

# An emergency archaeological survey and documentation of the recently vanished archaeological site of Enda Abune Niwaye Kirstos, Asgede Tsimbla Woreda, Northwestern Zone of Tigray, Ethiopia



**Abstract:** This paper reports on an emergency archaeological survey demonstrating the potential of the archaeological site of Enda Abune Niwaye Kirstos of the Asgede Tsimbla Woreda in the Northwestern Zone of Tigray, Ethiopia. The study area is rich in archaeological findings like pottery, lithic artifacts, remains of structures, and inscriptions. Aksumite structures with inscriptions are the most abundant discoveries. Data collecting relied on field surveys as well as recording oral traditions. The data obtained through archaeological fieldwork, as well as through observation, review of literature, and interview were subjected to qualitative analysis and a preliminary chronology was established. The site could be tentatively dated to the Aksumite period based on parallels from other sites in the region. The research helped to reconstruct the culture of the site's inhabitants, and the site was documented before it was lost forever. The new data provides insights into the archaeological landscape, settlement patterns, and cultural traditions of the region, suggesting a remarkable continuity of cultural interactions between sites in the area. Lastly, the paper indicates human and natural destruction agents at the archaeological site under consideration and provides point-of-departure data for further archaeological investigations as well as prospective heritage and land management works.

**Keywords:** inscriptions, Aksumite period, heritage protection, church

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## INTRODUCTION

Ethiopia is renowned for its rich tangible heritage, including archaeological sites distributed across different regions and representing a wide chronological scope. The practice of legal archaeological surveying in Ethiopia has been ongoing for approximately a century. While the southern region has yielded a plethora of prehistoric artifacts, the discoveries in the north predominantly represent historical archaeology. Extensive exploration on the Tigray Plateau have resulted in the discovery of numerous pre-Aksumite and Aksumite archaeological sites, but many of them still await investigation. The limited scope of archaeological works is caused by many factors, including a shortage of skilled archaeologists within the country, limited interest from foreign expeditions, financial challenges, absence of written records, and a lack of awareness within the local communities regarding the existing heritage. Both international and Ethiopian scholars have been hindered from surveying and documenting these sites by political instability. In addition, transportation limitations have posed significant obstacles for past fieldwork.

### **OBJECTIVES, SIGNIFICANCE, AND SCOPE**

In northern Ethiopia, various surveys and investigations have been conducted by both foreign and local scholars at pre-Aksumite and Aksumite sites (D'Andrea et al. 2023; Fattovich 2010; Harrower et al. 2023). The Dutch Aksum expedition in 1906 was a starting point for archaeological research in the region (Getachew Meressa Nigus 2012). However, most of the research has focused on easily accessible

areas along the main road from Aksum to Adigrat and Mekelle, neglecting areas that are harder to reach. It is important to explore these less accessible areas as past populations may have settled there for various reasons, leaving behind valuable traces of their material culture.

The study area in the Northwestern Zone of Tigray, specifically in Asgede Tsimbla Woreda, which includes the archaeological site of Enda Abune Niwaye Kirstos, is prone to disasters caused by both human and natural activity, and it is therefore important to survey, document, and investigate the cultural heritage in this area before it is damaged. The project reported herein comprised an emergency archaeological survey and documentation of the site of Enda Abune Niwaye Kirstos and its material record. Additionally, its goals were to conduct a preliminary investigation to address concerns about the destruction of the archaeological site, to make inquiries about the objects and features found through unauthorized excavation during construction of a new church in the area, as well as to understand why scholars overlooked this site and failed to recognize its significance before it was damaged.

Beyond the aim to survey and document the archaeological site, the project was intended to bridge a gap in the archaeological knowledge of the country and region. Its goal was to help preserve and manage the site by proposing strategies for cultural heritage conservation and attract the interest of scholars, readers, and the public by sharing insights into the site's history through its archaeological

remains. Furthermore, the project was aimed at encouraging the authorities to transform the site into a popular tourist destination. The Northwestern Zone of Tigray in Ethiopia has many more unexplored archaeological sites, but political instability and limited resources have hindered further investigations and preservation efforts. Thus, additional support is needed to fully unlock the potential of these historical sites.

### **METHODOLOGY AND TECHNIQUES FOR ANALYZING AND INTERPRETING DATA**

A combination of qualitative research methods was used to gather reliable evidence during the emergency study in the investigated area. Despite challenges in identifying the sites, it was possible to successfully pinpoint a specific site and employ various data collection methods. The collected data, solely qualitative in nature, was analyzed and interpreted accordingly using a qualitative approach. The analysis was descriptive, focusing on ideas, opinions, and beliefs expressed by informants and the researcher's observations. Meticulous field observations were conducted of the prominent archaeological features, and classification based on typology was crucial for analysis and interpretation of the site.

