
Ennedi Massif (Chad) No 1475

Official name as proposed by the State Party

Ennedi Massif: Natural and Cultural Landscape.

Location

East and West Ennedi Regions
Republic of Chad

Brief description

The Ennedi Massif is a mountainous region in north-east Chad, an impressive sandstone plateau eroded by wind and thermal cycles into gorges, cliffs, canyons and outliers. Although part of the Sahara, the climate of the Ennedi Massif is much more suitable for human habitation than most of the desert, with regular rain during summer, wadis flowing once or twice a year, *gueltas* and a relatively large range of flora and fauna – including some of the few remaining populations of crocodiles west of the Nile. On the rocky surfaces of its caves, canyons and shelters, thousands of images – dating from 5000 BC onwards – have been painted and engraved, comprising one of the largest collections of rock art in the Sahara and characterised by a wide variety of themes and styles.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2015) paragraph 47, it is a *cultural landscape*.

[Note: The property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances, while ICOMOS assesses the cultural significances.]

1 Basic data

Included in the Tentative List

21 July 2005

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

28 January 2015

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committee on Rock Art and on Cultural Landscapes, and several independent experts.

Technical Evaluation Mission

A Joint ICOMOS – IUCN technical evaluation mission visited the property between 4 and 15 October 2015.

Additional information received by ICOMOS

On 29 September 2015, ICOMOS sent a letter to the State Party, seeking additional information on: cartographic documentation, rationale for the definition of the buffer zone, existing and planned protection regimes, coordination measures between the traditional and the formalised management structures, tourism strategies, and tourism facility development in Fada.

The State Party responded on 30 October 2015 and the relevant information is incorporated into the present report.

Following the ICOMOS Panel, in November 2015, ICOMOS met the Chad Permanent Delegation and discussed issues emerged during the evaluation.

A joint ICOMOS-IUCN interim report and additional information letter was sent to the State Party on 16 December 2015 requesting updated information on the approval of the revised decree 400/2015; official submission of the revised map of the property and buffer zone presented during the meeting between ICOMOS and the Permanent Delegation at the end of November 2015, photographic and cartographic documentation of sites so far inventoried; additional information on mechanisms ensuring integration between traditional and institutionalised management, an implementation calendar for the finalisation of the management system and of the above.

On 25 February 2016 the State Party transmitted its additional information and a map depicting a major reduction of the nominated property, excluding the northern part of the Massif, and an amended buffer zone. This is discussed in the relevant sections of this report.

Date of ICOMOS approval of this report

11 March 2016

2 The property

Description

The natural environment and human settlement
The Ennedi Massif with its sandstone stratification rises above the continental granitic base, reaching almost 1,500 m a.s.l. at the Basso peak. The region witnessed in the past millennia dramatic climatic changes that shaped its morphology and environment. During the arid periods, immense sand dunes accumulated on the sides of the sandstone outcrops which served as occupation sites for human groups during the humid phases.

The last humid phase witnessed by this region began around 11,700 BP, when the desert climate was succeeded by a humid one, due to abundant precipitation.

These favourable climatic phases have left several traces in the Sahara, when the sandy plains and dunes were covered with tree-filled savannah, forest galleries grew in the bottom of the valleys, and the run-off from the inner Massif fed small endorheic lakes. Some specimens of the species that flourished in those epochs have survived until the present day in the deep canyons of the Ennedi. The specific climatic situation of the Ennedi also attracted human occupation and settlement.

Humans have been able to profit from the natural environment and its resources. The rich litho-stratigraphy of the region offered to stone-cutters a wide range of raw materials which they were able to profit from, as attested to by the thousands of stone implements in diorite, quartzite and sandstone found in the area. Later, metal workers and smelters were able to exploit the iron-rich ores hidden in the sandstone formations to feed their reduction furnaces.

Humans made their livelihood through hunting, fishing, gathering, and livestock farming (from the 6th millennium BCE) and later on agriculture, in an era which remains to be established, possibly around the 1st millennium BCE, when millet cultivation developed south-west of Lake Chad, and the rock art attests to some of their hunting and pastoral activities.

Thanks to its southern position, each time rainfall decreased, the Ennedi acted as a refuge zone at the crossroads of several cultures. The climatic deterioration led human groups to abandon the region and migrate towards other more favourable ones, e.g. Lake Chad, the Nile, the Niger or the Senegal valleys.

In the present day, local communities still practice nomadic pastoralism and a traditional way of life, which nevertheless integrates, where necessary, modern aspects.

The rock art

Past human presence is attested to by several rock art sites distributed throughout the Ennedi massif.

This form of human expression covers a span of some 7,000 years. Scholars have identified different periods: *archaic* (7,000 – 6,000 BP), *bovidienne* (5,000 – 2,000 BP), and *cameline* (2,000 BP – present day). Currently, the University of Cologne is carrying out a project on the Ennedi massif, with several lines of action, including inventorying rock art figures to continue the work begun earlier in the 20th century.

The inventories, a long way from being completed, have, however, already catalogued 650 decorated sites encompassing at least 10,000 motifs within the 30,000 sqkms comprising the plateau. The works are

diverse and original in both their expression and styles. The polychromy of the paintings and the engravings denotes refined techniques. Most of the rock walls were painted or engraved when cattle and sheep farming was practiced (after the 6th millennium BCE); some human figures, today out of reach due to soil erosion, are probably more ancient. The majority of the rock art expressions tell us about the links between humans and wild fauna and domestic animals, as well as about garments, jewellery, armaments and sometimes the habitat. The simultaneous introduction of horses and dromedaries 2000 years BP is attested to by innumerable images of mounted horses and *mehari* camels in flying gallops, representations which appear to be unique to the Ennedi. The riders exhibit a dynamic attitude and the mounting harnesses are rendered with plenty of details. The drawings highlight elements always popular in the Ennedi: flowing dresses, pommel saddles, dromedary cantles, arm knives, that illustrate details of the way of life of past communities.

Following the major reduction of the boundaries of the nominated property, some 30 sites of rock art, including the outstanding site of Guirchi Niola Doa, have been excluded by both the nominated property and the buffer zone.

Other cultural testimonies

Innumerable monumental tombs are scattered throughout the eastern part of the property. Only a handful of them have been studied in detail. They are tumuli grouped in large necropolises easily detectable in the landscape - in Chibi more than 2000 burial sites extend over dozens of hectares – and the ICOMOS technical evaluation mission found them to be intact. Their investigation using archaeological methods could yield much information on the ancient funerary traditions which could complement the studies of the ancient territorial occupation and of the rock art. The most ancient among these graves possibly date back to the end of the 4th millennium BCE, on the grounds of the C14 dating results that have been obtained from comparable monuments in south Libya, Algeria and north-east Niger.

The region has unexpectedly revealed itself to be rich in remains related to iron metallurgy. During the technical evaluation mission some 30 bases of reduction smelters were found in three distinct places, which can be considered the northernmost smelting sites currently known in the south Sahara. The observed structures relate to trapped slag furnaces which were ventilated by forced draught through tail pipes or bellows, or to larger devices functioning by natural convection provided with basal openings to allow the slag to be discharged outside of the combustion cell during or at the end of the reduction process. Future explorations and excavations could lead to important discoveries of ancient purification workshops and smithies. This knowledge on the metallurgy of the past could be interpreted through reconstructions and workshops. In this regard, ICOMOS notes that the knowledge and memories of local

blacksmiths are highly important and need to be recorded and preserved with the maximum urgency.

