State of Conservation of the World Heritage Properties in the Asia-Pacific Region

INDIA Ellora Caves

II.1 Introduction

Year of Inscription 1983

Organisation Responsible for the Report

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II.2 Statement of Significance

Inscription Criteria C i, iii, vi

Statement of Significance

Proposed as follows (new): "The magnificent group of rock hewn temples at Ellora, representing three different faiths, Buddhist, Brahmanical and Jain, marks the culmination of the Cave Temple architecture in Western India.

Ellora remained in oblivion for centuries but the cave temples of Ellora were known to the civilized world through the ages as living example of Indian religion and art. Mention of these caves has been made by travellers from time to time. The Baroda Copper Plate grants of Karka II refer to the magnificent excavations at Elapura (Le., Ellora). The Arab traveller Al-Masudi and the historian Farishta were the two early authorities of the Muslim period to record about Ellora in their accounts.

The entire group of more than 34 caves was excavated during the period from the 5t - 6th centuries to 12th - 13th centuries AD. The Buddhist Caves (nos. 1 -12) were excavated between the 5th and the 8th centuries AD. when the Mahayana sect of Buddhism flourished in this region. The Brahmanical group of Caves (nos. 13 - 29) was excavated between 7th and 10th centuries AD. The famous Kailasa temple in this group is attributed to the Rashtrakuta king, Krishna I (circa. AD. 757 - 783). The Jain group of Caves (nos. 30 - 34) was excavated between 10th and 13th centuries AD."

Status of Site Boundaries

• The demarcation line and buffer zone are adequate.



II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- No changes in authenticity/integrity.
- In future: no foreseeable changes.

II.4 Management

Administrative and Management Arrangements

- Legal protection considered as sufficient.
- Property management at regional level and the above arrangements are considered sufficient.
- A management plan exists, but ASI outlines periodical and long term plans and programmes for executing conservation works.
- To preserve the values in future: existing laws are considered sufficient; need to increase the number of staff and training.

Present State of Conservation

- Various constructions and garden landscape and equipment for tourism and conservation.
- Changes since inscription: no mention of SoC or of any changes.

Staffing and Training Needs

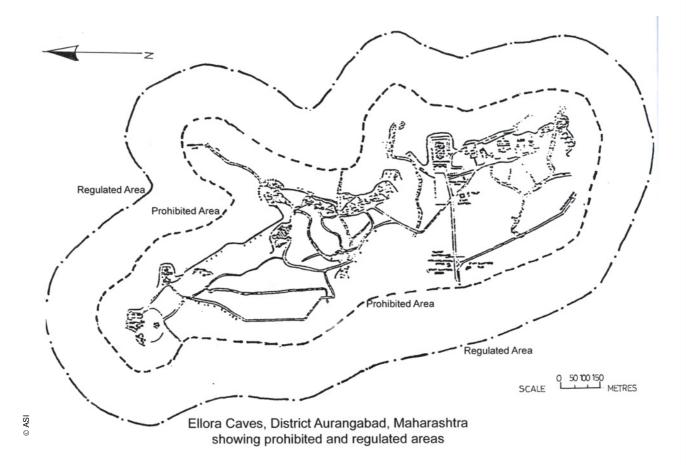
- 29 staff. Considered sufficient to monitor the site.
- The staff need training in conservation techniques, computer applications, photo-documentation, GPS, GIS, cartography.

Financial Situation

- Sources of funds from Central Government.
- Funding is considered as sufficient.
- * International Assistance: * (i) 1983, US\$13,331 from WHF; training workshop, (ii) JBIC loan for Ajanta Ellora Conservation and Tourism development programme.

Access to IT

- No computers, no email or Internet access, computers at regional office.
- No use of GIS.



Visitor Management

- 2001, 452,789 visitors.
- Various facilities: approach road/pathway, drinking water, post office, guide facilities, books, brochures, toilets, signage, sitting benches, tree rounds.
- Needed facilities: public information system, multimedia visualisation of paintings and CDs.
- Plan for public use: no existing plan.
- Communication of WH values through: brochures and booklets, website, various cultural awareness programmes, WH day and week, print and audio media.
- Educational programmes: on occasions of WH events, school students invited and involved in educational and creative activities.
- Role of the inscription into the List of World Heritage: awareness of public with more visitors, more research.

