# PERIODIC REPORTING ON THE APPLICATION OF THE WORLD HERITAGE CONVENTION

# SECTION II: STATE OF CONSERVATION OF SPECIFIC WORLD HERITAGE PROPERTIES

## **EXECUTIVE SUMMARY**

#### II. 1. Introduction

- a. State Party : INDIA
- b. Name of the World Heritage property: ELEPHANTA CAVES
- c. Geographical coordinates to the nearest second: 18° 57' 30" N; 72° 55' 50"
- d. Date of inscription on the World Heritage List: 11<sup>th</sup> December 1987
- e. Organisation(s) or entity(ies) responsible for the preparation of the report:
   Archaeological Survey of India
- f. Date of report: December 2002
- g. Signature on behalf of the State Party: Director General, Archaeological
   Survey of India.

## II.2. Statement of Significance

The seven caves located in the Arabian sea island, 11 km east of Mumbai, richly represents the Indian rock-cut art of Saiva faith ( $6^{th} - 7^{th}$  century A.D.). The art here carries a perfect expression especially the large and bold relief panels that are housed in Cave 1. However, the ancient vestiges found in the island goes back to the early centuries of Christian Era representing sherds of Roman amphorae, ancient jetty or docks (?) and a brick stupa.

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#### II.3. Statement of authenticity / integrity

The authenticity of the site and the World Heritage Property is well maintained since its inscription on the World Heritage List, albeit certain repairs on the façade and pillars were carried out for the structural stability of the monument.

### II.4. Management

The monument is maintained by the Archaeological Survey of India and governed by its rules and regulations. Apart from the provisions envisaged in the Ancient Monuments and Archaeological Sites & Remains Act 1958 and Rules 1959 certain special regulations were issued for the management of the site. They are Elephanta Island (Protected Monument) Rules, 1957 which prohibits mining, quarrying, blasting, excavation or other operation nearby the monument and in a notification in 1985 the area all around the protected monument and an area 1 km from the shore were declared as prohibited areas.

## II.5. Factors affecting the site

Saline activity and general deterioration of rock surface.

## II.6. Monitoring

The monitoring of the property is carried out periodically by the administrative set up of Archaeological Survey of India through its various branches like Conservation, Science and Horticulture.

#### II.7. Conclusions and recommended action

# a. Main conclusions regarding the state of the World Heritage values of the property (see items II.2 and II.3 above)

The World Heritage Values and authenticity / integrity of the site is well maintained since its inscription on the World Heritage List.

# b. Main conclusions regarding the management and factors affecting the property (see items II.4 and II.5 above)

The present set up of the Archaeological Survey of India is well equipped with the management and other issues related to the monitoring the factors affecting the property and implementing the remedial measures.

#### c. Proposed future action / actions.

The restoration of some of the pillars which were carried out in 1960s needs to be

dismantled and redone as it has developed cracks.

#### d. Timeframe for implementation.

Next five years, i.e., between 2002-2003 and 2007-2008.

#### e. Needs for international assistance.

The international assistance is required in the area of any technical knowhow providing information and methodology for surface treatment of rock surface which should be transparent on application.

## II.8 Assessment of the Periodic Reporting exercise for Section II

The Periodic Reporting exercise was very useful in understanding the various issues related to the maintenance, conservation, and management of the monument in a better way.

## **II.9 Documentation attached**

- 1. Maps showing the prohibited and core area of the monument.
- Compact Disc containing slides in PowerPoint on the various conservation activities of the monument, maps, etc.
- 3. Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage.
- 4. Perspective plan of the proposed activities during the next five years.

5. Indicative bibliography.

#### **II.1** Introduction

b.       Name of World Heritage property: ELEPHANTA CAVES       002         c.       In order to locate the property precisely, please attach a topographic map showing scale, orientation, projection, datum, site name, date and graticule. The map should be an original print and not be trimmed. The site boundaries should be shown on the map. In addition they can be submitted in a detailed description, indicating topographic and other legally defined national, regional, or international boundaries followed by the site boundaries.       003         The State Parties are encouraged to submit the geographic information in digital form so that it can be integrated into a Geographic Information System (GIS).       001 this questionnaire indicate the geographical co-ordinates to the nearest second (in the case of large sites, towns, areas, etc., give at least 3 sets of geographical co-ordinates):       004         center point: 18° 57' 30" N; 72° 55' 50" E       004         d.       Give the date of inscription on the World Heritage List and subsequent extension (if applicable): 11" December 1987       005         e.       Organisation(s) or entity(ies) responsible for the preparation of this report.       005         ARCHAEOLOGICAL SURVEY OF INDIA       Organisation(s) / entity(ies)       005         AURANGABAD CIRCLE, ARCHAEOLOGICAL SURVEY OF INDIA       Person(s) responsible: DR.S.K.MITRA, SUPERINTENDING ARCHAEOLOGIST       Address: AURANGABAD CIRCLE, BIBI-KA-MAQBARA         City and post code: AURANGABAD, MAHARASHTRA, 431004       City and post code: AURANGABAD, MAHARASHTRA, 431004       005	a.	Country (and State Party if different): INDIA	001
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	Telephone: 0091-0240-400620	
	Fax: 0091-240-400009.	
	E-mail: asiabad@sancharnet.in	
-		000
f.	Date of preparation of the report: December 2002	006
g.	Signature on behalf of the State Party	007
5		
	Signature:	
	Name: Mrs. KASTURI GUPTA MENON, I.A.S.	
	Function: DIRECTOR GENERAL, ARCHAEOLOGICAL SURVEY OF INDIA	