Traces of ancient human occupation are found on several dunes and sandstone outcrops within and outside the nominated property and these vestiges extend sometimes over hundreds of square meters. Archaeological investigations on these sites will be beneficial to understanding the evolution of prehistoric populations' traditions, of their artistry, and of habitats, complementing the information gained by the study of the rock art.

History and development

Climate alteration has been responsible for the dramatic changes that affected the region. Between 11,700 and 4,300 BP a humid climate transformed the desert and favoured the formation of an environment suitable for the growth of a diverse flora and fauna, which formed the basis for human settlement in the region. This humid phase ended around 5,300 BP and the end of abundant rainfall caused drastic stress to the flora and fauna, which were forced to adapt to the new climatic conditions. The geomorphology of the Ennedi massif preserved secluded humid environments and ecological niches, where animal and floral species have survived, bearing witness to these climatic alterations. Human history can be traced in the region since the Holocene (from 12000 BP ca onwards), thanks to archaeological, paleo-botanical and related research: the rock art in particular bears witness to human adaptation to changing climatic conditions.

Scientific research on the rock art of the Ennedi started as early as 1911, the major campaigns dating to 1948, 1953, and 1997, and it has continued up until today.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier has grounded its comparative analysis on the following aspects: quantity of images, temporal framework, quality, aesthetics and styles, exemplarity, rarity of techniques and of themes, and the state of conservation of the rock art. It has examined 15 areas containing rock art sites – all from Africa – providing a synthetic and quantitative table of the findings, in which is suggested a superiority of the nominated property compared to the other examples.

ICOMOS considers that a comparative analysis of rock art sites which is based only on properties from the same geo-cultural region could be justified, on the grounds of the specificities of the cultural traditions that produced these forms of human expressions and also of the different time-spans in which it developed in the different regions. However, the cultural attributes of the nominated property and particularly the rock art could have benefited from a comparison at the global scale.

ICOMOS also notes that, due to little awareness of a good part of the scientific literature on the Ennedi rock art, the comparison misses important arguments to support the Ennedi as a rock art region with a status so particular that it complies with the criteria for a World Heritage declaration. This weakness can also be recognised in the proposed justification of criterion (iii).

ICOMOS considers that, in certain parts, the comparative analysis unnecessarily overstates the significance of the nominated property in comparison with other similar sites in the Africa region: e.g. the rock art in Tsodilo (Botswana, 2001, (i)(iii)(vi)) is a rare and incomparable art tradition; the Drakensberg rock art (Maloti-Drakensberg Park, Lesotho/South Africa, 2000, (i)(iii)(vii)(x)) and shaded polychrome pictures of the region are a unique artistic achievement; or the Brandberg rock art sites (Brandberg National Monument Area, Namibia, tentative list) contain some 50,000 pictures in a much smaller area.

In ICOMOS's view the rock art of the nominated property is rich and particular but not unique in all its motifs. Clear lines of artistic relations can be drawn from the Jebel Ouweinat in the northeast or the Tibesti in the northwest. These links do not weaken but strengthen the case of the Ennedi: despite the clear integration of the region in the wider eastern Saharan landscapes, in small areas there have surfaced very peculiar artistic traditions evincing a high social and cultural dynamic while, on the other hand, a very homogenous subsistence system, based first on herding mainly cattle and later camels, prevailed throughout.

Following the major reduction of the boundaries of the nominated property officially proposed by the State Party in February 2016, ICOMOS does not consider that the comparative analysis could justify consideration of the reduced nominated property, due to the exclusion of crucial rock art sites, among which Guirchi Niola Doa.

Despite certain weaknesses, ICOMOS considered that the comparative analysis justified consideration of the originally nominated property for the World Heritage List. After the major reduction of its boundary and the exclusion of rock art sites crucial for the justification for inscription, ICOMOS does not consider that the comparative analysis justifies at this stage consideration of the property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The Ennedi Massif is a veritable open-air museum containing thousands of witnesses to natural and cultural history;
- The climatic changes of the Holocene have physically marked the region: the humid period of the lower Holocene (11,700 – 4,300 BP) allowed flora

and fauna to flourish and human societies to be established there;

- Thanks to its topography, the nominated property exhibits a high climatic diversity, which still allows human settlement, essentially of herder communities, whose way of life represents a living cultural tradition and a continuation of ancient cultures;
- The rock art in the Ennedi massif illustrates the evolution of human life in this region, covering a time-span of 7,000 years, from the era of the hunters-gatherers, to the period of the early herders, to that of nomadism;
- From a natural perspective, the Ennedi is a unique ecosystem within the Sahara region, a real biodiversity hotspot populated by Sahel and subtropical species. This environment is still inhabited by relict flora and fauna species that were widespread in the Holocene and are now restricted to the gorges and the *gueltas*;
- The combination of rock formations in the desert environment, rock art, wild flora and fauna and the local living communities form, altogether, an exceptional landscape.

ICOMOS considered that, overall, this justification was appropriate for the originally nominated property, however, following the drastically reduced boundaries and the subsequent exclusion of exceptional rock art sites directly supporting the proposed justification for inscription (see the ICOMOS Thematic Study on Rock art of Sahara and North Africa (2007), pp. 71 – 76), ICOMOS considers that the above justification is not sufficiently supported by the attributes still included in the nominated reduced property.

Additionally, the use of the term 'human evolution' is not applicable to the rock art of Ennedi, in that the human history so far known to be associated with the rock art of the nominated property, relates to the Holocene. Hence, it seems inaccurate to consider it as a source of information on human evolution, as the span of time along which rock art developed is not long enough.

ICOMOS nevertheless considers that the Ennedi rock art, as originally nominated by the State Party, is an outstanding source for a cultural expression of human adaptation to climatic deterioration and this represents the conclusive argument supporting the justification of inscription for the entire Ennedi Massif and its rock art in the World Heritage List. Archaeological remains contribute to shed light on these adaptations and on the technical knowledge developed by the ancient populations of the area.

Integrity and authenticity

Integrity

The nomination dossier explains that the attributes on which the proposed Outstanding Universal Value are grounded are the rock art sites, and the combination of

rock formations with *gueltas*, wadis and other natural features. The nominated property contains all the elements necessary to illustrate the proposed values and the processes underlying the formation of the relevant attributes. These are scattered throughout the Massif and therefore it was originally proposed for inclusion in the nominated property in its entirety; in this way it would have also allowed for the inclusion of all three hydro-geological basins of the Massif and the safeguarding of their delicate balances. However, this is no longer the case, and details are explained below.

In its letter dated of 30 October 2015, responding to ICOMOS's additional request for information, the State Party informed that, following discussions during the technical evaluation mission, in order to ensure that all relevant attributes are contained within the boundary of the nominated property, the State Party was modifying its limits to encompass the areas of Wadi Namous with its salt lakes, the oasis villages in the hollows of the palm groves, and the rock art sites located right up to the last outcrops at the north-east of Bahr el Ghazal.

