
Bagan (Myanmar) No 1588

Official name as proposed by the State Party

Bagan

Location

Mandalay Region
Magway Region
Myanmar

Brief description

Located on a bend in the Ayeyarwady River in the central dry zone of Myanmar, Bagan is a sacred landscape which features an exceptional array of Buddhist art and architecture, demonstrates centuries of the cultural tradition of Buddhist merit-making, and provides dramatic evidence of the Bagan civilisation (Bagan Period 11th – 13th centuries). Intangible attributes of the property are reflected in Buddhist worship and merit-making activities, traditional cultural practices and farming. The serial property of eight components consists of 3,595 recorded monuments – including stupas, temples and other structures for Buddhist spiritual practice, extensive archaeological resources, and many inscriptions, murals and sculptures.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 8 sites.

1 Basic data

Included in the Tentative List

4 October 1996

Background

This is a revised nomination. 'Bagan (Pagan) Archaeological Area' was nominated to the World Heritage List in 1995. An ICOMOS evaluation mission visited the property in February 1996, and provided an evaluation report in March 1997. ICOMOS recommended that the nomination be referred back to the State Party requesting clarification of the precise area proposed for inscription, the buffer zone(s), and details of the management plan and the provision of infrastructure and tourism developments. Concerns were also raised about the quality of the restoration work, materials and archaeological investigations, the shortage of trained personnel, and the documentation of the works being undertaken. Several developments were also the subject of comments from ICOMOS. Pending the satisfactory provision of these, ICOMOS recommended that the property could be

inscribed on the World Heritage List on the basis of criteria (i), (ii), (iii), (iv) and (v).

Consultations and Technical Evaluation Mission

Desk reviews have been provided by ICOMOS International Scientific Committees, members and independent experts.

An ICOMOS technical evaluation mission visited the property from 15 to 24 September 2018.

Additional information received by ICOMOS

A letter was sent to the State Party on 1 October 2018 requesting further information about development projects, management system components, ungraded monuments, community involvement, private ownership, and amendment to cultural heritage legislation. Additional information was received from the state Party on 21 June and 5 November 2018.

An Interim Report was provided to the State Party in December 2018 summarising the issues identified by the ICOMOS World Heritage Panel. Further information was requested in the Interim Report including: Justification of Components 5, 6 and 7; Boundary of the buffer zone for Component 4; Legal Protection; Development Pressures; and a Landscape Approach to Management and Presentation.

Additional information was received from the State Party on 25 and 28 February 2019 and has been incorporated into the relevant sections of this evaluation report.

Date of ICOMOS approval of this report

13 March 2019

2 Description of the property

Note: The nomination dossier and additional information contain detailed descriptions of this property, its history and its state of conservation. Due to limitations on the length of evaluation reports, this report only provides a short summary of the most relevant aspects.

Description and history

Bagan is a sacred cultural landscape which features an array of Buddhist art and architecture, demonstrates centuries of the cultural tradition of Buddhist merit-making, and provides important evidence of the Bagan civilisation.

The serial property of eight components is located on a bend in the Ayeyarwady River in the central dry zone of Myanmar. Seven of the components are located on one side of the River, and one (component 8) is located on the opposite side. There is a dense cluster of monuments for approximately 15 km along the River, reaching approximately 5 km inland at its centre. Altogether, there are 3,595 surviving monuments within Bagan.

The serial property is a vast, complex and layered landscape of tangible elements of different historical periods, styles/designs and scales. These include numerous stupas and temples for Buddhist spiritual practice, monasteries, halls and corner markers/stupas; pilgrimage sites, fortifications, inscriptions, murals, cloth paintings and sculptures. There are extensive associated archaeological resources, including Palaeolithic sites, and a pre-Bagan palace and reservoir. These elements are set within a landscape shaped by the river, lakes, caves, hills and farmlands. Intangible dimensions of the nominated property are reflected in Buddhist worship and merit-making activities, traditional cultural practices and farming. Numerous objects of movable heritage associated with Bagan's history and spiritual functions are cared for by the Bagan Archaeological Museum (located within the nominated property).

The property incorporates seven villages or parts of villages, and parts of two towns. For the most part, these have been excluded from the nominated components, but occur within the buffer zone.

The historical period of greatest relevance in this nomination is the Bagan period (11th – 13th centuries) of the region's history. Prior to this period, archaeological evidence demonstrates the human history of Bagan through its Palaeolithic and Neolithic periods, and the Pyu period (first millennium CE), which is represented on the World Heritage List through the inscription of Myanmar's Pyu Ancient Cities, located further downstream on the Ayeyarwady River. The Pyu period aligns with the introduction of Buddhism to southeast Asia; but the history of Bagan during this earlier period is the subject of needed further research.

The Bagan period marks changes from the 11th century, when redistributive Buddhism became a mechanism of political control, with the king effectively acting as the chief donor. Bagan's history is known from a range of sources, including modern histories, inscriptions, the evidence of monuments and objects, and oral traditions/legends. Bagan gained control of the river transport, extending its influence over a large area. Because Bagan was a substantial city located in a relatively resource-poor region, it was dependent on a strong flow of goods through religious exchanges from its wider networks of influence. The traditions of merit making resulted in a rapid increase in temple construction, peaking in the 13th century.

The State Party has provided a detailed inventory, and sequencing of the construction of the monuments during the primary period of historical significance. During this period, a system of laws and administration was codified, and there was a steady flow of tribute and goods to Bagan due to the integral relationship between Buddhism and the State. Diversity in architecture, painting and inscriptions is evident in this period. By the mid-14th century the locus of power moved upriver, nearer to current day Mandalay, under pressure from Mongol incursions. There was an expansion of Mon in the south

and the rise of Mrauk-U on the west coast. Despite the decline in Bagan's power, building constructions, monastic activity and pilgrimages continued until the British colonial period in the 19th century and into the modern era. Independence was achieved in 1948, and the country was under military rule between 1962 and 2010. Buddhism remains very strong in Myanmar, with continuing donation of money to support the monks, and the construction and maintenance of Buddhist structures.

Many earthquakes have affected Bagan throughout its history and have been recorded since the 12th century. The most recent severe earthquakes occurred in 1975 and 2016, and many structures today show the damages caused and/or the repairs that followed these disasters (with the assistance of UNESCO and United Nations Development Program). Conservation works and repairs have also been recorded throughout Bagan's history – from the 13th century to the present day.

Boundaries

The nominated area of the eight components originally totaled 4,987.88 ha as presented in the nomination dossier, with a single buffer zone of 17,821.97 ha.

The component boundaries and buffer zone have been based on the topography, legal designations and management considerations. Care has been taken to include critical elements, such as the four boundary ('relic') stupas, but also to define component boundaries in a way which encapsulates the thousands of monuments in their landscape setting.

As a result of discussions with ICOMOS, the State Party agreed to revise the boundaries of several components: the boundary of component 6 has been extended at its northeast corner to include the foundations of a residential building used by monks; and the boundary of component 7 has been extended at its southeastern corner, effectively joining it to component 1. In addition, the buffer zone at component 4 has been extended at its southern end to include a larger visual setting for Tuyin Hill. The State Party has advised that the administrative processes to finalise these revisions should be completed by June 2019.

Based on these changes, the State Party advises that the overall area of the property is 5,005.49 ha, and the buffer zone has an area of 18,146.83 ha.