The archaeological investigation took place in 2018 and spanned approximately four weeks, including phases of planning, fieldwork, analysis, and reporting. The small project made use of GPS devices for tracking locations, a camera for capturing images, and assorted minor field equipment. Surface survey techniques were applied throughout the investigation. Due to the urgent nature of the

work, only one site was thoroughly documented and reported, but it is likely that additional sites exist in the vicinity and remain undetected. Interviews were carried out with nine individuals, including residents, elders, priests, and tourism and heritage experts from nearby towns. The results of the research were recorded in photographs and comprehensive field notes. In compliance with national regulations regarding cultural heritage protection, the movable artifacts were securely stored at local administration offices utilizing proper shelving and labeling techniques.

### **LIMITATIONS**

A significant obstacle for the project was the lack of written documentation specifically related to the study area caused by the absence of previous archaeological investigations. Another major challenge was the ongoing conflict between Ethiopian, Eritrean, and Tigrean fighters. In addition, the research faced other hindrances including the unavailability of public transportation, limited budget, and security concerns, especially a constant fear of potential explosives in both survey and study areas. The geological and geographical characteristics of the area under investigation also contributed to the difficulty in accessing it on foot. The site itself is located at a considerable distance from Shire, approximately 63 km to the south of the city and 35 km southwest from the Shire–Gonder highway. These issues, combined with unique features of the site and time limitations, made this study exceptionally challenging. The urgent fieldwork focused on documenting the site, its sur-

face finds, and the material record of its past inhabitants. Efforts were made to understand why the ancient population chose to settle there, to determine the

size and dating of the site, and to assess its cultural development by analyzing evidence and comparing it to other sites and their environments.

## LOCATION OF THE STUDY AREA

Tigray is Ethiopia's northernmost federal state. It has a rich history dating back to 1600 BC, and it is known as the birthplace of the ancient Ethiopian civilization. Tigray is recognized for its acceptance of both Orthodox Christianity and Islam, fostering peaceful coexistence among its people. The region's cultural heritage, which includes rock-hewn churches and a unique alphabet, has earned it a place on the UNESCO World Heritage list. Despite its historical and cultural significance, however, the region's potential has yet to be fully realized. Tigray plays a pivotal role in Ethiopia's history, evident in its architecture, religious centers, and political frameworks. However, much of its historical wealth remains unexplored and undocumented.

The investigated site of Enda Abune Niwaye Kirstos lies on the Tigray Plateau,

within the Northwestern Zone of the Tigray region, and it falls under the jurisdiction of Asgede Tsimbla Woreda [Fig. 1]. The site is situated 86 km from the pre-Aksumite Yeha, the heart of the Da'amat kingdom, and 61 km west of the capital of the Aksumite kingdom, Aksum. The area of Asgede Tsimbla Woreda, located 26 km southwest of Shire city, is bordered by districts Tahtay Koraro to the north, La'elay Koraro to the west and south, Medebay Zana to the east, and Tselemti to the south. It covers 75,447 km<sup>2</sup> and plays a vital role in preserving the cultural heritage of the area, including the renowned Debre Abay monastery, as well as the local environment.

The study area has two main eco-zones: a flat plain suitable for year-round plow cultivation with irrigation, and hills/mountains less suitable for

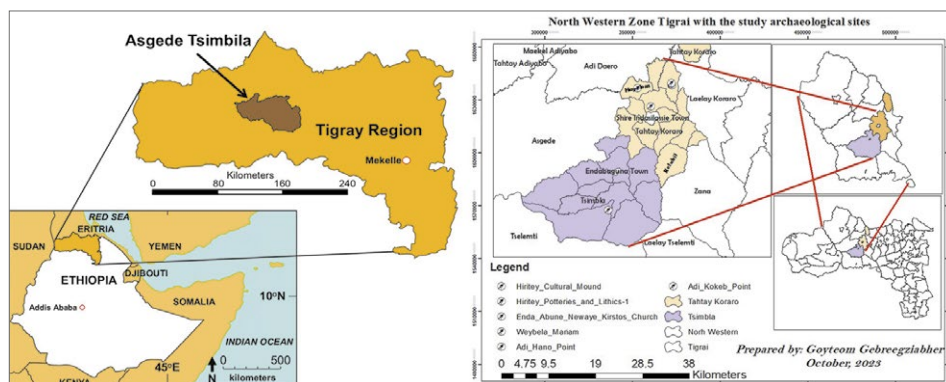


Fig. 1. Location of the study area in the Northwestern Zone, Tsimbla Woreda district (Map created with ArcGIS by Goyteom Gebreegziabher, 2023)

ox-plow cultivation. The physical environment is rich in natural resources like vegetation and streams, as well as cultural assets linked to urban development (Asgede Tsimbla Public Relations Office 2018).