Equally, the State Party informed that, in order to provide the nominated property with an added layer of protection, the buffer zone, originally covering a small tract of land on the eastern part of the Massif around Fada, is being expanded to include a 10 km-wide buffer around the whole of the nominated property.

As part of the evaluation process, following the meeting between the State Party representatives and ICOMOS at the end of November 2015 and the joint ICOMOS – IUCN interim report sent in December 2015, on 24 February 2016, the State Party submitted maps depicting radically reduced boundaries for the nominated property and different boundaries for the buffer zone from those agreed upon during the technical evaluation mission and in dialogue between the State Party and ICOMOS. The reasons for this drastic reduction of the proposed boundaries for the buffer zone are not explicitly explained but seem to be related to a partnership contract between the State Party and oil companies for oil extraction and private lease of land in areas partially included in the nominated property.

ICOMOS considers that the exclusion from the nominated property of the entire northern area of the massif, where some of the most important rock art sites are located, including the Guirchi Niola Doa site, which is a crucial attribute to support the justification for inscription, impairs the wholeness of Ennedi massif as a geo-cultural and archaeological environment and thus undermines substantially the integrity of the nominated property which cannot be any longer considered demonstrated.

At the level of individual sites, ICOMOS considers that the integrity of the attributes of the nominated property and particularly of the rock art, allows the reconstruction, with the support of the inventories and of the archaeological investigations, of the history of multi-

millennial human occupation of the Ennedi and therefore sheds light on an important phase of the human occupation of the Ennedi.

The exclusion of important cultural attributes from the nominated property and from the protected designated area puts at threat all artistic, archaeological remains and the landscape features of the Ennedi Massif relevant for the understanding of its proposed Outstanding Universal Value and not included in the reduced boundaries of the nominated property.

The cultural attributes of the nominated property exhibit overall a high degree of intactness and did not appear prone to imminent threats; however, the possible exploitation of the fossil resources in the northern part of the Massif substantially increases the threats to important rock art sites in the Massif.

Additionally, an increase in tourism, which is likely to occur due to the nomination process, may cause impacts on the delicate environment of the Ennedi and induce changes in the traditional socio-economic structure. They both need to be carefully assessed, managed and monitored.

Authenticity

According to the nomination dossier, the attributes of the property meet the conditions of authenticity as set out in the *Operational Guidelines*. The archaeological remains, and particularly the rock art, reflect human and cultural evolution throughout some 7000 years, in that they give a glimpse of the life, traditions, and beliefs of the ancestors of the local population, throughout the entire Holocene. They also make evident the role given to certain animals and the important connections between humans and animals.

The pristine state of the Ennedi Massif, along with its vegetation pattern, forms an intact landscape and a visual setting that are probably very close to that which existed when the rock art was created. Currently the site is used by the local population for traditional activities and tourism still accounts for very small numbers of visitors, and therefore does not interfere with the perception and understanding of this living and, at the same time, fossil landscape. The combination of archaeological remains, traditional way of life and intact natural environment conveys the sense of an authentic place. The traditional system of management of the resources and of the nominated property contributes to retaining its authenticity.

ICOMOS concurred with most of the statements of the State Party on the aspects of the authenticity of the nominated property but, following the major modification of the proposed boundaries for the nominated property, also the authenticity of the Massif, no longer nominated as whole, as a geomorphological, and relict cultural landscape illustrating impacts on cultural expressions of

climatic transitions during the Holocene is no longer demonstrated

Additionally, ICOMOS notes that living communities cannot be conceived as static entities. In this regard, a cultural landscape approach would be beneficial for the fine-tuning of the articulation of the conditions of authenticity with regard to traditions and human/environment interactions.

In conclusion, ICOMOS considered that the conditions of integrity and authenticity could have been met with the expansion of the boundaries of the nominated property to include a number of attributes as discussed with the State Party during the evaluation process (see Boundaries section). Following the present major boundary reduction of the nominated property, ICOMOS does not consider that integrity and authenticity are any longer met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criterion (iii), and natural criteria (vii) and (ix).

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

This criterion is justified by the State Party on the grounds that the rock art in the Ennedi Massif represents the human evolution in this area over a long span of time (7,000 years). This evolution is represented by the different artistic periods – the *périodes archaïque, bovidienne* and *cameline* – which include 16 styles, and illustrate the uninterrupted human occupation of the area and different stages of human evolution, from hunter-gatherers, through to early herders, to nomadism. The rock art figures also bear witness to the climatic changes occurring during the Holocene. The justification for this criterion also mentions that certain grottoes are still in use by nomadic groups of herders.

ICOMOS considered that there can be no doubt that the rock art provides a rich archive of the world views of past cultures in exceptional richness, expression and aesthetic elaboration. In fact, the argument for criterion (iii) could have been put forward much more convincingly and with many more details. For instance, while the motifs of the flying horse and of the flying camel are not unique, the motifs of the mounted flying horse and of the mounted flying camel are unique to Ennedi rock art.

ICOMOS notes that the use of the term 'evolution' in statements such as 'human evolution' appears problematic, since this would suggest that the Ennedi Massif harbours sources on human evolution and may be seen to be in some way in line with the findings at Toumaï, further west in Chad. However, as far as it is known up to now, human history in the Ennedi Massif exclusively relates to the Holocene and therefore no data or sources can be found in the region that would

provide information on human evolution. However, the rock art of Ennedi testifies in an exceptional manner to the cultural expression of human groups adapting to climatic deterioration.

Despite certain weaknesses of the arguments, ICOMOS considered that this criterion was justified for the originally nominated property. Following the major reduction to the proposed boundary of the nominated property, excluding significant rock art and archaeological sites ICOMOS does not consider that this criterion is still justified.

ICOMOS considered that the nominated property could meet criterion (iii) and conditions of authenticity and integrity, with minor and agreed modifications to the boundary of the nominated property and to the buffer zone, as discussed during the technical evaluation mission and in dialogue with the State Party at the end of November 2015. The unexpected reduced boundaries for the nominated property submitted in February 2016 impair the ability of the nominated property to meet criterion (iii) and the conditions of integrity and authenticity.

4 Factors affecting the property

The nomination dossier makes a thorough analysis of the factors impacting on the nominated property.

Thermal differences and sun exposure cause localised exfoliation and spalling, and there is also wind erosion. Changes in pastoral practices and increases in the numbers of sheep may impact on natural resources, especially water and vegetation. The use by shepherds of decorated rock caves or hollows as shelters, and the lighting of fires, has a negative effect on the paintings, although this habit is limited to a few sites only. Also, the consumption of wood for heating or charcoal production may threaten the tree cover in that, with additional human pressure caused by visitors and population increases, dead wood may not suffice to satisfy fuel needs.

Some modest negative impacts derive from the cattle roaming in areas where decorated rocks are located: their hides and droppings may in the long term affect the figures.

In the additional information provided by the State Party on February 2016, the State Party informs for the first time about the existence of a partnership contract between Chad and private companies for oil extraction that concerns also areas included in the originally nominated property. The State Party has thus proposed a reduced boundary for the nominated property so as to exclude the leased areas. In so doing, however, it also excluded crucial attributes for the justification of inscription of the nominated property.

