



**PERIODIC REPORTING EXERCISE  
ON THE APPLICATION OF THE WORLD HERITAGE  
CONVENTION**



**SECTION II**

State of Conservation of specific World Heritage properties



State Party : **ARCHAEOLOGICAL SURVEY OF INDIA**  
Property Name : **THE SUN TEMPLE, KONARAK, ORISSA.**

## II.1 Introduction

a.	Country (and State Party if different):  <p style="text-align: center;"><b>India</b></p>	001
b.	Name of World Heritage property :  <p style="text-align: center;"><b>Sun Temple, Konarak</b></p> <p><b>Documents Attached : 1.b. Detailed slides (002) - 86 nos.</b></p> <div style="text-align: center;">  <p><b>SUN TEMPLE KONARAK : GENERAL VIEW</b></p>  <p><b>LOGO OF WORLD HERITAGE</b></p> </div>	002

Continued ...

b.

002



**PORCH AND A STRIP OF SANCTUARY  
AS ILLUSTRATED BY J. FERGUSSON - 1837**



**SUN TEMPLE, KONARAK, SOUTH-EAST CORNER VIEW  
BEFORE CLEARANCE WORK - 1902**

Continued ...



b.

002



**SUN TEMPLE, KONARAK :NORTH-EAST CORNER VIEW  
BEFORE CLEARANCE WORK 1902.**



**SUN TEMPLE : EAST SIDE GENERAL VIEW  
BEFORE CLEARANCE WORK - 1902**

Continued ...

b.



002

**JAGAMOHANA, GENERAL VIEW**



**JAGAMOHANA, INNER VIEW, BEFORE SAND FILLING**

Continued ...



b.



**GENERAL VIEW, NORTH SIDE**



**GENERAL VIEW, WEST SIDE**



**GENERAL VIEW, SOUTH SIDE**



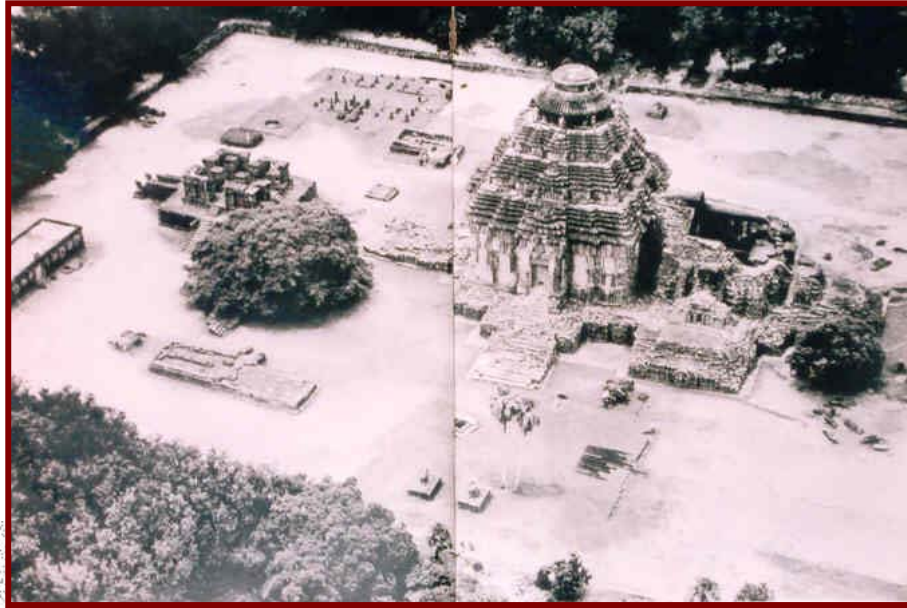
**GENERAL VIEW, EAST SIDE**

Continued ...

002

b.

002



**AERIAL VIEW : SUN TEMPLE**



**SUN TEMPLE IN MOON LIGHT**

Continued ...



b.

002



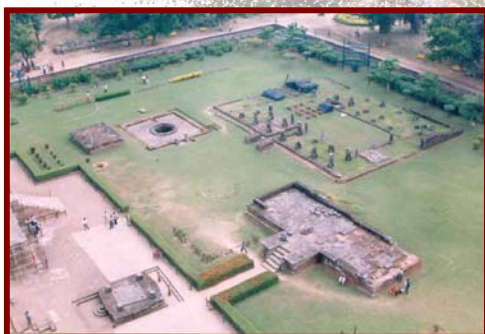
← **AERIAL VIEW  
NORTH-EAST**

**AERIAL VIEW  
NORTH-WEST SIDE** →



← **AERIAL VIEW  
WEST SIDE**

**AERIAL VIEW  
SOUTH SIDE** →



← **AERIAL VIEW  
SOUTH-EAST SIDE**

Continued ...



b.

002



← **AERIAL VIEW  
EAST SIDE**



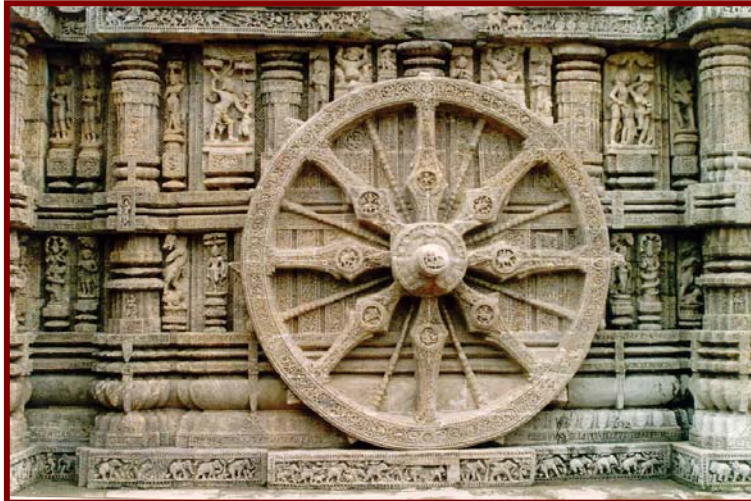
**AERIAL VIEW : EAST SIDE**



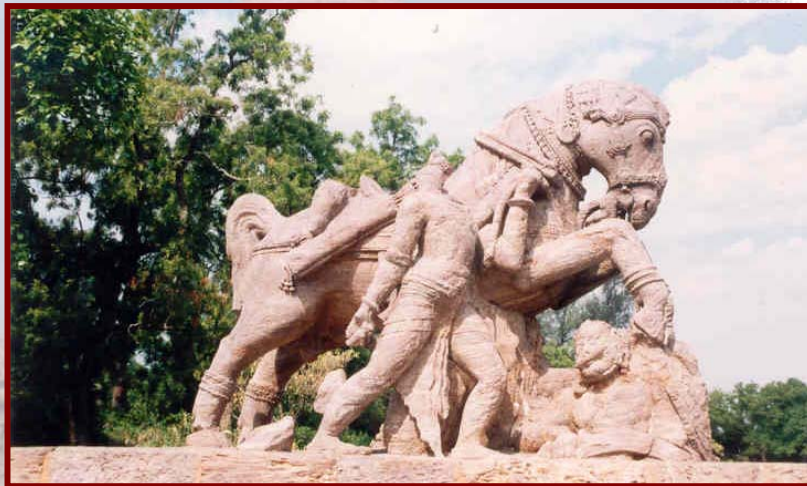
**CHHAYA DEVI SHRINE & SUN TEMPLE**

Continued ...

b.



**WHEEL**



**HORSE**



**ELEPHANT**

002

Continued ...



b.



**DEPICTION OF GIRAFFE**



**LADY WITH DRUM**



**LADY WITH DRUM**



**LADY WITH CYMBALS**

002

Continued ....



b.



**LADY WITH LONG PIPE**



**BHAIRAVA**



**KING NARSIMHADEVA-I'S  
HOMAGE TO SIVA,  
DURGA & JAGANNATH**

Continued ...

002



b.

002



WHEEL



EROTIC COUPLES

- 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).