The buffer zone has been established in order to provide a sufficient area within which to control development and other factors that might have a negative impact on the proposed Outstanding Universal Value of the nominated property. The two main towns are included in the buffer zone and each surrounds and is surrounded by nominated property components.

ICOMOS considers that the proposed boundaries and buffer zone (as revised) have been carefully considered and, adequately incorporate attributes relevant to the proposed Outstanding Universal Value of the nominated

property. However, there are some instances requiring future management actions (such as re-location of illegal houses).

The Bagan Airport is located close to the township of Nyaung U within the buffer zone for the nominated property. Currently, ICOMOS does not consider that the Airport is intrusive, although two phases of future works (runway extension and re-location of the terminal and aircraft parking areas) are proposed and should be subject to a Heritage Impact Assessment and the Bagan National Coordinating Committee (BAGANCOM) approval.

The State Party has commenced a program of installing markers along the boundaries of the property components and the buffer zone. ICOMOS supports this measure along with removal of the redundant boundary markers of the former 'Heritage Protection Zone' to avoid confusion.

State of conservation

The State Party has outlined the long history of conservation and repair of the monuments of Bagan, emphasising the complexity of portraying the state of conservation simply across such a large and complex property. The major focus at present is the response to the damages that occurred as a result of the 2016 earthquake; however, the State Party considers that, in general, the property is in a reasonably intact condition due to the well-constructed and robust character of the monuments and other structures. The major monuments are in the care of Department of Archaeology and National Museum or temple trustees and are regularly maintained. However, others show signs of their age and the environmental and human factors affecting their condition. Past interventions to a number of structures have introduced cement mortar, and this is being progressively removed. Guidelines are provided in the Integrated Management Framework.

ICOMOS also notes that due to the vast number, scale and age of the physical features that comprise the nominated property (ie. the stupas, temples and monasteries), the state of conservation is varied. Considered as a totality, the Bagan landscape is largely intact, albeit with some individually intrusive elements. The condition of archaeological resources is also varied, although major sites have been conserved.

Based on the information provided by the State Party and the observations of the ICOMOS technical evaluation mission, ICOMOS considers that the state of conservation is good/acceptable, noting that many of the factors that have negatively impacted on some elements in the past are being progressively addressed by the State Party.

Factors affecting the property

Based on the information provided by the State Party and the observations of the ICOMOS technical evaluation mission, ICOMOS considers that the main factors affecting the property are past conservation interventions, tourism and development pressures, environmental pressures and natural disasters.

As outlined above, the property has been affected by the introduction of hard masonry and cement to many of the pagodas. These changes have adversely affected the physical integrity of individual buildings and the property overall, and many are being addressed progressively through current and future conservation programmes.

The property is also at risk from development pressures, particularly those related to tourism. There are some large-scale modern hotels within component 1 which are intrusive and inconsistent with the historical and visual setting of the Buddhist monuments. Hotel construction continues, both at new sites and through extensions to existing hotel facilities. There are also a number of smaller scale structures which intrude upon the setting of particular monuments. These include commercial premises and shops and infrastructure installations.

In June 2018, the State Party provided a short list of developments planned within or near to the nominated property. In response to request for further information from ICOMOS the State Party provided more detail about 15 projects, some of which are already implemented, and others that are still in the planning stages. In addition to these, there are several hotel development projects which urgently require rigorous Heritage Impact Assessment. Some projects have been subject to the 'interim Heritage Impact Assessment' process outlined in the nomination dossier, which has now been endorsed by BAGANCOM. Training of DANM staff (Department of Archaeology and National Museum) in Heritage Impact Assessment processes has commenced.

The property features brick monuments, many of which are a millennium old, the original fabric of which is at risk from ongoing environmental processes. The quantity of moisture delivered into the masonry by monsoonal downpours is therefore a factor. The property is also likely to be affected by climate change; particularly increases in the frequency or intensity of severe weather events, or greater variation in relative humidity, which may affect masonry elements. Along the Ayeyarwady River, erosion presents a significant threat, particularly in the northern areas of component 1 and the river edge of component 2. In some places, the river bank has moved inland by significant distances, threatening the stability of monuments. The State Party has carried out significant stabilisation works, but in some places the situation remains precarious.

The major threats from natural disaster arise from earthquakes, as has already occurred with very significant impacts in 1975 and 2016.

The property currently receives substantial visitation, and is a 'must see' for inbound international visitors to Myanmar. However, at present visitor pressure is not a major threat, due to the large scale of the property and capacity of major temples. Visitor numbers are likely to increase once the property is inscribed on the World Heritage List, so in the medium-term, it will be important to recognise that some of the popular buildings and

locations within the property have limits on their physical capacity. If effective visitor management is not put into practice, there is a future potential for damage to the values, authenticity and integrity of the property – including disruption to traditional religious activities. Careful monitoring and adaptive management is required.

3 Proposed justification for inscription

Proposed justification

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

- Bagan provides an exceptional testimony to the peak of the Bagan civilisation when it was the heart of the largest Buddhist empire of the medieval world, with economic and political functions supported by religious and royal exchanges;
- Bagan is an outstanding example of a rich ensemble of Buddhist architecture;
- Bagan demonstrates in an exceptional way the 'Bagan Period' between the 11th to the 13th centuries, and its primary focus of religious activity;
- Bagan is an exceptional and early testimony of the Buddhist practice of merit-making on an impressive scale, both as a powerful historical force and continuing practice.

Comparative analysis

The Comparative Analysis is presented in three major parts that accord with the primary arguments presented in the State Party's justification for inscription. In each part, the analysis includes comparisons with relevant World Heritage and Tentative List properties and other areas within Myanmar and in other countries.

The Bagan Kingdom is briefly discussed within the context of neighbouring kingdoms during this historical period, many of which are represented on the World Heritage List in India, Viet Nam, Laos, Cambodia and Sri Lanka. The differences between these roughly contemporaneous kingdoms are briefly outlined. More detail is provided in the comparative analysis of the ensemble of Buddhist architecture. Various specific elements are discussed including the widespread use of the 'voussoired vault' above the rooms and corridors of all temples and monasteries, affecting the arrangements of the internal spaces. The analysis also considers the survival of a large corpus of mural paintings at Bagan, due in part to the dry climate.

The State Party has presented a detailed comparative analysis with other Asian Buddhist properties on the World Heritage List and/or Tentative Lists (in Sri Lanka, India, Nepal, China, Afghanistan, Pakistan, Cambodia, Republic of Korea, Thailand and Japan), clearly demonstrating the great diversity of expressions of Buddhism in the region. This diversity relates to the different historical periods represented, the attributes that express these values and particular traditions of

Buddhism. In relation to the arguments about the significance of Bagan as an exceptional testimony to the Theravada Buddhist practice of merit making (Kammatic Buddhism), the comparative analysis also provides a very detailed comparison with other areas within Myanmar. Bagan's practice of merit making served as a model for subsequent Theravada kingdoms in the region, and is a continuing tradition, with a reinvigoration of pilgrimage.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (vi).

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

This criterion is justified by the State Party on the grounds that Bagan is an exceptional and continuing testimony to the Buddhist cultural tradition of merit making, and to the peak of Bagan civilisation in the 11th-13th centuries when it was the capital of a regional empire.

ICOMOS considers that Bagan is an exceptional example of this important regional historical period and its cultural traditions.

ICOMOS considers that criterion (iii) is justified.