ICOMOS considers that fossil resources exploitation in the northern part of the Ennedi Massif threatens its values and attributes and jeopardises the possibility for its inscription on the World Heritage List. The nomination process seemed to be conducted with a great sense of responsibility by the State Party, however, at this stage, it appears severely undermined by this recent decision to give prevalence to private interests and fossil resources extraction.

ICOMOS considers that the State Party should halt any fossil resource exploitation, a Heritage Impact Assessment (HIA) should be carried out independently with the maximum urgency and the results transmitted to the World Heritage Centre and the Advisory Bodies for review.

With regard to the other factors reported by the State Party in the nomination dossier, ICOMOS considers that it would be advisable that those sites most used by cattle be inventoried and light measures adopted to prevent access by the animals (e.g. fences or light shelters in front of their preferred sites).

Thankfully, for the time being, no looting and vandalism are observed in the Ennedi.

At the moment, tourism does not represent a threat to the property: the area is not easily accessible and this keeps low the number of visitors per year. Nevertheless, the nomination dossier highlights the impact of motorized vehicles on the vegetation, as they drive outside of the marked routes, and the blown sand caused by the speed of the vehicles may contribute to damaging the rock art.

To address tourism-related issues, the Chad Tourism Office (OTT) has set out clear and strict rules for travel agencies. These include leaving vehicles 500m away from the rock art sites, camping further away, and removing all waste and traces of visitors' presence.

However, in view of the inscription of the property in the World Heritage List, increase of tourism can be expected and the contact between outsiders and local traditional communities may cause issues that need careful management.

ICOMOS concurs with the State Party that management measures for all tourism-related impacting factors should be put in place to assist the local communities in tackling this challenge and to avoid negative effects on the nominated property and their living environment. This also implies their careful monitoring.

With regard to tourism pressures, the nomination dossier mentions the construction of a hotel for 150 guests. ICOMOS requested additional information on this project and the State Party has only provided some illustrations of the planned facility but it is not clear in which location this will be built.

ICOMOS notes that the graphic documentation provided only concerns the new building, but nothing is shown of its setting, nor is it clear how it would fit into its building site, or its immediate setting.

In this regard, ICOMOS recommends that a heritage and landscape impact assessment for this hotel be carried out according to the HIA ICOMOS Guidance, and the results be submitted to the World Heritage Committee before any final decision is taken.

ICOMOS considers that the main threats to the property are oil extraction within the originally proposed perimeter of the nominated property, the subsequent decision to propose a major reduction of the proposed boundaries of the nominated property, and thus the lack of effectiveness in protection. ICOMOS recommends that any fossil resource exploitation be halted and an independent Heritage Impact Assessment be urgently carried out for the extraction programme and its results submitted to the World Heritage Centre and the Advisory Bodies. Other factors include spalling and exfoliation of the rock layers, possible improper waste management, and over-use of natural resources. ICOMOS also considers that tourism-related development needs to be carefully assessed. ICOMOS also suggests that a Heritage Impact Assessment be carried out for the hotel planned to be built in Fada. The final report of both HIAs should be submitted for consideration by the World Heritage Committee with the maximum urgency.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property (30,445 km², with 30,000 inhabitants, concentrated in sparse hamlets) follow the topographic and visual features of the landscape, namely the distinction between the massif, the plains and the contour levels. For the most part they include the mountainous relief excluding the plains, but in some directions parts of the plains are encompassed within the boundaries of the nominated property for protection purposes.

The buffer zone (1,363 km²) is a small area, compared to the size of the nominated property, on the east, encompassing Fada and its surroundings.

In September 2015, ICOMOS requested clarification on the rationale for the definition of the buffer zone.

In its response, the State Party informed that, following discussions during the technical evaluation mission, the buffer zone was being extended to encompass a 10km-wide buffer around the entire nominated property, in order to provide an adequate added layer of protection, especially from visual disturbances.

Additionally, the State Party also informed that the boundaries of the nominated property were being extended towards the west, to include within the zone Wadi Namous with its salt lakes, the oasis villages in the hollows of the palm groves, and the rock art sites located right up to the last outcrops, at the north-east of Bahr el Ghazal.

Immediately after the ICOMOS Panel meeting in November 2015, a meeting was held with the State Party representatives in which issues emerged during the evaluation and highlighted by the Panel were discussed. In this occasion, the State Party made available a revised map in line with the ICOMOS – IUCN recommendations requesting the enlargement of the buffer zone and the inclusion of some sites within the nominated property.

A joint ICOMOS–IUCN interim report was sent on 16 December 2015 requesting from the State Party formal submission of the maps depicting the expanded boundaries of the nominated property and its buffer zone.

On 25 February 2016, the State Party submitted a map depicting boundaries for the nominated property and the buffer zone substantially different from those included in the nomination dossier and those made available during the meeting at the end of November 2015. By means of a straight horizontal line this major modification to the boundaries of the initial proposal excludes from the nominated property a substantial part to the North of the Ennedi Massif, which preserves some of the most prominent rock art sites. Furthermore, no buffer zone is envisaged for the reduced boundary of the property to the North and the proposal to create a 10 km buffer surrounding the entire Massif – announced in the first additional information and reiterated during the meeting at the end of November 2015 – is no longer confirmed.

ICOMOS considers that the proposed reduction of the nominated property severely affect its integrity and undermines its Outstanding Universal Value.

An amendment to the decree n. 400/2015 that was supposed to take into account the new expanded limits of the property and its buffer zone was announced in the first additional information submitted by the State Party and rediscussed at the end of November 2015.

In their joint letter sent in December 2015, ICOMOS and IUCN requested updated information on the progress made in the final approval of the amended Decree.

In February 2016, the State Party informed that, following the reduction of the boundaries of the nominated property, the decree was in process to be further amended and finalised.

ICOMOS considers that the reduction of the nominated property impairs the protection of the Ennedi Massif in relation to its proposed Outstanding Universal Value.

ICOMOS considers that the major reduction to the proposed boundaries for the nominated property depicted in the map officially submitted on 25 February 2016 makes these boundaries highly inadequate with regard to the inclusion of the crucial attributes depicting the proposed Outstanding Universal Value of the nominated property and thus undermines the integrity of the nominated property and its ability to meet the requirements of the *Operational Guidelines*.

In conclusion, ICOMOS considers that the boundaries of the nominated property will be adequate when expanded to encompass the zone of Wadi Namous, with its villages and palm groves, and the entirety of the rock art sites at the north-east of Bahr el Ghazal. The boundaries of the buffer zone will be adequate when expanded to encompass a 10 km-wide buffer around the nominated property and this will be equipped with appropriate protection measures.

Ownership

The nominated property belongs to the State, although rights of use are granted to the local population. The access to the property is regulated by the local traditional Chiefs. Land-use rights on specific parcels are granted to the local inhabitants for traditional forms of exploitation.

Protection

The nominated property is protected under different legal instruments, among which the most important are Law n. 14/PR/2008 on forests, fauna and fishing resources and Law n. 14/PR/98 on the environment, which also includes a chapter on the protection of the historic and cultural heritage.