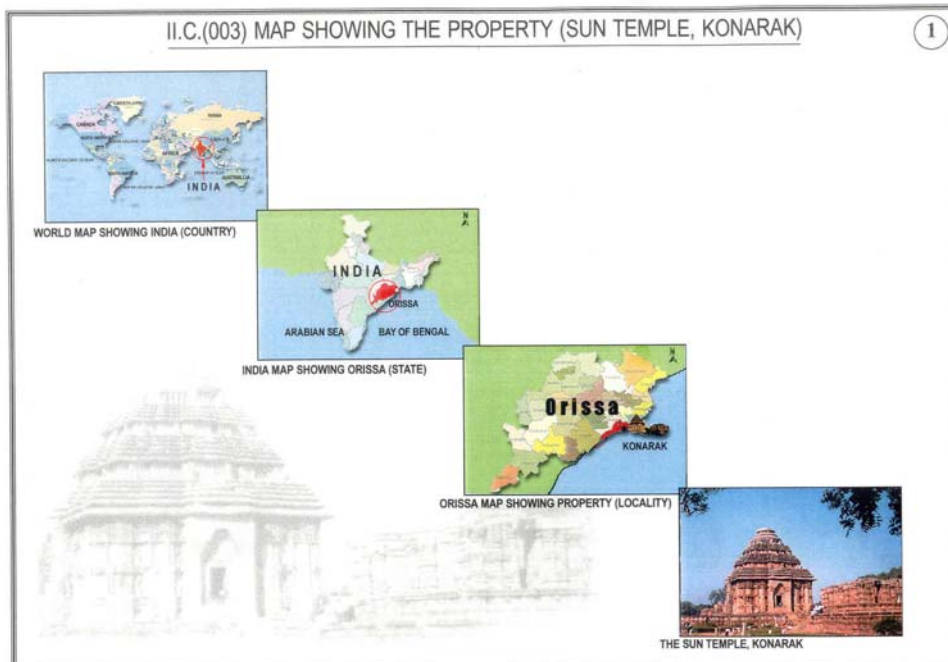
On this questionnaire indicate the geographical co-ordinates to the nearest second (in the case of large sites, towns, areas etc., give at least 3 sets of geographical co-ordinates):

Centre point: **19° 53' 12" N. 86° 05' 49" E**

North-west corner: **19° 53' 12" N. 86° 05' 47" E**

South-east corner: **19° 53' 13" N. 86° 05' 50" E**

**Documents Attached : 2.c.Details of drawings & maps (003) : 13 nos.**



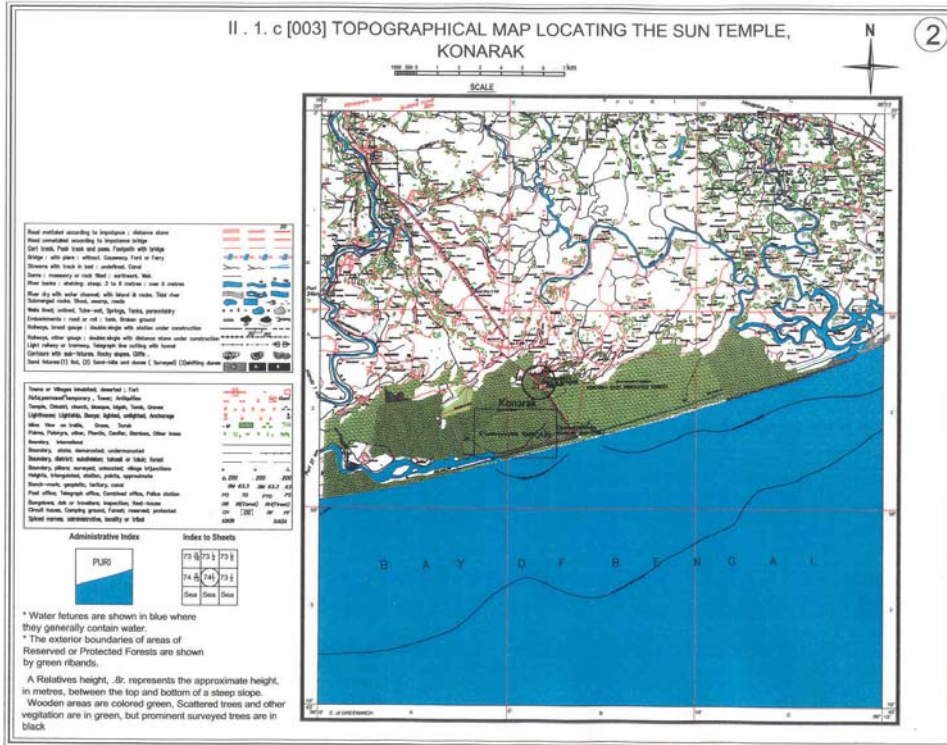
**1. MAP SHOWING THE PROPERTY (SUN TEMPLE, KONARAK)**

Continued ...



C.

003

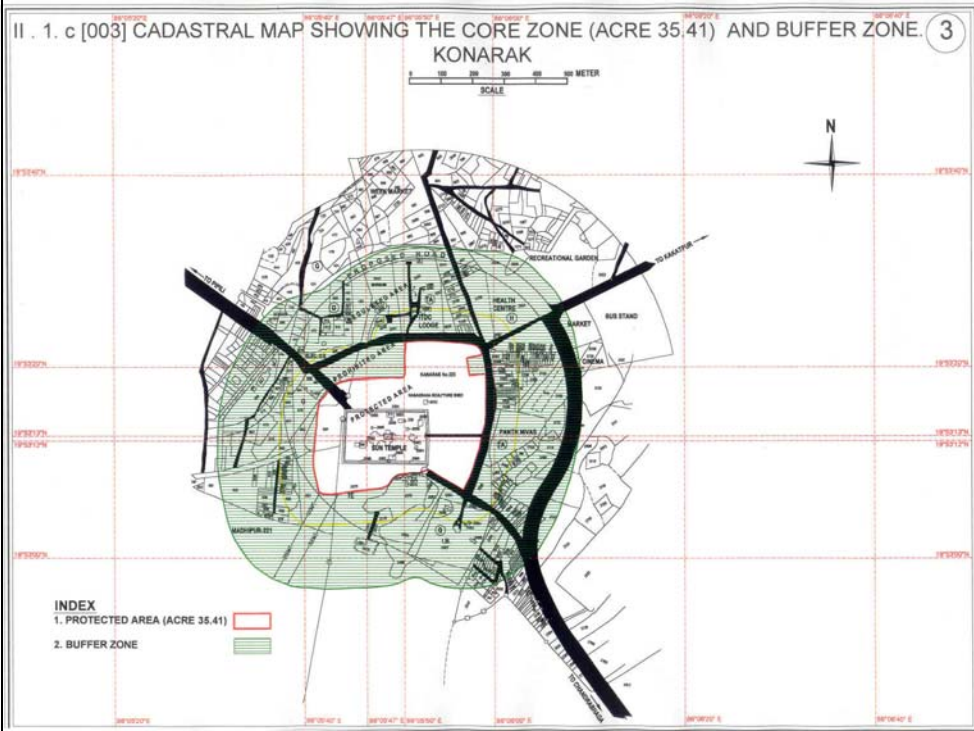


## 2. TOPOGRAPHICAL MAP LOCATING THE SUN TEMPLE, KONARAK.

Continued ...

c.

003



**3. CADASTRAL MAP SHOWING THE AREA CORE ZONE (ACRE 35.41) AND BUFFER ZONE.**

Continued ...



c.

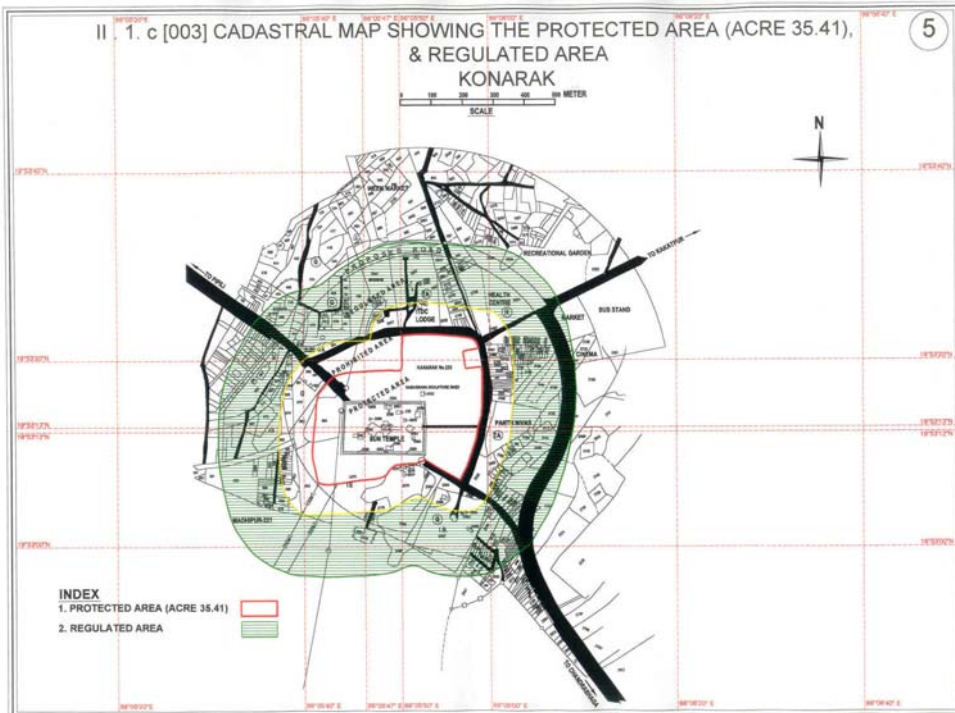


**4. CADASTRAL MAP SHOWING THE PROTECTED AREA (ACRE 35.41) AND PROHIBITED AREA.**

Continued ...

c.

