and modern urban...

2.5 Identifying Heritage Value/Significance

Cultural value/significance means aesthetic, historic, scientific, social or spiritual value of the past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups (Australia ICOMOS Burra Charter, 2013).

The term cultural significance is synonymous with heritage significance and cultural heritage value. Cultural significance may change as a result of the continuing history of the place. Understanding of cultural significance may change as a result of new information.

Four factors are considered in (Australia ICOMOS Burra Charter, 2013) designating value to cultural heritage, namely aesthetic, historic, social and technological values discussed in the following points.

5.1 Housing Typology

As far as housing typology and morphology of the town is concerned, many 18th century European travelers tried to describe the town by looking at the various features of the town.

Originally the housing typology of the town consisted of two types some of which were conical form with thatched roofs (locally known as seqella) and the others were also of rectangular shape with flat roofs which are locally known as hudmo.

In fact, the pattern of settlement in the early times was that the houses were irregularly built as many of the 19th century travelers noted. The description given as “irregularly built” must be understood with western perspective in this case.

“irregularly built” is put under a citation because the definition of regularity depends on perspective and the observant background. There is a notion of defining African settlements as “irregular” but this settlements have evolved over time organically and must be observed and understood as such.

The following are architectural elements of Adwa architecture.

- i. Tebehi: Display house hold material Shelf
- ii. Deberi: Storage and Master Bedroom
- iii. Guwada: Kids Sleeping, Cooking
- iv. Bete Madi: Dining room
- v. Adarash: Living Room
- vi. Hidmo: Storage secured/master bed room
- vii. Hademe means Zega in Amharic which signifies closing
- viii. Eka Bete : storage

