# Trang An (Socialist Republic of Viet Nam) No 1438

# Official name as proposed by the State Party

Trang An Landscape Complex

## Location

Ninh Binh Province, North Viet Nam Socialist Republic of Viet Nam

# **Brief description**

At the southern edge of the Red River delta, Trang An is a dramatic towering Karst limestone landscape interspersed by a network of flat valleys, some flooded, and framed by sheer, almost vertical, cliffs.

Exploration of some of the higher level caves that punctuate parts of this landscape have revealed archaeological evidence for seasonal human activity from the Late Pleistocene to the Early-Middle Holocene periods, spanning more than 30,000 years.

This evidence is beginning to chronicle the way early human groups adapted to far-reaching environmental changes at the end of the last glacial period, and, with further work, might provide a reference for understanding the process of adaptation to, and recolonization of, landscapes under changing conditions.

The property also includes Hoa Lu, the ancient capital of Viet Nam in the 10<sup>th</sup> and 11<sup>th</sup> centuries, as well as temples, pagodas and scenic areas of rice paddy fields, villages and sacred places.

#### 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 2013) paragraph 47, it is also a cultural landscape.

[Note: the property is nominated as a mixed cultural and natural site. IUCN will assess the natural significance and ICOMOS the cultural significance.]

# 1 Basic data

Included in the Tentative List 30 September 2011

International Assistance from the World Heritage Fund for preparing the Nomination None

# Date received by the World Heritage Centre 17 January 2013

Background This is a new nomination.

# Consultations

ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

# **Technical Evaluation Mission**

A joint ICOMOS/IUCN technical evaluation mission visited the property from 10 to 19 August 2013.

# Additional information requested and received from the State Party None

Date of ICOMOS approval of this report 6 March 2014

# 2 The property

# Description

The visually spectacular Trang An karst limestone landscape rises from the vast flat coastal floodplains of the Day and Van Rivers.

The property covers 6,172 hectares. It is mainly made up of three contiguous protected areas. These are the Hoa Lu Ancient Capital, the Trang An-Tam Coc-Bich Dong Scenic Area along the Sao Khe River, with fields for rice and other crops and farming villages, and the Hoa Lu Special-Use Primary Forest, where excavations of a series of limestone caves in recent years have provided evidence for seasonal human activity between the 1,000 and 33,000 BCE.

Most of the property is said to be uninhabited and in a natural state. However those parts of the property that are cultivated are home to around 14,000 people.

Over many millennia, the Trang An massif (along with the much wider south east coast of Asia) was subject to wildly fluctuating climatic and environmental conditions, especially as a result of three marked fluctuations in sea level during the late Pleistocene-Holocene period between around 130,000 to 30,000 BP. Trang An was at times surrounded by sea and at other times was well inland.

The recent archaeological research has revealed evidence of seasonal settlement in several caves from c. 30,000 to 12,000 years BP, during the Last Glacial Maximum and marine regression. It has also shown how people adapted their gathering of food between sea and inland resources as the sea level rose and fell.

Also in the property, mainly along the Sao Khe River are the remains of the Hoa Lu Ancient capital and hundreds

of temples, pagodas and shrines dating from different periods, as well as rice fields and villages. It should be noted that in the nomination dossier details of the temples, pagodas and traditional way of life are provided under criterion (vii). Although IUCN is considering that criterion, attention is given in this report to these cultural aspects.

These aspects are considered separately:

- Caves
- Hoa Lu Ancient capital
- Temples, pagodas and shrines
- Rural landscapes and villages

## Caves

Since 2007, archaeological investigations have been undertaken in 9 of the 29 caves that have been identified in the limestone massifs of the nominated area. Results are said to have revealed evidence of seasonal use by prehistoric people over a 30,000 year time span, from around 1,200 BP at the Moi cave (*hang*) back to at least 24,438 BP at the high altitude Trong cave and around 33,000 BP at the Mai da Ong Hay rock-shelter.