A specific decree for the designation of the nominated property under the national legislation was under approval at the time the nomination dossier was submitted.

In its first request for additional information, ICOMOS asked for an updated status of the legal protection regimes.

The State Party responded on 30 October 2015, providing the text of the approved decree (n. 400, 28 January 2015) and also informing that this decree was being updated to take into account the new boundaries that were agreed during the technical evaluation mission.

This information was taken into account during the ICOMOS Panel meeting and when meeting the State Party.

The interim report asked the State Party to submit updated information on the revision of the above-mentioned decree.

The State Party informed that the Decree was undergoing one further amendment to align it with the substantially reduced boundaries of the nominated property now being proposed and that this process was being finalised.

ICOMOS considers that the reduction of the boundaries of the nominated property and the exclusion of some of the most prominent rock art sites from it and the subsequent modification of the Decree establishing legal protection within the national framework undermines the efforts to protect effectively the Outstanding Universal Value of the Ennedi Massif.

ICOMOS additionally noted that all implementation measures indicated in the decree n.400/2015 were not yet in place and the decree itself did not contain an implementation calendar for these measures nor did it contain any protection measures to be applied pending the ad-hoc protective instruments.

ICOMOS in this regard considers it to be crucial that protective measures be in place at the time a property is nominated for inscription and requested the State Party to provide updating on this aspect.

On 25 February 2016, the State Party responded that the Decree had been amended and was under ratification. The protection measures established by the decree include the exclusion of mining prospection or exploitation, hunting and tree-cutting. On the other hand the traditional uses are allowed.

The Ministry of Culture, Youth and Sports is in charge of the World Heritage sites, while the protected areas and the environment are under the responsibility of the Ministry of Environment and of fishing resources, as well as of the Ministry of Water. Within the decentralisation framework, the regions have obtained additional powers and stronger institutional structures. The two regions of West and East Ennedi share the responsibilities for the administration of the nominated property. They now have a regional delegation for the Environment and the fishing resources, which is involved in the process of the elaboration and implementation of the management plan.

Protection measures are implemented by the regional delegation, the national and international Non-Governmental Organisations (NGOs), and the local communities, through their traditional organisational structures.

The local communities are still founded on traditional forms of organisation (chiefdoms) and these forms have provided, over time, the protection and the conservation of the property.

Currently the NGO's work in close collaboration with the support of the Swiss and they have accomplished already substantial work for the protection of the property. Two associations have been set up at the level of the local villages; the *Association pour la Promotion des Initiatives de Développement Local* (APIDEL), and the *Bureau d'Appui aux Initiatives de Protection de l'Environnement* (BAIPE). These are meant to assist the local population and the administration in their tasks.

ICOMOS considers that a combined form of protection that includes both traditional and institutional stewardship is very important to ensure the involvement of the local communities and to increase their awareness and participation in the protection and the management of the nominated property. Their cooperation and integration, however, should be carefully structured in order to prevent overlaps.

Whilst NGO's are also important entities in providing assistance to civil society, ICOMOS notes that it is important to ensure long-term sustainability for their operation, so as to ensure that once external donors eventually withdraw, the structure put in place can continue to operate. This requires a careful strategy for fund raising and donor diversification.

In conclusion, ICOMOS considers that the reduction of the boundaries of the property covered by the Decree 400/2015 does not ensure the adequate protection of crucial attributes of the nominated property as originally proposed. The legal protection in place will be adequate when the decree issued in 28 January 2015 is revised, provided with protective measures for the entire Ennedi Massif, and accompanied by an implementation calendar for the protection and management measures contained therein. In particular the decree should also provide for safeguarding measures pending the finalisation of the permanent protective measures.

Conservation

A long-term project of the University of Cologne is ongoing in the Ennedi Massif (ACACIA project). This has various lines of actions and has already carried out surveys and inventories that continue work commenced previously. These inventories, a long way from being complete, have, however, already catalogued 650 decorated sites encompassing at least 10,000 motifs within the 30,000 sqkms delimiting the plateau.

ICOMOS nevertheless notes that neither the nomination dossier nor the additional information transmitted by the State Party contain detailed information and samples of these inventories. ICOMOS also observes that the additional cartographic documentation sent with the additional information by the State Party upon ICOMOS's request is largely insufficient as a base for the conservation, planning and management of the property.

In this regard, ICOMOS considers that a more detailed cartography should be provided or developed and all known rock art and archaeological sites should be clearly mapped. Geometric and photographic documentation of the decorated rock walls should be developed as a base for any protection, conservation, management and monitoring purposes. The ICOMOS *Rock Art: pre-nomination Guidelines* offers useful suggestions for the elaboration of the preliminary documentation of rock art.

In the interim report transmitted in December 2015, ICOMOS asked the State Party to provide samples of

cartographic and photographic documentation of the inventoried rock art sites.

In February 2016, the State Party informed that, due to the difficult accessibility to most of the areas where the cultural attributes are located, no new inventories could be elaborated; however a long term interdisciplinary research programme is envisaged. To respond to ICOMOS request concerning examples of inventories, three scientific papers were provided, documenting investigations, mappings and inventories carried out in the previous years.

ICOMOS considers that the additional documentation provided on inventories appears at this stage inadequate to ensure the necessary knowledge of the cultural attributes for their protection and conservation.

In conclusion, ICOMOS considers that the production of cartography at adequate scales of detail, the precise mapping of the known archaeological and rock art sites, and the graphic and photographic documentation of the cultural heritage resources is urgent. Agreements with research institutions operating within the region to obtain copies of their surveys and to develop further research should be envisaged in order to set up a baseline documentation for protection, conservation and monitoring purposes.

Management

Management structures and processes, including traditional management processes

The management of the natural and cultural heritage of Ennedi up to the present day has been based on traditional management practices and structures.

Social organisation in West and East Ennedi depends upon one Sultan, based in Amdjarass, and 55 Canton Chiefs – 33 in East Ennedi and 22 in West Ennedi. They have the mission of preserving the ancestral values, including peaceful cohabitation among the populations, and managing in a rational and effective manner the natural and cultural resources, for their transmission to future generations. The power of the chiefs is passed on from father to son; they provide the continuity of tradition. This traditional system is framed within the organisation of the State and the Canton Chiefs are all formally recognised by presidential decree.

Traditional management is granted by the Canton Chiefs: they monitor the entrance to the property, are responsible for security, the management of tree cutting and for the sensitisation of local communities towards the preservation of the rock art sites.

Since 2012 the Chad Tourism Agency has complemented the work of the Canton Chiefs, by organising the local guides and the staff of travel agencies.

However, an institutional management system has been envisaged to support traditional practice. This has not yet

been put in place but, according to the State Party, the different actors involved – *Comité Scientifique National Interministeriel et Pluridisciplinaire* (CSNIP), regional ministerial delegates, the local population, Chad Tourism Office (OTT), the international organisations (African Parks and Sahara Conservation Fund), and the tour operators – began consultations in 2011. The key topics of the management are pastoralism, tourism, and protection of rock art and of natural resources.

ICOMOS asked for additional information in September 2015 on the steps undertaken to establish a formal management system in support of the traditional one and on the ways to integrate them in one single system.