# **II.2 Statement of Significance**

Heritage Comm World Heritage property deserve	scribing a property on the World Heritage List, the World ittee indicates its outstanding universal value(s), or value(s), by deciding on the criteria for which the ed to be included on the World Heritage List, Circle the for the inscription: (i) – (iii)	008
	ria added by re-nominating and / or extending the e original inscription?	009
If YES, please ex Not applicable	plain:	010
Advisory Body(ie The ICOMOS rec	observations concerning the property made by the es) during the evaluation of the nomination: ommended that the cultural property can be inscribed on the st on the basis of Criteria I & III	011
appropriate, ma inscription and e	cisions and observations / recommendations, if de by the World Heritage Committee at the time of extension (if applicable): took note with satisfaction of the statement of the	012

representative of India that her Government would take appropriate steps to protect the fragile property from the possible adverse impact of industrial projects in the vicinity.	
Identify the actions taken as follow-up to these observations and / or decisions:	013
Necessary restrictions have been imposed by the Maharashtra Government to curtail the impact of industrial projects in the vicinity.	
Please propose a statement of significance by providing a description of the World Heritage value(s) for which the property was inscribed on the World Heritage List. This description should reflect the criterion (criteria) on the basis of which the Committee inscribed the property on the World Heritage List and it should also detail what the property represents, what makes it outstanding, what the specific values are that distinguish the property as well as what its relationship with its setting is, etc:	014
Among the two hills on the island, the western and the eastern has altogether five rock-cut caves in the former and the latter, has a brick stupa on the top of it with two caves and few rock-cut cisterns. One of the caves on the eastern hill is unfinished and the other a plain excavation.	
The most important among the caves in the western hill is the great Cave 1 which measures 39 metres from its front entrance to the back. In plan the cave closely resembles Dumar Lena cave at Ellora. The main body of the cave, excluding the porticos on the three open sides and the back aisle, is 27 metres-square and is supported by rows of six columns each. The most striking of the sculptures is the famous colossal Trimurti at the back of the cave facing the entrance. It is a colossal bust of the three forms of Siva, the aghora, turbulent and fearsome; tatpurusha, benign and meditative and vamadeva, mild pleasing and lovable. On each side of the Trimurti recess is a pilaster in front of which stand gigantic dwarapalas or doorkeepers.	
There are also beautiful sculptured compartments in this cave such as those depicting ardhanari (representing the unified form of Siva and Parvati); kalyanasundaramurti (the marriage of Siva and Parvati); andhakasuravadamurti (Siva killing the demon Andhaka); nataraja (dancing Siva); Demon King Ravana shaking the mountain Kailasa, the abode of Lord Siva;	
For the extension of a property or the inclusion of additional criteria a re- submission of the property may be considered. This might be regarded as necessary in order to recognise cultural values of a natural World Heritage property, or vice-versa, become desirable following the substantive revision of the criteria by the World Heritage Committee or due to better identification or knowledge of specific outstanding	015

universal values of the property. Should a re-nomination of the property be considered?	
YES / NO	
If YES, please explain:	016
Not applicable	
Are the borders of the World Heritage property and its buffer zone (still) adequate to ensure the protection and conservation of the property's World Heritage values:	017
YES / NO	
If NO, please explain why not, and indicate what changes should be made to the boundaries of the property and / or its buffer zone (please indicate these changes also on a map to be attached to this report):	018
Not applicable	
Is the State Party actively considering a revision of the property boundaries or the buffer zone?	019
YES / NO	
If YES, indicate what is being done to that end:	020
Not applicable	