There is evidence that during this time, people hunted both large animals such as cattle and small ones such as monkeys and giant squirrels. At the beginning of this period, there is also evidence for the use of used basalt pebble tools, at Hang Trong, and from 12,000 years ago tools made mainly of limestone. The remains of seasonally available seeds, fruits, vegetables and tubers, and particularly mountain and freshwater snails, suggests seasonal use of the caves. And evidence for fire suggests that food was cooked.

As well as these three sites, the main caves and shelters so far investigated are the Boi, Thung Binh 1, Thung Binh 2, Thung Binh 3, Thung Binh 4, Nui Tuong, Ang Noi, and Da Mang caves, and the Oc, Vang, and Cho rock shelters. These are all within the Special Use Primary Forest Zone in the west of the property.

While these archaeological investigations have been underway, geologists have been taking core samples to investigate the history of geological and environmental changes during the same time period, working on a 10m thick sediment layer deposited since the beginning of the Holocene period.

The outcome of the fusion of evidence emerging from the work of archaeologists and geologists, is knowledge of long-term human interaction with the environment, from the extreme end of the Pleistocene to the Holocene, through cycles of substantial environmental change linked to massive changes in sea levels and climatic conditions. Trang An is said to be one of the longest, most securely dated and already most intensively studied such sequences in Viet Nam which are beginning to show how people reacted to these environmental changes. ICOMOS notes that this work has currently only been directed at a small proportion of the potentially rich cave resources of the Trang An massif and is still continuing. The lowest levels in the caves so far investigated have not yet been reached and there are many other caves that could be investigated. It cannot therefore be claimed that the full potential of Trang An has yet been revealed or understood.

# Hoa Lu Ancient capital

Hoa Lu, in the north of the nominated property, served as a political capital for 42 years during the Dinh Dynasty from CE 968 to CE 1010. Subsequently, it became an important regional centre. In the 13<sup>th</sup> and 14<sup>th</sup> centuries CE, Hoa Lu as a military citadel, defended the nation's frontier against invaders from both Mongolia and China.

In the late 16<sup>th</sup> and early 17<sup>th</sup> centuries some temples including Linh Coc temple and the temple of the Dinh-Le emperors were rebuilt and others such as Bich Dong temple built anew. In 1788, during the resistance war against the Chinese, the original ramparts was strengthened and new ramparts constructed.

The remains of both the Inner and Outer Citadels cover an area of around 300 ha  $(3.0 \text{ km}^2)$ . Today, the citadels no longer exist, and few vestiges of the  $10^{\text{th}}$  century buildings apparently remain. Many temples and tombs have been reconstructed either in the  $16^{\text{th}}$  and  $17^{\text{th}}$ centuries or more recently 'aided by physical excavation, exposure and in-situ preservation of foundations and other structures'.

ICOMOS notes that although annotated photographs are supplied in the nomination dossier, very few descriptive details have been provided for this area.

# Temples, pagodas and shrines

Within the nominated property there are said to be hundreds of historic pagodas, temples, and shrines dating from different historical periods. These include two temples of King Dinh and King Le with their traditional wooden architecture, the Nhat Tru Pagoda with its Buddhist scriptures carved on the temple's stone pillars in the 10<sup>th</sup> century, and Thai Vi Temple of the Tran Dynasty. There are also imperial dragon stone beds, and scared dog statues dating from the 17<sup>th</sup> century CE.

ICOMOS notes that few specific details are provided on this aspect of the property. However it is understood that these cultural sites are mainly along the Sao Khe river area, in the vicinity of the Hoa Lu ancient capital. Some temples are now in ruins, others have been reconstructed from ruins with modern materials, while yet others in the main tourist area have been completely restored, in order to make them more attractive to visitors. This overall work is still in progress largely funded by pilgrims.

#### Rural landscapes and villages

The nomination dossier states that the 'abundant archaeological evidence is complemented and supported by a rich supply of historical and cultural information, manifest in structures such as temples, pagodas and palaces, and in more intangible elements of cultural heritage such as folklore, festivals and handicrafts'.

On the extensive alluvial flats in the nominated property and extending beyond into the buffer zone, are rice paddy fields, villages and canals. The picturesque qualities of these fields are much in evidence in the photographs within the nomination dossier.

