

# **Qohaito Archaeological Site and Cultural Landscape.**

## **Eritrea**



**World Heritage Tentative List Submission**

**July 2007**

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### **Draft World Heritage Tentative List Submission**

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State Party: The State of Eritrea

Submission prepared by: Relevant authority.

Name of property: Qohaito Archaeological Site and Cultural Landscape.

Region: Zoba Debub, Southern Region

Location: The extreme borders of the plateau are defined by 14,773 and 14,912 northern latitude and by 39,403 and 39,448 eastern longitude.

#### **The site boundary:**

The boundary of the site is determined by the extension of the plateau as defined by the upper edge of the escarpment. The buffer zone includes the mountain slopes and associated landscapes, which form an interrelated social-economic environment comprising the five sub-zones of Adi Keih Sub-regional Administration. Listed from north to south the names are as follows: Karibosa, Safira, Subiraso, Masagolesula and Igila

The boundaries are not yet mapped pending preparation of a digitised map based on satellite images and Geographic Information System (GIS) technology.

#### **Site description and significance:**

Qohaito is a mountain plateau located at an elevation of about 2.600 m to 2.700 m above sea level in southern Eritrea. Situated between the Wadi Haddas and the Wadi Komailé the high mountain range gives way to a flat plateau, which extends about 16 km in the south-north direction and varies between 4 km and 400 metres in the shorter direction east-west. The total area is about 32 square kilometres and the perimeter of the escarpment reaches about 84 kilometres.

The physical environment has stunning attributes with steep, rocky escarpments at all sides of the plateau and wide views to the high mountain ranges to the east culminating at Amba Soyra, the highest mountain in Eritrea reaching a height of 3.018 m above sea level. On a clear day the Red Sea can be seen in the distance towards north east.

In Antiquity, Qohaito developed and prospered as a complex society during the time of the Aksum Empire from around 100-700 AD. As part of a dominating regional civilisation expanding from present day Sudan to the southern part of the Arabian Peninsula the ancient inhabitants of Qohaito

benefited from extensive local trading networks as well as from foreign relations to the Roman and Byzantine empires.

The ancient port of Adulis on the Red Sea coast was the empire's main emporium from where two main routes lead into the highlands, either through Wadi Haddas, or through Wadi Komalié and both are passing close to the Qohaito plateau. Occupying a strategically important location Qohaito would be able to intercept and benefit from trade caravans travelling to and from Aksum. The high number of ancient urban centres reinforce the sentiment that the whole mountain area of Tigray and the southern part of present day Eritrea was densely populated during the first millennium AD. and a close interaction took place between the urban zones and the rural areas creating a interrelated commercial network depending on an extensive subsistence farming and cattle herding.

From the sheer number of archaeological remains it is obvious that Qohaito had an important position within the Aksumite realm, but very little is known about the socio-economic background of the ancient society, which developed as independent settlement at the Qohaito Plateau.

The area seems to have been abandoned sometime around 900 AD. and was subsequently left in relative isolation for centuries, until foreign travellers heard about this exceptional place in the middle of the 19th century and again made it known to the outside world through their travel accounts about the enigmatic archaeological monuments and sites on the plateau.

The Saho people, the present inhabitants in Qohaito, have occupied the plateau for centuries as pastoralists and farmers exploiting the scarce resources to sustain a livelihood on the plateau, which is marginal to human existence. The fields are used for grazing of highland cattle during the raining season and in the following months until the grass has been eaten away. Most of the livestock are then taken to the lowland to benefit from the winter rain there by early December, only to return to the plateau when the summer rain starts in June and the sowing of the fields has to take place.

The village setting and the vernacular architecture is so far preserved practically undisturbed by modern changes. However, the cost of maintaining and building traditional houses has become prohibitively high and the timber for the construction is no longer locally available in the required dimensions. These houses are now precious historic houses that need preservation as examples of a regional vernacular building tradition, which may not survive in other places.

## **Archaeology**

The area was first subject to scientific investigations by the German Archaeological Expedition to Eritrea in 1996 and 1997. This survey identified about 900 archaeological structures scattered all over the plateau with the highest concentration located in an area east of Safira in the central part of the plateau.