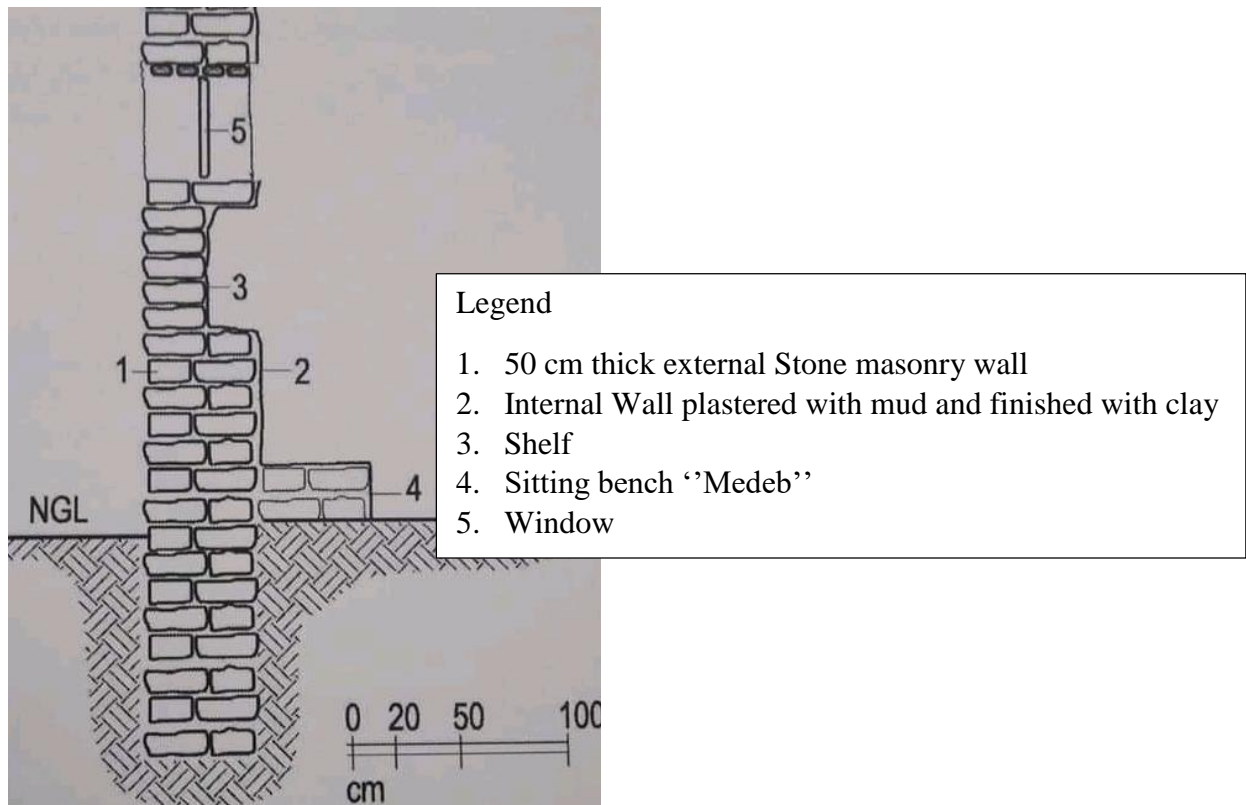


Figure 2: Foundation and wall

2.6 Challenges of Architectural Heritage

Functional obsolescence of buildings and public spaces arises when these structures become inadequate for the functions for which they were originally designed. Examples of this problem are the traditional houses of high income families in the historic centers, which were abandoned by their wealthy occupants when changes in fashion and the desire for modern amenities made new buildings become more desirable. The houses were turned into slum dwellings occupied by low-income families, a change of use that although destructive of the asset, is welcomed by the poor families who benefit from the central location of the housing and by the landlords who extract rental income is close to zero.

A similar pattern of obsolescence affects other types of historic buildings, such as old hospital buildings that become obsolete as a result of new medical technologies, old libraries that are incapable of accommodating modern sized book stocks or new information technologies, railway stations no longer used, or convents or churches that communities can no longer support (Rojas, 2002).

Physical obsolescence referring to the deterioration of the structure, installations, or façade of buildings to the point of turning them incapable of accommodating the functions they house. Usually the outcome of poor maintenance, physical obsolescence may also result from natural disasters (earthquakes or floods) or the unstained effect of the weather or urban activities (for instance, Vibrations generated by vehicles).

Economic obsolescence occurs when it is no longer profitable to continue using a building for its original purposes because the land on which it sits has increased in value, resulting in increasing pressures to tear it down and put the land to the market's "best and highest use." This process affects historic districts, particularly in large cities that continue to experience pressure for commercial development and services.

3. Heritage Value/ Significance

Defining Architectural Heritage of Adwa; as (Australia ICOMOS Burra Charter, 2013) States on Statement of cultural significance: "The practitioner should prepare a succinct statement of cultural significance, supported by, or cross referenced to, sufficient graphic material to help identify the fabric of cultural significance. It is essential that the statement be clear and pithy, expressing simply why the place is of value but not restating the physical or documentary evidence."

Adwa, with its striking and majestic scenery has existed since Axumite Times. Until the seventeenth century it was a small sprawling regional village. When the Gondar become the capital of the empire, one of the principal trade routes from the Red sea to Gondar passed through Adwa. Soon thereafter Adwa began to flourish as a commercial and trading center. For many traders and foreign visitors it was the 'de facto' gateway from the Red sea to Gondar or wherever the political power resided. In the eighteenth century Adwa rose to particular importance under the rule of Ras Micheal Sheul. IN the nineteenth century, however, Adwa was overshadowed politically first by Antalo and later Adigrat. Nevertheless it remained a major commercial center and emporium and a prize for which several warring nobles fought.

Dr. Richard Pankhurst notes in his book on the "History of Ethiopian Towns" that many foreign observers of the 18th and 19th centuries produced description of the towns, far more detailed in the fact of than available for any other settlement in Tigray. He notes that the Englishman, Henry Salt, who visited Adwa in 1805 and again in 1810, observed that the place "presented a striking appearance on the Account of the multitude of Wanza trees which were thickly planted

in the enclosure around the houses”. Another pleasant features of Adwa, Salt also noted was the existence of many “small gardens” “cultivated with considerable care; the town itself being plentiful supplied with water from tree streams, which take their course through the valley below”.