ICOMOS notes that although the precise extent of this rural landscape is not made clear in the nomination dossier, what is made clear is that the majority of the nominated area is uninhabited and in a natural state. The cultivated landscape along the Sao Khe River thus covers only a very small part of the nominated area.

#### History and development

The early pre-history of the area is outlined above.

From around 4,000 BP, there is evidence that the caves were used less frequently and, as the sea levels dropped, people began settling in the margins of the area and particularly in the coastal dunes.

From the 2<sup>nd</sup> century BC to 10<sup>th</sup> century AD, Viet Nam in general and Trang An in particular were under Chinese domination.

Following the collapse of the Chinese Tang dynasty at the beginning of the 10<sup>th</sup> Century, and the emergence of the Southern Han dynasty, a Viet Namese noble, Ngo Quyen, seized power over what is now the north of Viet Nam in a battle at Bach Dang river in AD 938 and established his capital at Co Loa (now in Hanoi). This event concluded the 1000-year period of Chinese domination in Viet Nam, opening the era of national independence for the country. However, after his death a civil war ensued that lasted for 20 years ending when one of the warlords defeated the others and established what is regarded as the first imperial monarchy in Viet Nam with a short lived capital at Hoa Lu. Forty-two years later the capital was moved back to Co Loa.

Between 1407 and 1427, Viet Nam was invaded by China and became the Chinese province of Jiao Zhi but under the Le Dynasty (1428-1527) regained its independence.

# 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The property is compared to four inscribed World Heritage properties: the first two, Hoi An Ancient Town

(Viet Nam), and Town of Luang Prabang (Lao), are suggested on the basis that they were inscribed under criterion (v). This does not bring any valid comparisons. The second two are Ban Chiang Archaeological Site (Thailand) and Archaeological Heritage of the Lenggong Valley (Malaysia). Ban Chiang is noted as representing a specific and well defined archaeological culture which is quite different to the Trang An caves which are related to human-environmental relationships over time rather than a specific culture. There are more similarities with the Lenggong valley, although here the research has primarily been focused on the past 10,000 years and particularly on the making of lithic tools, in contrast to the focus on behavioural adaptation at Trang An.

Comparisons are made with five Tentative Lists properties. Two of these are in the Philippines: the Archaeological sites of the Cagayan Valley, and the Tabon Cave complex. The Cagayan Valley research is also partly related to behavioural adaptation but is seen as dealing with habitation on islands rather than, as at Trang An, a landscape that is only sometimes surrounded by the sea, nevertheless it is suggested that this valley could produce material that is complementary to Trang An. Similar material in terms of human response to the changing environment might also be provided at the Tabon cave but this research has not yet been published and it appears that it might not be as continuous as at Trang An.

The three other sites are Badah-lin and associated caves, Myanmar, Con Moong cave, Viet Nam, and Prehistoric Caves in Maros Pangkep, Indonesia. Of these, the Con Moong cave, only 25 kilometres from Trang An, is seen to be the most similar, in terms of revealing behavioural patterns but it is considered unlikely to contain the same breadth of evidence as Trang An.

More relevant are three others sites not so far included in Tentative Lists. These are the Niah cave, Malaysia, Lang Rongrien, Thailand, and Song Gupuh, Indonesia. All of these are important sites with on-going archaeological investigations. They are all seen as sites where human adaptation to the environment is important but there reflect distinct differences. For instance the Niah cave deal with a rain forest area, but most importantly all three have revealed considerable archaeological richness linked to specific time frames and specific sites.

The comparative analysis reveals with emerging importance of archaeo-environmental studies in southeast Asia and further afield. The sites mentioned are all a reflection of the richness of evidence for early human settlements in this region and for the potential for sites to reveal ways in which people reacted to changing environment over time. At Trang An, the main emphasis is on this link, with the archaeological evidence linked to geological research. At some of the other sites the main focus is on substantial archaeological evidence for one or more specific sites and/or specific periods that may also reveal environmental parameters.