The majority of sites appear as settlement mounds situated on rock outcrops and raising to a height of up to about 1.5 -2 meters above the surrounding arable fields. The rubble mounds most often extend 10 and 40 meters in diameter, though in certain areas they cover an area of up to five hectares. These very dense clusters of mounds have been referred to as 'towns ruins' already at the first map of Qohaito prepared by Georg Schweinfurth in 1894. The topography of some of the larger conglomerations of mounds allows to identify streets and blocks of buildings. Additionally

15 cisterns and 35 so-called 'podium buildings' were identified, five of them with remains of monolithic stone pillars. The few visible architectural features resembles Aksumite architecture, typically with a raised foundation and stepped masonry.

Further field surveys were conducted as an integrated part of the management planning process in the autumn of 2006 based on a consistent terminology of the site features suitable for systematic registration, which will allow for a subsequent comparative analysis of the finds based on Geographic Information System (GIS) technology and a database. During the first survey an area of 7.4 square kilometres was covered recording 128 sites. The site registration has subsequently been continued at the plateau and within the buffer zones by staff in the National Museum. The final outcome of the registration is not yet available and a more detailed presentation and discussion of the results is pending. However, based on the digitised information of 128 sites a preliminary quantitative estimate indicate that about 80 % are categorised as mounds, complexes of mounds or walls/buildings and only 16 % of these sites have standing architecture of visible walls or pillars; 10 % are categorised as rock art sites while the remaining 10 % are hydraulic installations (dams and cisterns), tombs and ancient terrace walls.

The sites with remains of standing pillars give a visual impression of an ancient monumental architecture, which is sited on prominent locations in the landscape and further raised on a high foundation forming a podium. The original use and significance of these monuments is uncertain at the moment, but the find of a Christian cross engraved on a building stone and traces of foundation stones for an apse facing towards east suggest that these type of buildings were churches conservatively dated to a period c. 400-1000 AD.

The Safira Dam is one of the most significant vestiges of the elaborate hydraulic installations forming the original condition of the existence of a complex society in a place marginal to human existence. The dam is associated with a visit of Queen Saba to Qohaito adding to the fame of the historic water reservoir on the plateau. The dating of the monument is not certain, but it is believed to be pre-Aksumite and has construction details similar to hydraulic systems in Yemen possibly indicating an early Sabaen relationship ( - however, the dating of the Marib Dam has recently been reconsidered and may be dated to the late Antiquity).

Additional hydraulic installations and extensive systems of terraced fields are identified throughout the plateau testifying to the existence of extensive water and soil management in Antiquity. Further archaeological investigations may reveal the full extent of terraced fields and related hydraulic constructions and will eventually make it possible to reconstruct of the ancient cultural landscape in some detail.

Pottery and stone tools are to be found at most of the sites, but no systematic analysis has yet been made. The presence of lithics tools and especially microlithics of obsidian have been observed on the surface of many of the smaller mounds in the landscape and may have been taken as evidence for middle Stone Age occupation. However, lithics are known to have been used into the historical era and can as such not be taken as evidence for prehistoric activities. The pottery, of which a wide range of shapes have been observed, can provide a more detailed chronology, but only finds of potsheds of amphoras provide a more precise dating evidence relating to the period 300-800 AD, and systematic studies have yet to be conducted.

Rock art sites are numerous at rock shelters along the escarpment in many different places of Qohaito. The majority of rock paintings depict themes connected with cattle herding showing human figures together with various representations of cattle and other domesticated animals. The rock paintings vary in technique and style but collectively they give a valuable and authentic picture of the livelihood in pastoralist communities. To date no rock art sites have been studied in detail and their dating and significance remains unknown.

