### STATE OF CONSERVATION REPORT BY THE STATE PARTY

(In compliance with Paragraph 169 of the Operational Guidelines)

Name of World Heritage Property : Archaeological Site of Nalanda Mahavihara

(Nalanda University) at Nalanda, Bihar

State Party : India

Identification Number : 1502

### 1. Executive Summary of the report

While inscribing Nalanda Mahavihara on World Heritage List in July, 2016, the World Heritage Committee recommended four actions to the State Party in respect of the property which was duly taken care in the post inscription period. The area within the property as well as its vicinity has been subjected to historical research through excavation. The Sarai mound within the protected limits and Rukmini Sthan in the vicinity (about one kilometre away as the crow flies) was taken up by Patna Circle and Patna Excavation Branch respectively of Archaeological Survey of India for scientific clearance and documentation with good results. Historical research on the sculptures and management issues regarding Nalanda and its vicinity were pursued at individual level as well. All the original drawings of successive excavation years beginning a century ago have been digitized and steps to preserve the originals have been taken to ensure their availability as resource documents for future researchers and conservationists.

Structural conservation of different components of Mahavihara continued as per established norms and policies of archaeological works in order to maintain the authenticity and Outstanding Universal Value of the property. In the process select bricks at inconspicuous locations have been inscribed with the year of intervention to make the conservation work discernible from the original fabric. Scientific (chemical) treatment to select structures was taken up by the specialized Science branch of Archaeological Survey of India to enhance the preservation state of the property and protect them against further deterioration. Similarly the specialized Horticulture branch of Archaeological Survey of India continued its engagement with landscape and garden development work within the property limits. Structural and scientific (chemical) conservation alongwith garden maintenance & development at the site will be regular feature in future also. It will be planned on the basis of prioritization of work in different points of the site.

A major initiative has been taken to upgrade the Archaeological Museum at Nalanda which houses the excavated artifacts of the Archaeological Survey of India. This move includes compatible extension of museum building to create additional space for displaying more objects from reserve collections, reorganize the existing displays on chronological basis and to enhance the visitor's experience through interactive displays.

A Master Plan on Nalanda Mahavihara is being prepared by the State government of Bihar under the legislative and legal framework of Bihar Urban Planning and Development Act, 2012 and Rules, 2014 made thereunder. It will buttress the existing statutes and extend the area of influence for regulating activities in the vicinity of property. The jurisdiction of this Master Plan extends upto Rajgir to which the Nalanda Site is historically connected very closely. Thus not only the property but other important historical, religious, cultural and archaeological heritage will also be aptly

maintained through this regulation. This will further enhance the prospect of preserving authenticity and Outstanding Universal Value of the property and its contextual setting.

Preparation of Master Plan has reached an advance stage. The "Rajgir Regional Planning Area" was notified on 31.03.2016 and the "Rajgir Regional Planning Area Authority" was constituted on 24.08.2017. The Housing & Urban Development Corporation Ltd. (HUDCO), a public sector undertaking of Government of India has been roped in far preparation of Master Plan and the Preliminary Inception Report has already been submitted by HUDCO. The Master Plan is mandated to be prepared on Geographical Information System platform using satellite imagery of best possible resolution. Methodology of its preparation has been standardized and articulated in state laws. It is being prepared through a consultative and participatory process giving reasoned consideration to the concerns of all stakeholders. It is likely to be put in place by the next year (2018).

### 2. Response to the Decision of World Heritage Committee

The most recent decision of the World Heritage Committee for this property was taken at its 40<sup>th</sup> session held in July 2016 at Istambul when it inscribed Nalanda Mahavihara (Nalanda University) on the World Heritage List, simultaneously directing the State Party to give consideration to four specific recommendations. The State Party has ensured compliance of the recommendations which are briefly enumerated below: -

#### A. Historical Research

### (i) Research through excavations

Historical research at Nalanda continued alongwith related documentation to maintain authenticity of the property. The revelation of temple site known as Sarai mound during 1974-82 was limited to the high area of the mound. The peripheral mound between the temple and the main access pathway was subjected to systematic excavation by Patna Circle of Archaeological Survey of India in 2016-17 and its outcome was duly documented. This also improved the landscape by restoring it to the original contour after removal of overlying debris heaped due to collapse of structure.