ICOMOS considers that the main difficulty with this comparative analysis lies in the fact that the work at Trang An is comparatively recent, that there is the potential for it to continue, and that overall the field of environmental-archaeological research is a rapidly developing one which needs to be considered in terms not only of sites in south east Asia but also further afield.

The case is being made that Trang An can be seen as contributing to an understanding of human response to changing environments in a very specific coastal area, whereas other sites are producing material on different localities and types of geology and ecology. Given the current state of knowledge, with only limited excavations at some caves, it is difficult to say that Trang An will prove in the long term to be a defining moment in our knowledge of human response to climatic variations, and thus seen to be of outstanding importance.

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List at this stage.

# 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 archaeological evidence of human habitation in the massif, extends back in time some 30,000 years and shows how early human forager-hunter peoples, occupied the massif probably on a seasonal basis, and adapted to changing climate and environments from the time of the last glacial maximum through the turbulent transformations at the end of the glacial period, during which time the massif was incrementally and sometimes rapidly inundated by the sea.
- The Trang An property is now recognized as being outstanding in Southeast Asia as an exceptionally rich repository of information for demonstrating human-environment interaction in Late Pleistocene and Holocene time period.
- In historic times the inhabitants of Trang An continuously evolved their cultural identity in close harmony with the natural landscape, establishing the first three dynasties of the independent feudal Viet Nam more than one thousand years ago and the country's first political capital.

ICOMOS considers that the currently excavated caves have not produced finds that have dramatically altered our knowledge of human settlement in south-east Asia; much earlier and more substantial finds have been made elsewhere in the region. The distinctiveness that is being put forward for Trang An is evidence for the link between archaeological finds and geological and environmental change over time. This has been demonstrated through the way excavated materials display how food gathered by the seasonal users of the caves changed as sea level rose and fell from land to sea resources and then changed again as sea levels decreased.

The relationship between archaeology, geology and climate change is a rapidly emerging subject area which has the potential to reveal evidence for the way early communities adapted to their changing environments. Bringing together the two disciplines of archaeology and geology does however highlight differences in approaches to geological and archaeological time and thus chronological accuracy. There is also the issue as to how far this type of evidence needs to be related to tectonic movements as well as to other parameters.

In terms of assessing value, the issue is how exceptional the evidence is from Trang An in relation to other evidence from this region and from other parts of the world. The results from Trang An are of interest but the project is still in its early stages. The scientific information provided in the nomination dossier is highly variable in quality and quantity and is in some places contradictory. Although some work has been published, the results have not yet been the subject of a substantial publication that would allow them to be tested alongside other sites.

In 10 years' time this picture may well have changed. In the meantime, ICOMOS considers that the case is not proven for Trang An being seen as a defining site in terms of our knowledge of human adaptation to the environment in relation to settlement in this region.

# Integrity and authenticity

### Integrity

The boundaries of the property encompass not only archaeological sites, but also the remains of Hoa Lu, shrines and temples and also agricultural land and villages.

As set out above, the cultural criterion (v) relates only to the archaeological evidence. In terms of archaeological attributes, the boundaries do not closely follow the disposition of cave sites. Most of these are in the west of the property and some are currently outside the boundaries.

In terms of the boundaries including all the necessary attributes, then ICOMOS considers that these are at the moment not entirely satisfactory.

In terms of the integrity of individual archaeological sites, the evidence in some of the caves appears to be threatened by the lack of backfilling after excavations in the recent years and the lack of satisfactory supports for excavated faces. The lack of protection has led to the collapse of soft sediment, causing the irretrievable loss of information in unexcavated areas. There are also issues connected to the setting of these caves in relation to concrete paths (see below).

The integrity of the overall property is adversely affected by a range of facilities and infrastructure arrangements for tourists. These include new roads and enlarged tunnels through the mountains.

## Authenticity

The authenticity of the archaeological evidence is highly vulnerable in some excavated caves due to the lack of adequate support or back filling.