Figure 3: Designation of Adwa Enda Medhane Alem Area as a historic quarter

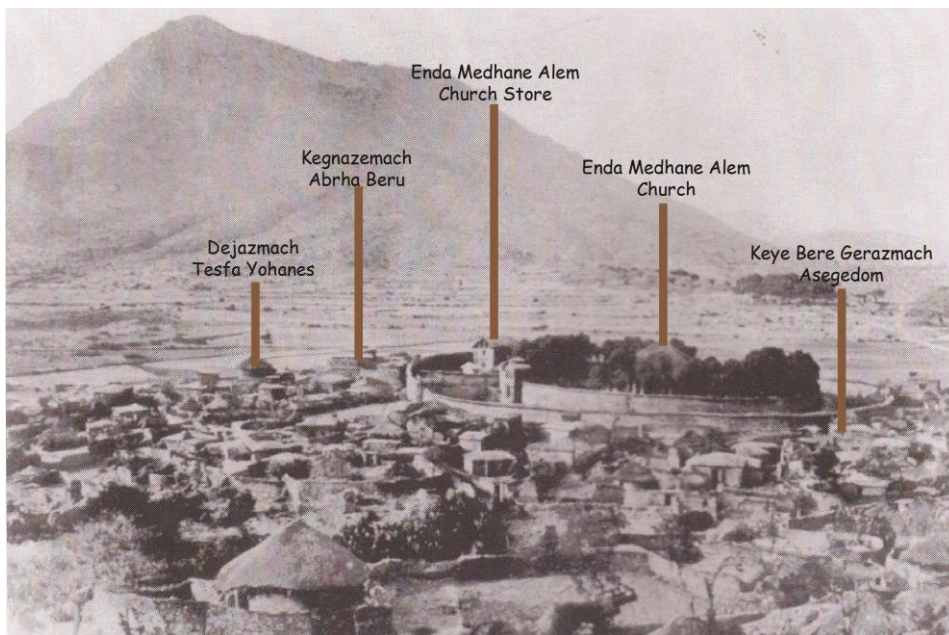


Figure 4: Enda Medhane Alem Area 1935 Source

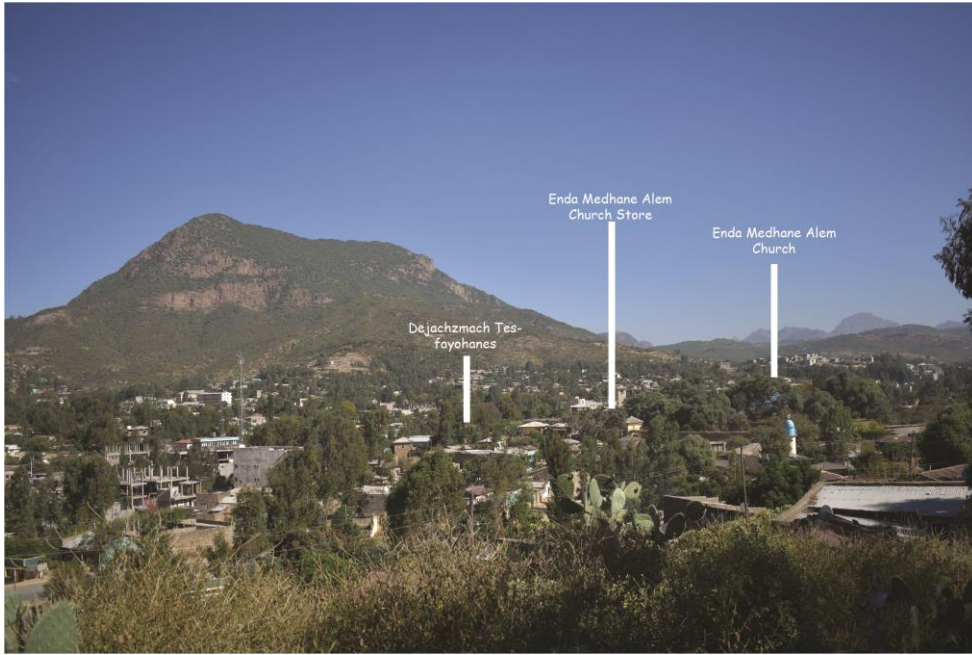


Figure 5: Enda Medhane Alem Church Area 2020

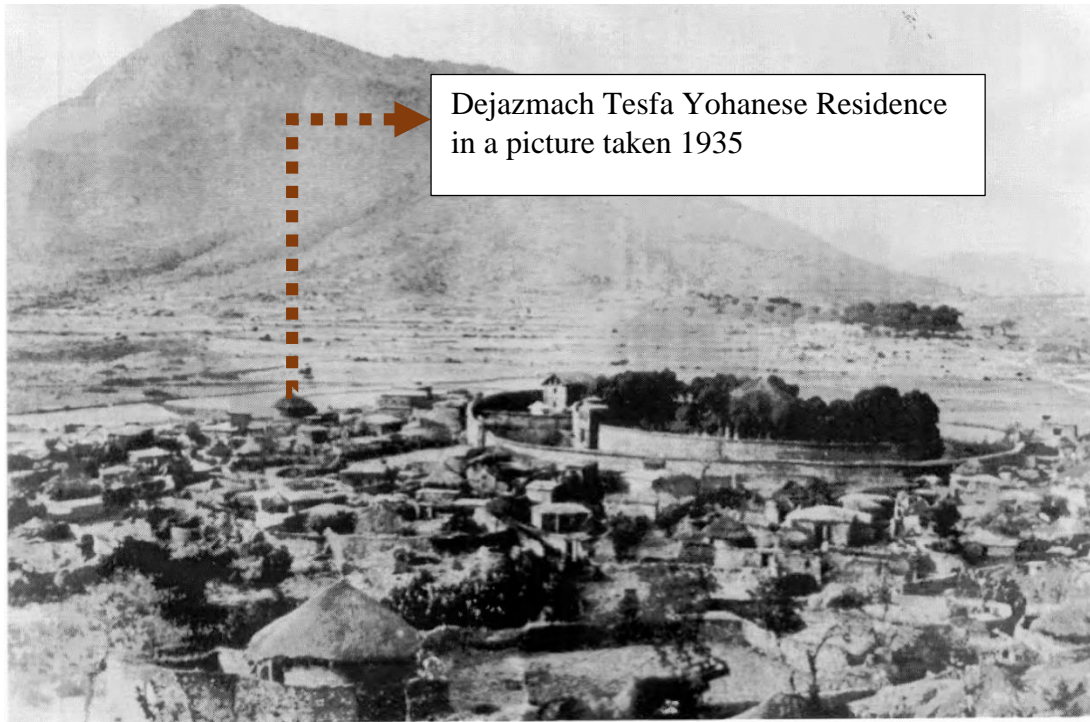
3.1 Dejazmach Tesfa Yohanese Residence