The geological context of the Northwestern Zone of Tigray, mainly the Asgede Tsimbla district, largely owes its unique features to widespread volcanic activity that formed imposing mountains and plateaus, including the undulating range of Endab-Guna and its surroundings (Asrat 2002; Butzer 1981; Machado, Pérez-González, and Benito 1998). Many flat-topped plateaus, locally called *gobos*, were completely isolated from one another, and therefore constituted good defensive sites for settlements [Fig. 2]. The isolated nature of these highlands, including the study area, had important implications for the archaeological and historical reconstruction of past human settlement patterns and cultural development (Gebru et al. 2009). The exposed nature of the Enda Abune Niwaye Kirstos plateau is due to gradual erosion possibly caused by ancient human activity over time.

Among the geological and geomorphological features of the study area and its surroundings are sedimentary rock formations seen in the varying terrain, as well as volcanic ridges and metamorphic outcrops. The presence of sediment deposits in the area contributes to its fertile soil. One of the main soil types of the Asgede Tsimbla district is a reddish and black-colored soil, which results from the presence of volcanic ashes and is recognized as fertile and well-suited for crop cultivation (Feoli, Vuerich, and Woldu 2002; Machado, Pérez-González, and Benito 1998).

Palaeoecologists widely concur that climate changes play a significant role in explaining the emergence of states (Gebru et al. 2009), settlement patterns, and shifts in adapting to the environment (Bard et al. 2000). Likewise, the moderate climate of the Tigrayan highlands facilitated permanent settlement and abundant agricultural productivity. The historical background of the Northwestern Zone of Tigray provides compelling evidence for the changing spatial and temporal availability of resources and resulting interconnections between ancient communi-



Fig. 2. The environment in the Enda Abune Niwaye Kirstos area in 2018 (Photos Gidey Gebreegziabher, 2018)



ties (Bard et al. 2000). Over an extensive period, ancient civilizations established their settlements on the now-depleted semi-arid Aksum–Shire Plateau in the Tigray Region (Butzer 1981; Michels 2005). This area, including the site of Enda Abune Niwaye Kirstos, offers valuable data on the potential interactions between palaeoenvironments and trajectories of ancient civilizations (Machado, Pérez-González, and Benito 1998).

The study area falls within the intermediate (mid-latitude) zone, considered favorable for human settlement (Egziabher et al. 1998; Finneran 2011). Consequently, there may have been a significant loss of vegetation (deforestation) and extensive land degradation due to intensive land use throughout its history. These factors have played a significant role in climate fluctuations and soil erosion in northwestern Tigray (Feoli, Vuerich, and Woldu 2002; Machado, Pérez-González, and Benito 1998). In terms of hydro-climatic conditions, the Tekezze River facilitated access to water and interaction of ancient populations inhabiting both its sides (Curtis 2004). Therefore, due to its geographical location, the re-

gion, and specifically the study area, seem highly susceptible to climate change and its impact on ecosystems. However, further investigation from archaeological and geological perspectives is necessary to confirm this.

According to the altitudinal and latitudinal data, the study area of Enda Abune Niwaye Kirstos is in the temperate zone, with warmer and slightly drier conditions. The climatic zone, however, falls under the subtropical, summer-rain climate, with an annual temperature of approximately 25°C. The climatic conditions are mainly characterized by dry and rarely very dry seasons, with annual rainfall ranging between 500 mm and 900 mm. Most of the land is suitable for agriculture (Asgede Tsimbla Public Relations Office 2018).

The district under study offers a variety of tourist attractions, including the picturesque Tekeze River gorge and the historic Debre Abay monastery, which contribute to the area's economy as tourist attractions. Other notable sites include the Italian cemetery at Mai Bekli, Flasha's tombs, and Dedebeit, where an important revolution took place. It also

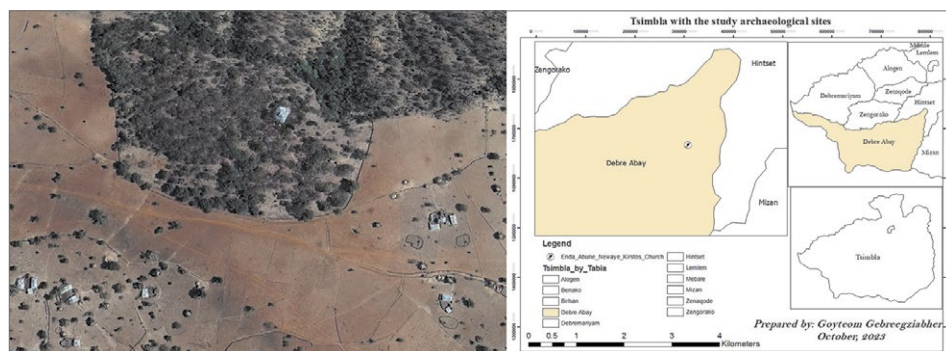


Fig. 3. Location of the Enda Abune Niwaye Kirstos archaeological site (Drawings Goyteom Gebreegziabher, photo Google Earth, 2023)

features the St. Giyorgis church, as well as prehistoric cave sites. The presence of other undocumented archaeological,

religious, and natural sites underscores the importance of further exploration and preservation initiatives in the region.