In terms of the overall authenticity of the property, it is difficult to say that the overall landscape clearly reflects the way human communities responded to their environment over time. This relationship between people and changing climatic conditions has emerged from only nine caves and even in these is it as a result of analysis of comparative evidence. The landscape cannot be said to reflect these changes in any meaningful way.

Of concern in terms of threats to authenticity are the changes taking place to parts of the landscape for tourist development and to the current arable landscape (see below).

ICOMOS considers that the conditions of integrity and authenticity have not been met at this stage.

# Criteria under which inscription is proposed

The property is nominated on the basis of cultural criterion (v) (and natural criteria (vii) and (viii)).

Criterion (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;

This criterion is justified by the State Party on the grounds that Trang An is an outstanding locale for demonstrating the way that humans interacted with the natural landscape and adapted to major changes in the environment over a time period spanning more than 30,000 years. This continuous cultural history is strongly associated with the geological evolution of the Trang An limestone karst massif since the end of the last glacial period, during which it experienced marked changes in sea levels and in climatic conditions, as revealed in paleo-environmental records.

Although the nomination includes other cultural sites such as Hoa Lu ancient city and numerous temples, pagodas and shrines that are included as part of the justification for Outstanding Universal Value, they are not included in the justification for this, the only cultural criterion. ICOMOS notes that the detailed archaeological analysis presented in the nomination dossier relates to excavations at nine caves in the Special Forest reserve (out of 29 caves so far identified as having the potential for further research). Although evidence from some of these extends back to 30,000 this is not the case for all the excavated sites, some of which contain evidence dating back only some 5,000 years.

The evidence from these caves is beginning to provide evidence on the way communities reacted to dramatic environmental climatic change over many millennia that affected the coastal regions of south-east Asia. This research is comparatively recent - work started in 2007 - and still has not been the focus of substantial publications and comparisons with other work in the same region and elsewhere. Clearly Trang An is at the forefront of sites where the archaeological evidence is not producing substantial finds that are related to defining archaeological cultures, but rather evidence over a long time span that is related to environmental and climatic changes. This is an emerging field and clearly Trang An has the potential for further research over the next decade or so. What has so far not been demonstrated is how Trang An can be seen to show in a archaeological-environmental defining way these relationships.

This focus on how communities adapted to their environment over time also brings up the difficulty as to how the property might reflect the evidence that has been discovered. Given the very large difference in sea levels between the Holocene period and today it is not possible to establish a clear link between the sites as they are now and the dynamics of adaptation to climate change that excavations have revealed.

ICOMOS considers that this criterion has not been justified at this stage.

ICOMOS does not consider that the conditions of authenticity and integrity been met at this stage nor has the criterion been justified.

# 4 Factors affecting the property

The development of facilities for visitors appears to be moving forward rapidly. Currently around one million tourists visit the property annually but this number is growing in particular amongst foreign tourists.

The focal point for tourist groups from Viet Nam and Asia is the new Trang An Scenic Landscape Visitor Centre. On an island, this is a series of modern buildings in traditional architectural style, with car parking space built on land fill. The centre serves as the starting point for the traditional sampans (rowing boats) operated by local people that take visitors on circuits around the site. Some 1,500 boats contribute to the daily life of about 7,500 families. In the southern part of Trang An Scenic landscape, which tends to attract Western visitors, are a further 1,100 boats, managed by different companies.

Also in order to facilitate the passage of tourists both in boats and motorized vehicles tunnels through the rocks are being drilled or enlarged. Also within a fully protected area (the Hoa Lu Special-Use Forest) a long 2-3m wide concrete path – running to several kilometres, and including hundreds of steps – has been constructed to the foot of the Hang Trong cave. It has been funded by a private tourism company in spite of the fact that the protective legislation does not allow unauthorized access to the protected area.

Perhaps the greatest impacts have been caused by a new road within the protected area of the ancient capital of Hoa Lu, and by new resort currently under construction within the property. This is the Tam Côc luxury 'Eco lodge' complex and it consists of large blocks of brick buildings that have a high negative visual impact.

A further negative change within the property is the creation of raised embankments on the paddy fields. These are apparently being created to allow either the construction of houses or the planting of trees, both of which would have a significant impact on views of the traditional farmed landscape.