003

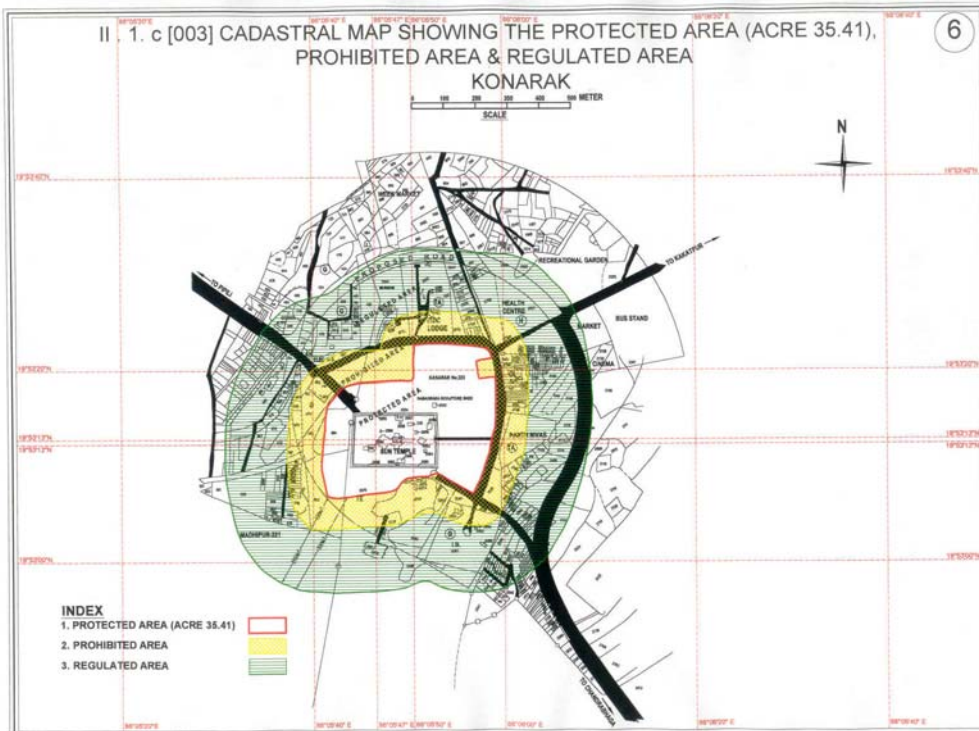


**5. CADASTRAL MAP SHOWING THE PROTECTED AREA (ACRE 35.41) AND REGULATED AREA.**

Continued ...



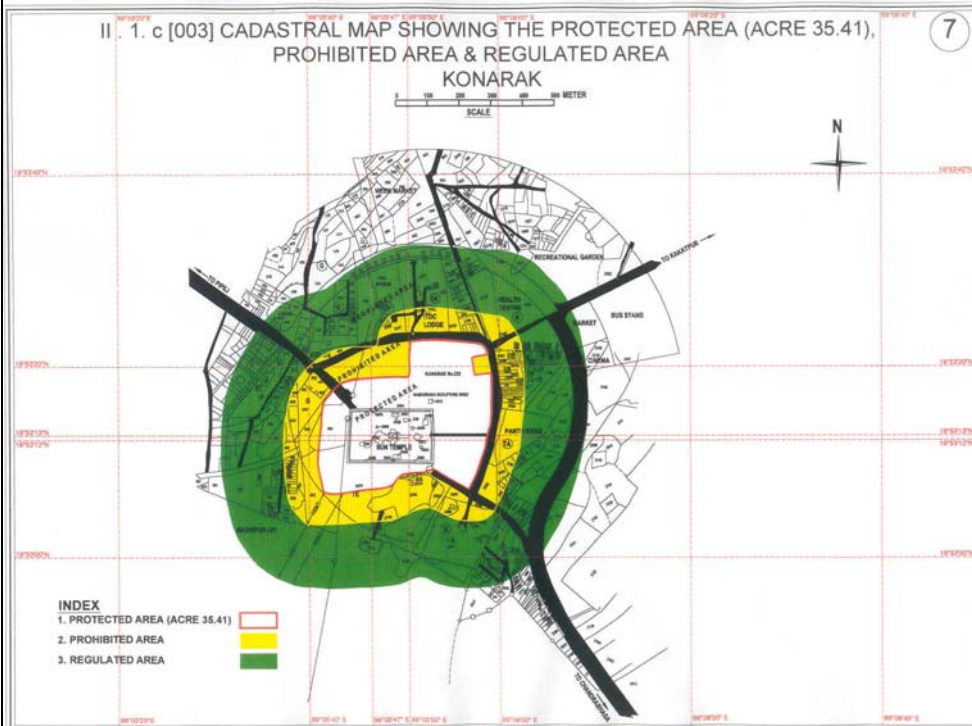
c.



**6. CADASTRAL MAP SHOWING THE PROTECTED AREA (ACRE 35.41), PROHIBITED AREA AND REGULATED AREA.**

Continued ...

c.



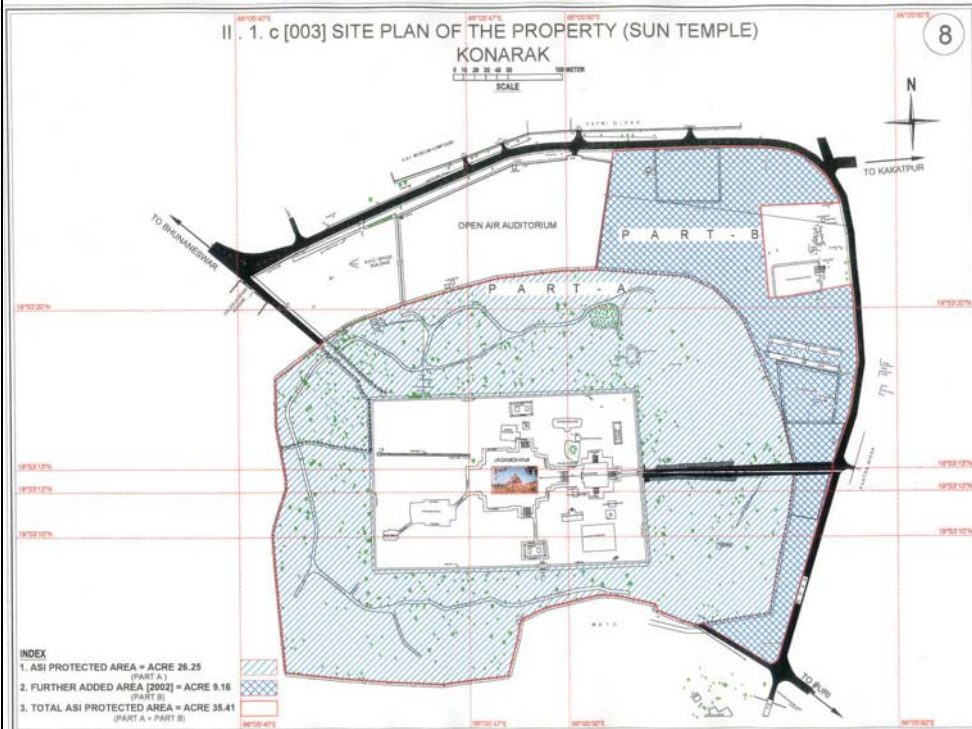
**7. CADASTRAL MAP SHOWING THE PROTECTED AREA (ACRE 35.41), PROHIBITED AREA AND REGULATED AREA.**

Continued ...



c.

003

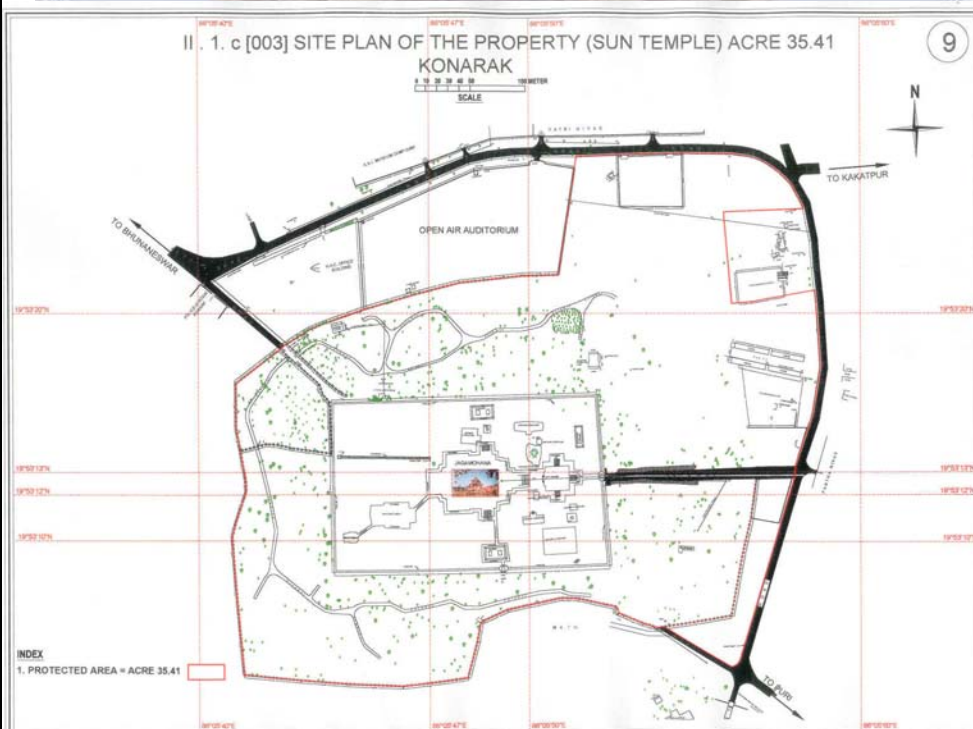


## 8. SITE PLAN OF THE PROPERTY (SUN TEMPLE).

Continued ...

c.