Criterion (iv): *be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*

This criterion is justified by the State Party on the grounds that Bagan contains an extraordinary ensemble of Buddhist monumental architecture, reflecting the strength of religious devotion of an early major Buddhist empire.

ICOMOS considers that within the context of the very rich expressions and traditions of Buddhist architecture and art found throughout Asia, Bagan is distinctive and outstanding.

ICOMOS considers that criterion (iv) is justified.

Criterion (vi): *be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;*

This criterion is justified by the State Party on the grounds that Bagan is an exceptional example of the living Buddhist beliefs and traditions of merit making, expressed through the remarkable number of surviving stupas, temples and monasteries, supported by continuing religious traditions and activities.

ICOMOS considers that while the evidence of practices of merit-making are common in many Buddhist sites and areas, the influences established in the Bagan period, and the scale and diversity of expressions, and continuing traditions make Bagan exceptional.

ICOMOS considers that criterion (vi) is justified.

ICOMOS considers that the serial approach is justified and that the nominated property meets criteria (iii), (iv) and (vi).

Integrity and authenticity

Integrity

The integrity of the nominated serial property is based on the rationale for the selection of the components and their ability to convey the potential Outstanding Universal Value; the material evidence of the landscape, archaeological sites, monuments, inscriptions, sculptures, murals, cloth paintings and the overall setting; and the continuing intangible heritage and cultural practices. The intactness of the individual components and the series as a whole (including consideration of the adequacy of their boundaries), the state of conservation and the way major pressures are managed are also determinants of integrity.

The State Party has presented this nomination as a series of 8 components, and argues that the integrity of the property rests on their ability to represent the significance of Bagan. ICOMOS considers that the extent to which this rationale is readable within the property, and whether all components are necessary to portray the proposed Outstanding Universal Value varies.

Bagan is a complex, layered cultural landscape which also incorporates living communities and contemporary urban areas. ICOMOS considered that the rationale for the selection of components 1, 2, 3, 4 and 8 was justified in relation to the proposed Outstanding Universal Value, and engaged in further dialogue with the State Party concerning the inclusion and boundaries of components 5, 6 and 7.

Component 5 raised questions because it does not contain attributes related to the justification of Outstanding Universal Value provided by the State Party. This component comprises a remnant reservoir, part of the ancient hydraulic system of Bagan, with little physical evidence other than some obscured stone walling. A stele with a significant inscription has been removed from this site and is now in the Bagan Archaeological Museum. In discussion with the State Party, the importance of the water management system in the historical functioning of urban system of Bagan has been given greater prominence. ICOMOS notes that historical water management system elements are present within several components, and can be considered as attributes of the Outstanding Universal Value of Bagan. Further research

and documentation of the historical water management system is recommended.

ICOMOS notes that components 6 and 7 are located within mixed urban contexts. While component 6 traverses a main road, includes a high proportion of monuments with substantial reconstruction and has an awkward physical and visual relationship with the modern town of New Bagan, the State Party has provided additional information to strengthen the rationale for its inclusion. There is one stele with a historically significant inscription and an important cluster of stupas, temples, monuments and unexcavated archaeological sites. In exchanges with ICOMOS, the State Party agreed to extend the boundary of this component to the northeast to include the foundations of a residential building used by monks. Component 7 also contains an area of largely reconstructed brick stupas near the southern edge of New Bagan. To improve the integrity of this component, the State Party has agreed to a suggestion by ICOMOS to extend its boundary at its southeastern corner, effectively joining it with component 1.

In general, ICOMOS considers that the components of the nominated property retain a high degree of visual integrity, including the broader physical settings. Many monuments are ancient and some, understandably suffer from deterioration arising from natural processes, notwithstanding the continuing practice of repair and maintenance as part of traditional Buddhist merit-making activities.

The nominated property occurs in an earthquake prone area and there is substantial evidence of earthquake damage. Repairs made in the 1970s, together with work undertaken by the national government in the 1990s introduced new design elements and hard masonry components that have affected the visual character, design and physical integrity of the nominated property. Some of this work has been able to be rectified by the conservation programme initiated after the 2016 earthquake. Notwithstanding the impressive efforts made to address the impact of the 2016 earthquake, many built structures remain damaged and vulnerable.

The property suffers from some adverse effects of inappropriate developments. In particular, there are some large-scale modern hotels within component 1 which are intrusive and inconsistent with the historical and visual setting of the Buddhist monuments. Other intrusive developments can be identified throughout the nominated property including hotels (some unlawfully constructed), public infrastructure and a few residential buildings. The State Party has indicated a willingness to address such intrusions through a staged process involving assessment of the heritage impact and site-specific circumstances of particular developments. A long-term program for removal and relocation of inappropriate structures is proposed. ICOMOS supports these initiatives noting the sensitivities involved and the need to take account of the interests and well-being of the affected workers and residents.

While there has been significant intensification of development in urban areas and a growing focus on new hotel, retail, commercial and other facilities arising from increased tourism, these uses are predominantly located in discrete areas. In both Nyaung U and New Bagan, there are modern buildings and urban forms, but the scale and location of these precincts and the buildings within them do not currently impact significantly upon the nominated property components. These also reflect the aspirations and needs of the contemporary community.

Much of the nominated property and its buffer zone are used for agricultural purposes. Farmed fields and the way in which agricultural activities are managed help maintain the visual and functional setting for the pagodas, monasteries and other significant built elements. Buddhist practices remain prevalent and appear to co-exist with the current levels of tourist activity, although this aspect will require ongoing monitoring and strict implementation of development controls.

Despite many continuing challenges, ICOMOS considers that the property is of such scale and complexity that many built elements retain a high degree of integrity and, by their very nature reflect hundreds of years of merit-making through physical improvement, including repair and maintenance. Many murals remain in the temples and the attributes of the nominated property also include thousands of movable sculptures and other artworks which are conserved in the Bagan Archaeological Museum.

ICOMOS considers that the integrity of the nominated series is adequately demonstrated. The integrity of the individual components is generally satisfactory, although many are vulnerable. There are issues requiring careful management and continued work on current conservation programmes.

Authenticity

The authenticity of the property is based on the landscape of Buddhist monuments of diverse sizes, scales, materials, designs and antiquity; the architectural and archaeological studies of Bagan; and the rich and continuing religious and cultural traditions.

The major built elements within the property, particularly the very large temples and stupas, retain a high degree of authenticity in their form and design, both internally and externally. The decorative elements of many of the individual monuments survive in their original form.

The materials of the major structures demonstrate varying degrees of authenticity, due in part to the extensive introduction of hard mortars and bricks as part of the reconstruction activities in the late 20th century.

The period between 1975 and 2008 saw extensive levels of intervention, which has altered the form of some pagodas, and introduced inauthentic hypothetical reconstruction of elements such as finials. Although repair

and changes to the pagodas is a traditional merit-making activity, the manner in which such interventions have varied from historical evidence has impacted the authenticity of the individual monuments and the ensemble as a whole. Following the 2016 earthquake, actions are being taken to remove such interventions, especially where the newly-introduced hard masonry has itself cracked or fallen, causing additional damage.

Many built elements (including the monasteries and ancillary structures at major stupas and temples) remain in ongoing use and have been subject to changes in response to the operational needs of religious communities. Other changes include the introduction of modern lighting of statues, and installations of close circuit monitors and fire detection systems to assist with security or protect the fabric.