Figure 6: Dejazmach Tesfa Yohanese Residence Exterior

Part I: General Information

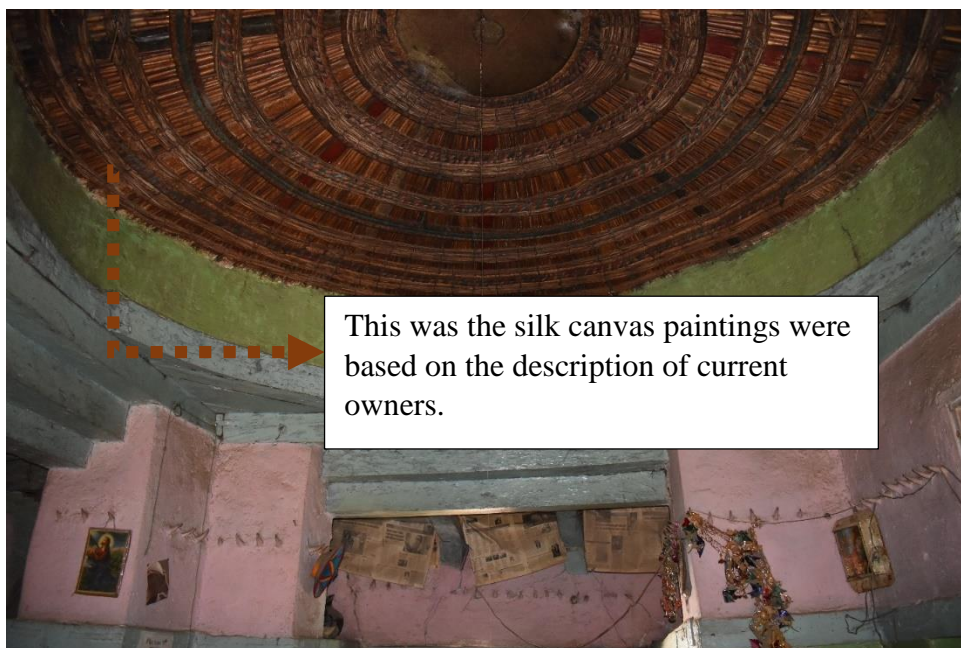
Location:	14950.1 N, 385355.3 E
Current Owner:	Dejazmach Tesfa Yohanese descendants
Current Use:	Rental (Currently empty)
Significance:	Architectural, historical, and social
Date of Erection	