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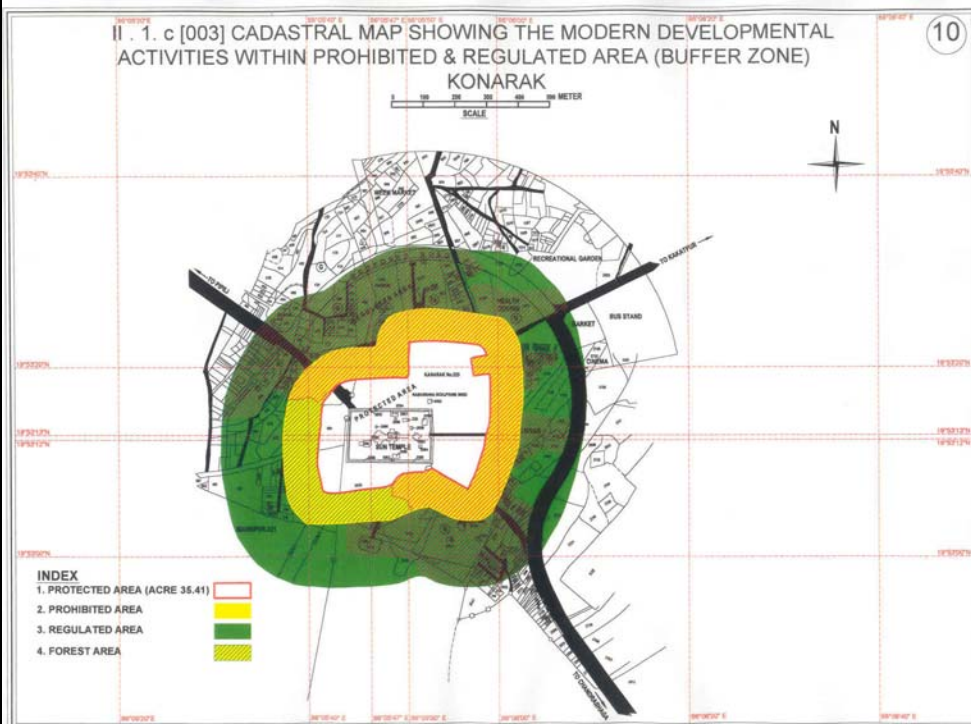
**9. SITE PLAN OF THE PROPERTY (SUN TEMPLE).**

Continued ...



c.

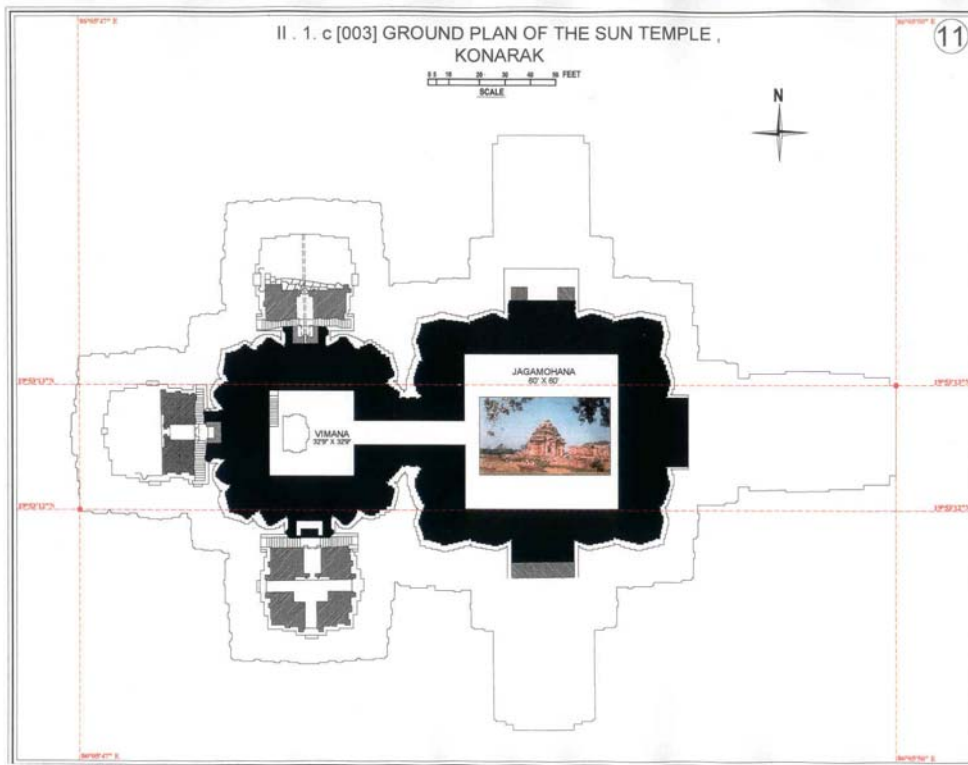
003



**10. CADASTRAL MAP SHOWING THE MODERN DEVELOPMENTAL ACTIVITIES WITHIN PROHIBITED & REGULATED AREA (BUFFER ZONE).**

Continued ...

c.

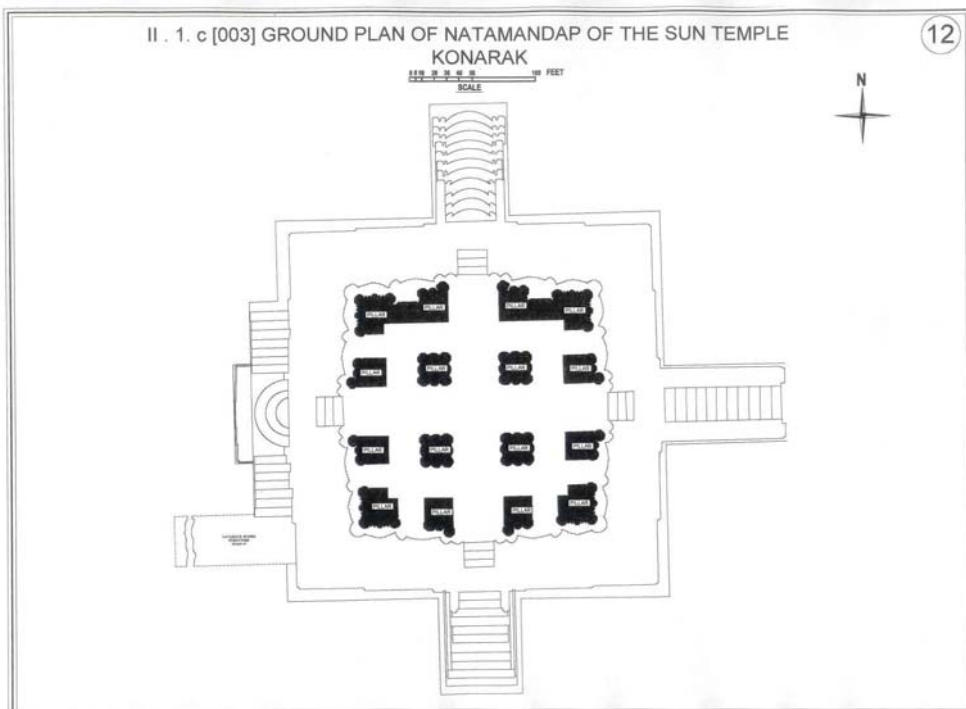


**11. GROUND PLAN OF THE SUN TEMPLE, KONARAK.**

Continued ...



c.