## ENDA ABUNE NIWAYE KIRSTOS ARCHAEOLOGICAL SITE

The archaeological site of Enda Abune Niwaye Kirstos ( $13^{\circ} 83' 42.82''$  N;  $38^{\circ} 15' 92.57''$  E, 1879 m a.s.l.) is located in the Northwestern Zone of Tigrai, specifically in the Asgede Tsimbla Woreda, in the Adi Shiwa peasant association [Fig. 3]. Extensive archaeological research on the site had been recommended

to fully understand the chronology, nature, and value of the site, as well as to plan the development of future tourism and heritage management. However, this need became urgent in 2018 following a call from the local community regarding the construction of a new church on the site [Fig. 4].



Fig. 4. Ancient wall foundation with a newly constructed structure on top (A); black ware Aksumite pottery and a fragment of curved stone (B); newly built church (C) (Photos TCTB)



The site spans around 2.25 ha and includes intricately carved stones, inscriptions, and a central circular stone feature. The visible remains suggest that it was the site of a church, which, according to oral testimonies, was dedicated to Enda Abune Niwaye Kirstos. Its central area was utilized as a chapel for church services by the local communities. However, growing interest from the community in constructing a new church has put the old structure at risk of destruction resulting from excavations and other forms of damage to the site. Destruction of the site commenced in late 2016, although the construction project faced delays until early 2018 due to budget constraints and conflicts of interest. The extent of the destruction was significant, resulting in considerable damage. The demolition of the remaining structures, which were intended for reuse in the construction of the new church, significantly impacted the archaeological site.

The terrain surrounding the archaeological site of Enda Abune Niwaye Kirstos, stretching across a vast area along the Tekeze River, boasts breathtaking natural beauty. The landscape remains largely undisturbed by human activities. Despite the site's remote location, however, cultural practices such as collecting native plants and extraction of natural rock for personal gain have led to its degradation.

Approximately 350 m north of the Enda Abune Niwaye Kirstos site, there is another significant location recognized as the dwelling and resting place of the founder monk Adi-Shiwa, associated with Enda Abune Niwaye Kirstos. The latter site currently serves as a burial

ground. Both the burial site and the cultural mound are situated near the cliff of Adi Shiwa Kushet, a locally recognized spot that constitutes the administrative border with the neighboring peasant association. All three locations form part of the unexplored cultural heritage of the region under study.

Despite the site's significance, the Tigray Culture Tourism Bureau (TCTB) had not received any information regarding the archaeological site of Enda Abune Niwaye Kirstos. An emergency report, revealed in 2018, had been concealed from the TCTB for nearly two years following its release.

As in the case of other lesser-known cultural heritage sites in Tigray, it seemed crucial to conduct a comprehensive survey and documentation to assess the tourism potential and importance of Enda Abune Niwaye Kirstos. Therefore, it was decided that experts should evaluate and analyze this site to provide a detailed description and determine its current value. Acknowledging and highlighting the cultural significance of this location could attract more attention and visitors, thereby contributing to preservation and promotion of Tigray's cultural heritage.

The present author documented the archaeological findings, structural remains, and diverse material culture groups, particularly focusing on the prominent mound located at the site of Enda Abune Niwaye Kirstos, as well as on the inscriptions discovered on the standing structure at this location. Regional narratives suggest that the mound, recognized as the resting place of the monk Abune Niwaye Kirstos, was constructed by monks from the Shiwa region in Oro-

mia. These monks reportedly ventured to the area to propagate Christianity in the 15th century, amidst the conflicts of the Ahmed Gagn war against the Christian faith. The founder of the church in Enda Abune Niwaye Kirstos is believed to have been one of these monks. The area, initially settled by the monks from Shiwa, was later inhabited by their Christian followers. The monks built their isolated structures within one compound, as well as separate houses for male and female monastics. The story about the initial settlement by monks from Shiwa was recounted to the present author by Mr. Berhe Weldegrima, who was familiar with the region, during an inquiry about the area.