The State Party responded on 30 October 2015, explaining that the Sultans' responsibilities are outlined in the Law n.13/PR/2010, which establishes that the traditional authorities cooperate with the State and are accountable to their regional governors. In view of the creation of the natural and cultural reserve and of its long-term management by the NGO, African Parks, the State Party will put in place an official steering committee.

ICOMOS observes that the institutional framework envisioned for the nominated property is largely based on the management system adopted for Lake Ounianga World Heritage Property. The mandate of the national Inter-ministerial and interdisciplinary scientific committee will be extended to the Ennedi Massif. The manager, yet to be appointed, along with local operational committees (*Comités locaux d'Organisation et d'Exécution*) will be responsible for the preservation of the natural and cultural heritage of the nominated property, including all the range of actions needed to make this operational.

In this regard, it would be crucial that the State Party clarifies how, operationally, the institutional management system which is going to be established, will integrate and cooperate with the traditional organisation and practice so far implemented and defined in the existing legislation.

Coordination with the local actors is envisaged through meetings to be held every two months. Considering the size of the nominated property and the difficult accessibility of large parts of the area, as well as the means of transportation available to local communities and their traditional representatives, it appears very difficult for this to be achieved.

At the time when the ICOMOS technical evaluation mission was carried out, the management system for the Ennedi was being put in place. The Ministry of the Environment has established close cooperation with African Parks; while the Ministry of Planning has approached the European Development Fund, in order to secure financial assistance to implement management actions.

The State Party informed that on 21 October 2015 the European Union (EU) validated the 11th programme of the European Development Fund (2014-2020) and that the

EU stated officially its intention to support Chad in the institutional management of the nominated property, the putting into operation of which seemingly will begin in December 2016.

With regard to the additional information provided by the State Party, ICOMOS notes that it has not been clarified how, operationally, the integration between traditional and institutional management would be set up and implemented. Whilst the time-scale to set up the management system is given – December 2016 – no additional information is provided on the operational steps that are planned to make it happen.

An implementation calendar guiding the steps towards the setup of the reserve and of its management system/plan by December 2016 would assist in achieving the objective in the planned time. ICOMOS therefore suggests the development of such an operational timeframe.

In this regard, in the joint ICOMOS-IUCN interim report, ICOMOS asked the State Party to provide further updated information on the finalisation of the institutionalised management and its integration with the traditional management, as well as on the above-mentioned implementation calendar.

The State Party responded that a complete management plan will be elaborated that shall take into consideration all aspects of management and protection and that a management committee will be established before December 2016.

ICOMOS considers that the key aspect is the integration of the traditional management into the institutionalised management in order to guarantee coordination, the maintenance of traditional practices as well as social organisations and empowerment of local communities.

The State Party has prepared an implementation calendar to respond to ICOMOS and IUCN concerns as emerged in December 2015. However, the major reduction of the boundaries of the nominated property, the disconfirmation of the proposed boundaries for the buffer zone as presented at the meeting with ICOMOS at the end of November 2015, the information that fossil resource exploitation were in existence in areas within the nominated property, indicate that contradictory protection and management priorities need to be addressed. These include halting oil or gas prospection and exploitation in the areas comprised in or in the vicinity of the nominated property as originally delineated, elaborating a Heritage Impact Assessment for these exploitation programmes to assess the negative impacts of such a plan and identify any corrective measure to cancel or reduce these impacts.

In general, ICOMOS considers that resources extraction activities are not in line with World Heritage designation.

In ICOMOS's view, an important aspect that requires further clarification in the management system concerns

the sharing with local communities of revenues generated through tourism. This aspect is mentioned in the nomination dossier but not explained. In particular, the management system should address the imbalances created by uneven tourism potential of the different areas of the nominated property, and envision mechanisms for redistribution in order to ensure that benefits from tourism are enjoyed directly or indirectly by all local communities.

Policy framework: management plans and arrangements, including visitor management and presentation

A management plan is attached to the nomination dossier. The document illustrates the values and attributes of the nominated property, the main factors that affect or may affect it, the opportunities to be grasped and the challenges to be tackled. It also describes the management system in place for the nominated property, and the measures to be put in place to ensure that the nominated property is protected and adequately managed.

In ICOMOS's view, the measures envisaged by the plan are reasonable and sound. They need, however, a robust training and capacity building programme for the implementation of which the European Union funds could assist greatly. In particular, it would be very important that mid- to long-term programmes to prepare managers and management staff within the members of the local communities be elaborated and implemented.

With regard to tourism, the nomination dossier mentions that a national tourism strategy is being developed. This will be crucial in setting out the vision at the national level and for the places having major tourism potential.

In its letter, ICOMOS requested additional information concerning the national and regional strategies for tourism.

The State Party replied on 30 October 2015 and, with regard to tourism, transmitted two decrees issued by the Region of West Ennedi on regulations concerning tourism management.

ICOMOS considers these decrees important steps; however, it also notes that the State Party has not provided any additional explanation as to how tourism would be managed and on the time-scale of the national and regional tourism strategy.

However, ICOMOS also notes that important steps concerning training in the tourism sectors have been already initiated by the Chad Tourism Office (OTT). These efforts should be continued so as to increase the number of members of local communities that are prepared to face tourism consequences.

The additional information sent by the State Party also included the recommendations issued by the Chad Tourism Office for the travel agencies. In this regard,

ICOMOS considers that this is an important step for the engagement of the tourism sector in the appropriate management of the impacts from tourism.

ICOMOS, however, considers that waste management measures already in place should be strengthened, by defining ad-hoc measures for the removal of all non-recyclable or slowly-recyclable waste (e.g. plastic containers, tins, glass).

With regard to the development of facilities for tourists, while this exigency needs to be met, ICOMOS considers that it would be important that a general plan be prepared and clear guidance on materials, building processes, and eco-sustainable operation be established and implemented.

Involvement of the local communities

In ICOMOS's view, this crucial aspect has been rather vaguely dealt with in the nomination dossier. While the consultation and participation of the local stakeholders is mentioned many times, there is no conclusive information about who got involved, when and with what concerns. It is not clear whether this process included the common people in a more or less participatory discourse or it largely concerned the political and administrative spokespeople.

This aspect needs to be addressed by the State Party in order to ensure that the institutional management can be understood and accepted by local communities, and that they can cooperate through their traditional and officially-recognised management practices.

In the interim report, ICOMOS asked the State Party to provide updated information on how local communities are involved in the finalisation of the institutionalised management system being set up.

The State Party responded that the revised decree 400/2015 will allow traditional activities within the protected area. Participation and involvement of local communities to management will be supported through periodical meetings.

ICOMOS considers that the participation process requires an ad-hoc strategy with regard to institutionalised management and should be further detailed.

ICOMOS considers that the major reduction of the boundaries of the nominated property unexpectedly proposed in February 2016 poses some fundamental questions with regard to management effectiveness and priorities that need to be addressed urgently. With regard to the proposed framework, ICOMOS considers that special attention is needed to ensure the integration/coordination of the traditional and institutional management forms, identifying clear responsibilities and providing the necessary implementation means. Clarification on how the revenue from tourism would be returned to all local communities, through agreed

redistribution mechanisms, is also necessary. Training and capacity building strategy and programmes should be developed in order to prepare future local managers for the nominated property, so as to ensure that in the mid- to long-term, the management of the property can rely on organisations internal to Chad.