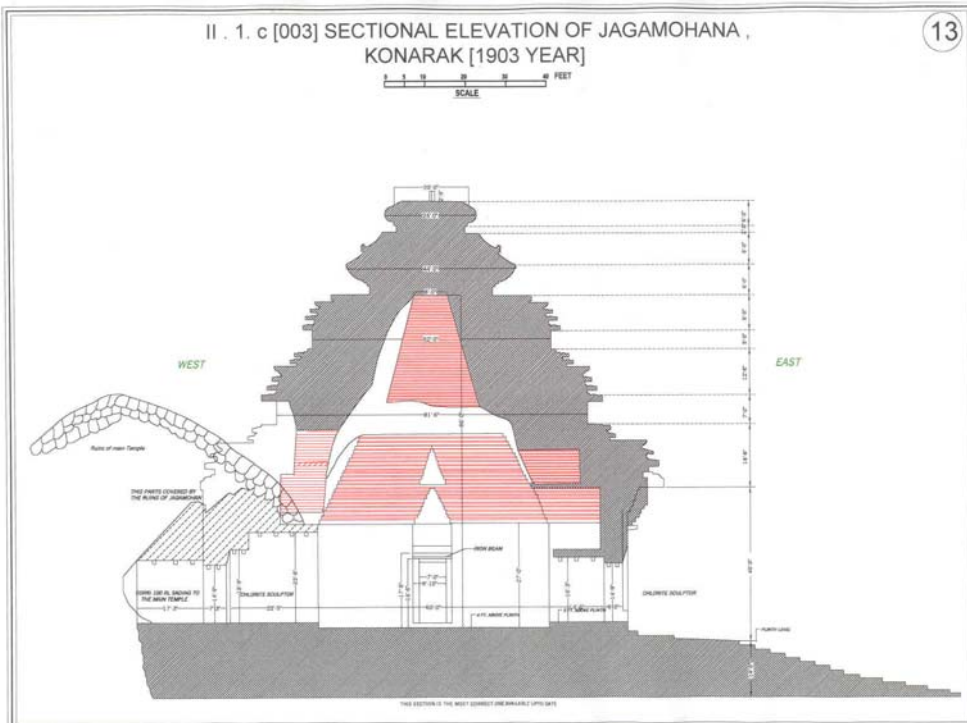


**12. GROUND PLAN OF NATAMANDAP, KONARAK.**

Continued ...


c.

003

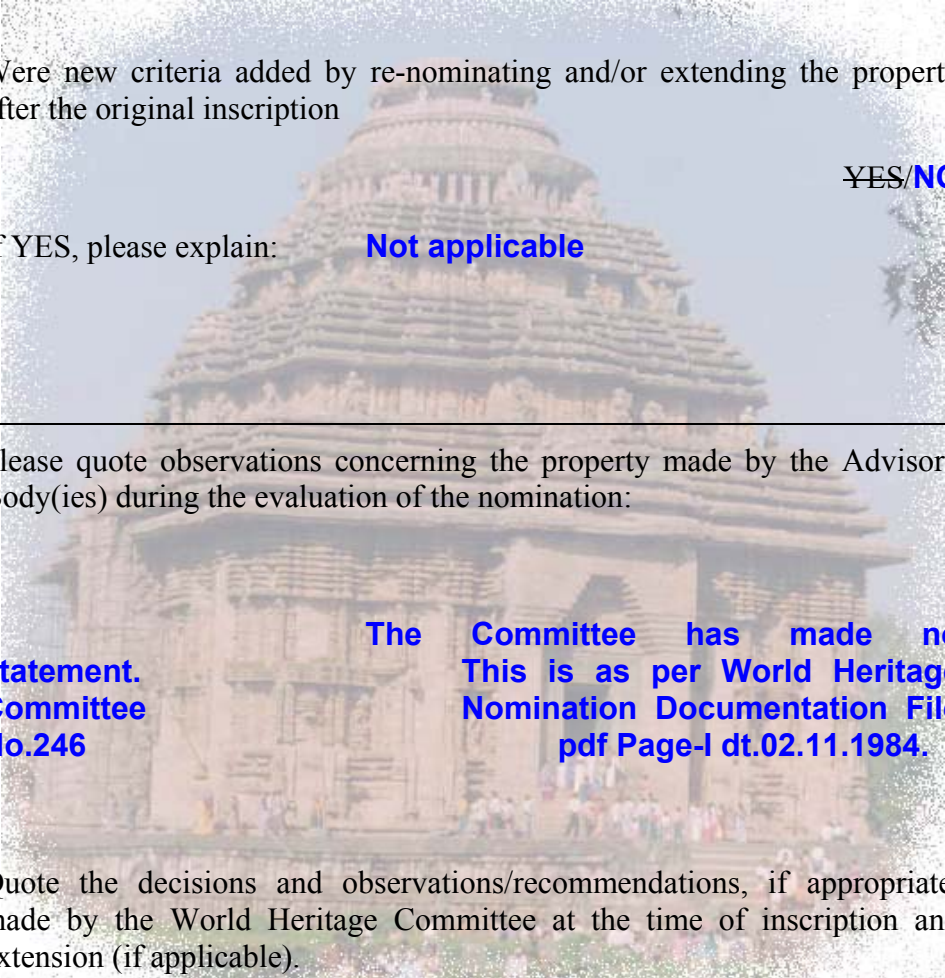


**13. SECTIONAL ELEVATION OF THE JAGAMOHANA OF THE SUN TEMPLE, KONARAK.**



d.	<p>Give the date of inscription on the World Heritage List and subsequent extension (if applicable):</p> <p style="text-align: center;"><b>02.11.1984</b></p>	004
e.	<p>Organization or entity responsible for the preparation of this report.</p> <p>Organization /entity: <b>Archaeological Survey of India</b></p> <p>Person responsible: <b>Superintending Archaeologist &amp; Site Manager, Archaeological Survey of India, Bhubaneswar Circle, Old Town, Bhubaneswar-751002, Orissa (India).</b></p>  <p>Telephone: <b>0674 - 2340590(O)</b> <b>0674-2340588(O)</b> <b>0674-2340627(O)</b></p> <p>Fax: <b>0674 - 2340590</b></p> <p>E-mail : <b>asibbsr@ori.nic.in</b></p>	005
f.	<p>Date of preparation of the report :</p> <p style="text-align: center;"><b>10.12.2002</b></p>	006
g.	<p>Signature on behalf of the State Party:</p> <p>Signature :</p> <p>Name : <b>Shri T. Satyamurthy</b></p> <p>Function : <b>Superintending Archaeologist, Archaeological Survey of India, Bhubaneswar Circle.</b></p>	007

## II.2 Statement of significance.

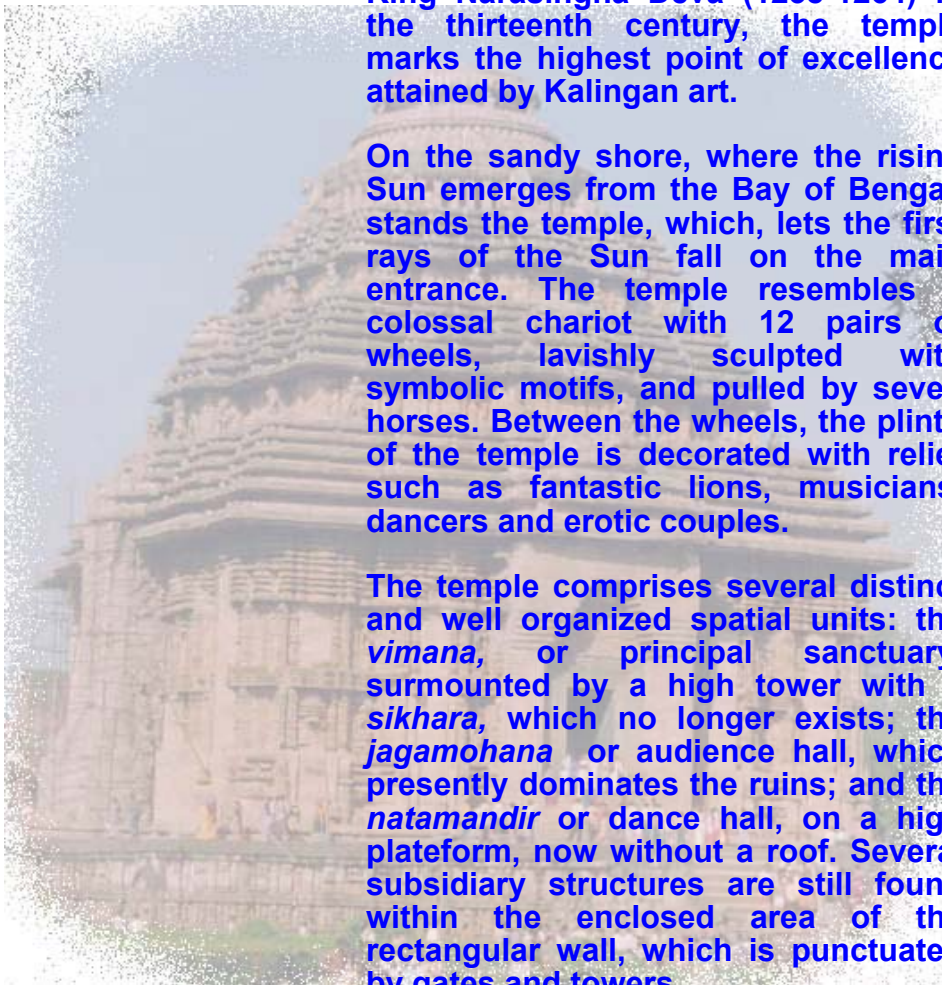
	<p>At the time of inscribing a property on the World Heritage List, the World Heritage Committee indicates its outstanding universal value(s), or World Heritage value(s), by deciding on the criteria for which the property deserved to be included on the World Heritage List. Circle the criteria retained for the inscription:</p> <p>Cultural criteria : <b>i</b> - ii - <b>iii</b> - iv - v - <b>vi</b></p> <p>Natural criteria : i - ii - iii - iv</p> 	008
	<p>Were new criteria added by re-nominating and/or extending the property after the original inscription</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, please explain: <b>Not applicable</b></p> <p>Please quote observations concerning the property made by the Advisory Body(ies) during the evaluation of the nomination:</p> <p><b>The Committee has made no statement. This is as per World Heritage Nomination Documentation File pdf Page-I dt.02.11.1984.</b></p> <p>Quote the decisions and observations/recommendations, if appropriate, made by the World Heritage Committee at the time of inscription and extension (if applicable).</p> <p style="text-align: center;"><b>Not Applicable</b></p> <p>Identify the actions taken as follow-up to these observations and/or decisions:</p> <p style="text-align: center;"><b>Not Applicable.</b></p>	009 010 011 012 013