### **The Saho and their history in Qohaito**

Existing information about the Saho, their socio-cultural history and livelihood pattern is very scarce. Based on scattered information in various sources and interviews with Saho living in Qohaito area, the following picture emerges about the Saho and their history in Qohaito:

The longstanding presence of the Saho in Qohaito can be confirmed by historical records, from which it appears, that the Saho moved into the foothills of Akele Guzai during the ninth to twelfth centuries AD. Here they incorporated other ethnic groups from the remnants of the Aksumite Empire and by the fifteenth century they had settled in the eastern highlands of Akele Guzai including the plateau around Qohaito. The Saho claim that they can trace their presence in Qohaito 30 generations back. In fact some old individuals claim that they know in detail their history of descent for these 30 generations in the area, while others claimed that they could trace their genealogy in detail for 15-20 generations.

For the Saho in Qohaito the seasonal use of resources in the highland and lowland respectively has been and still is crucial to sustain their livelihoods. Access to pastures in the lowland is crucial especially for the cattle during the winter period, and today access to arable land for some of the Saho in both areas is important. Many claim that they only survive because they are supplementing the economic activities in the highland with those in the lowland.

The increased pressure on pastures as well as arable land in combination with the need for sending the children to school have resulted in a change of migration pattern of the Saho in recent years. As a result more people are settling on the plateau, where they are now becoming sedentary cultivators, living permanently in stone built houses. *Hidmo* is the term used for both Tigrean and Eritrean vernacular housing, typically build as rectangular buildings with flat roofs. The settlements and villages have developed as an informal, organic structure of individual properties surrounded by low stone walls or fenced off by hedges made up of thorny twigs or cactus to create privacy and to keep cattle and goats away from the gardens. Frequently the villages are perched along the slopes of the escarpment, at times so steep that the houses are built into the steep side of the mountain and blending completely with the surroundings.

### **Environmental condition and vegetation history**

In the 19<sup>th</sup> century and in the first half of the 20<sup>th</sup> century it appears that the plateau was covered by more or less dense forests of mainly juniper trees as described by J. T. Bent in the travel records, *The Sacred City of the Ethiopians* (London 1893, p.220): ‘...it is very rich in water and springs and offers excellent pasturage..’ and later referring to ‘..a dense mass of juniper trees’..and when descending from the plateau ‘..wandering through a thick forest’.

The German Aksum Expedition in 1906 is referring that the whole plateau was covered by dense shrub and trees providing an impression of a parkland unusual to the otherwise treeless highlands. The photos by Theodor von Lüpke corroborate this information depicting large trees close to the ruins. In addition to juniper trees also *Boswellia papyrifera* was identified, which is one of the five species of *Boswellia* used for production of frankincense.

During the 30 years of the Eritrean liberation war the dense vegetation has largely disappeared due to several reasons, including increasing population pressure resulting in the conversion of woodland to agricultural land and the consumption of fuel and construction wood. At present the larger part of the southern plateau is used for extensive farming with only smaller areas still covered by bushes and a rather sparse vegetation cover including cactus and agave. The northern part of the plateau and especially the slopes along the escarpment have a higher plant cover with dense and lush vegetation in places where water is more abundant. The valley at Karibosa is exceptionally fertile with a vegetation of large trees and cultivation of olive trees.

The observation of *Boswellia* trees on the plateau is interesting, because it contributes to the ancient myths of the Land of Punt and the origin of frankincense. The real extent of the growth on the plateau cannot be clearly asserted on basis of the scant literary sources. Recent surveys of the frankincense trees in Eritrea indicate that the geographical distribution is limited to an altitude of 600-1500 m a.s.l.. There is, however, a lack of detailed studies on the distribution of *Boswellia*, which can grow in dry and rocky sites where other tree species often fail and it is highly likely that the change in distribution pattern relates to the drastic decline in natural forest cover. If the previous observations of *Boswellia* is not verified certainly *Commiphora* species do exist in Qohaito and these species are used to extract Myrrh, which was also traded in Antiquity, when Qohaito was a commercial centre.