Some traditional uses and functions have continued over centuries, including agricultural production, domestic life, religious practices, and merit-making. The monasteries, temples and major stupas are cared for by communities of monks and nuns, whose numbers remain strong, supported by local community members serving as temple trustees. The predominant form of intangible heritage at the property is the continuing Buddhist traditions reflected in the *sangha* and their religious activities, everyday worship by the majority of local people, and an ongoing commitment to merit-making through donations and good works.

Overall, the components of the property enjoy intact physical and visual settings, despite localised impacts from new developments or other interventions. However, there are some localities, such as parts of the riverside, interfaces with urban areas and some hotel precincts where the setting of the property is marred by relatively new built forms or inappropriate structures. Decision making processes for all new developments are therefore critical to the future integrity and authenticity of Bagan.

ICOMOS notes that while documentation is an immense ongoing activity, Bagan has been extensively researched and the overall authenticity of the landscape of monuments is demonstrated when the full range of tangible and intangible attributes is considered, despite many changes over time. Many individual monuments exhibit high levels of authenticity in relation to their form, design, construction, spirit and feeling. Other individual elements have been subject to changes that have impacted adversely on their authenticity.

ICOMOS considers that the requirements of authenticity have been met, although the authenticity of some elements have been adversely affected by past interventions, deterioration and damage to some structures. ICOMOS considers that the integrity is vulnerable due to the multiple factors affecting the nominated property; and considers that the changes to the boundaries of components 6 and 7, and the buffer zone of component 4 should help to strengthen the integrity of the serial property. Rigorous decision making

processes for all new developments are critical to sustaining the future integrity and authenticity of Bagan.

Evaluation of the proposed justification for inscription

ICOMOS considers that the comparative analysis justifies the consideration of this nominated serial property to the World Heritage List. The property has demonstrated criteria (iii), (iv), (vi) and it meets the requirements of authenticity and integrity. The authenticity of some elements has been adversely affected by previous interventions; and the integrity is vulnerable due to the multiple factors affecting the nominated property.

Attributes

The attributes of the Outstanding Universal Value of Bagan include: the overall setting of Bagan (hills, plain, river and corner stupas), the landscape of more than 3000 monuments, the monuments themselves, inscriptions, murals, cloth paintings, sculptures, the Old Bagan wall, archaeological sites of the palace and other features, water management features, and artefacts and objects held by the Bagan Museum. The continuing religious and cultural practices are also attributes of the potential Outstanding Universal Value of the nominated property.

In conclusion, ICOMOS considers that the nominated serial property demonstrates Outstanding Universal Value according to criteria (iii), (iv) and (vi). The authenticity of the nominated serial property is variable but acceptable given its vast scale; and that the integrity is vulnerable due to the multiple factors affecting the nominated property. Changes to the boundaries of components 6 and 7, and the buffer zone for component 4 have provided a stronger rationale for the delineation of the components and strengthened the integrity of the property.

4 Conservation measures and monitoring

Conservation measures

Major earthquake damage occurred in 1975, followed by an extensive phase of repair, with consequent changes to earlier fabric and introduction of new structural elements. During the 1990s, the national government undertook a widespread programme of rebuilding and reconstruction, often using hard masonry and incorporating design elements for which there was no historical evidence. While this activity also occurs within the context of 'merit-making', it has affected both the design integrity and physical integrity and altered the visual character of the landscape.

While there is a high degree of technical expertise available and deployment of national and international resources, the extent of the challenge is considerable and the remedial conservation processes will be ongoing for the foreseeable future.

In 2016, there was another major earthquake, which resulted in major damage to more than 400 pagodas (including damage to internal murals). In many cases, fracturing has occurred where hard mortar had been introduced in the 1990s. Since this most recent earthquake, a major conservation programme has commenced with assistance from UNESCO and the international community, rapid assessment and response using a structured triage and, in many cases, repair and stabilisation of earlier forms.

The majority of built structures within the components of the property are subject to repair and maintenance activity which has increased following the 2016 earthquake. However, the cracking which has occurred to the hard masonry additions from the 1990s has, in many cases, exacerbated water ingress. This is particularly problematic because of heavy monsoonal rains and the effect of internal moisture on softer masonry and fragile sculptures and murals inside the temples.

Bagan poses obvious challenges for prioritising conservation works and deciding on the degree of intervention. The overarching approach is provided in the Integrated Management Framework and Conservation Guidelines. These have been prepared with the benefit of national and international advice, and represent a well-resolved approach to the conservation challenges at Bagan. The guidelines distinguish between active and inactive monuments and between original and rebuilt fabric. There is also recognition of the implications of structural damage and principles that apply to the introduction of new materials or structural elements, in contrast to stabilisation, replacement or repair using original or traditional fabric and techniques.

There is an acknowledgement that removal of past cement mortar repairs is needed. This work is a long-term initiative and the practical reality is that in many cases, previous hard masonry or cement mortar repairs cannot be effectively removed without causing additional damage to significant fabric. However, in many cases the 2016 earthquake has fractured or damaged late 20th century hard masonry interventions and, in accordance with the Conservation Guidelines, major monuments are being stabilised in their pre-intervention state. Completion of post-earthquake urgent repairs will continue for several years.

Monitoring

Monitoring arrangements are described in the nomination dossier and in the Integrated Management System (IMS). The primary focus is on the condition of the main monuments (which have been graded according to their significance from outstanding, exceptional, important and ungraded). Monitoring of the monuments, archaeological sites and important objects and artworks are the responsibility of teams from the Department of Archaeology and National Museum (Bagan Branch). Other aspects of the monitoring system are implemented by the District Administration Office, and local government at the township or village level. Monitoring of the landscape is the

responsibility of the NyaungU/Pakokku District Level Working Committees. Monitoring is therefore described by the State Party as a collaborative effort. A table of key monitoring indicators has been developed by the State Party. These focus on the condition of the tangible attributes, and the disturbances arising from specific factors affecting the property. Monitoring outcomes are reported to ensure that needed activities can be included in the Action Plans; and the overall monitoring of implementation of the management system is monitored by BAGANCOM.

ICOMOS considers that the monitoring system is able to facilitate urgent responses and central collation of data. It appears that the elements within the components which are actively used for Buddhist ritual are subject to regular inspection and monitoring, but that monitoring of other elements is more sporadic and reactive. Additional resources are needed to achieve a proactive and systematic monitoring system, with relevant indicators.

ICOMOS considers that while many challenges remain, including the sufficient resourcing of the monitoring system, the conservation measures and monitoring systems are satisfactory.

5 Protection and management

Documentation

A number of inventories are cited in the nomination dossier, and the legal protection rests on several of these. Through its 'One Map' initiative, the State Party is bringing the different legal maps of Bagan into a single system. This work has been supported by Italian funds and DANM is expected to complete the data collection for the ownership and land use phase by the end of 2019. The overall project is expected to be completed in 2022. ICOMOS supports this important initiative as it will help to establish a coherent and integrated approach to decision making, and provide a benchmark for monitoring.

Data management is identified as a major tool for managing the nominated property. ICOMOS agrees that this is a pressing priority given the vast amount of data that has been collected by different agencies and in different time periods. There has been a substantial effort to collate and cross-reference this information, but many of the datasets – for example folders related to individual monuments – have yet to be integrated into the cross-referenced datasets. Information on the physical condition and significance of individual elements is not linked to the property GIS. The scale of the work to be done and the limited resources mean that this is a significant and longer-term objective. Better documentation of the geography and setting of the nominated property, including the workings of the water management system are other suggested longer-term improvements.