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.:

**Cultural criteria: I, III & VI**

**On the east coast of India, south of the Mahanadi delta, stands the Sun Temple of Konarak, one of the magnificent architectural wonders of the world. Built during the reign of King Narasingha Deva (1238-1264) in the thirteenth century, the temple marks the highest point of excellence attained by Kalingan art.**



**On the sandy shore, where the rising Sun emerges from the Bay of Bengal, stands the temple, which, lets the first rays of the Sun fall on the main entrance. The temple resembles a colossal chariot with 12 pairs of wheels, lavishly sculpted with symbolic motifs, and pulled by seven horses. Between the wheels, the plinth of the temple is decorated with relief such as fantastic lions, musicians, dancers and erotic couples.**

**The temple comprises several distinct and well organized spatial units: the *vimana*, or principal sanctuary, surmounted by a high tower with a *sikhara*, which no longer exists; the *jagamohana* or audience hall, which presently dominates the ruins; and the *natamandir* or dance hall, on a high platform, now without a roof. Several subsidiary structures are still found within the enclosed area of the rectangular wall, which is punctuated by gates and towers.**

**ICOMOS recommends the inclusion of the temple of Konarak in the World Heritage List based on criteria, I, III and VI.**

Continued .....



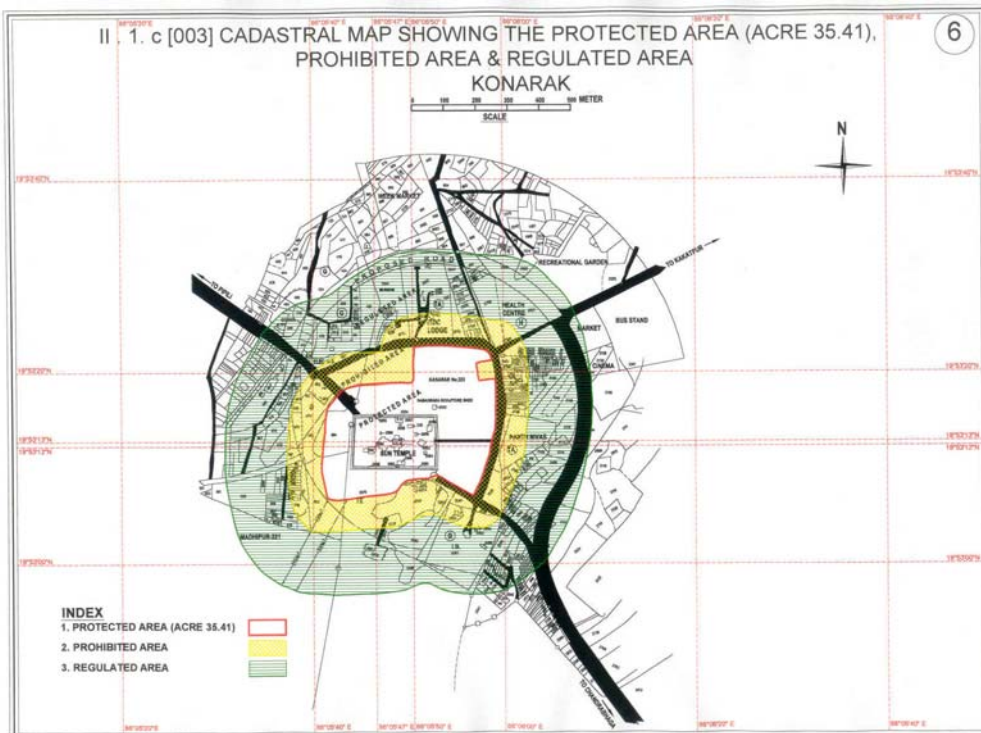
**II.2 continued**

	<p>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:</p> <p style="text-align: right;"><b>YES/NO</b></p>	<p>017</p>
	<p>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):</p> <p style="text-align: center;"><b>Not Applicable</b></p>	<p>018</p>
	<p>Is the State Party actively considering a revision of the property boundaries or the buffer zone?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, indicate what is being done to that end:</p> <p style="text-align: center;"><b>Buffer zone around the property is being extended by means of land acquisition for systematic and better management of the monument. Site management plan of the buffer zone is being finalized.</b></p> <p style="text-align: right;"><b>Continued .....</b></p>	<p>019</p> <p>020</p>



II.2 continued

020



**CADASTRAL MAP SHOWING THE PROTECTED AREA  
(ACRE 35.41), PROHIBITED AREA AND  
REGULATED AREA.**

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

	<p>Have the World Heritage values identified above been maintained since the property's inscription?</p> <p style="text-align: right;"><b>YES/NO</b></p>	021
	<p>If NO, please describe the changes and name the causes:</p> <p style="text-align: center;"><b>Not Applicable</b></p>	022
	<p>What was the evaluation of the authenticity / integrity of the property at the time of inscription? (Please quote from the ICOMOS/IUCN evaluation):</p> <p style="text-align: center;"><b>On the east coast of India, south of the Mahanadi delta, stands the Sun Temple of Konarak, one of the magnificent architectural wonders of the world. Built during the region of King Narasingha Deva (1238-1264) in the thirteenth century, the temple marks the highest point of excellence attained by Kalingan art.</b></p> <p style="text-align: center;"><b>On the sandy shore, where the rising Sun emerges from the Bay of Bengal, stands the temple, which, lets the first rays of the Sun fall on the main entrance. The temple resembles a colossal chariot with 12 pairs of wheels, lavishly sculpted with symbolic motifs, and pulled by seven horses. Between the wheels, the plinth of the temple is decorated with relief such as fantastic lions, musicians, dancers and erotic couples.</b></p> <p style="text-align: right;">Continued .....</p>	023

**II.3. continued**





	<p>The temple comprises several distinct and well organized spatial units: the <i>vimana</i>, or principal sanctuary, surmounted by a high tower with a <i>sikhara</i>, which no longer exists; the <i>jagamohana</i> or audience hall, which presently dominates the ruins; and the <i>natamandir</i> or dance hall, on a high platform, now without a roof. Several subsidiary structures are still found within the enclosed area of the rectangular wall, which is punctuated by gates and towers.</p> <p>ICOMOS recommends the inclusion of the temple of Konarak in the World Heritage List based on criteria, I, III and VI.</p> <p>Criterion-I : The colossal size of the temple, its perfectly proportioned structure, matched by the endless wealth of decoration ranging from minute patterns executed with a jeweler's precision to the massive free standing sculptures, make it a unique artistic achievement. It represents a masterpiece of human creative genius.</p> <p>Criterion-III : Konarak represents a tradition, the remnants of which are traceable in contemporary Indian society. There are many tribal communities in Orissa, for whom the Sun is the Supreme Deity. Friendship contracted in the name of Sun (<i>Surya Bandhu</i>) is in vogue even now in Orissa and several other parts of the country. The Sun-centric Konarak is indeed a culmination of an age-old tradition adopted through many layers civilization.</p> <p>Criterion – VI : The monument represents an ancient faith based on the curative and life-enhancing properties of Sun light. Taking a holy dip in the sacred Chandrabhaga river at Konarak on Magha Saptami day (Jan – Feb.) as a cure for skin diseases bears testimony to a living tradition. Konarak stands as an important land mark in the history of diffusion of the sun cult in India, which originated in Kashmir in the 8<sup>th</sup> century and finally reached the eastern shores in course of time.</p>	<p>023</p>
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### II.3. *continued*

	<p>Have there been changes in the authenticity/integrity since inscription?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, please describe the changes to the authenticity / integrity and name the main causes?</p> <p style="text-align: center;"><b>Not applicable</b></p>	<p>024</p> <p>025</p>
	<p>Are there (further) changes foreseeable to the authenticity/integrity of the property in the near future?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, please explain and indicate how these changes might affect the World Heritage values of the property:</p> <p style="text-align: center;"><b>Not applicable</b></p>	<p>026</p> <p>027</p>