The archaeological site spans an extensive area exceeding 2.5 ha and is characterized by a variety of scattered ruins of differing dimensions. Near the burial mound, dressed stones have been

uncovered, suggesting the existence of wall foundations that had likely formed part of the site's main edifice. Although many of these stones are obscured by soil and small stone piles, their outlines remain discernible. The site of Enda Abune Niwaye Kirstos encompasses more than a dozen distinct structures situated in proximity to this building. The ruins are overgrown with indigenous flora including *shittim* (*Vachellia nilotica* L.) and *akacha* (*Acacia abyssinnica* L.). A notable feature of all the structures is the use of unworked stones. Interestingly, the dilapidated buildings are situated close together in a small area, in contrast to the contemporary residential dwellings near the site. Most of these structures are circular in plan. These are currently the only visible elements of the site until further historical and archaeological investigations shed more light on its features.

## ANALYSIS AND DISCUSSION OF THE FINDINGS

This study offers an initial discussion of the results, focusing on the ceramics, in-

scriptions, and structures identified during the investigation.



Fig. 5. Black ware and red-orange ceramics (Photos TCTB)

## CERAMICS

In the area under investigation, a diverse assemblage of pottery fragments with varying decorations, colors, and forms has been identified and recorded, although analyzing their physical characteristics at this initial survey stage presented challenges. Therefore, the research focused on the decoration and color of the collected pottery, which were treated as chronological and cultural markers. A comparative analysis was performed, drawing on published studies of pottery from different parts of Tigray to establish a tentative relative age of the archaeological discoveries at the site (Bard et al. 2000; D'Andrea et al. 2008; Fattovich 2010; Kifle Zerue 2014; Phillipson 2002; White and King 2007). Upon initial examination, the

ceramics discovered at the site proved to represent black and reddish-orange wares characteristic of the Aksumite period [Fig. 5]. However, further evaluation is required to provide more detailed insights.

## Structures

The site of Enda Abune Niwaye Kirstos features remains of a modern rectangular building standing on top of older structures [Fig. 6]. The stonemasonry consists of quarry stones joined without any mortar. The structure is surrounded by remains of auxiliary buildings standing at various distances from one another. The main building stood on a substructure consisting of tiers 44–50 cm tall and 6–7 cm wide at their highest point. The substructure had a trapezoidal outline



Fig. 6. Fragments of an Aksumite building (Photos TCTB)

and was reinforced by quoins for stability and cohesion. Additionally, facing blocks were found along the sides of the building on top of the substructure. Another notable feature of the buildings was alternating projections and recesses in the façades of both the main structure and the auxiliary buildings. This feature, as well as the overall appearance of this architecture, are typical of Aksumite construction (Phillipson 2012).

The central building had broad monumental stairs comprising seven steps and ending with a paved threshold in the doorway. These steps were constructed on top of a substructure which formed what can be referred to as the “ground floor” of the central building. This ground floor was di-

vided into nine relatively small rooms organized in rows of three. In one of the corner rooms there was a corner masonry block indicating the presence of a wooden staircase. These rooms had been cleared out, as the lack of paving slabs suggests that they were removed after the abandonment of the building. Given the rooms’ small size and the existence of a staircase, the ground floor was likely utilized for storage, while the living spaces were probably situated on the upper floor. The space of the upper floor would have also necessitated the existence of posts or pillars. Circular mounds of masonry in the substructure indicated the location of slabs meant to support such posts, which presumably had been made of wood. Wood was



Fig. 7. Still-standing wall at Enda Abune Niwaye Kirstos and detail with an inscription, 2018 (Photos TCTB)



a material commonly used in Aksum for floors, door frames, and beams, and even integrated into walls. Baked bricks were also employed for specific purposes. These architectural elements are fundamental characteristics of Aksumite design, evident in monumental structures. Despite some deviations, this traditional style was consistently prominent in Aksumite architecture. Stuart Munro-Hay (1991) dates Aksumite stelae to the 3rd and 4th centuries, and obelisks, royal tombs, and palaces to the 6th and 7th centuries.

The structures at Enda Abune Niwaye Kirstos find parallels in past discoveries. In 1906, a German expedition made significant findings in Aksum, where three imposing partially preserved structures were excavated and examined (Littmann, Krencker, and von Lupke 1913). Known as “princely residences” or “royal palaces”, these buildings stood out due to their exceptional masonry, size, and central location within the ancient city. Interestingly, in Adulis, on the other end of the Aksumite territory, along the Red Sea coast, an Italian expedition led by Rodolfo Fattovich (2010) discovered architectural remnants that bore a resemblance to the monuments found in Aksum (Bard et al. 2000; Fattovich 2010).

In the 1960s, an important discovery was made in D'ngur, located just west of Aksum. The Ethiopian Institute of Archaeology, in collaboration with the French Archaeological Mission, uncovered remains of a residence that had belonged to a member of the upper class of Aksumite society — likely a wealthy merchant. Although the exact identity

of this person remains unknown, the design of the dwelling indicated high social status (Anfray 2012).