Legal protection

Legal protection is provided by the Law for Protection and Preservation of Cultural Heritage Regions No. (20/2019), (formerly the Law on the Protection and Preservation of Cultural Heritage Regions 1998, amended 2009, with updated regulations 2011), Protection and Preservation of Ancient Monuments Law 2015 (with updated bylaw 2016), and Protection and Preservation of Antique Objects Law 2015 (with updated bylaw 2016). These laws are administered by DANM.

The Law for Protection and Preservation of Cultural Heritage Regions establishes Cultural Heritage Regions (such as Bagan) that can then be divided into protection zones. In 2018, a new zoning order was established by DANM, with the result that the nominated property is designated as equivalent to the 'Ancient Monumental Zone', the highest level of available protection. The proposed buffer zone is equivalent to the 'Preserved Zone' which is the lowest level of protection within this legal framework. A more detailed zoning plan is provided in the Integrated Management Framework. This provides for 'settlement areas with a town character', 'settlement areas with a village character', and the remaining landscape. Development Guidelines and Building Bylaws apply to each of these zones.

Amendment to the Protection and Preservation of Cultural Heritage Regions Law 1998 had been foreshadowed by the State Party in order to provide a number of critical elements of the legal protection of Bagan including recognition of intangible attributes and traditional cultural practices, authority for BAGANCOM, the ability to require Heritage Impact Assessments, the ability to collect and apply funds for conservation, and specific connection to the obligations of the World Heritage Convention. The State Party advised that the Amendment was finalised and in place on 28 February 2019.

ICOMOS considers this amendment to be critical to achieving the adequate and sustainable protection and management of the nominated property. In light of the recent practice of approval of different development projects within both the buffer zone and the property by a range of different government agencies, it is essential that there is a single cohesive management and decision-making process within the framework of the (amended) Protection and Preservation of Cultural Heritage Regions Law and the Integrated Management Framework. This will assist in preventing the recurrence of approvals of projects which affect the potential Outstanding Universal Value of the property without reference to the appropriate Union Government agency (as has occurred in the past). Crucial to this process is clarity about the ultimate authority in case there are matters about which the regional governments and BAGANCOM disagree.

The monuments within the nominated property have been graded according to their relative significance, and this has implications for the management approach, because many are 'ungraded'. Grading of monuments is a time consuming work-in-progress and it is recognised that

completion of the relative grading underpins long-term decision-making. In response to the 2016 earthquake, a systematic triage process has been applied, which has regard to public safety, structural integrity, potential for further damage, aesthetic, architectural and historic values and contemporary importance for religious practice. Post-earthquake conservation works are guided by 'Post-disaster Rehabilitation Procedures and Guidelines' and appear to function well.

Protection and management arrangements for the landscape are established by a combination of ownership, regulation and procedures. The Bagan Heritage Urban and Regional Plan, as well as the over-arching authority of BAGANCOM are the principal mechanisms for regulating development.

The State Party acknowledges that its enforcement of development controls in the past has not been fully effective, particularly for hotels. Approximately 85 hotels and guesthouses have been approved by DANM, and around 50 have been approved by the Regional Government. For the future management, ICOMOS considers the role of BAGANCOM in these decision-making processes to be very important.

ICOMOS considers that enforcement of development controls is an issue, especially in relation to hotels; and acknowledges that the removal of hotels could have impacts on the livelihoods of local employees (as advised in a submission received from the International Union of Food, Agriculture, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (Asia/Pacific)). Many of the longer-established hotels are of a modest height and set in landscaped grounds; however, some newer hotels and other tourism facilities (such as restaurants) are intrusive and inconsistent with the visual character of the nominated property.

While the nomination dossier asserts that hotels within the nominated property will be phased out by 2028, there does not appear to be any mechanism in place to achieve this, and this does not necessarily seem warranted in all cases given that some of the existing hotels do not seem to have a high-degree of adverse heritage impact. Some of the new and under-construction hotels within the buffer zone are similarly benign, particularly in light of the growing tourism market. However, there are some new projects, including projects under construction, which do not have the required government consent and appear to have adverse heritage impacts. ICOMOS considers that addressing the issues concerning hotels requires a long-term strategy based on heritage impact assessment, having regard to the general principle of avoiding new development within the property components, the legality of the existing facilities, reasonableness for the owners and employees, and long-term consequences for the property.

There are some relatively new structures within the nominated property along the river which are visually intrusive. The Bagan Viewing Tower is prominent in close

views, but its scale, form and colour mean that it is not visually intrusive within the wider landscape. The State Party is also aware of the need to implement mechanisms for controlling commercial signage.

Heritage zoning plans have been established and integrated into regional plans to ensure coordination. A further protective zone of 100 km x 100 km around the property has been established to control development.

All developments within the protected zones are currently subject to site-specific archaeological assessment and input from DANM. However, the statutory and institutional arrangements rely on a proposed Archaeological Risk Map which is in preparation. This commenced in 2017 and two pilot projects have been undertaken. Additional information received from the State Party indicates that the process will be completed for the nominated property area in 2019, the buffer zone in 2022, and the wider setting of Bagan in 2025. The State Party also plans to conduct a magnetometer survey as part of this work.

The Integrated Management Framework refers to an interim system for Heritage Impact Assessment (HIA). In its Additional Information, the State Party explained that HIA has been implemented since 2015. However, the necessary legal basis for HIA relies on the recently finalised amendment to the national legislation. In addition, capacity building to properly apply the HIA process has just commenced. ICOMOS therefore considers that this is not yet fully operational in relation to the need to rigorously assess the impacts on the Outstanding Universal Value of World Heritage properties. The framework for undertaking HIAs is consistent with current best practice and resources are being deployed to train DANM staff to undertake them. Any development requiring consent will require a Heritage Impact Assessment.

Management system

BAGANCOM has been established by the national government as the decision-making body for Bagan, ensuring inter-agency coordination. According to Additional Information received from the State Party, it had its first meeting in August 2018, and approved the Integrated Management System.

There are also regional management committees for the Mandalay and Magway regions that are responsible for coordinating local organisations. The Ministry for Religious Affairs and Culture and the Department of Archaeology and National Museum have responsibility for monitoring and for drafting new regulations. Some monuments are under the custodianship of the sangha (monastic community) through lay Pagoda Trustee Committees.

While there are some privately owned lands within the property, the majority is public land, areas of which are made available to local farmers. These arrangements are long-standing. The Integrated Management Framework policies are binding on these farmers and they tightly

control land use, extent of agriculture, depth of excavation, manual rather than mechanical processes, and crop type (eg. sugarcane is prohibited). The proposed amendments to the national legislation will strengthen the statutory basis of these controls, although there do not appear to be any pressures to vary existing arrangements.

The 'Bagan Agriculture Sector Strategy' is to be collaboratively prepared between DANM and the Department of Agriculture. It appears that this is yet to be commenced, but the State Party has advised that it should be completed ready for consideration by BAGANCOM in 2019. The liaison between DANM and the Department of Agriculture appears to be effective.