#### **Assessment of outstanding universal value:**

Qohaito is considered to have outstanding universal value according to criteria (iii) and (v):

*(iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared:*

*(v) be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.*

On basis of the stated criteria (iii) and (v), Qohaito can be characterised as a Cultural Landscape according to the definition set out in the Operational Guidelines para. 47.:

*Cultural landscapes are cultural properties and represent the "combined works of nature and man" designated in Article 1 of the Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.*

More specifically Qohaito can be considered as an organically evolved landscape in accordance with the requirements set out in Annex 3 of the Operational Guidelines:

*The organically evolved landscape results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features.*

They fall into two sub-categories, of which the second apply to Qohaito:

*- a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its revolution over time.*

On this basis the site is proposed for nomination to the World Heritage Tentative List under the category 2b, as a **Continuing Organically Evolved Cultural Landscape** on the basis of the following assessment:

The ancient cultural landscape of Qohaito is characterised by a high density of archaeological sites dating back to the first millennium AD. with the large majority of archaeological sites relating to an extended early settlement of the plateau probably reaching to a culmination from the second to the seventh century AD. simultaneously with the rise of the Aksumite Kingdom.

The discontinuity of human activities since Antiquity until the arrival of the Saho people is a distinctive attribute to Qohaito. The nomadic lifestyle of the Saho have left practically no traces in the archaeological record, leaving the archaeological landscape and the ancient sites largely undisturbed of subsequent development. This unique circumstance creates an exceptional possibility of studying the organisation of land use, property and household resources in an extinct ancient society through archaeological research.

The special conditions and properties in Qohaito provide unique possibilities for comprehensive studies of the cultural and socio-economic condition of the ancient extinct society and its interrelationship with the natural environment. Only very few archaeological sites in the world have a similar potential for reconstructing the interrelationship between an ancient farming settlements and the related land use system within a well-defined area.

The extent of the Qohaito plateau covering an area of about 32 square kilometres scattered all over with the well preserved remains of an extinct complex society is unique, making it one of the most extensive archaeological landscapes in sub-Saharan Africa.

### **Comparative analyses**

Ancient Qohaito has been closely affiliated to the Aksumite civilisation embracing a group of archaeological sites dating to the same historic period that share distinguished architectural and artefact features. Whereas extensive research has been conducted on Aksum relatively little research has been carried out on the affiliated sites in Tigray and Eritrea and only a few

observations have so far provided some insight into the foundation of Qohaito and its cultural and socio-economic background.

Recent archaeological reconnaissance surveys at Hishmale and other sites around Adi Keih to the west of Qohaito, reveal the existence of extensive archaeological deposits indicating a wide-spread settlement pattern integrated into a common social-economic system in the region. To the south of Adi Keih ancient archaeological remains are located near the village of Tokonda, with exposed architectural elements resembling sites at Qohaito. About 30 km further south spectacular ruins of the same period are located at Keskesse and Matara. All of these sites are within a day's travel by foot from the Qohaito Plateau. All are situated strategically close to the major caravan trade routes along Wadi Haddas and Wadi Komailé providing the main access in Antiquity between the Red Sea port of Adulis and the Aksum capital city and beyond.

These places are important archaeological sites in their own rights representing similarities in mound composition, architectural details and ceramic tradition similar to Qohaito, which tentatively suggests a wider interrelated network of settlements forming a common cultural and socio-economic system in Antiquity. However, they do not have the attributes of a continuing evolving cultural landscape within clearly defined boundaries that characterises the Archaeological Site and Cultural Landscape of Qohaito.

A serial nomination for Qohaito, Tokonda, Keskesse and Matara can be considered with reference to the Operational Guidelines para. 137. With reference to the Operational Guidelines para. 134-136. Qohaito and the affiliated archaeological sites could possibly be considered as part of a transboundary, serial nomination of the most important ancient trade route in East Africa together with the archaeological site of Aksum

**Statement of integrity** (as defined in Operational Guidelines para 87-89):

Qohaito is an exceptional place with dramatic natural features and great scenic beauty. The dramatic heights of the Qohaito plateau situated about 2600 m above sea level with vertical cracks, deep gorges and great vistas to the surrounding mountain ranges create a unique feeling of unchanged wilderness. The network of footpaths that meanders through the otherwise inaccessible steep and rocky terrain connecting settlements on isolated locations on the mountain slopes are unlikely to have changed significantly for centuries.

The archaeological investigations in neighbouring Adi Keih area and the close affiliation with other known archaeological sites such as Tokonda, Kaskase and Matara have expanded the knowledge about an interrelated complex society in Antiquity. Due to the geographical conditions and clearly defined location, the site of Qohaito has retained its cultural integrity and the archaeological remains have been left largely undisturbed..