In conclusion, ICOMOS considers that the traditional management system for the property appears adequate; however, the ways in which coordination of the traditional and institutional management systems will be provided need to be further clarified. The management system will be effective only if specific action plans are implemented. ICOMOS recommends that priority should be given to waste and water management, with a view to an increase in visitors.

6 Monitoring

The nomination dossier includes a set of indicators articulated under different lines of action, following the main focus of the management plan. These indicators could be understood also as a sort of roadmap for the implementation of the management activities. They include 8 lines of action and 52 indicators – in fact, activities to be carried out within three years.

ICOMOS considers that the monitoring system is site-specific and objective-based and would serve the purpose of measuring the advancement of the action plans. ICOMOS however considers that the monitoring system should assist in measuring both the management effectiveness and the condition of the property.

In conclusion, ICOMOS considers that the monitoring system is targeted to the specific needs of this management phase and may need adjustment in the future, in order to monitor both management effectiveness and the state of conservation of the property.

7 Conclusions

The Ennedi Massif is a mountainous region in north-east Chad, an impressive sandstone plateau eroded by wind and thermal cycles into gorges, cliffs, canyons and outliers. Although part of the Sahara, the climate of the Ennedi Massif is much more suitable for human habitation than most of the desert, with regular rain during summer, wadis flowing once or twice a year, *gueltas* and a relatively large range of flora and fauna – including some of the few remaining populations of crocodiles west of the Nile. Throughout its caves, canyons and shelters, thousands of images – dating from 5,000 BC onwards – have been painted and engraved, comprising one of the largest collections of rock art in the Sahara and characterised by a wide variety of themes and styles.

The State Party appeared fully engaged in protecting and managing in a sustainable manner the Ennedi Massif for the benefit of its inhabitants. The measures already put in place seemed to point in the right direction and suggested that the major challenges for this property and its inhabitants had been recognised and being addressed.

ICOMOS notes that despite the many steps already undertaken, much still remains to be done in order to set up management mechanisms that ensure the protection of the delicate environmental balances of the property and, at the same time, contribute to the sustainable, equitable and compatible development of the communities living therein.

The setting-up of the institutional management system, planned to be established by December 2016, and its integration/coordination with the traditional management, needs to be clarified and further detailed.

In this regard ICOMOS suggests that an implementation calendar be elaborated with all needed actions detailed, so as to assist the State Party to achieve its goal.

Local communities, who have until now managed the nominated property and its resources according to traditional practices, which have been formally recognised also by the State, need to be fully involved in the finalisation of the institutional management system.

The recent and unexpected information that a partnership contract was signed between the State Party and private oil companies for resource exploitation, implying the lease of land within the boundaries of the originally proposed nominated property, and the equally unexpected decision to reduce significantly the boundaries of the nominated property, instead of expanding them, as agreed between ICOMOS and the State Party to include the Wadi Namous area and the oasis villages, and not to confirm the proposed buffer zone, as presented at the end of November 2015, have a significant impact on ICOMOS evaluation of this nomination.

The exclusion of the northern part of the Ennedi Massif from the nominated property by drawing a straight line and ignoring any geomorphological, hydrological or other natural or cultural features implies the exclusion also of some of the most important rock art sites and archaeological remains in the region. These include Guirchi Nola Doa, which, according to the ICOMOS Thematic Study on Rock Art of the Sahara and North Africa (2007) are the most significant rock art sites that could justify the inscription of this property on the World Heritage List. This inexplicable and unexplained decision severely undermines the integrity and authenticity of the nominated property and its ability to meet the requirements of the *Operational Guidelines*.

ICOMOS previous assessment of the integrity and authenticity of the nominated property, which could have been demonstrated by expanding the boundaries of the nominated property as agreed between ICOMOS and the

State Party (see additional information sent on 30 October 2015 and the map made available by the State Party on 30 November 2015), cannot be any longer valid.

The recent information that a partnership contract between the State party and private oil companies is signed and that lease of land within the nominated property for fossil resource extraction has been issued, magnifies the scale of the threats to the nominated property. The fact that the nomination process did not contribute to avoid that fossil resource exploitation permitted within the originally nominated property or its vicinity suggests significant gaps in protection and management effectiveness as well as in heritage awareness.

8 Recommendations

ICOMOS recommends that the World Heritage Committee adopts the following draft decision, noting that this will be harmonised as appropriate with the recommendations of IUCN regarding their evaluation of this mixed site nomination under the natural criteria and included in the working document WHC/16/40.COM/8B.

Recommendations with respect to inscription

ICOMOS was ready to recommend the inscription of the Ennedi Massif: natural and cultural landscape, Chad, on the World Heritage List, on the ground of the original nomination dossier and the expansion of the boundaries of the nominated property and of the buffer zone as agreed between ICOMOS and the State Party until the meeting held in ICOMOS headquarter on 30 November 2015 and attested to by the additional information submitted by the State Party on 30 October 2015 and by the map made available in occasion of the above mentioned meeting. However, following the major reduction of the boundaries of the nominated property and the disconfirmation of the expansion of the boundaries of the buffer zone, proposed by the State Party with its letter sent on 25 February 2016, ICOMOS regrets that its recommendation has to be changed, in that the new reduced boundaries of the nominated property do not include crucial cultural attributes supporting the justification of criterion (iii) and the proposed Outstanding Universal Value.

ICOMOS therefore finds itself obliged to recommend that the examination of the nomination of the Ennedi Massif: natural and cultural landscape, Chad, to the World Heritage List be **deferred** in order to allow the State Party to:

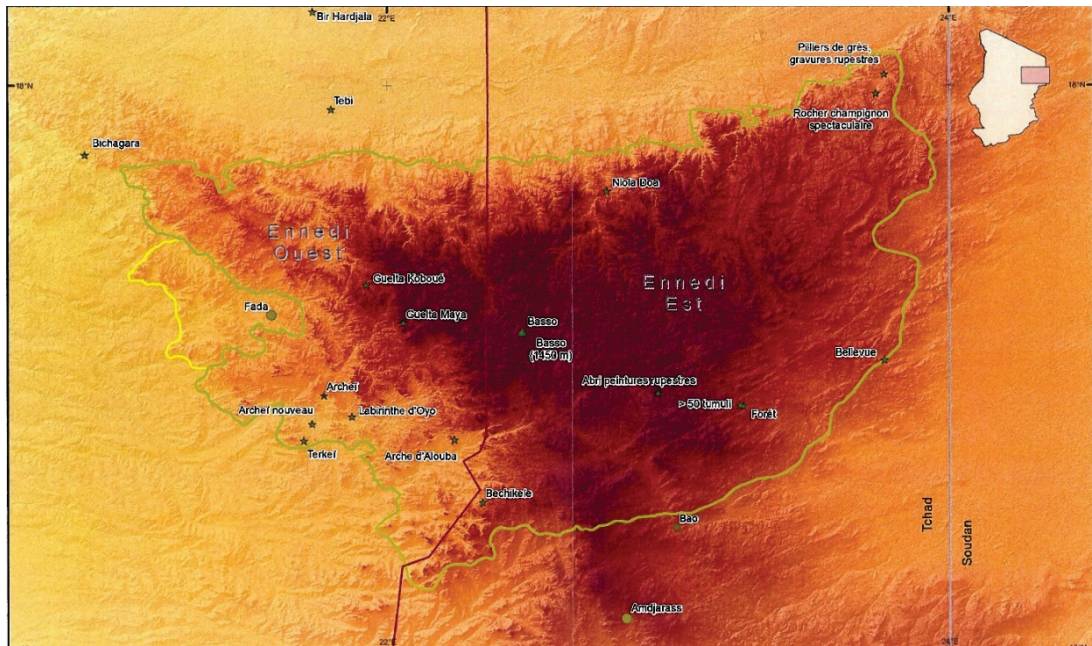
- Halting the oil exploitation programme in areas within the original nominated property;
- Reestablishing the boundaries of the nominated property as depicted in the map submitted at the end of November 2015;