Farming is allowed within five feet of monuments, but no closer, and no mechanical equipment is allowed. Only seasonal crops are permitted (peanuts, beans, sesame, etc). ICOMOS considers that this approach is currently working well. For the smaller pagodas, this form of agriculture provides a traditional, simple and appropriate visual setting. At the larger temples, agricultural activities only take place a considerable distance away, as the forecourts are occupied by stalls, parking areas and other activities associated with temple visitation.

There has been a substantial increase in the staff levels of DANM. The State Party has advised that available resources within DANM and the property will be further enhanced, as a result of ongoing allocation of a proportion of entry receipts to management and conservation. The site managers do intend to seek and facilitate further international support; there is already a conservation laboratory which is funded by the Archaeological Survey of India. A new memorandum was signed with the Chinese Government; and discussions are at an advanced stage with the Getty Conservation Institute. The International Coordination Committee, which will report to BAGANCOM has been established to coordinate, manage and guide international support, which will extend across buildings, murals and movable heritage items.

The management system and framework of policies is provided in the Integrated Management System, which was initiated in 2013 and developed through a consultative process. An Integrated Plan of Actions (IPA) supports the implementation of the management system. Other documents that make up the management system are the Conceptual Regional Plan, Sustainable Tourism Strategy, and the Disaster Risk Management Strategy. All of these have been formally adopted at the national level.

Many additional guidelines, strategies, manuals and interim documents have also been developed and incorporated into the management system: Manual for the Conservation of Monuments and Historic Buildings; Guidance Note in Approaches for Conservation of Mural Paintings and Architectural Decorative Works; Guidelines for Post-Earthquake Temporary Structural Stabilisation of Monuments; and the Interim Procedures for HIA. The State Party has stated that the key documents that

comprise the IMS have been adopted at the national level, and function as statutory legal instruments.

In the Additional Information provided by the State Party, the commitment to apply a landscape approach to the management and presentation of the nominated property was confirmed. According to the State Party, the goal of the management of the property is to ensure that Bagan's heritage is safeguarded while enabling the local communities to improve their well-being. The long term management expectations include: strengthened community understanding and support; enhanced conservation of monuments especially in response to earthquake damage; removal or mitigation of adverse developments; harmonious tourism development; and increased monitoring and conservation capacity.

In addition, a Conceptual Regional Plan is in place to guide the overall development within the larger protective zone around Bagan (approximately 30 km beyond the buffer zone).

The State Party and the international community, including the World Bank, have been active since 2018 in development of the Bagan Disaster Risk Management Plan which includes both policies and actions aimed at risk reduction and risk preparedness across a full range of hazards. The Plan is expected to be completed by the end of 2020.

The 2016 earthquake has served to harness and focus considerable expertise and resources, including a small Advisory Team and a more extensive Technical Experts Team. These teams have supervised a coordinated triage process in which property-specific guidelines have been prepared for conservation works: 'Bagan Archaeological Area and Monuments Post-disaster Rehabilitation Procedures and Guidelines 2016'. At a practical level, the triage and prioritisation process has careful and logical regard to critical factors such as public safety, prevention of further damage, relative significance and a values-based decision-making. ICOMOS notes that there is a focus on 'original' fabric, but not always a consistent approach to what is considered 'original'. As noted above, in the aftermath of the 2016 earthquake, the opportunity is being taken to remove and/or revise inappropriate interventions from the 1990s.

According to Additional Information received from the State Party, Seismic Hazard Map and Seismic Risk Assessment Map is being prepared for the Bagan-Nyaung U Area with the involvement of various professional organisations for engineering, earthquakes and geoscience. This project commenced in mid-2018 and should be completed in the first half of 2019.

Visitor management

A range of visitor services have been established at Bagan, including the visitor centre and some tourism infrastructure. It is important that the carrying capacity of the more heavily visited pagodas and other parts of the

property be assessed so that proactive visitation management can occur.

The 'sunset view' of Bagan is an attractive opportunity for some visitors, and the State Party acknowledges that there are some issues arising from inappropriate visitor behaviour (such as climbing on the temples). The Bagan Sunset Tower receives a relatively modest proportion of overall visitors. Sunsets are also observed from four different constructed 'mounds'. ICOMOS considers that the location of at least one of these is inappropriate (and was not subject to the required consent processes). There are opportunities to improve the sunset experience of visitors, while simultaneously improving site management/operations – for example, by making information about sunset vantage points more readily available to visitors.

The current levels of interpretation offer considerable scope for improvement. Basic information is provided at most major temples, but interpretation for visitors relies on tour guides. There are approximately 400 tour guides, with more being trained. ICOMOS recommends the preparation and implementation of an Interpretation Strategy to extend and complement existing initiatives.

A Sustainable Tourism Strategy is being jointly implemented by the Hotel and Tourism Department and DANM. While the Strategy has been adopted, and some initiatives are being implemented concerning transportation and accessibility, it has yet to be fully incorporated into annual action plans, and budget allocations, and there are some variances with the overall management system. For example, the Strategy suggests that Nyaung U Airport 'shall not be extended', yet there is a current program to widen the runway and re-locate the terminal and aircraft parking areas. ICOMOS considers that this is an example of the challenges associated with cohesive, integrated management.

Community involvement

This nomination traverses a large area, involving a number of townships, communities and ongoing cultural and religious practices. ICOMOS has observed that there is a high degree of community support for the World Heritage inscription of Bagan, although an ongoing and highly interactive consultation about the long-term implications for a wide range of affected stakeholders is needed.

The components of the property have multiple owners, with different levels of knowledge and resources. The suite of guidance and regulatory documents (both existing and proposed) is appropriate, but more resources need to be directed towards better information about requirements, and greater practical support for private owners. Additional Information received from the State Party indicates intentions to develop a strategy for appropriate community livelihood and sustainable development, marketing of Bagan-made products, and promotion of livelihoods based on traditional skills. The State Party has also undertaken to ensure that local

communities are not displaced due to economic, political or technical reasons.

ICOMOS has also observed that religious communities, senior monks and monasteries are informed about the nomination and support it, particularly because of the emphasis is placed on the continuation of traditional cultural practice and specific activities such as merit-making. There is also an expectation that inscription will result in improved economic circumstances for local communities. Continuing religious activities are strongly supported through the property management systems and genuinely permeate all aspects of day-to-day management. Pilgrims are actively encouraged as are Buddhist practices generally. At this stage, no conflicts were observed between the needs of pilgrims and other visitors, but this could become an issue as tourism numbers increase.

Evaluation of the effectiveness of the protection and management of nominated property

The State Party has completed an immense amount of work to prepare the Integrated Management System and the various associated documents. Considerable progress towards long-term and sustainable management of the property has been made. For example, ICOMOS notes that risk reduction, preparedness and responses have been significantly improved as part of the response to the 2016 earthquake. However, it is also evident that most of the elements in the management system have not yet had time to be implemented and prove their effectiveness. The management system seems well-conceived, and the State Party is provided the needed resources.

ICOMOS commends the State Party for finalising the Amendment to the Law for the Protection and Preservation of Cultural Heritage Regions, as it is considered crucial for ensuring sufficient legal protection of the nominated property. ICOMOS considers that while there has been insufficient time for the effectiveness of the management system to be established, the approach seems sound, and there are guidelines that have been developed to support the most pressing activities.

6 Conclusion

Bagan is an extraordinary sacred cultural landscape which features an exceptional array of Buddhist art and architecture, demonstrates centuries of the cultural tradition of Buddhist merit-making, and provides dramatic evidence of the Bagan civilisation. There are more than 3000 Buddhist temples, stupas and other structures. Intangible attributes of the nominated property are reflected in Buddhist worship and merit-making activities, traditional cultural practices and farming.