There are no indications in the archaeological records of continued human activities from the Aksumite period until modern times. German travellers visiting the area a century ago remarked that the area seemed to be uninhabited. However, the modern population claims to have lived in the area in 20-30 generations. Local informants have also pointed out, that the recent stone houses have been built within the last 30 to 50 years, and it appears therefore that the permanent settlements, as

we can now observe, are a relatively recent feature. Past land use may thus have been seasonal exploitation of the land, without permanent structures and settlements of humans, and because of the need of travelling light use of pottery in the households may have been very limited or totally absent.

The discontinuity of the extended occupation of the plateau by the end of 8<sup>th</sup> cent. AD has left the ancient fabric virtually intact as part of an archaeological landscape, which remains basically as a pastoral landscape. The pastoralist livelihood of the Saho people, the present occupants of the plateau, has left very little impact on the archaeological record, whereby a very significant proportion of the ancient sites have been preserved untouched by subsequent change in the environment since Antiquity. This condition provides an exceptional opportunity for archaeological investigations and research, providing a genuine possibility to reconstruct various aspects of an ancient extinct society in details, within an authentic and well defined archaeological landscape.

**Conditions of authenticity** (as defined in Operational Guidelines para 79):

The well preserved archaeological landscape dating back to the first millenium AD. is closely integrated with the subsequent use by the Saho pastoralists, demonstrating a unique and authentic example of harmonious co-existence between the archaeological landscape and the livelihood pattern of the Saho people primarily based on cattle herding and seasonal migration.

The traditional village setting and the vernacular architecture of the Saho making maximum use of locally available materials is so far preserved practically undisturbed by modern changes, and the traditional settlements and *hidmo* houses are now precious historic houses, that may be preserved as examples of a local vernacular building tradition, which may not survive in other places.

**Management systems** (as defined in Operational Guidelines under para 108-119):

*Each nominated property should have an appropriate management plan or other documented management systems which should specify how the outstanding universal value of a property should be preserved, preferably through participatory means (para 108).*

The preparation of a Management Plan for the archaeological site and cultural landscape of Qohaito affirms the commitment of the Government of Eritrea to strengthen mechanisms of identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage of outstanding universal value according to the stipulations set out in Operational Guidelines.

The Management Plan dated July 2007 identifies the specific cultural values represented in the site based on three basic attributes relating to the natural environment, the archaeological landscape, and the living culture of the Saho.

The Management and Implementation Plan sets out proposals for the establishment of a management regime, including guidelines for the preservation and presentation of the archaeological sites. In order to manage continuity and change in livelihood patterns and

demographic pressure the plan includes strategic policies for land use and development control based on a zoning of the plateau according to the specific conditions and opportunities in each area.

Furthermore the Plan proposes a number of initiatives reflecting local needs and circumstances aiming to establish a sustainable future livelihood for the inhabitants with respect of the intangible heritage values specific to their life as pastoralists and farmers. Central to the Plan is establishment of a management regime consisting of a Board of Trustees, a Management Committee and a Site Management Co-ordinator. Further supported by the setting up-of a Regional Museum in Adi Keih the cultural heritage initiatives are designed to strengthen the preservation on site and create synergies through reinforced partnership among all the involved stakeholders. For further details please confer with the Management and Implementation Plan, July 2007.

The Management Plan carries no statutory authority and in the absence of a national heritage legislation the specific regulatory control remains in the hands of the respective authorities and local communities and their representatives. In other words the Plan gains authority only to the extent to which it is adopted or implemented by the Government and concerned administrative bodies. At some later stage Qohaito may be instituted as a special preservation zone pending the enactment of a Law on the Protection of Cultural Heritage in Eritrea.

### **Present state of conservation**

The ancient buildings on the Qohaito plateau were abandoned and eventually collapsed when the ancient society died away. Subsequently the desolated ruins have largely been left untouched and the archaeological remains are preserved in a relatively good condition, because husbandry and traditional farming techniques have interfered very little with the archaeological remains.