In the buffer zone on the Tam Côc tourist circuit, a large multi-story hotel is under construction, next to tall telecommunications towers, and together these could impact adversely on views in the first part of the tourist circuit. Also a huge religious complex is being completed on 200 acres at the north-west boundary of the property next to the Bai Dinh pagoda. A large bridge is also under construction on the river marking the northern boundary of the property.

From the above it is difficult to understand how protective arrangements for the property and the buffer zone are being managed, in relation to the stated visual importance of the property (and its natural value), and also the sensitivity of the archaeological layers. These changes are already irreversible in certain zones.

The integrity of some of the excavated caves is now threatened by the lack of backfilling of excavated archaeological sites by researchers in recent years. This lack of protection for excavated sections has led in some irretrievable loss of information in unexcavated areas.

The caves are mostly in remote sites which is beneficial to their conservation. There is concern that new paths, as mentioned above, and new signs on the archaeology that have recently appeared, could lead to undesirable access to the caves which are not in any way in a state to be visited.

Natural disasters of various types could well be extremely harmful to archaeological evidence. There is a need for this subject to be addressed and consideration given as to whether and how preventive measures might be identified and put in place.

ICOMOS considers that the main threats to the property are lack of adequate regulation for development of facilities for tourism and reconstruction.

# 5 Protection, conservation and management

# Boundaries of the nominated property and buffer zone

The boundary encircles the major limestone massif and appears adequate to encompass the main aspects of geology.

As currently drawn, the boundary encompasses a mixture of archaeological cave sites, the ruins of Hoa Lu, temples, pagodas and rural agricultural landscapes.

The boundary is thus not clearly related to the archaeological evidence of the caves, the main attributes put forward for the cultural criterion as some of these are beyond the current boundary, and some parts of the property are quite unrelated to the justification for criterion (v).

Surrounding the entire property is a buffer zone of 6,268 hectares, which consists mainly of farms and small villages. The boundaries of this appear unrelated to the cultural value of the property and do not appear to constrain development – as outlined above.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are not adequate in terms of being related to the cultural attributes being put forward for the justification of criterion (v).

#### Ownership

The entire property is nationally owned.

#### Protection

The Hoa Lu ancient capital was classified as a historic monument in 1962, covering an area of 314 hectares. In 2012, the site was placed on the list of Special National Heritage as was the Trang An-Tam Coc-Bich Dong Scenic Landscape.

The Hoa Lu Special-Use Forest reserve covering an area of 3,375 hectares has protection for biodiversity conservation and environmental protection It is thus not protected for its archaeological significance although this is the part of the property where nearly all the key archaeological sites are located.

Given the extreme sensitivity of the archaeological sites already excavated and the large number that potentially hold further valuable evidence, ICOMOS considers that these sites need specific national protection for their cultural value, beyond the protection they currently have as part of an ecological area. ICOMOS notes that a project has been defined to determine and establish boundaries surrounding caves that have important archaeological resources and excavations, to prevent any damage or loss, and this would clearly be a prerequisite to putting in place legal protection.

ICOMOS considers that the legal protection in place is not adequate at this stage and needs to be strengthened to give protection to the archaeological sites.

#### Conservation

At the Trong cave, excavated areas were not covered after excavation and this has led to progressive erosion of stratigraphic sections and a rapid loss of parts of the scientific value and authenticity of the site. Similar problems have been experienced in other caves and need to be actively addressed.

The nomination dossier lists a project to protect cultural deposits in caves from disturbance due to roof collapse and from water and this also needs to be implemented.

An overall conservation plan for all the excavated areas needs to be developed and implemented.

There is also need for all this work to be brought together within an excavation strategy that, on the basis of surveys, could identify potential areas for excavation as well as those areas best studied with noninterventionist measures. Such a strategy could also define conservation approaches, as well as the protection and long term management implications of excavated areas.

ICOMOS considers that on the basis of detailed surveys, the caves and rock shelters of archaeological importance, and other associated archaeological sites, need to be given national protection for their cultural value. An excavation strategy should be developed to manage the overall approach to the study of the caves and shelters. There is also a need to improve the conservation of both excavated and unexcavated sites through the development and implementation of a conservation plan.