Not only the site proper, but its ambience has also been made part of the research. In the year 2016-17, Patna Excavation Branch of Archaeological Survey of India continued the scientific digging of Rukmini Sthan mound which is about 1 km from Nalanda site as the crow flies and is believed to be a satellite cultural site of Nalanda Mahavihara. Excavation revealed it to be a site contemporary to the flourishing stage of Nalanda in Gupta-Pala period. (Annexure 1a to 1d)

#### (ii) Academic research

A very significant research work on Nalanda sculptures has been taken up by Dr. C.P. Sinha, Ex. Director of K.P. Jayaswal Research Institute, Patna. Successful completion of this research may establish that Nalanda was not only a centre of art; rather it represents a school of art. The students coming to this institute from abroad took this sculpture tradition to their respective countries in South and Southeast Asia where its influence is distinctly discernible. This research may bring a paradigm shift in the existing dogmatic belief about

Nalanda sculptures which so far recognizes it to be part of the Pala School of art or the medieval eastern school of art.

In December 2016, a research work on Nalanda was successfully completed by Dr. N.K. Pathak, Superintending Archaeologist in Archaeological Survey of India. This work was titled as "Growing concern of heritage conservation and management in India with special reference to the integrated development of Nalanda". Many crucial issues related to the conservation and management of Nalanda site has been dealt in this work which may be of immense help in preserving the site and its environs.

#### (iii) Preservation of resource documents

To ensure authenticity in respect of future conservation works to be undertaken at Nalanda some major initiatives have been taken in this year. All the original drawings belonging to the different years of excavation beginning a century ago have now been preserved in digital form. It is to be noted that these drawings are resource documents for the site. Therefore, by digitizing them, their availability for a longer period has been ensured. This will help authentic conservation of structures in future. Initiative has also been taken to stretch the longevity of the original paper documents through scientific treatment by specialized Science Branch of Archaeological Survey of India. The space where these drawings are kept in cabinets has been air conditioned to check any adverse impact due to unregulated temperature and humidity conditions.

#### (iv) Structural conservation

Conservation of the ancient brick structures for their consolidation continued as per the established norms of archaeological works in order to maintain authenticity of the site. Major conservation works were undertaken at Temple site 13 & 14, Monastery nos. 1, 8 & 10 during the years 2016-17 and 2017-18 which is still continuing. Select bricks at inconspicuous location along the border line have been inscribed with the year in order to make the conservation work discernible from the original construction. For overall facelift of the site patch work repairs were also undertaken in different structures. (Annexure 2a to 2e)

All conservation works have been executed under professional hands of trained expertise in Archaeological Survey of India so that authenticity is not compromised. Conservation methodology use minimal interventions for consolidation works only and retain the original systems and non perishable materials of original construction. Archaeological Survey of India adopts contemporary scientific approach to conservation subjected to periodic review and encourages use of traditional building material and skill. Conservation process also takes cognizance of internal as well as international guidelines on it. The core decisions on conservation and management is governed by the National Policy for Conservation of ancient monuments, archaeological sites and remains protected by Archaeological Survey of India which is a comprehensive technical instrument formulated in 2014 with updated international concepts.