# II.3 Statement of authenticity / integrity

Have the World Heritage values identified above been maintained since the property's inscription?	021
If NO, please describe the changes and name the causes: Apart from maintaining the values mentioned above, the only notable changes are in the way of providing pathways in front of the caves; provision of drinking water in the cave complex for the benefit of the visitors; repair to the Custodian quarters and converting it into a site information centre.	022
What was the evaluation of the authenticity / integrity of the property at the time of inscription? (Please quote from ICOMOS / IUCN evaluation):	023

Periodic Reporting Exercise on the Application of the World Heritage Convention Section II: Application of the World Heritage Convention by the State Party

To be filled by the Directorate	
Have there been changes in the authenticity / integrity since inscription?	024
Yes / No	
If YES, please describe the changes to the authenticity / integrity and name the main causes?	025
Not applicable.	
Are there (further) changes foreseeable to the authenticity / integrity of the property in the near future?	026
Yes / No	
If YES, please explain and indicate how these changes might affect the World Heritage values of the property:	027
Not applicable.	

# II.4 Management

How could the arrangements for the protection and the management of the property best be defined (more than one indication possible)?	02
Legal ( √ )	
Contractual ( )	
Traditional ( )	
Please describe and assess the implementation and effectiveness of these arrangements for the preservation of the values described under item II. 2 at the national, provincial and / or municipal level:	0
<b>Legal:</b> The monument is governed under various Acts and Rules passed by the Parliament of India. These legislations were passed during different periods upon the requirements and it encompasses all requirements for the proper safeguard of the monuments. These Acts and Rules include Ancient Monuments and Archaeological Sites & Remains Act 1958; Ancient Monuments and Archaeological Sites & Remains Rules 1959; Antiquities and Art Treasures Act 1972; Antiquities and Art Treasures Rules 1973 and the subsequent amendments.	

1947, Maharashtra Tree Felling Act 1967, Wildlife Protection Act 1972, Forest Conservation Act 1980, The Maharashtra Regional and Town Planning Act, 1966, Heritage Regulations for Greater Bombay 1995, etc also have certain provisions for control of illegal activities in the area in which the monument is located. Elephanta Island (Protected Monument) Rules, 1957 which prohibits	
mining, quarrying, blasting, excavation or other operation nearby the monument and in a notification in 1985 the area all around the protected monument and an area 1 km from the shore were declared as prohibited areas.	
The local governments are entrusted with the law and order problem and are bound by the legislations passed by the Parliament.	
In general terms, can this legislative, contractual and / or traditional protection be considered sufficient?	C
YES / NO	
Please explain:	0
As explained above in 029 the legislations passed by the Parliament of India covers the entire nation and it encompasses all requirements for safeguarding	
the interests of the monuments.	
the interests of the monuments. Provide a list and summaries of laws and regulations concerning cultural and natural properties protection and management (including extracts of relevant articles from the Constitution, Criminal Law, Law / Regulations on Land-use, Environment Law and Forestry Law, amongst others). Please also attach any documentation available concerning these points:	C
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Rules framed based on the provisions of Ancient Monuments Preservation Act 1904 for its implementation.	
Export Control Act 1947	
An Act to control the export of antiquities.	
The Ancient Monuments and Archaeological Sites & Remains (Declaration of National Importance) Act 1951	
An Act to declare certain ancient and historical monuments and archaeological sites and remains in (Part A States and Part B States) to be of national importance and to provide for certain matters connected therewith.	
Elephanta Island (Protected Monument) Rules, 1957 prohibits mining, quarrying, blasting, excavation or other operation nearby the monument.	
Ancient Monuments and Archaeological Sites & Remains Act 1958	
An Act to provide for the preservation of ancient and historical monuments and archaeological sites and remains of national importance, for the regulation of archaeological excavations and for the protection of sculptures, carvings and other like objects.	
Ancient Monuments and Archaeological Sites & Remains Rules 1959	
Rules framed as per the provisions of Ancient Monuments and Archaeological Sites & Remains Act 1958.	
Antiquities and Art Treasures Act 1972	
An Act to regulate the export trade in antiquities and art treasures, to provide for the prevention of smuggling of, and fraudulent dealings in, antiquities, to provide for the compulsory acquisition of antiquities and art treasures for preservation in public places and to provide for certain other matters connected therewith or incidental or ancillary thereto.	
Antiquities and Art Treasures Rules 1973	
Rules framed as per the provisions of Antiquities and Art Treasures Act 1972.	
A notification in 1985, the area all around the protected monument and an area 1 km from the shore were declared as prohibited areas.	
The Indian Forest Act, 1927	