# Management

Management structures and processes, including traditional management processes

The Trang An Landscape Complex Management Board, appointed by the provincial government in 2012, has responsibility for day to day management of the property. In addition to its primary management role, its tasks include monitoring of the state of conservation of the cultural heritage and the natural environment, surveillance and mitigation of threats, and management of tourism activities and services. Under the Management Board, there is a department directly in charge of the Hoa Lu Ancient Capital. The Board is headed by a director and three deputy directors and works with five separate departments for Collaboration, Research and Environment, Environmental Protection, Project Management; Administration. More than 70 people are employed by the Board.

For the Trang An part of the nominated property, the Board works in partnership with a private company that has been given a 70 year lease.

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

A management plan was submitted with the nomination dossier. This has been authorized by the Provincial Authorities. There is also a Master Plan on the preservation, restoration and promotion of the Hoa Lu Ancient Capital (2000-2015) which was approved in 2003.

A Management Board for the property was set up in 2012. It is headed by a Director with three Assistant Directors and works with five separate departments: Cooperation, Research and Environment, Environmental Protection, Project Management and Administrative.

The Management Plan is basic in respect of the archaeology of the site and not nearly specific enough in terms of how the archaeological sites should be protected, conserved and managed. Nor does it appear effective in terms of managing the wider property.

Development in and around the property related to tourism as outlined above is already impacting adversely on the property. If this is intensified, it could have significant and irreversible consequences on the authenticity of the property.

Measures proposed to address these threats do not appear to be sufficient and also local authorities do not appear to fully understand the potential and actual negative impact on the overall property.

## Involvement of the local communities

Although the nominated area is home to many thousands of people and some benefit from tourism through their involvement with the provision of boats, there is no evidence in the nomination dossier of the aim to involve local communities in the overall management of the property in a way that allows them to have the potential to benefit from its future development.

ICOMOS considers the management system for the property does not appear to be robust enough to meet the challenges affecting it in terms of tourism development and protection of the archaeological resource.

# 6 Monitoring

Monitoring indicators are proposed but those for the archaeological sites are passive rather than active and propose to measure illegal disturbance or removal of artefacts and damage to cave surfaces. Similarly indicators related to development, including land clearance include recording the number of illegal constructions or activities. Monitoring is every two years or sooner if illegal activities are found.

ICOMOS considers that the monitoring of such a sensitive archaeological landscape needs to be undertaken on an on-going basis and to be part of the routine job of Park rangers. Recording transgressions needs to be done but monitoring overall needs to aim to ensure that no transgressions occur.

ICOMOS considers that the monitoring arrangements need to be more finely tuned to the needs of the site and carried out regularly as part of the task on property staff.

# 7 Conclusions

From a cultural perspective the reasons for nominating this property are confusing. The boundaries enclose some 29 caves, rock shelters and other archaeological sites mainly in the areas of forested limestone pinnacles in the west, while in the north there are the remains of Hoa Lu, capital of Viet Nam for short period in the 10<sup>th</sup> and 11<sup>th</sup> centuries, and groups of temples and paddies from more recent centuries, and in the east the scenic landscape of rice paddy fields, villages, canals and lagoons between karst limestone cliffs, where some 14,000 people live.

Justification for criterion (v), the sole cultural criterion, is related to the excavations in nine of the caves, while the scenic cultural landscape is related to natural criterion (vii). The remains of Hoa Lu and the numerous temples and pagodas are not related to any of the criteria.

Form a cultural perspective, the boundaries do not relate in a meaningful way to the archaeological record so far uncovered in nine caves. The remains of Hoa Lu and the scenic landscape of rice paddies are not relevant in a nomination for a series of archaeological sites that relate to habitation by communities in the Late Pleistocene to the Early-Middle Holocene periods.