### (v) Scientific (Chemical) conservation

Structural conservation was also accompanied by chemical conservation of the brick structures which included removal of superficial accretions. A major scientific treatment of Monastery no.10 was taken up by specialized Science Branch of Archaeological Survey of India in 2016-17 and 2017-18 with the objective to improve its preservation state & physical appearance and also to protect the building materials against physical, chemical and biological deterioration. (Annexure 3a to 3c)

#### (vi) Landscape development

The general landscape and garden development at the site was upgraded in and 2017-18 (still continuing) through specialized Horticulture Branch of Archaeological Survey of India. Special mention may be made of the area around Temple site 12, 13 & 14 where laying of new garden has been done. This almost completes the aesthetic garden development at the site except the Sarai mound area which is also being taken up shortly. (Annexure 4a & 4b)

#### (vii) Museum development

The Nalanda Museum under Archaeological Survey of India, where excavated antiquities have been displayed, has been taken up for up-gradation for which DPR has been finalized. This move also includes compatible extension of the museum building to provide space for displaying at least some more antiquities which are so far lying in the storage. But more significantly, it will enhance visitor's experience through more organized and interactive display. On the occasion of completing one hundred year in 2017, Nalanda Museum is going to organize a seminar which may end up with quality suggestions for development of site as well as museum.

#### B. Integrated Master Plan

The Urban Development and Housing Department, Government of Bihar is preparing the Integrated Master Plan for Rajgir including Nalanda Mahavihara. The process is being done under the legislative framework and legal protection of Bihar Urban Planning and Development Act, 2012 and Rules, 2014 made thereunder. This Master Plan is mandated to be prepared on Geographical Information System platform using satellite imagery of best possible resolution. Methodology of the preparation of Master Plan has been standardized and the steps are well articulated in the State laws. It aims to strike a balance between preserving the Outstanding Universal Value of Nalanda Mahavihara and at the same time provisioning for the needs of the local community. "Rajgir Regional Planning Area" has been notified on 31.03.2016 in consultation with Bihar Urban Planning and Development Board with the objective to develop this region of important historical, religious, cultural, educational and archaeological heritage in a sustainable and planned manner. The extent of planning area is 517 square kilometres. The archaeological site of Nalanda Mahavihara and its immediate vicinity is part of Rajgir planning area. The core area of designated world heritage site covers 23 hectares surrounded by a buffer area of 57.88 hectares. Historically speaking, the entire notified area is very intimately connected to Nalanda which initially developed as a suburb of Rajgir in 6<sup>th</sup> Century BCE. Notification of the planning area is an important step in the process of plan

preparation as it empowers the State government to control the change of land use of the notified area for its integrated and sustainable growth. Further, "Rajgir Regional Planning Area Authority" has been constituted on 24.08.2017 to monitor preparation of Master Plan as well as other development plans in the area, its implementation and for other lawful actions. Divisional Commissioner and District Magistrate are Chairman and Vice Chairman respectively of this Authority which has representatives of various other district authorities and local bodies as members apart from expert from the related field.

Furthermore, Housing & Urban Development Corporation Ltd. (HUDCO), a public sector undertaking of Government of India has been roped in to prepare the Integrated Master Plan. HUDCO is a techno-financial organization of national repute having extensive experience in preparation of Development/Master Plans and specific experience of working in heritage cities/sites. HUDCO has the requisite expertise required to sensitively prepare the Master Plan and to address the issue of development in the vicinity of property that will ensure conservation of its Outstanding Universal Value.

The Preliminary Inception Report has been submitted by HUDCO which outlines the methodology and the process for Master Plan preparation. To address the development concerns in the vicinity of the Nalanda Mahavihara, a 'Special Area' would be designated. The Special Area would cover the core zone which coincides with the World Heritage Site area and the buffer zone which coincides with the area as given in the nomination dossier. In addition to this a peripheral area would be delineated after due study of the setting of the Mahavihara. The peripheral area of heritage sensitivity would be indentified wherein careful attention would be paid to planning, design and implementation of development projects. This would be done after careful study and listing of built and natural heritage in the vicinity of the Nalanda Mahavihara and in line with the Bihar Urban Planning and Development Rules, 2014 as well as UNESCO guidelines.

A comprehensive Development Control Regulations (DCR), which is part of the Master Plan document, may be implemented for the Rajgir region to ensure that future development respects and conforms to the outstanding universal value of Nalanda Mahavihara. The DCR would regulate the land use and ensure that no non-complementary development takes place in the designated peripheral area that may compromise Outstanding Universal Value of the Mahavihara. It would also protect the agricultural land and water bodies within the peripheral area from land fill or any other form of transformation including construction (temporary or semi-permanent of permanent).