An act to consolidate the law relating to forests, the transit of forest-produce and the duty leviable on timber and other forest produce.	
Bombay Forest Rules 1947	
Maharashtra Tree Felling Act 1967	
Wildlife Protection Act 1972	
An act to provide for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto.	
Forest Conservation Act 1980	
An act to provide for the conservation of forest and for matters connected therewith or ancillary or incidental thereto.	
The Maharashtra Regional and Town Planning Act, 1966	
An act to make provision for planning the development and use of land in Regions established for that purpose and for the constitution of Regional Planning Boards therefore; to make better provisions for the preparation of Development plans with a view to ensuring that town planning schemes are made in a proper manner and their execution is made effective; to provide for the creation of new towns by means of Development Activities; to make provisions for the compulsory acquisition of land required for public purposes in respect of the plans; and for purposes connected with the matter aforesaid.	
Describe the administrative and management arrangements that are in place for the property concerned, making special mention of the institutions and organisations that have management authority over the property as well as of the arrangements that are in place for the coordination of their actions:	033
Administrative and Management Arrangement	
The Aurangabad Circle, Aurangabad of the Archaeological Survey of India is directly responsible for the administrative, management and all other matters connected with the day-today maintenance of the protected monument and its complex area. The administration is carried out through a Sub-Circle located at Mumbai headed by a Conservation Assistant who assess and executes the functions as directed by the Superintending Archaeologist.	
Institution / Organisation having management authority	
The Archaeological Survey of India is the only institution / organisation having the management authority.	
	and the duty leviable on timber and other forest produce. Bombay Forest Rules 1947 Maharashtra Tree Felling Act 1967 Wildlife Protection Act 1972 An act to provide for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto. Forest Conservation Act 1980 An act to provide for the conservation of forest and for matters connected therewith or ancillary or incidental thereto. The Maharashtra Regional and Town Planning Act, 1966 An act to make provision for planning the development and use of land in Regions established for that purpose and for the constitution of Regional Planning Boards therefore; to make better provisions for the preparation of Development plans with a view to ensuring that town planning schemes are made in a proper manner and their execution is made effective; to provide for the creation of new towns by means of Development Activities; to make provisions for the property concerned, making special mention of the institutions and organisations that have management authority over the property as well as of the arrangements that are in place for their actions: Administrative and Management Arrangement The Aurangabad Circle, Aurangabad of the Archaeological Survey of India is complex area. The administration is carried out through a Sub-Circle located at Mumbai headed by a Conservation Assistant who assess and executes the functions as directed by the Superintending Archaeologist. Institution / Organisation having management authority

Please indicate under which level of authority the property is managed:
Local ( )
Regional ( $$ )
National ( )
Other(please describe):
Please provide the full name, address and phone / fax / e-mail of the entity(ies) directly responsible for the management (conservation, preservation, visitor management) of the property:
Superintending Archaeologist Archaeological Survey of India Aurangabad Circle, Aurangabad 431004. Phone: 91-0240-400624; 400009 (f) E-mail: asiabad@sancharnet.in
Is it necessary to revise the administrative and management arrangements for the property?
YES / NO
If YES, explain why this is the case:
If YES, explain why this is the case: Not applicable
Not applicable
Not applicable Is there a management plan for the property?

vicinity of the monument. The Conservation Branch of the ASI executes all the matters related to the structural conservation, preservation, of the monument.	
In this regard, the Archaeological Survey of India chalks out periodical plans and programmes for executing the conservation works upon the approval of a competent authority. The ASI also chalks out long term plans for executing them.	
Please report on legal and administrative actions that are foreseen for the future, to preserve the values described under item II.2 (e.g. passing of legislation, adjusting administrative and management arrangements, implementing or drawing up of a (new) management plan, etc.):	040
Passing of legislation	
The existing laws and regulations of the Archaeological Survey of India is sufficient for the maintenance and upkeep of the cultural heritage.	
But if necessitated with new perceptions for the better management and upkeep necessary amendments to the by-laws can be effected for which necessary provisiton is incorporated in the Ancient Monuments and Archaeological Sites & Remains Act 1958.	
Administrative and Management arrangements	
The existing administrative arrangement of Archaeological Survey of India through Superintending Archaeologist, Archaeological Survey of India, Aurangabad Circle for the management arrangement of World Heritage Property is sufficient.	
Please provide detailed information, particularly in cases where changes have occurred since the inscription of the property, on the following matters:	041
<ul> <li>Conservation Make reference to all major interventions at the property and describe its present state of conservation</li> </ul>	042
Construction of pathways Conservation of fallen and broken pillars Conservation of fallen and collapsed facades Construction of flight of steps leading to the Caves from jetty Repair to the Custodian Quarters and setting up of a Site Information Centre	
<ul> <li>Ownership Make reference to all major changes in ownership of the property</li> </ul>	