In terms of assessing the value of the archaeological record, ICOMOS considers that interesting material has emerged from the few caves so far examined. In a couple of sites the record of habitation evident extends back as far as 30,000 BP and overall when this material is integrated with geological data, evidence is beginning to emerge to show how over time small communities of people changed their food gathering habits in response to dramatic changes in sea levels and local ecology.

Some of the evidence put forward in the nomination dossier is however confusing and at times contradictory.

The excavations have been undertaken comparatively recently starting only in 2007. So far work in the caves that have been examined has not yet reached the lowest strata of debris. Excavations are continuing and will in time extend to others of the 29 potentially rich archaeological caves so far identified. Although some work has been published, a more substantial publication would be needed based on further research and refinement of the geological/archaeological interface if Trang An were to be seen as an outstanding site in relation with evidence for adaptive behaviour of early communities.

ICOMOS considers that once a further body of archaeological work has been undertaken, then further reflection would be needed on how Trang An might be put forward for cultural criteria and on how appropriate boundaries might be defined. Such a reflection would need to consider the protection of the archaeological record as well as how the property might convey its archaeological importance in relation to climate change and adaptive behaviour.

# 8 Recommendations

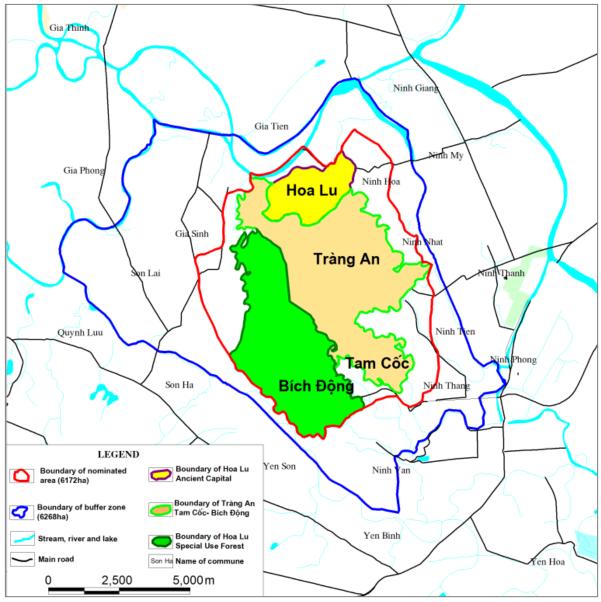
# Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Trang An Landscape Complex, Socialist Republic of Viet Nam, to the World Heritage List in relation to cultural criteria be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Continue its archaeological and geological research in the nine caves and shelters so far studied and in others of the twenty-nine further caves and shelters identified as holding potentially significant archaeological material, based on a detailed excavation strategy;
- If a substantial publication of the results of this further work can demonstrate the way that Trang An might be seen as an exemplar site related to the way communities adapt to changing climatic conditions, then:
  - Consider re-nominating the property but within a boundary that clearly considers the archaeological record;
  - Provide national protection for the archaeological sites and their essential setting;
  - Ensure adequate conservation of excavated and unexcavated archaeological sites;
  - Put in place stronger management arrangements to ensure the protection and

appropriate presentation of the archaeological sites and appropriate visitor management arrangements.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.



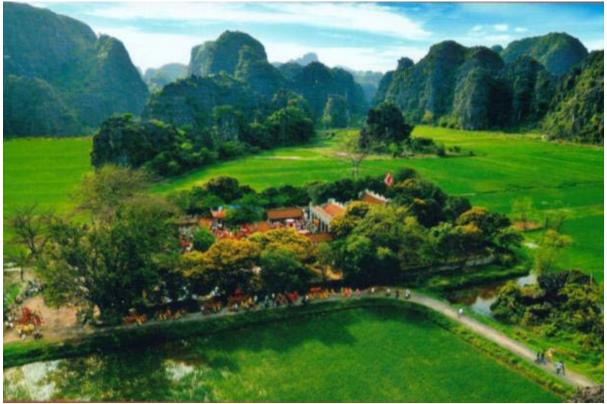
Map showing the boundaries of the nominated property



View of the landscape



Rock shelter



Overview of the King Dinh temple



Thai vi festival