Physical attributes of the nominated property are in varying condition. The landscape is largely intact, despite some individually intrusive elements. Extensive

archaeological resources remain. There is huge diversity in the physical condition of the stupas, temples, monasteries and other buildings. Many were extensively damaged by earthquakes in 1975 and 2016. Interventions between the 1990s and 2008 used inappropriate materials and included hypothetical reconstruction, impacting on their authenticity. Nevertheless, the nominated property retains its authenticity, through the presence of extensive original historic fabric, archaeological resources, murals and sculptures, combined with ongoing traditions of Buddhist worship and merit-making.

The State Party has proposed the World Heritage inscription of Bagan as a serial property of eight components with a single buffer zone. ICOMOS considers that the nominated property has the potential to be inscribed in the World Heritage List on the basis of criteria (iii), (iv) and (vi) because it is an extraordinary ensemble of Buddhist monumental architecture and art; its ability to demonstrate the importance of the Bagan Period (11th-13th centuries), in an exceptional way; and because it is an exceptional example of the living Buddhist beliefs and traditions of merit making.

While many changes have occurred that have impacted on the authenticity of a number of individual monuments. ICOMOS considers that the nominated property of eight components meets the requirements of authenticity and integrity. Agreed changes to the boundaries of components 6 and 7, and to the buffer zone for component 4 are considered desirable in order to ensure the protection of the setting and the strengthening of the integrity of the serial property.

The property receives protection through statutory controls, provisions of an Integrated Management Framework, specific strategy documents and the efforts of BAGANCOM and government agencies. The property is also protected through practices and commitment of the religious communities and local people. The statutory protection measures for the property depend significantly on the full implementation of the recently finalised amendments to the Protection and Preservation of Cultural Heritage Regions Law.

Factors affecting the property are many and somewhat interrelated, posing many long-term challenges for the State Party, stakeholders and partners. These include urbanisation, future tourism growth, inappropriate development (particularly of hotels and other tourism infrastructure), natural deterioration of attributes and earthquake damage.

The Integrated Management Framework for the property is soundly conceived, well-structured and comprehensive, but its effectiveness is largely untested. Other key strategic and policy documents, including the Sustainable Tourism Strategy are yet to be operationalised. Significant gaps in management include the Archaeological Risk Plan and Agriculture Sector Strategy which are not yet completed, and crucial procedures such as the 'Heritage

Impact Assessment System' and Sustainable Tourism Strategy, which are yet to be fully implemented. The property contains a number of intrusive elements, such as hotels, which are apparently to be removed, but there is no specific strategy or program in place to do so.

7 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Bagan, Myanmar, be inscribed on the World Heritage List on the basis of **criteria (iii), (iv) and (vi)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Bagan is a sacred landscape which features an exceptional array of Buddhist art and architecture, demonstrates centuries of the cultural tradition of the Theravada Buddhist practice of merit making (Kammatic Buddhism), and provides dramatic evidence of the Bagan Period (Bagan Period 11th – 13th centuries), when redistributive Buddhism became a mechanism of political control, with the king effectively acting as the chief donor. During this period, the Bagan civilisation gained control of the river transport, extending its influence over a large area. The traditions of merit making resulted in a rapid increase in temple construction, peaking in the 13th century. The serial property of eight components is located on a bend in the Ayeyarwady River, in the central dry zone of Myanmar. Seven of the components are located on one side of the River, and one (component 8) is located on the opposite side. Intangible attributes of the property are reflected in Buddhist worship and merit-making activities, traditional cultural practices and farming. The serial property of eight components consists of 3,595 recorded monuments – including stupas, temples and other structures for Buddhist spiritual practice, extensive archaeological resources, and many inscriptions, murals and sculptures. Bagan is a complex, layered cultural landscape which also incorporates living communities and contemporary urban areas.

Criterion (iii): Bagan is an exceptional and continuing testimony to the Buddhist cultural tradition of merit making, and to the peak of Bagan civilisation in the 11th-13th centuries when it was the capital of a regional empire.

Criterion (iv): Bagan contains an extraordinary ensemble of Buddhist monumental architecture, reflecting the strength of religious devotion of an early major Buddhist empire. Within the context of the rich expressions and traditions of Buddhist architecture and art found throughout Asia, Bagan is distinctive and outstanding.

Criterion (vi): Bagan is an exceptional example of the living Buddhist beliefs and traditions of merit making, expressed through the remarkable number of surviving stupas, temples and monasteries, supported by

continuing religious traditions and activities. While the evidence of practices of merit-making are common in many Buddhist sites and areas, the influences established in the Bagan period, and the scale and diversity of expressions, and continuing traditions make Bagan exceptional.

Integrity

The integrity of Bagan is based on the ability of the 8 components to convey the Outstanding Universal Value; the material evidence of the landscape, archaeological sites, monuments, inscriptions, sculptures, murals, cloth paintings and the overall setting; the continuing intangible heritage and cultural practices; and the management of pressures on the state of conservation. The integrity is vulnerable due to the multiple factors affecting Bagan, tourism and development pressures, environmental pressures and natural disasters.

Authenticity

The authenticity of Bagan is demonstrated by the landscape of Buddhist monuments of diverse sizes, scales, materials, designs and antiquity; and the rich and continuing religious and cultural traditions. The major built elements within the property, particularly the very large temples and stupas, retain a high degree of authenticity in their form and design, both internally and externally. The decorative elements of many of the individual monuments survive in their original form. The authenticity has been impaired by inappropriate interventions from the 1970s and 1990s, and by the extensive damages that resulted from earthquakes.

Management and protection requirements

Legal protection of Bagan is provided by the newly amended Law for Protection and Preservation of Cultural Heritage Regions No. (20/2019), Protection and Preservation of Ancient Monuments Law 2015 (with updated bylaw 2016), and Protection and Preservation of Antique Objects Law 2015 (with updated bylaw 2016). These laws are administered by the Department of Archaeology and National Museum (DANM). Effective legal protection is dependent on the full implementation of the Protection and Preservation of Cultural Heritage Regions Law. The property is also protected through practices and commitment of the religious communities and local people.

Heritage zoning plans have been established and integrated into regional plans to ensure coordination. A further protective zone of 100 km x 100 km around the property has been established to control development. All developments within the protected zones are currently subject to site-specific archaeological assessment and input from the Department of Archaeology and National Museum (DANM).

The Bagan National Coordinating Committee (BAGANCOM) has been established by the national government as the decision-making body for Bagan,

ensuring inter-agency coordination. The main factors affecting Bagan are past conservation interventions, tourism and development pressures, environmental pressures and natural disasters.

The management system is based on the Integrated Management Framework. While some aspects of the management system have recently established, and others are not yet fully implemented, the approach is sound. Guidelines that have been developed to support the most pressing activities. In particular, risk reduction and disaster response have been significantly improved as part of the response to the 2016 earthquake. Further elaboration of the management system should be based on a landscape approach to the management of the serial property.