and describe the present status of ownership:	
The Archaeological Survey of India is the owner of the cave monuments	
Please, give a detailed description of the staffing of the site:	043
Group B Group C Group I	
(i) Regular Nil 1 6	
(ii) Temporary Status Nil Nil Nil (iii) Private Nil Nil 12	
(iii) Private Nil Nil 12	
Is the staffing level sufficient for adequate management of the property	<b>y?</b> 044
(YES)/ NO	
If NO, what should be done to improve the situation?	045
Netersliechle	
Not applicable	
	046
Does the staff need additional training?	
(YES)/ NO	
If YES, what are the training needs for your staff?	047
The staff requires training in the areas of recent advances Conservation Techniques; computer applications in archaeology a	
conservation; recent advances in the sphere of photo-documentation	
photogrammetry including application of GPS, GIS; cartography etc.	
Describe the funding and financial situation of the property, indicati	<b>on</b> 048
sources, level and regularity of financing:	
All the funding for the property is through the Archaeological Survey of Inc	lia
Department of Culture, Ministry of Tourism & Culture.	,
The funds are made available both on yearly basis and also to cope	au
emergency situations.	ap
le the evelleble funding sufficient for edequate management of t	be 040
Is the available funding sufficient for adequate management of t property?	t <b>he</b> 049
YES/ NO	
If NOT, describe the financial resources that would be required for t	t <b>he</b> 050

Not applicable
Indicate International Assistance from which the property has benefited:
World Heritage Fund: -
UNESCO International Campaign: -
<ul> <li>National and / or regional projects of UNDP, the World Bank or other agencies:</li> </ul>
UNESCO funded an amount of Rs. 9,47,025/- in which the following works were carried out.
Providing & laying stone pavement for pathway; Providing & constructing UCR masonry for ertaining wall & parapet wall, providing M.S. iron pipe railing, erecting barbed wire fencing, repairs to booking counter, improvement of toilet block, repairs to drains with UCR masonry, laying PCC in the flooring of Cave 1
Bilateral co-operation: -
Other assistance: - Describe the IT (computer) equipment of the site and / or management office and assess its effectiveness:
At present there is no equipment at the Elephanta Caves, the management office at Aurangabad is having computers but basically meant for normal office functioning and not dedicated entirely to the aspects of maintenance of the Elephanta Caves.
Are you using (multiple indications are possible):
Are you using (multiple indications are possible): PC ( $$ )
PC ( √ )

At the Aurangabad office at present 4 PCs are available.	
Does an operational access to the Internet exist?	059
At the Aurangabad Office	
Is e-mail used for daily correspondence?	060
At the Aurangabad Office	
Is there a Geographical Information System (GIS) for the site?	061
YES / NO	
If YES, what software do you have and how is the GIS used?	062
Not applicable	
List scientific studies and research programmes that have been conducted concerning the site:	063
<ol> <li>Geophysical Investigations of the Elephanta Group of Caves by the Geological Survey of India.</li> <li>Other periodical studies are conducted for carrying out conservation measures at the monument.</li> </ol>	
Describe financial and human resource inputs for the research programmes and or facilities:	064
The Archaeological Survey of India conducts various research programmes and survey projects including documentation studies as part of its functioning. Its various branches conducts studies in Archaeology and History; nature of the paintings, conservation problems, etc for proper understanding of the caves and to propose remedial measures.	
Describe how the information / result are disseminated?	065
The Archaeological Survey of India publishes a yearly journal named The Indian Archaeology A Review and through this medium all the studies and works carried out by various branches of the Survey are published for the	

general public and scholars alike.

Are there any visitor statistics for the site?	066
If YES, please summarise the statistics and attach to this report:	067
The visitor statistics for the last five years is enclosed as Annexure.	
What visitor facilities do you have at the property?	068
The following visitor facilities are available at the site at present;	
<ul> <li>(i) pathway, the latter connecting each and every cave</li> <li>(ii) drinking water facility</li> </ul>	
(iii) post office (iv) guide facilities	
(v) porter facility	
(vi) books, guide-books and brochures	
<ul><li>(vii) toilet facility</li><li>(viii) steps for the visitors from the foothill to the cave group</li></ul>	
(ix) descriptive signages, etc.	
What visitor facilities are you in need of?	069
<ul><li>(i) public information system</li><li>(ii) multimedia visualisation of the paintings and CDs</li></ul>	
 Is a public use plan (tourism / visitor management plan) in existence for	070
the property?	
If YES, please summarize, if NO explain if one is needed:	071
A Public use plan is essentially required without hindering any aspect of heritage management of the monuments. As more and more concentration is given to tourism and visitor management related issues heritage management is given less importance and often at the cost of monuments. Hence a proper public use plan should be generated to facilitate the tourists as well as to educate and encourage them for protection of the heritage.	
Indicate how the property/'s World Heritage values are communicated to residents, visitors and the public (please attach examples of leaflets, videos, etc. and print-outs and / or the address of a web-page):	072