Sites/mounds/antiquities of archaeological significance located in the vicinity would be part of the micro-planning initiatives under the Master Plan so that the development/transformation activities in such areas can also be regulated in accordance with the principles of heritage conservation. Ambience of the site shall be monitored and controlled to create a pollution free zone around the site. This implies regulation of mining/commercial/industrial activities (including brick kilns), which may cause any adverse impact on the site irrespective of the distance of its

location. Also, formulation of a regional level vehicular traffic movement plan to minimize impact on the property including re-routing if required shall be ensured.

Preparation of Master Plan is a consultative and participatory process with legal implications and requires approval at multiple levels from various stakeholders like planning authority, line departments, people's representatives, citizen groups, etc. It consists of stages like delineation of planning area, preparation of existing land use map and register vulnerability analysis adoption of existing land use map and register, draft plan proposals and adoption of final plan after giving reasoned consideration to the objections from stakeholders. It also takes care of the micro level interventions and initiatives to ensure provision of civic amenities and physical & social infrastructure in and around the World Heritage Site. The Government of Bihar is committed to prepare and implement the Plan and ensure incorporation of concerns related to the conservation of Nalanda Mahavihara as a World Heritage Site.

The Urban Development & Housing Department, State Government of Bihar is committed to prepare the Master Plan as a comprehensive statutory document to regulate area development around Nalanda Mahavihara in accordance with the guidelines related to World Heritage Site. Preparation of Master Plan will be completed as early as possible, hopefully by next year, that is, 2018. However, until the Master Plan gets prepared the property and buffer zone are protected by extant national laws and is monitored by National Monument Authority at national level supported by State Government at local level. The most important regulatory provision comes from Ancient Monument and Archaeological Sites & Remains Act 1958 and Rules 1959 framed thereunder with amendment in 1992 and further Amendment and Validation in 2010 that controls land use pattern in the vicinity and thereby assures that the property is protected against any form of incompatible development. Its buttressing by Master Plan which enhances the environs will be a value addition to the property.

- C. So far no land use change has been proposed from any side. The State Party assures to conduct Heritage Impact Assessment in accordance with the ICOMOS guidance for any development plan envisaged within the vicinity of the property. For activities like mining and construction in prohibited/regulated area which limits the buffer zone of property in this case, there are statutes in place. Beyond it, regulation of vicinity will be effected through the Master Plan which is in advance stage of preparation under the legislative framework and legal protection of Bihar Urban Planning and Development Act 2012.
- D. Conservation and documentation of the property is continued with the methodology and implementation plan by Archaeological Survey of India on the basis of established norms well laid in the statutes. Conservation methodology use minimal interventions for consolidation works only and retain the original systems and non perishable materials of original construction. Archaeological Survey of India adopts contemporary scientific approach to conservation subjected to periodic review and encourages use of traditional building material and skill. Conservation process also takes cognizance of internal as well as international guidelines on it. The core decisions on conservation and management is governed by the National Policy for

Conservation of ancient monuments, archaeological sites and remains protected by Archaeological Survey of India which is a comprehensive technical instrument formulated in 2014 with updated international concepts.

3. Other current conservation issues identified by State Party which may have an impact on the property's OUV

Nil

4. Any potential major restoration / alteration and / or new construction intended within the property, buffer zone and / or corridor or other areas where such developments may affect OUV / authenticity / integrity.

Nil

5. Public access to the State of conservation report

The conservation report is regularly included in the Indian Archaeology: A Review of the respective year published by Archaeological Survey of India on annual basis which can be referred by scholars and public. The annual conservation programme with identified works and estimates are also uploaded on conservation portal of Archaeological Survey of India which is in public domain.