Dejazmach Tesfa Yohanese Residence
in a picture taken 1935

Figure 7: Dejazmach Tesfa Yohanese Residence on 1935 picture (Richard Pankhurst and Leila Ingrams)

- i. Original and Subsequent Owners: There is a record on the Enda Medhane Alem church documentation the house was owned by Ato Mohamend a trader residing in Adwa.
- ii. Original Plans and Constructions: The building has retained most of the structural elements intact. The descendant of the Dejazmach Tesfa Yohanese has claimed there were silk canvas painting on the walls supporting the roof.



This was the silk canvas paintings were
based on the description of current
owners.

Figure 8: Silk canvas painting location

iii. Alteration and Additions

Because the building was rented for multiple tenants at the same time; they segregated their access by introducing new doors in to the building.



Figure 9: Wall altered to introduce a new door

Part III: Architectural Character

i. Distinctive Features

One of the most distinctive feature of the area architecture is the compound entrance; illustrated on the first picture marked 1. Compound entrances range from a simple one door opening, to wider entrance with a cover extending to two story compound entrance.

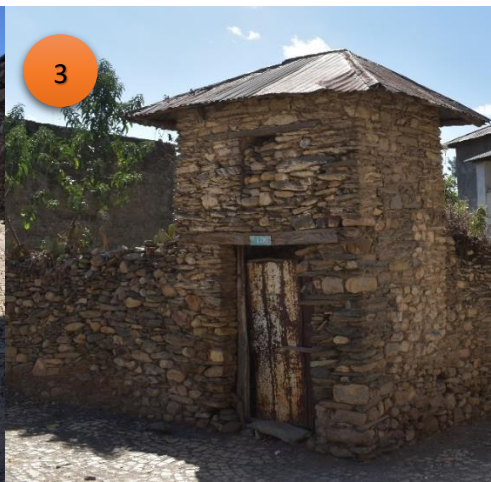
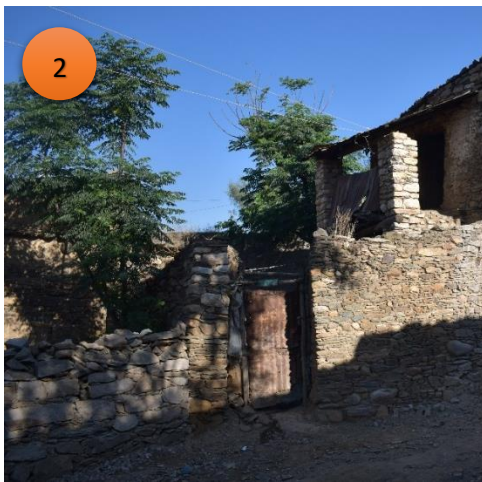


Figure 10: Compound Entrance



This one of the unique features of this area architecture. This is the only building with this feature.