World Heritage heritage value highlighting all programmes co Heritage Day (/ of the activitie public. Similarl by other organ	gical Survey of India brings out brochures and booklets on the Monuments and the importance of their conservation and s. The ASI has also has a web-site namely asi.nic.in the activities of the organisation. Besides, through various onducted round the year by way of cultural awareness, World April 18), World Heritage Week (November 19 – 25) are some s which communicates the residents, visitors and common y by participating in other like natured programmes conducted sations and delivering lectures and such activities by officers pread the message of heritage. The message is also spread audio media.	
Are there edu schools?	cational programmes concerning the property aimed at	073
	YES/ NO	
If YES, please	describe:	074
of every year. organises exhibit and college ch They can fully u the interaction generally aime	gical Survey of India observes World Heritage Day on April 18 During this day and consecutive two or three days ASI bitions, debates, painting competition, etc., aimed at the schoo ildren so that they can actively participate in these events inderstand the objectives and values of World Heritage through with the ASI staff and also through the exhibition which is d to create an awareness among the public regarding the ur heritage and the necessity to safeguard them.	
	es World Heritage inscription play for the site concerning mber, the research programmes and / or the awareness ties?	
public regarding enthused to vis and foreign res of these caves (April 18 every year) are gener	in the World Heritage imbibes a lot of responsibility among the g the importance of the property and more and more public are it the monument to enjoy the values it preserve. Various Indian earch institutions concentrate their research on various aspects The cultural awareness programme like World Heritage Day year) and World Heritage Week (19 - 25 November every cally observed in the world heritage monuments to highlight the values and the necessity for their preservation.	

# II. 5 Factors affecting the property

Please comment on the degree to which the property is threatened by particular problems and risks, such as development pressure, environmental pressure, natural disasters and preparedness, visitor / tourism pressure, number of inhabitants. Also mention all other issues that you see as problematic.	076
<b>Developmental Pressure:</b> Further developmental pressure can threaten the authenticity of the Elephanta Caves.	
Saline activity and general deterioration of rock surface.	
Is there an emergency plan and / or risk preparedness plan for the property in existence?	077
If YES, please summarise the plan and provide a copy:	078
Not applicable	
If NO, describe what is being done – and by whom – to counteract the dangers that threaten or may threaten the property: The Archaeological Survey of India has facilities to look after any small and medium ranged problems and to tackle them. However it does not have the resources and manpower to tackle any large scale disaster like earthquake, cyclones, terrorist threat, etc. Under these circumstances a collaborative strategy is to be adopted with the State Governments to tackle these problems.	079
Indicate area where improvement would be desirable and / or towards which the State Party is working:	080
The following improvements would be desirable:	
<ul> <li>(i) Pre-recorded cultural texts and messages can be given to the tourists so that they can individually enjoy the caves / paintings.</li> <li>(ii) Publication of innumerable brochures, booklets and other guide books to enable the tourists and scholars alike to understand the paintings and caves well.</li> </ul>	
Give an indication if the impact of the factors affecting the property is increasing or decreasing:	081
The natural factors affecting the property due to unprecedented rainfall (leakages), insect activity due to migration from the present forest reserve, if left uncontrolled and at times uncontrolled tourist behaviour in a proper manner is some of the factors observed at the World Heritage Site. However,	

the things are under control and decreasing.	
What actions have been effectively taken, or are planned for the future, to address the factors affecting the property?	082
Attempts are on for educating the masses (and tourists) in proper behavioural approach towards the World Heritage Property, do's and don'ts as envisaged at the site and closely monitoring the cultural phenomena by installation of modern gadgets (to record the Relative Humidity, temperature variations, rainfall, etc) for proper and effective management.	

# II. 6 Monitoring

If applicable, give details (e.g. dates, results, indicators chosen) of any previous periodic or reactive monitoring exercises of the property:	08
The monument is regularly monitored.	
Is there a formal monitoring system established for the site?	08
YES / NO	
If YES, please give details of its organisation:	08
At the local level the monument is monitored on a daily basis at Elephanta itself. It consists of :	
Structural Conservation	
Archaeological Survey of India through its administrative system.	
Chemical Preservation	
Science Branch, Archaeological Survey of India through its administrative system.	
At the Circle level periodic inspections and directives are given by the Superintending Archaeologist and other officers who regularly visit the monuments.	
If not already in place, is the establishment of a formal monitoring system planned?	08
YES / NO	