6. Signature of the Authority

जानहीज शर्मा / JANHWIJ SHARMA

संयुक्त महानिदेशक (संरक्षण) / Jt. Director General (Conservation) भारत सरकार/Govt. of India

भारतीय पुरातत्व सर्वेभण Archaeological Survey of India जनपुर, नई दिल्ली-110011/Janpath, New Delhi-110011

## Annexure – 1a





Excavation near Sarai Mound, Nalanda

# Annexure – 1b

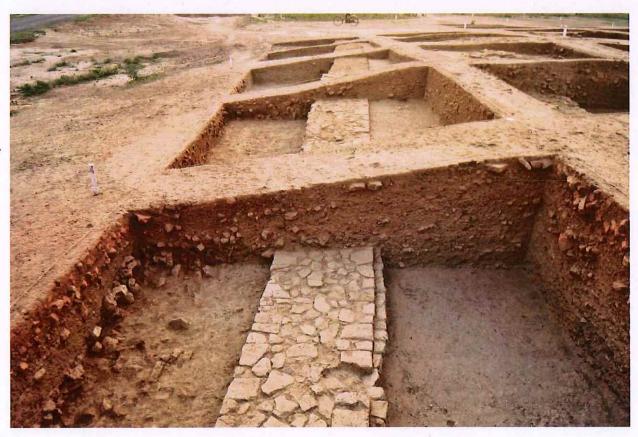




Excavation near Sarai Mound, Nalanda

## Annexure – 1c





Excavation at Rukmini Sthan, Nalanda

## Annexure – 1d





Excavation at Rukmini Sthan, Nalanda

# Annexure-2a

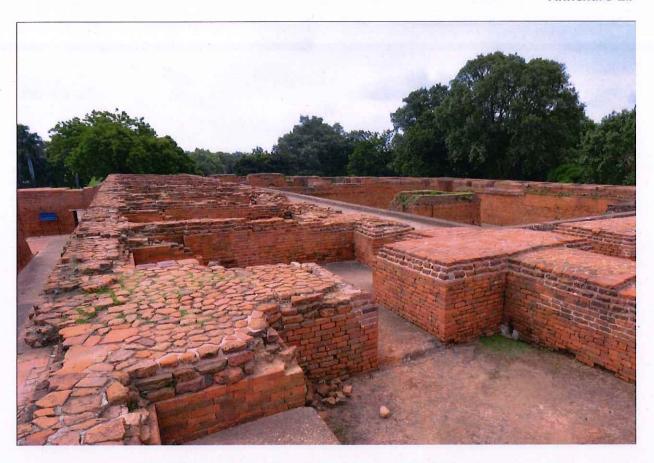


Structural Conservation at Monastery 1 (before)

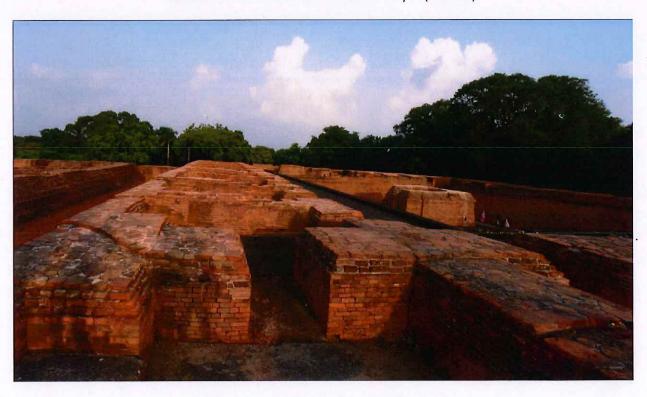


Structural Conservation at Monastery 1 (after)

### Annexure-2b



Structural Conservation at Monastery 1 (before)



Structural Conservation at Monastery 1 (after)