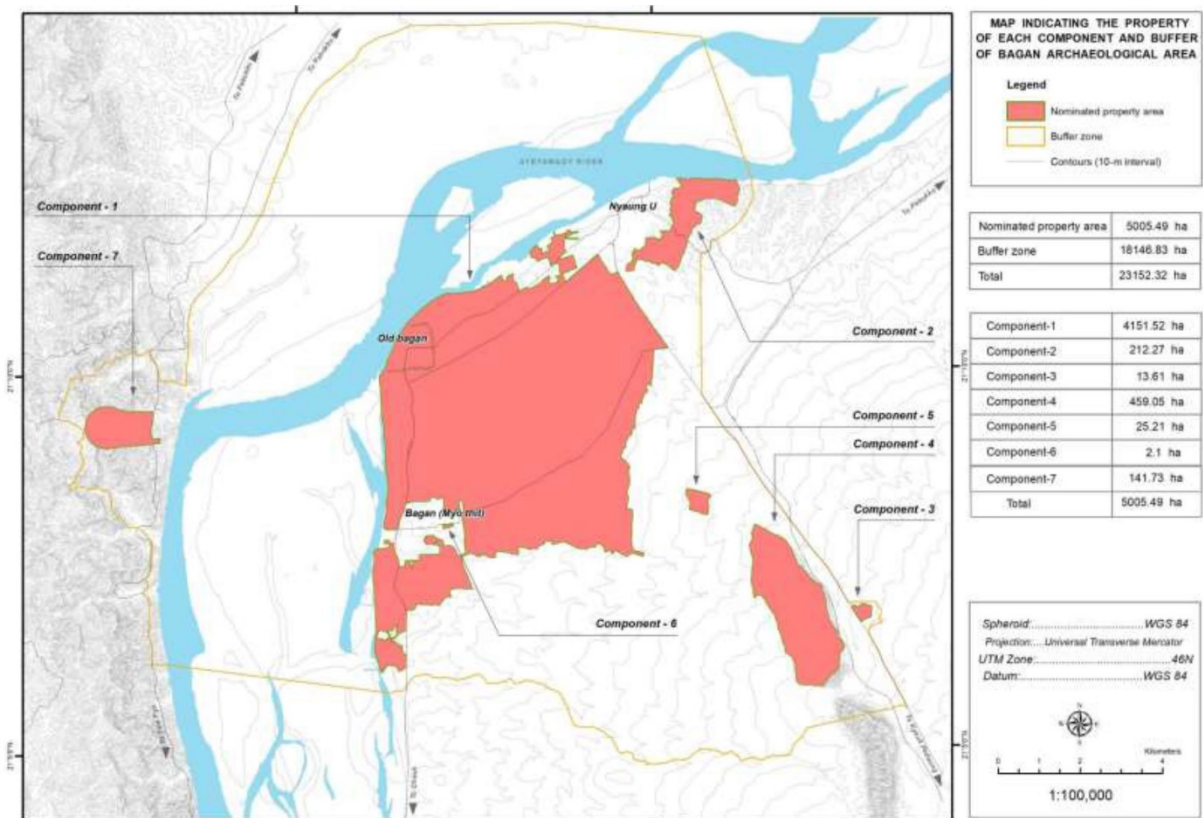
Some key strategic and policy documents, including the Sustainable Tourism Strategy, Archaeological Risk Plan, Agriculture Sector Strategy and Heritage Impact Assessment System are yet to be completed and/or fully operationalised. The property contains a number of intrusive elements, such as hotels. Rigorous Heritage Impact Assessment and clear decision making processes about development are critically important to the future management of Bagan. A long-term Hotels Strategy that identifies zones where hotels can be developed in the future has been recommended.

Additional recommendations

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

- a) Completing the administrative processes to revise the boundaries of components 6 and 7, and the buffer zone for component 4, and submitting the revised maps to the World Heritage Centre,
- b) Conducting further research and documentation of the historical water management system of Bagan, and ensuring that the elements of this system are conserved and managed as attributes of the Outstanding Universal Value of the inscribed property,
- c) Completing as a priority the 'One Map' initiative to bring the legal maps into a single GIS, completing the Bagan monument inventory and grading of monuments, and working to bring all the site datasets into an integrated data management system,
- d) Completing the program of installation of markers along the boundaries of the property components and the buffer zone, and removing the redundant boundary markers of the former 'Heritage Protection Zone' to avoid confusion,
- e) Completing the proposed Archaeological Risk Map and ensuring that its findings and associated procedures are communicated to all relevant stakeholders,

- f) Requiring all international missions working at Bagan to enter into formal agreements that include compliance with the provisions of the Integrated Management Framework, BAGANCOM decisions and advice from the Bagan ICC,
- g) Reviewing the current planning and development controls and associated approval processes, including the Urban and Regional Plan of the Environs of the Bagan Heritage Zone, to ensure that it is no longer possible to construct new buildings within the property or the buffer zone that are of an inappropriate height, scale or form,
- h) Ensuring that a landscape approach is incorporated into the continuing development and implementation of the management system,
- i) Further developing the Heritage Impact Assessment system to rigorously evaluate the potential impacts of change and development on the Outstanding Universal Value of Bagan, and ensuring that 'HIA' are compulsorily required for all new developments within Bagan, in accordance with the amended framework of legal protection. In the immediate timeframe, ensuring that this is required for all new tourism infrastructure developments and the expansions to Bagan Airport,
- j) Further evaluating the 'carrying capacity' and management of the future growth in tourism for Bagan, including consideration of the constraints arising from the physical and social circumstances of each component,
- k) Establishing and convening a regular forum between officers of BAGANCOM, the regional governments and representatives of the hotel and tourism industries to facilitate dialogue, communicate regulatory requirements and conservation programs, and identify tourism management issues,
- l) In addition to the removal of intrusive hotels and tourism facilities, and taking account of the need for a phased approach and longer-term strategy for hotels in Bagan, preparing a Hotel Strategy in consultation with ICOMOS and the World Heritage Centre which creates zones within which hotels can be developed (including all changes to existing facilities). All new developments should be subject to heritage impact assessment, and the establishment of zones where hotel developments can occur should be accompanied by regulations concerning building heights and other site and design issues, and be integrated into the regional Tourism Strategy,
- m) Placing a moratorium on the construction of new viewing mounds or other purpose-built viewing structures/buildings pending a review of visitor facilities and needs and finalisation and implementation of the Bagan Sustainable Tourism Strategy,
- n) Allocating additional resources to further develop the monitoring system,
- o) Providing professional development opportunities in cultural heritage management to staff of BAGANCOM and relevant regional government officials,
- p) Allocating the needed resources to ensure the comprehensive implementation of the actions specified in the Bagan Disaster Risk Management Plan,
- q) Completing and implementing the proposed Bagan Agriculture Sector Strategy following review by BAGANCOM, the World Heritage Centre and ICOMOS,
- r) Following a process of consultation and careful consideration of the interests and welfare of residents, establishing a staged plan for the progressive removal of dwellings that have been illegally constructed within the property boundary,
- s) Ensuring that all major projects that could impact on the series should be communicated to the World Heritage Centre in line with paragraph 172 of *Operational Guidelines for the Implementation of the World Heritage Convention*,
- t) Submitting to the World Heritage Centre by 1st December 2021, a report on the implementation of the above-mentioned recommendations for examination by the World Heritage Committee at its 45th session in 2022;



Revised map showing the boundaries of the nominated property (February 2019)



Landscape of Bagan with monuments



Shwe-zigon



Old Bagan city wall and Tharaba gate



Scenes from the Buddha's life, Loka-hteikpan