If YES, please outline the functioning of that system, taking into consideration the key indicators you will be asked to define below (see 089 / 090)	087
Not applicable	
Are there any indicators established for monitoring the state of conservation of the property?	088
YES/ NO	
If YES, please provide up-to-date information with respect to each of the key indicators established and / or used. Care should be taken to ensure that this information is as accurate and reliable as possible, for example by carrying out observations in the same way, using similar equipment and methods at the same time of the year and day. Name and describe the key indicators for measuring the state of conservation of this property:	089
<b>Use of Tell-Tales:</b> The ASI uses tell-tales for monitoring the cracks develops in the monuments. These are periodically monitored to see whether any cracks further develop are not.	
Monitoring the loose portions of rock surface etc:	
As the Elephanta group of Caves is excavated in volcanic trap rock the geological setting had been disturbed in the past. This has caused in loosening of rock portions at some places and at places the facades, ceilings, pillars. Hence these vulnerable points are periodically monitored and immediate measures are carried out as per need.	
Monitoring the Relative Humidity inside and outside the caves	
Monitoring the Pollution Levels in the vicinity of the monument	
Monitoring the variation in temperature levels inside and outside the caves	
Monitoring the rainfall (during the season)	
If NO indicators have been identified and / or used so far, please define key indicators for future use in monitoring:	090
Not applicable	

	09 <sup>,</sup>
Apart from ASI no other partner is involved in the direct monitoring exercise of the monument.	
Identify the administrative provisions for organising the regular monitoring of the property:	092
As per the reply in 085 the set-up monitors the property.	
Describe what improvement the State Party foresees or would consider desirable in improving the monitoring system:	09
On the basis of necessity and new scientific innovative applications can be considered which are not in vogue. For example the GPS and GIS applications can be utilised for better and effective management of the site.	
In specific cases, the World Heritage Committee and / or its Bureau may have already examined the state of conservation of the property and made recommendations to the State Party, either at the time of inscription or afterwards. In such cases the State Party is requested to report on the actions that have been taken in response to the observations or decisions made by the Bureau or Committee. Give details, if applicable:	09
Necessary restrictions have been imposed by the Maharashtra Government to curtail the impact of industrial projects in the vicinity.	
Please summarise the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above):	09
	09
Heritage values of the property (see items II.2. and II.3. above):	09
Heritage values of the property (see items II.2. and II.3. above):         Remains unchanged.         Please summarise the main conclusion regarding the management and	
Heritage values of the property (see items II.2. and II.3. above):         Remains unchanged.         Please summarise the main conclusion regarding the management and factors affecting the property (see items II.4. and II.5 above):         The management set-up of the Archaeological Survey of India effectively monitors and takes measures as and when necessity arises. The factors	

Name the agency responsible for implementation of these actions (if different from 005):	098
Archaeological Survey of India.	
Give a timeframe for the implementation of the actions described above:	099
As per the necessity of the implementation programme with specific conservation needs the actions would be carried out.	
Indicate for which of the planned activities International Assistance from the World Heritage Fund may be needed (if any):	100
To be decided at the Directorate level.	
Are there any contacts with management units of other properties within or outside your country?	101
YES / NO	
If YES, please explain:	102
With the site managers of other World Heritage Property; the Directorate Office and other units of Archaeological Survey of India like the Science Branch, Horticulture Branch, etc.	
Please indicate which experience made during the periodic reporting exercise and / or during the on-going conservation / protection efforts of the property could be shared with other States Parties dealing with similar problems or issues:	103
Nil	
Provide the name(s) and address(es) of organisation(s) or specialist(s) who could be contacted for this purpose:	104
Nil	
Agency / Organisation:	
Person responsible:	
Address:	
City and post code:	
Telephone:	
Fax:	

E-mail:

## II. 8. Assessment of the Periodic Reporting exercise for Section II

Was sufficient and adequate information made available to the responsible authorities and individuals during the preparation phase of the Periodic Reporting exercise (information given, meetings etc.)?	105
Yes	
Was the questionnaire clear and did it help to comply with the reporting requirements of the State Party?	106
Yes	
What are the perceived benefits and lessons learnt of the exercise?	107
To understand the follow-up action and measures required in the best interest of the World Heritage Property.	
Please describe the expected outcome of the Periodic Reporting exercise and the desired follow-up by the World Heritage Committee:	108
Would help in proper monitoring and taking steps for proper management, conservation and follow-up action for the general upkeep, maintenance and longevity of the World Heritage Property.	

#### **II. 9. Documentation attached**

The State Party is invited to supply the materials listed above. Please check those items that were attached.