### II.4. Management

	<p>How could the arrangements for the protection and the management of the property best be defined (more than one indication possible)?</p> <p style="text-align: center;">         Legal            <input checked="" type="checkbox"/>          Contractual    <input checked="" type="checkbox"/>          Traditional     <input type="checkbox"/> </p>	<p>028</p>
	<p>Please describe and assess the implementation and effectiveness of these arrangements for the preservation of the values described under item 11.2 at the national, provincial and/or municipal level:</p> <p style="text-align: center;"><b>In order to preserve the values of the property, various Legislative Acts are in force viz.;</b></p> <p style="text-align: right;">Continued ...</p>	<p>029</p>

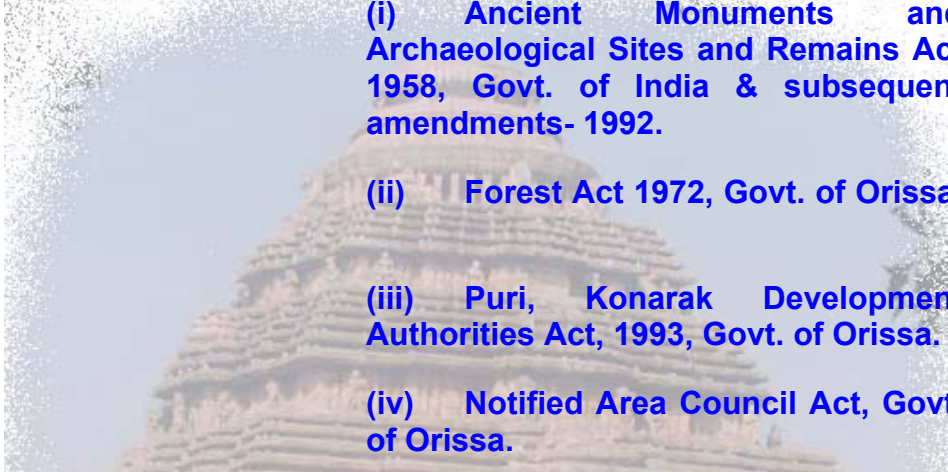
**II.4. Continued**

	<p><b>1. <u>NATIONAL LEVEL</u></b></p> <p><b>(i) Ancient Monuments and Archaeological Sites and Remains Act – 1958 and Rules 1959 and subsequent amendment – 1992, Govt. of India.</b></p> <p><b>2. <u>PROVINCIAL LEVEL</u></b></p> <p><b>(i) Forest Act 1972, Govt. of Orissa.</b> <b>(ii) Puri, Konarak Authorities</b></p> <p><b>Development Act, 1993</b></p> <p><b>Govt. of Orissa.</b></p> <p><b>3. <u>MUNICIPAL LEVEL</u></b></p> <p><b>(i) Notified Area Council Act, Govt. of Orissa.</b></p> <p>In general terms, can this legislative, contractual and/or traditional protection be considered sufficient?</p> <p style="text-align: right;"><b>YES/NO</b></p>	<p>029</p> <p>030</p>
<p>Please Explain:</p>	<p><b>1. The core area falls within the protected and prohibited zone and all activities are controlled as per Ancient Monuments Archaeological Sites and Remains Act 1958 and Rules 1959.</b></p> <p><b>2. The constructional and other developmental activities in buffer zone are effectively controlled by Puri-Konarak Development Authority Act 1993 and Notified Area Council Act, Government of Orissa.</b></p> <p><b>3. The area between the southern side of the Temple and the sea falls within the protected forest area and no such constructional activities are allowed as per Forest Act 1972, Govt. of Orissa.</b></p>	<p>031</p>



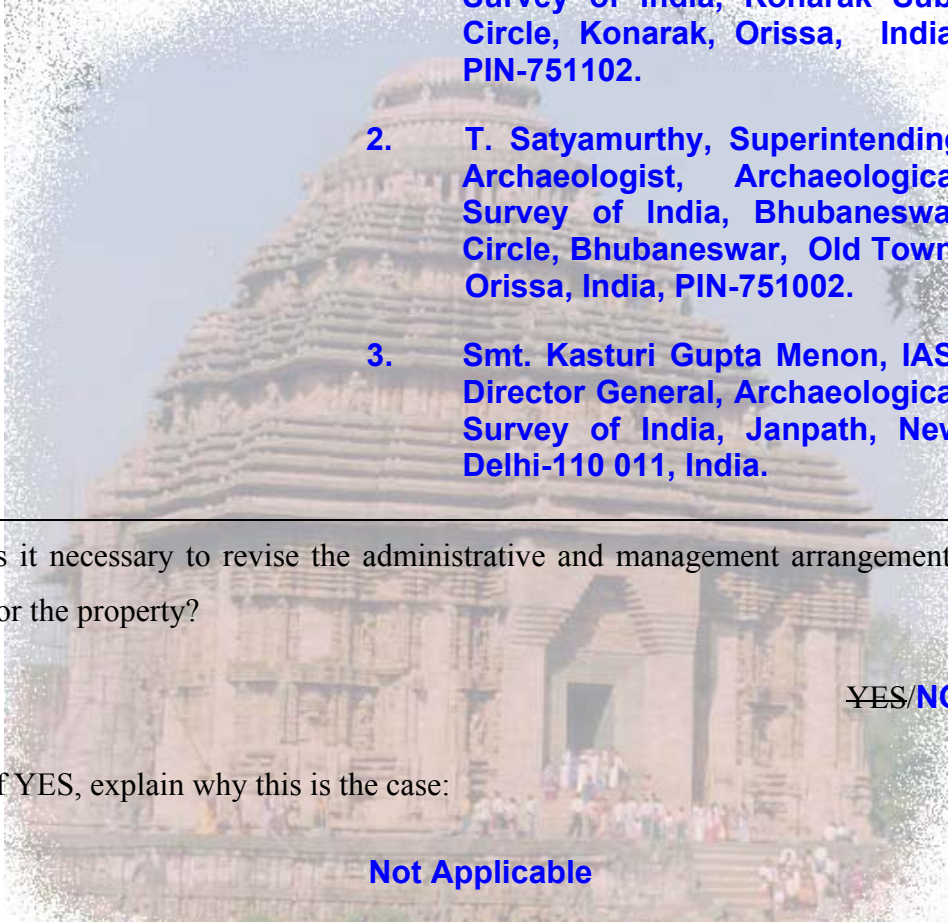
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**II.4. Continued**

	<p>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:</p> <p style="text-align: center;"><b>Documents attached (4 nos.)</b></p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p><b>(i) Ancient Monuments and Archaeological Sites and Remains Act 1958, Govt. of India &amp; subsequent amendments- 1992.</b></p> <p><b>(ii) Forest Act 1972, Govt. of Orissa.</b></p> <p><b>(iii) Puri, Konarak Development Authorities Act, 1993, Govt. of Orissa.</b></p> <p><b>(iv) Notified Area Council Act, Govt. of Orissa.</b></p> </div> </div>	032									
	<p>Describe the administrative and management arrangements that are in place for the property concerned, making special mention of the institutions and organizations that have management authority over the property as well as of the arrangements that are in place for the coordination of their actions:</p> <p style="text-align: center;"><b>The property is wholly owned by the Archaeological Survey of India, Bhubaneswar Circle, Bhubaneswar, Orissa, India, which also Manages of the property.</b></p>	033									
	<p>Please indicate under which level of authority the property is managed:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Local</td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 80%;"><b>Conservation Assistant, Gr.-I, Archaeological Survey of India Konarak Sub-Circle, Konarak.</b></td> </tr> <tr> <td>Regional</td> <td style="text-align: center;">-</td> <td><b>Superintending Archaeologist, Archaeological Survey of India , Bhubaneswar Circle, Orissa.</b></td> </tr> <tr> <td>National</td> <td style="text-align: center;">-</td> <td><b>Director General, Archaeological</b></td> </tr> </table>	Local	-	<b>Conservation Assistant, Gr.-I, Archaeological Survey of India Konarak Sub-Circle, Konarak.</b>	Regional	-	<b>Superintending Archaeologist, Archaeological Survey of India , Bhubaneswar Circle, Orissa.</b>	National	-	<b>Director General, Archaeological</b>	034
Local	-	<b>Conservation Assistant, Gr.-I, Archaeological Survey of India Konarak Sub-Circle, Konarak.</b>									
Regional	-	<b>Superintending Archaeologist, Archaeological Survey of India , Bhubaneswar Circle, Orissa.</b>									
National	-	<b>Director General, Archaeological</b>									

	<p><b>Survey</b></p> <p><b>of India, New Delhi, India.</b></p>	
	Other(Please describe): <b>Nil</b>	