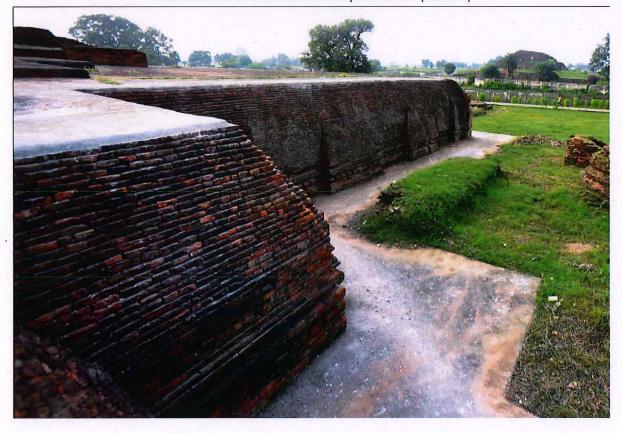
Structural Conservation at Temple site 13 (before)



Structural Conservation at Temple site 13 (after)



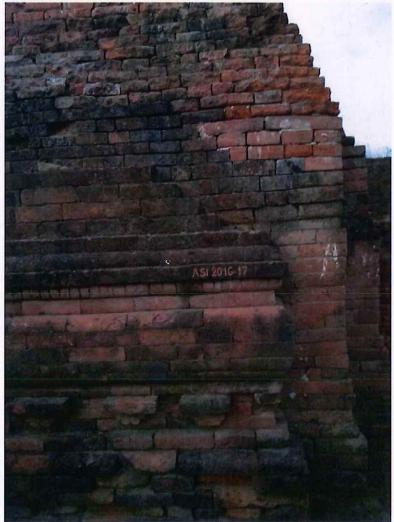
Structural Conservation at Temple site 13 (before)



Structural Conservation at Temple site 13 (after)

## Annexure-2e





Year inscribed on brick to discern conservation intervention

# Annexure-3a



Scientific Treatment at Monastery 10 (before)



Scientific Treatment Monastery 10 (after)

# Annexure-3b



Scientific Treatment at Monastery 10 (before)



Scientific Treatment Monastery 10 (after)

# Annexure-3c



Scientific Treatment at Monastery 10 (before)



Scientific Treatment Monastery 10 (after)

# Annexure-4a

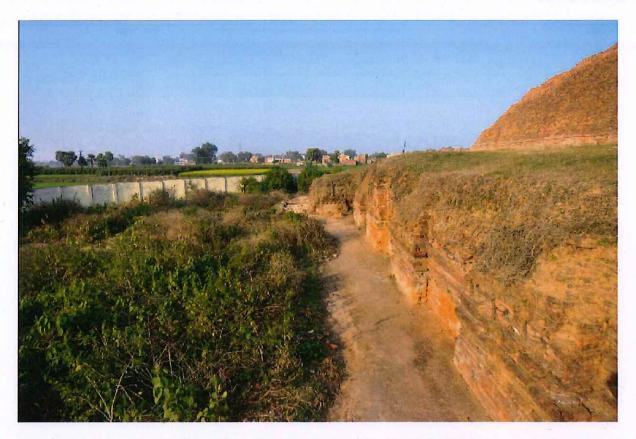


Garden and landscaping at Temple site 14 (before)

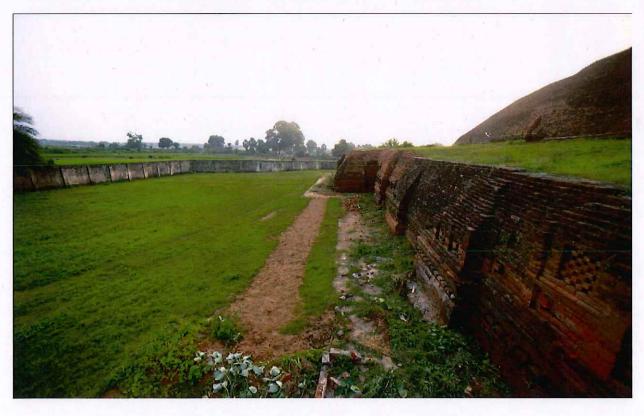


Garden and landscaping at Temple site 14 (after)

# Annexure-4b



Garden and landscaping at Temple site 14 (before)



Garden and landscaping at Temple site 14 (after)