- 1.  $(\sqrt{)}$  Maps and plans showing the general location of the property, its boundary and buffer zone as well as the necessary detail of the property itself (see question 003 for specifications)
- 2.  $(\sqrt{})$  Photo of general view (aerial view) of the property (in CD)

- 3.  $(\sqrt{)}$  Illustrations of the state of conservation of the site (photographs, slides and, if available, film / video) (in CD)
- 4.  $(\sqrt{)}$  Details of important aspects of the property (landscape, animal and vegetable species, monuments etc.)
- 5.  $(\sqrt{)}$  Photos illustrating the main threats to the site and its surroundings.
- 6.  $(\sqrt{)}$  Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage at national, provincial and municipal levels.
- 7.  $(\sqrt{)}$  Copies of the management plan of the site as well as extracts and / or copies of other plans relating to the site (e.g. emergency plan, use plan, etc.
- 8.  $(\sqrt{})$  Indicative bibliography.

### II.9.4

# Details of important aspects of the property (landscape, animal and vegetable species, monuments etc.)

The island on which the Elephanta Caves are located is also a resultant of volcanic lava flow which approximately took place between Cretaceous and Eocene periods of the Secondary and Tertiary Epochs respectively of Geological Time Scale.

Except on the northeast and east, the hill sides are covered with brushwood; in the hollows under the hill are clusters of well grown mango, tamarind and karanj trees; and over the hillside and standing out against the sky is thick sprinkling of barb palms along the crest of the hill. Below is a belt of rice land and in front of the shore of sand and mud, a fringe of mangrove bushes is noticed.

The following faunal species are recorded in the island.

#### Two kinds of monkeys

Vanar
Makad
Fruit eating bat or flying fox
Must rat
Black bear
Mangoose
Jackals, Fox, etc.

Semnopithecus Macacus radiatus Pteropus medius Sorex cxrulescens Ursus labiatus Herpstes

## Four kinds of snipe

Grey quail	Cortunik communis
Bustard quail	Turnik taigoor
Golden plover	Charadrius fulvus
Curlew	Numerius lineatus

Pigeon, doves, parrots and crows are

common Vultures, hawks, eagles and owls are wild birds Yellow woodpecker

# INDICATIVE BIBLIOGRAPHY (ELEPHANTA)

J. Burgess	Report on the Ellora Cave Temple and the Brahmanical and Jain Caves in Western India, London, 1833.
J. Fergusson & j. Burgess	History of Indian and Eastern Architecture, 2 Vols. London 1910.
J. Fergusson	History of Indian and Eastern Architecture, London 1910.
E.B. Havell	Ancient and Medieval Architecture of India, London 1915.
A.K. Coomaraswamy	History of Indian and Indonesian Art, Cambridge, Mass., 1927.
R.S. Wauchope	Buddhist Cave Temples of India, Calcutta, 1933.
Benjamin Rowland	The Art and Architecture of India, Harmondsworth, 1956.
H. Goetz	India-Five Thousand Years of India Art, Bombay 1959.
Percy Brown	Indian Architecture (Buddhist and Hindu Periods), third edition, Bombay 1959.
G. Yazdani (ed.)	The Early History of the Deccan, Oxford, parts VII-XI, pp. 762-74.
V.A. Smith	History of Fine Art in India and Ceylon, third edition, revised by K. Khandalawala, Bombay, 1962.
K.V. Soundara Rajan	Indian Temple Styles, New Delhi, 1972.
K.V. Soundara Rajan	Cave Temples of the Deccan, New Delhi 1981.

## ARCHAEOLOGICAL SURVEY OF INDIA, AURANGABAD CIRCLE, AURANGABAD

## **VISITORS DATA OF ELEPHANTA CAVES**

MONTH	1998-99	1999-2000	2000-2001		2001-2002		2002	
							(Upto Nov,2002)	
			INDIAN	FOREIGN	INDIAN	FOREIGN	INDIAN	FOREIGN
APRIL	16104	20402	26487		26649	1171	20255	845
MAY	21379	25847	30785		27872	577	24904	420
JUNE	7801	14296	14495		16074	333	12065	110
JULY	4889	9330	5894		8497	469	8802	276
AUGUST	7047	12283	9495		11723	793	9010	433
SEPTEMBER	9909	10864	12055		16926	748	11550	556
OCTOBER	25041	20418	23625	289	202286	954	25316	1111
NOVEMBER	25489	31170	24794	3083	27565	1572	30310	1735
DECEMBER	48065	30726	47679	3669	42785	1666		
JANUARY	39214	34940	32234	3060	35530	1882		
FEBRUARY	20166	26740	15445	2591	25381	2190		
MARCH	24107	20947	26094	3228	17962	1709		
TOTAL	249211	257963	269082	15920	277250	14064	142212	5486
AVERAGE/MONTH	20768	21497	22424	3184	23105	1172	17777	686