## Inscriptions

Enda Abune Niwaye Kirstos stands out among Aksumite sites due to the presence of not only architectural remains, but also inscriptions. These mostly fragmented texts were found on stones reused in its construction [Fig. 7].

The inscriptions discovered at the site are written in proto-Ge'ez script used for transcribing the Ge'ez language. Some inscriptions are believed to have been created by the Sabe'ans, while others, bearing a distorted version of the South Arabian script, possibly by local people (Tsuge 1993). The inscribed stones, which have become the focus of considerable scholarly attention (Nebes 2017), are of significant interest. However, prior to the investigation at Enda Abune Niwaye Kirstos, knowledge about these artifacts was limited in comparison to other studied material, and the local community reported little information about them before their complete destruction. Similar inscriptions have been found in Hinzat (Bulakh and Yohannes Gebre Selassie 2022), revealing a tradition of cursive writing dated to the pre-Aksumite period and offering valuable insights into the evolution and origins of writing in Ethiopia.

The epigraphic finds are complemented by two slates containing proto-Ge'ez inscriptions (Bulakh and Yohannes Gebre Selassie 2022). Currently, the texts have yet to be deciphered, but some words seem to be attributable to the Ge'ez language.



## PROTECTION AND CONSERVATION

The research yielded rich archaeological findings, but without proper management the sustainability of the studied site is questionable. Most of its features are being destroyed, leading to the loss of valuable contextual information. While some of the detrimental factors are natural, it is mainly human activity that impacts the preservation of the archaeological sites in the study area, leading to a decline in their historical value. The site is subject to various destructive activities, one of which is dismantlement of the remains that has resulted in the degradation of the archaeological heritage [Fig. 8]. The site experienced significant destruction from 2016 until the submission of the report by local stakeholders

to the TCTB in 2018. Around 85% of the structures were dismantled by the community in order to facilitate the construction of the new church. In addition, both the structures and the associated material culture at the archaeological site are frequently disturbed by individuals traversing the area, ultimately resulting in loss of their original context.

The archaeological site of Enda Abune Niwaye Kirstos suffers from numerous factors affecting its integrity, preservation, and cultural significance. Among the most formidable are the unlawful construction activities, namely the building of the new church, as well as the illicit digging that violates the Ethiopian Heritage Authority *Proclamation No.*



Fig. 8. Examples of destruction at Enda Abune Niwaye Kirstos in 2018: looting and construction of the new church (Photos TCTB)

209/2000. Based on the legislation, hiring professionals to oversee the site is crucial for its protection and supervision. These experts can ensure that the site is managed effectively and that preservation techniques are applied correctly. However, the successful implementation of legislation is often hindered by a lack of awareness among the local community and stakeholders. To address this challenge, it is essential to conduct awareness campaigns and educational programs that inform the community about the importance of the site and the legal measures in place for its protection. This can involve workshops, informational sessions, and collaboration with local schools and organizations to foster a culture of preservation. By increasing awareness and understanding, the effectiveness of the legislation can be significantly improved,

ensuring the long-term protection of the archaeological site. Measures undertaken to protect archaeological sites include legal action, enforcement of heritage preservation regulations, community engagement, public education initiatives, site surveillance, conservation, and global collaboration aimed at safeguarding and maintaining these invaluable cultural assets. Through recognizing and mitigating risks, archaeologists, conservators, authorities, and local communities can collaborate to guarantee the sustained safeguarding and admiration of this archaeological heritage. The proclamation prepared by the central government of the Federal Democratic Republic of Ethiopia —the Ethiopian Heritage Authority *Proclamation No. 209/2000*— states that illegal construction and excavation is prohibited.

## CONCLUSION AND RECOMMENDATIONS

The cultural history of the Tigray region has been reconstructed through extensive archaeological surveys and documentation spanning over a century. However, the archaeological significance of numerous sites in the region remains underestimated. Notably, the Northwestern Zone of Tigray, known for its rich sites dated to the Historic, Early, Middle, and Late Stone Age, pre-Aksumite, and Aksumite periods, has never undergone a systematic survey like those conducted in the Central and Eastern Zones. The emergency preliminary archaeological survey and documentation conducted in the study area to address this gap revealed the significant potential of the area. Thus far, despite numerous findings, archaeological

documentation in this region has been limited. To resolve this issue, a systematic archaeological survey will be undertaken to uncover and document other potential archaeological sites within the area. These sites have already yielded a wide range of artifacts, among which pottery fragments, structures, and inscriptions are the most prevalent.

According to local legend, the site of Enda Abune Niwaye Kirstos was established in the 15th century and is linked to the founder of the church. However, archaeological evidence and comparative architectural analysis suggest that the site could date back to the Aksumite period (4th to 7th centuries AD). This conclusion is supported by the presence

of inscriptions and remains of structures that bear the characteristics of Aksumite architecture.