The digitised data processing of the archaeological records is an essential management tool for the identification and future management of the sites. Based on the surveys carried out by the German Archaeological Mission to Eritrea in 1996 a supplementary survey has been conducted as an integrated part of the management planning process in co-operation with staff from the National Museum. The information gathered from the site registration is digitised into a database using a Microsoft Access platform and combined with geographic references. The interconnection between the GIS system and all the data obtained in the different areas of study result in a detailed site information system, which will form the basis for all subsequent study and management of the sites.

In addition to the general development regulation stipulated in the Zoning Development Plan, there is an imminent need of preservation of individual archaeological sites along the following principles:

Condition survey shall be conducted of all sites with special high preservation value such as standing pillars or other visible architectural features. These high priority sites shall be monitored on a regular basis each year.

Traditional *Hidmo* houses situated within or occupying an ancient site can remain *in situ* provided that no further degradation occur to the archaeological remains and that the owner of the property contributes towards preservation of the ruins. New developments are being restricted according to the zoning plan regulations.

Sites located in areas designated for urban development shall be protected from encroachment by a 100 metres preservation zone. This provision is applicable to sites located within the New Safira, and building plots already allocated within this preservation zone shall be relocated. Likewise the military camps of the Brigade 52, Masagolezula, occupying ancient sites shall be relocated.

Ground disturbing activities, ploughing and planting are not permitted within 2 meters from the base of an archaeological site.

### **Current threats to the site**

The nomadic lifestyle of the Saho is unlikely to have had any significant negative impact on the archaeological landscape and it is also unlikely to have left any traces in the archaeological record. Some ancient sites have been exploited for modern habitation, and stone masonry from ancient ruins have been collected for reuse, but this activity has stopped.

Intentional destruction or vandalism does not seem to take place and examples of thoughtless or destructive action are hardly seen. Inevitably, increasing population pressure and more intensive land-use, that may include mechanised farming techniques, are threatening the archaeological heritage and the cultural landscape.

The increased numbers of resident people, who now stay on the plateau throughout the year, make the best possible use of the available natural resources. The exploitation of natural resources in Qohaito has also increased during the war and subsequent border conflicts, whether it is firewood, building material for shelters to refugees, military camps, etc., and consequently the dense vegetation has diminished. The use of grazing land in favour of agricultural land is also being intensified throughout the Qohaito Plateau with crops being grown in the midst of the ancient sites. The increased exploitation of land poses a potential threat to the archaeological remains and the natural setting, but further degradation to the archaeological remains is not likely to take place as long as the current non-mechanised farming methods are maintained.

The greatest threats to the cultural landscape are due to urban encroachment and modern infrastructure developments, which may intensify along with the completion of a new road construction connecting the plateau with the valley of Komalié from Karibosa via Demihno and further on to Massawa. The new road will improve the accessibility to the Qohaito plateau and it cannot be avoided that the increase of vehicular traffic to some extent will interfere with the genuine feeling of wilderness.

Grazing rights have traditionally been governed by customary rights, but as there are no specific legal provisions protecting such rights, and there will be nothing to prevent the state from expropriating communal land used for pastures and to lease it to commercial farmers for example. The many pressing land issues, which need attention in Eritrea, may lead to viewing land resources as a commercial factor and a means to increase production output with disregard of the importance of community ties and the cultural and social relation people have to the land. There is a fear therefore that cleavage between farmers and pastoralists may have serious implications for the Saho, who depends heavily on the migration between the highlands and the lowlands.

A possible subdivision of land into individual leasehold property or private ownership may result in a permanent change of the character of the landscape and traditional social organisation of the Saho. In the worst of cases the cultural heritage represented by traditional livelihood patterns as pastoralists will not be preserved.

The area may experience significant environmental, social and economic change due to human activities and natural processes. It is important to examine the impacts of development and monitoring changing conditions through annual and five-year review cycles in order to avoid negative impacts that may gradually undermine the integrity of the place and threaten the archaeological resource base.

Attachment: The Archaeological Site and Cultural Landscape of Qohaito, Eritrea : Site Management and Implementation Plan, July 2007.