II.5 Factors Affecting the Property

Threats and Risks

- Development pressures: any further developmental pressure can threaten the authenticity,
- Certain leakages inside the caves,
- General deterioration of rock surfaces,
- Bats in the cave interior,
- Tagging on rock surfaces.

Counteractive Plans

- No emergency plan.
- Actions: the ASI has the authority to tackle any problem, however no resources are available to tackle large scale disasters. If such a situation arises collaborative strategy is to be adopted with the State Government.
- Improvements needed: site information system, pre-recorded cultural texts for tourists, brochures, booklets and guidebooks.
- Impacts of natural factors (rainfalls and leakages), insect activity and uncontrolled tourist behaviour are decreasing.
- Measures adopted or planned: attempts to educate the masses, monitoring by installation of modern gadgets for proper and effective management.

II.6 Monitoring

Monitoring Arrangements

- Daily basis monitoring.
- No partners involved.
- Foreseen improvements: scientific innovative applications, such as GPS and GIS for better site management.

Monitoring Indicators

 Telltale glasses, loose portions of rock surface, relative humidity, pollution levels, temperature, rainfall.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- Values: unchanged.
- Management and factors affecting property: the management set-up of ASI effectively monitors the factors affecting the site which are kept well under control.

- Future actions: the adopted monitoring system recordings would be analysed for formulating future action in the interest of the property.
- Timetable for the implementation of the Plans: as required.

* State of Conservation Reports

1997 Bureau WHC-97/CONF.204//2B - no buffer zones. Removal of bats, vegetation and fungus was completed in one of the 34 Ellora caves recently Factors that affect sites are; (i) tree roots above the caves create cracks and increase water seepage, which leads to wall painting and sculpture damage and eventual structural instability; (ii) humidity increase caused by uncontrolled numbers of visitors which leads to fungus growth, attracting insects and eventually bats; (iii) inadequate security encourages vandalism and theft. Phase I of the Ajanta-Ellora Development Plan, will be completed within 1997, upon which evaluation will be conducted before Phase II is implemented.

"In view of the information provided by the Secretariat, the Bureau recommended a study be made on the means of vegetation control and selection of species to be planted to prevent soil erosion. The Bureau also requested the concerned authorities to implement visitor control measures and to keep the Committee informed of the developments of the OECF Ajanta-Ellora Development Plan and conservation plans at Elephanta."

2001 Committee WHC-2001/CONF.208//10 - Request for a reactive monitoring mission by an international wall painting expert to enable the national conservation experts to consider various conservation measures following international standards for long-term protection and presentation of the paintings. Following this request, a mission was organized for November 2001. The findings will be presented to the Bureau at its twenty-fifth extraordinary session. Finally, the Centre is assisting the ASI in the organization of a conservation and management workshop to be undertaken in early 2002. The objective of the workshop is to review and integrate the various tourism and site-enhancement development plans into a comprehensive conservation and development plan.

2002 Bureau WHC-2002/CONF.201/11Rev - WH Centre organized a reactive monitoring mission by an international mural painting between 1-9 December 2001. The mission noted the following main threats facing the wall paintings: - infiltration of rainwater into the caves; - minor cracks on carved surfaces - flaking of the paint layer; - infestation of bats and insects within the caves.

UNESCO expert recommended that the authorities consider: (a) revising present methods for stabilizing and cleaning the wall painting surfaces; (b) testing new and alternative methods on small wall painting surfaces; (c) continuous monitoring of the microclimate conditions; (d) enhancing documentation and archival material to evaluate changing conditions of the wall painting material; (e) conserving further the unique natural setting of the Ajanta and Ellora Caves by following the concept of minimal intervention with the historically established environment and giving preference to conservation solutions which involve minimal changes.

Finally, noting certain weaknesses within the institutional framework the UNESCO mission recommended that cooperation be enhanced between the complementary ASI branches to enhance the long-term protection and conservation of the two sites. At the time of the preparation of this working document, the WH Centre was continuing consultations with the authorities to mobilize international technical co-operation for following up on the recommendations of the UNESCO mural painting expert.