The archaeological site of Enda Abune Niwaye Kirstos is facing rapid deterioration primarily attributed to illegal excavation and construction activities. Therefore, based on the researcher's description of the study area's findings and their current state of preservation, the following recommendations are put forth to ensure its preservation.

It is crucial to involve a multidisciplinary team of experts to gather scientific information about the site's ancient population and reconstruct its cultural history. The TCTB, along with its local office, should monitor the site to ensure its long-term preservation. Adequate care and protective measures are necessary due to the risks the site faces. Official recognition and protection of the surveyed site is essential for future preservation and tourism. Scholars can raise awareness to increase community engagement in heritage protection. Promoting public understanding of managing archaeological findings and emphasizing the importance of the site for both the local community and the nation is vital. Community awareness initiatives near the site are important for ensuring its long-term sustainability.

It is essential to urgently implement conservation and preservation strategies at the site of Enda Abune Niwaye Kirstos. Engaging with the local community and academic institutions, such as Aksum University, is crucial for effectively addressing the issues of unauthorized excavation and construction activities and ensuring the protection of the site. The

careful management and preservation of its cultural traditions and physical artifacts are of paramount importance. Oral histories provide significant insights that can help interpret the site, it is therefore vital to document and analyze the stories shared by residents, considering the site's distinct characteristics. To conduct a comprehensive analysis of the archaeological artifacts, specialists such as ceramicists, lithics experts, and ethnoarchaeologists should actively investigate areas where pottery, stelae, and lithic artifacts have been found during the emergency survey. Interpreting the site using different approaches and methodologies in detail will undoubtedly bring valuable additional insights in the future. Employing a range of techniques, such as stratigraphic excavation, geophysical surveys, and comparative architectural analysis will help uncover various aspects of the site's history and use. Advanced technologies, like GIS mapping and 3D modeling, can provide a more comprehensive understanding of the site's spatial organization and structural features.

It is of utmost importance to conduct archaeological heritage impact studies before proposing any developmental activities in areas that contain archaeological structures and objects. This is crucial to ensure their preservation and sustainability. It is recommended to carry out additional archaeological research in the area and its surroundings, involving qualified experts, TCTB, and international researchers. Before engaging in any land use activities, a comprehensive archaeological impact assessment is necessary. Therefore, the universities in Tigray, like Aksum and Mekelle, and TCTB must ex-

pand their training initiatives beyond in-house programs and actively participate in the future community-based project. The effective management of archaeology, especially at a site like Enda Abune Niwaye Kirstos, requires the expertise of archaeologists and heritage specialists in various capacities. To safeguard cultural heritage, it is essential to collect and exhibit privately owned archaeological artifacts in a museum, while also documenting them in academic publications.

The salvage archaeological survey and documentation brought attention to Enda Abune Niwaye Kirstos and extended the boundaries of the site defined by previous research. The true limits of the site, however, remain unknown due to challenges faced during the assessment. The rugged terrain hindered an accurate topographic survey, and the landscape proved altered by human activities, which complicated the identification of the ancient site's limits. More topographic work is, therefore, necessary in the future.

A significant part of the area remains unexplored. Current documentation and survey efforts have focused on surface findings, suggesting the presence of deeper structures yet to be uncovered. Further exploration holds a promise of revealing more about the site's historical significance. Thus far, artifacts from the Aksumite period, including pottery, structures, and lithics, have been meticulously documented and photographed, laying the groundwork for future research.

The archaeological site of Enda Abune Niwaye Kirstos is currently in a state of significant deterioration. Consequently, it is imperative for government institutions such as the TCTB and the Ethiopian Heritage Authority to assess the illegal activities related to the archaeological site in accordance with the *Federal Proclamation No. 209/2000*. Additionally, enhancing community awareness should be implemented as a supplementary strategy for the preservation of archaeological heritage, in partnership with universities and the justice system.

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#### References

- Anfray, F. (2012). Matara: The archaeological investigation of a city of ancient Eritrea. *Palethnologie*, 4. <https://doi.org/10.4000/palethnologie.5690>
- Asgede Tsimbla Public Relations Office. (2018). *Annual newspaper of the Culture and Tourism Office*