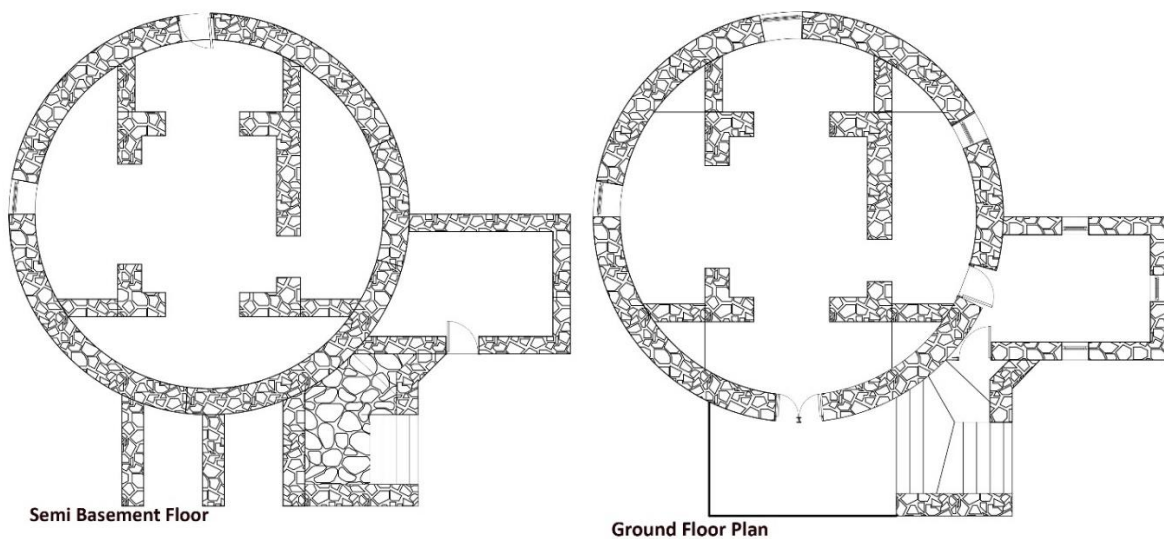
vii. Roof

a) Roof Shape, Covering: This building has a conical shape with a low angle.



Figure 11: Ceiling design

viii. Floor Plans



ix. Openings

a) Doors

- b) Windows are constructed with wood and have not been altered.



Figure 12: Double and single opening wooden windows with decorations

4. Conclusion

One of the main conclusions from the Enda Medhane Alem architectural heritage case study research is; the area is undeniably exceptional testimony of this culture at its height and represents the expression of this civilization's creativity during this highly productive phase in architectural and urban development.

The current development motivation highly favors the new construction and urbanization. The small gesture designation Enda Medhane Alem as historical does not have the expected impact. Suggestion for Conservation will definitely have a positive environmental, social and impact on the surrounding area.

Cultural Heritage as economic, social and environmental asset is a phenomena that must be understood and further exercised for Adwa Enda Medhane Alem area extending to the different nucleus identified within this research.

Patterns of Obsolescence is the gravest threat for the architectural heritage. Patterns of obsolescence as discussed in detail Chapter two literature review of this study define a path towards the complete loss of architecture in any particular area. In this regard functional, physical and economic obsolescence is observed in the majority of the buildings surveyed.

Adwa has special standings within the Ethiopian political, social, religious and cultural history. The settlement pattern and the picturesque townscape also make old Adwa unique example of

northern historic towns. The two hundred year old core of the old towns with its church, mosque and residential quarter is requires immediate attention.

The need for Physical, Economic, and Social Revitalization is critical at this point in time in order to conserve the area architectural value. Reduce, Re-use and Recycle must be adapted for Enda Medhane Alem area. Reusing buildings within the local community case point Dejach Tesfa Yohanece residence.

5 Recommendations

UNESCO defends the case of indivisibility of culture and development, understood not simply in terms of economic growth, but also as a means of achieving a satisfactory intellectual, emotional, moral and spiritual existence. This development may be defined as that set of capacities that allows groups, communities and nations to define their futures in an integrated manner.¹

While the conclusion of this research is discussed in detail supporting and aligning with the finding discussion of this research; the researcher prefers to list out the recommendation in short and precise manner.

Based on the existing urban and architectural fabric a new building code should be developed to protect and build on the existing fabric. Dialogue workshops with residents is the path way to understand the needs and aspiration of the community for the future of the town.

Revival of traditional crafts and skills handicraft Production are essential to realize the of socially and economically revived small town urban tourism development. A further study into the socioeconomic reinvigoration of the city is required. The financial support for the renovation of 40+ houses is and added budget requirement on behalf of the city administration.

Restoration of Dejach Tesfa Yohance as a cultural center and rearranging the Enda Medhane Alem church store building in to the church antique museum are one of the first steps towards demonstrating the feasibility of adaptive re-used within the Adwa old town.

¹ [Closed: UNESCO Culture Sector](#)

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