- Finalising the revision of decree n. 400/2015 in line with the reestablished boundaries of the nominated property as suggested by ICOMOS during the evaluation process and by including protection measures and an implementation calendar for the envisioned protective measures;
- Carrying out an independent Heritage Impact Assessment for the fossil resource exploitation plan identifying the negative impacts on the nominated property, its attributes and its setting and submit the result of the HIA to the World Heritage Centre and the Advisory Bodies for examination;
- Finalising and putting in place the institutional management system and prepare an operational implementation calendar for all steps needed to achieve this goal and clarify the management responsibilities of the new system in coordination with the traditional one which has been in place until today;
- Ensuring the full participation of the local communities and of their traditional authorities at the different levels to the finalisation of the institutional management system.

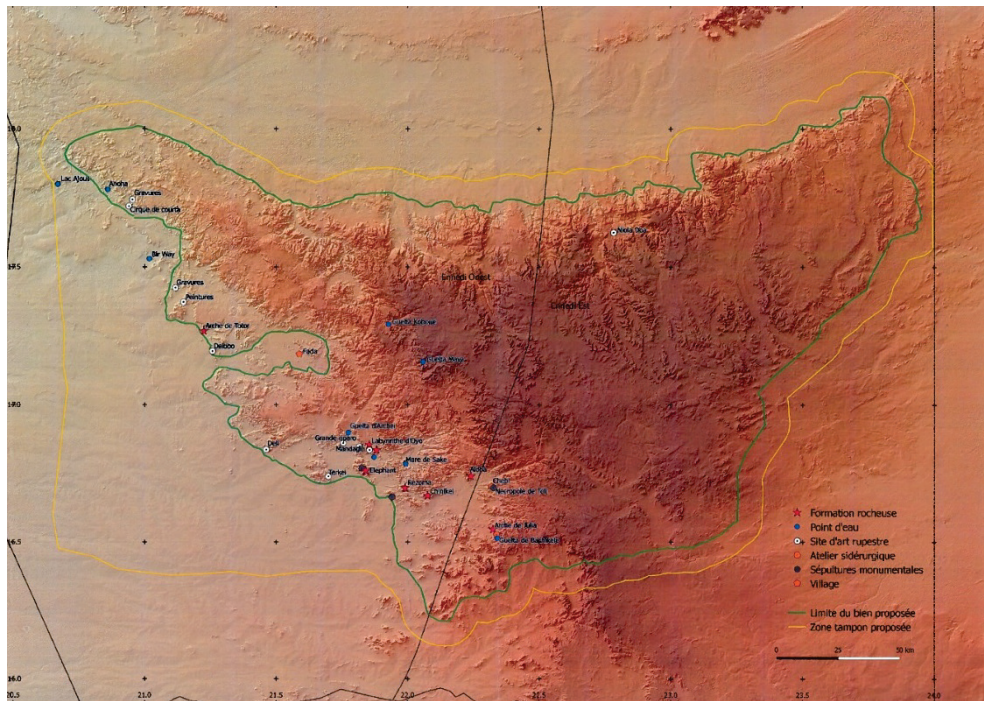
Additional recommendations

ICOMOS further recommends that the State Party gives consideration to the following:

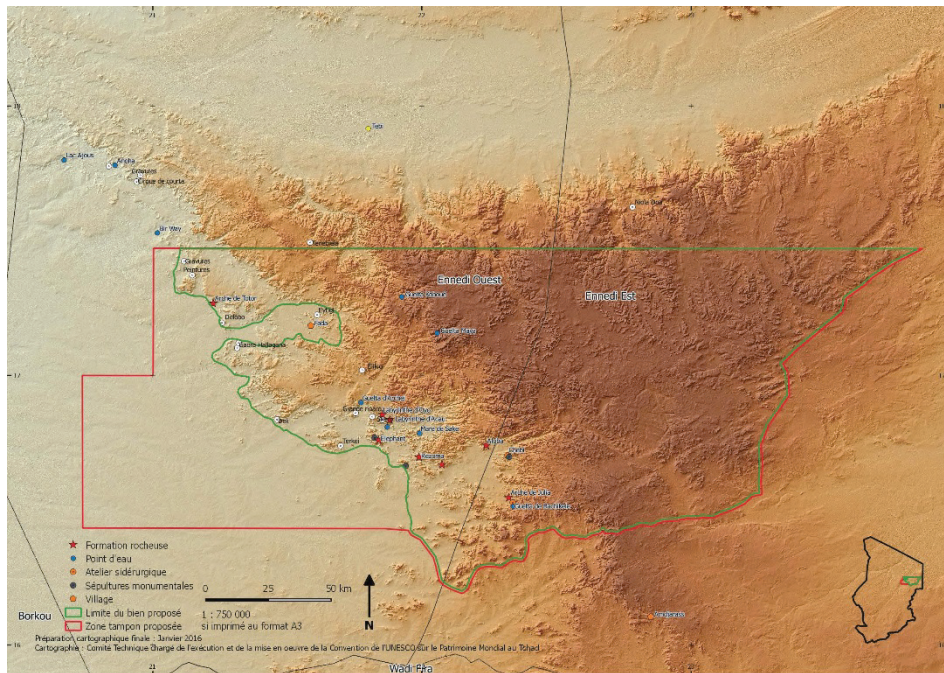
- Preparing and submitting cartographic documentation and mapping, with the assistance of the research institutions that have been and are currently working in the region, at an adequate scale, of the sites so far inventoried, in order to have a baseline for protection, conservation and management purposes;
- Strengthening and diversifying waste management according to the waste types;
- Continuing training and sensitization of local communities;
- Establishing capacity building strategies and training programmes in order to prepare the future managers of the property from within the members of the local communities;
- Incorporating a Heritage Impact Assessment approach into the management system, so as to ensure that any programme, project or legislation regarding the property be assessed in terms of its consequences on the Outstanding Universal Value and its supporting attributes.



Original map showing the boundaries of the nominated property (included in the nomination dossier)



Revised map showing the boundaries of the nominated property submitted on 30 November 2015



Revised map showing the boundaries of the nominated property submitted in February 2016



Oyo labyrinth



Rock art - Horses and camels galloping



Rock art - Bovines with individual characteristics