- Asrat, A. (2002). The rock-hewn churches of Tigray, Northern Ethiopia: A geological perspective. *Geoarchaeology*, 17(7), 649–663
- Bard, K.A., Coltorti, M., DiBlasi, M.C., Dramis, F., and Fattovich, R. (2000). The environmental history of Tigray (Northern Ethiopia) in the Middle and Late Holocene: A preliminary outline. *African Archaeological Review*, 17(2), 65–86
- Bulakh, M. and Yohannes Gebre Selassie. (2022). New readings and interpretations on the inscribed stele from Hənzat (HS1). *Aethiopica*, 25, 125–159
- Butzer, K.W. (1981). Rise and fall of Axum, Ethiopia: A geo-archaeological interpretation. *American Antiquity*, 46(3), 471–495
- Curtis, M.C. (2004). Ancient interaction across the southern Red Sea: New suggestions for investigating cultural exchange and complex societies during the first millennium BC. In P. Lunde and A. Porter (eds), *Trade and travel in the Red Sea Region: Proceedings of Red Sea Project I held in the British Museum, October 2002* (=BAR International Series 1269) (pp. 57–70). Oxford: Archaeopress
- D'Andrea, A.C., Manzo, A., Harrower, M.J., and Hawkins, A.L. (2008). The Pre-Aksumite and Aksumite settlement of NE Tigray, Ethiopia. *Journal of Field Archaeology*, 33(2), 151–176
- D'Andrea, A.C., Welton, L., Manzo, A., Woldekiros, H.S., Brandt, S.A., Beldados, A., ... Johnson, L.M. (2023). The Pre-Aksumite Period: Indigenous origins and development in the Horn of Africa. *Azania: Archaeological Research in Africa*, 58(3), 329–392
- Egziabher, T.B., Feoli, E., Ferneti, M., Oriolo, G., and Woldu, Z. (1998). Vegetation mapping by integration of floristic analysis, GIS and remote sensing. An example from Tigray (Ethiopia). *Plant Biosystems – An International Journal Dealing with All Aspects of Plant Biology*, 132(1), 39–51
- Fattovich, R. (2010). The development of ancient states in the northern Horn of Africa, c. 3000 BC – AD 1000: An archaeological outline. *Journal of World Prehistory*, 23(3), 145–175
- Feoli, E., Vuerich, L.G., and Woldu, Z. (2002). Processes of environmental degradation and opportunities for rehabilitation in Adwa, Northern Ethiopia. *Landscape Ecology*, 17(4), 315–325
- Finneran, N. (2011). *The archaeology of Ethiopia*. London: Routledge
- Gebre, T., Eshetu, Z., Huang, Y., Woldemariam, T., Strong, N., Umer, M., DiBlasi, M., and Terwilliger, V.J. (2009). Holocene palaeovegetation of the Tigray Plateau in northern Ethiopia from charcoal and stable organic carbon isotopic analyses of gully sediments. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 282(1), 67–80
- Getachew Meressa Nigus. (2012). Ethiopian archaeology: Retrospect and prospect. *Nyame Akuma*, 77, 82–93
- Harrower, M.J., Mazzariello, J.C., D'Andrea, A.C., Nathan, S., Taddesse, H.M., Dumitru, I.A., Priebe, C.E., Zerue, K., Park, Y., and Gebreegziabher, G. (2023). Aksumite settlement patterns: Site size hierarchies and spatial clustering. *Journal of Archaeological Research*, 31(1), 103–146
- Kifle Zerue. (2014). *Archaeological investigation in Ahferom Woreda, Tigray: Ethiopia* (MA thesis). Addis Ababa University



- Littmann, E., Krencker, D., and von Lupke, Th. (1913). *Deutsche-Aksum Expedition*, vols I–IV. Berlin: Reimer
- Machado, M.J., Pérez-González, A., and Benito, G. (1998). Paleoenvironmental changes during the last 4000 yr in the Tigray, Northern Ethiopia. *Quaternary Research*, 49(3), 312–321
- Michels, J.W. (2005). *Changing settlement patterns in the Aksum-Yeha region of Ethiopia: 700 BC – AD 850* (=BAR International Series 1446). Oxford: Archaeopress
- Munro-Hay, S.C. (1991). *Aksum: An African civilisation of late antiquity*. Edinburgh: Edinburgh University Press
- Nebes, N. (2017). The inscriptions of the Aksumite King Ḥafil and their reference to Ethio-Sabaeen sources. *Zeitschrift für Orient-Archäologie*, 10, 356–369
- Phillipson, D.W. (2002). *Ancient Ethiopia: Aksum, its antecedents and successors*. London: British Museum Press
- Phillipson, D.W. (2012). *Foundations of an African civilisation: Aksum and the Northern Horn, 1000 BC – AD 1300*. Woodbridge: James Currey
- Proclamation No. 209/2000 (Research and Conservation of Cultural Heritage Proclamation). Federal Negarit Gazeta, 6th Year No. 39, 27 June 2000
- Tsuge, Y. (1993). On the South Arabian inscriptions of Ethiopia. *Bulletin of the Society for Near Eastern Studies in Japan*, 36(1), 71–88
- White, G.G. and King, T.F. (2007). *The archaeological survey manual*. Walnut Creek, CA: Left Coast Press