**II.4. Continued**

	<p>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:</p> <ol style="list-style-type: none"> <li>1. <b>K.. J. Lucka, Conservation Assistant, Gr.I, Archaeological Survey of India, Konarak Sub-Circle, Konarak, Orissa, India. PIN-751102.</b></li> <li>2. <b>T. Satyamurthy, Superintending Archaeologist, Archaeological Survey of India, Bhubaneswar Circle, Bhubaneswar, Old Town, Orissa, India, PIN-751002.</b></li> <li>3. <b>Smt. Kasturi Gupta Menon, IAS, Director General, Archaeological Survey of India, Janpath, New Delhi-110 011, India.</b></li> </ol> 	035
	<p>Is it necessary to revise the administrative and management arrangements for the property?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, explain why this is the case:</p> <p style="text-align: center;"><b>Not Applicable</b></p>	036
		037
	<p>Is there a management plan for the property?</p> <p style="text-align: right;"><b>YES/NO</b></p>	038

**II.4. Continued**

	<p>If YES, please summarize, indicating if the plan is being implemented and since when:</p> <p style="text-align: center;"><b>The following management related plans are being implemented in respect of Sun Temple, Konarak.</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SI.No.</th> <th style="text-align: left;">Name of Plan</th> <th style="text-align: left;">Prepared by</th> <th style="text-align: left;">Implementation</th> </tr> </thead> <tbody> <tr> <td>01.</td> <td>Inner Safety &amp; Security of Sun Temple, Konarak</td> <td>Archaeological Survey of India,</td> <td>Ancient Monuments Preservation Act 1904 &amp; Ancient Monuments &amp; Archaeological Sites &amp; Remains Act 1958</td> </tr> <tr> <td>02.</td> <td>Environmental Plan</td> <td>Department of Forest, Govt. of Orissa.</td> <td>Orissa Forest Act-1972</td> </tr> <tr> <td>03.</td> <td>Master Plan</td> <td>Puri-Konarak Development Authority, Govt. of Orissa.</td> <td>Puri-Konarak Development Authority Act-1993</td> </tr> <tr> <td>04.</td> <td>Environmental Development</td> <td>Tata Consultancy Services.</td> <td>To be implemented by Govt. of India and Govt. of Orissa.</td> </tr> <tr> <td>05.</td> <td>Tourist Management Plan Orissa.</td> <td>Department of Tourism, Govt. of Orissa.</td> <td>Tourism Department, Govt. of Orissa.</td> </tr> </tbody> </table>	SI.No.	Name of Plan	Prepared by	Implementation	01.	Inner Safety & Security of Sun Temple, Konarak	Archaeological Survey of India,	Ancient Monuments Preservation Act 1904 & Ancient Monuments & Archaeological Sites & Remains Act 1958	02.	Environmental Plan	Department of Forest, Govt. of Orissa.	Orissa Forest Act-1972	03.	Master Plan	Puri-Konarak Development Authority, Govt. of Orissa.	Puri-Konarak Development Authority Act-1993	04.	Environmental Development	Tata Consultancy Services.	To be implemented by Govt. of India and Govt. of Orissa.	05.	Tourist Management Plan Orissa.	Department of Tourism, Govt. of Orissa.	Tourism Department, Govt. of Orissa.	039
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	<p>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.):</p> <p style="text-align: center;"><b>The present legislative and administrative management are</b></p>	040																								



	<b>adequate.</b>	
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**II.4.continued**

Please provide detailed information, particularly in cases where changes have occurred since the inscription of the property, on the following matters:

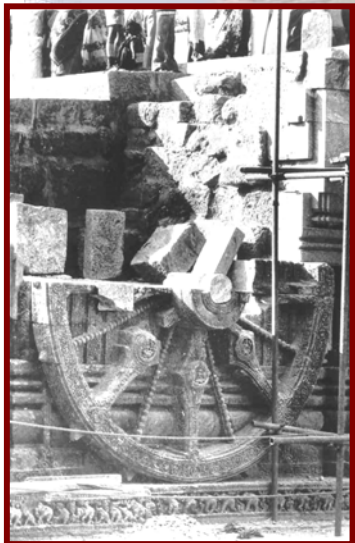
041

- Conservation

Make reference to all major interventions at the property and describe its present state of conservation:

**As per the recommendations of Sir Fielden and Prof. Beckmann, UNESCO Experts, 1987 major conservation and restoration work of the platform of the Jagamohana have been taken up on south-east and north-east sides and property have been stabilized.**

**A comprehensive five year works programme has also been prepared for the remaining works of the conservation. Besides, periodical chemical treatment, paper pulp treatment and application of preservative are also done.**



**WHEEL : SOUTH-EAST  
BEFORE**



**AFTER**

Continued .....

II.4.continued

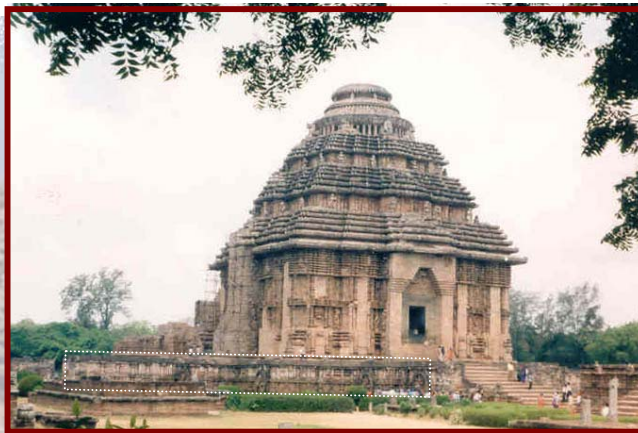
041



▲  
**BEFORE**

**PLATFORM,  
JAGAMOHANA  
SOUTH-EAST  
CORNER.**

**AFTER** ▶



◀ **BEFORE**

**STEPS,  
EASTERN SIDE.**

**AFTER**  
▼



Continued ....



II.4. continued

041



**BEFORE**

**STEPS,  
NORTHERN SIDE.**

**AFTER** ➔



**BEFORE**

**STEPS,  
SOUTHERN SIDE.**

**AFTER** ➔



Continued ....

II.4.continued

041



**BEFORE**

**JAGAMOHANA  
PLATFORM,  
NORTH-EASTERN SIDE.**

**AFTER** →



**BEFORE**

**STEPS & PLATFORM  
NORTHERN SIDE.**

**AFTER** →

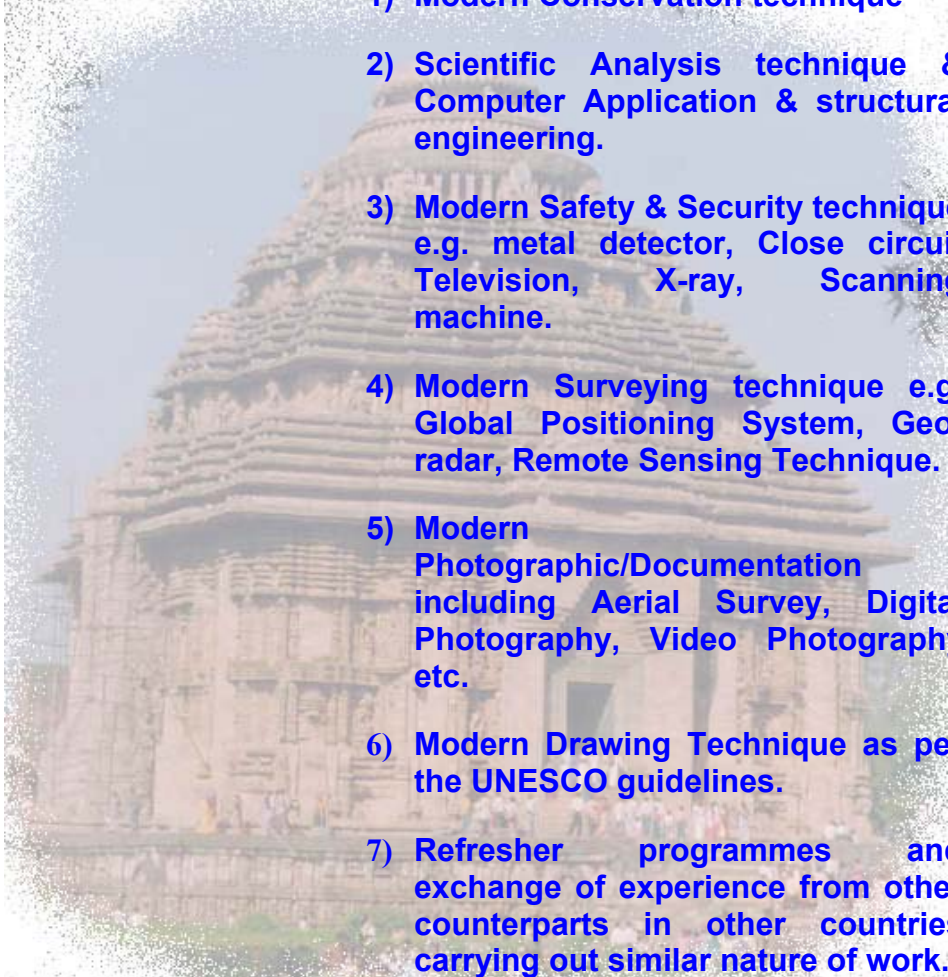






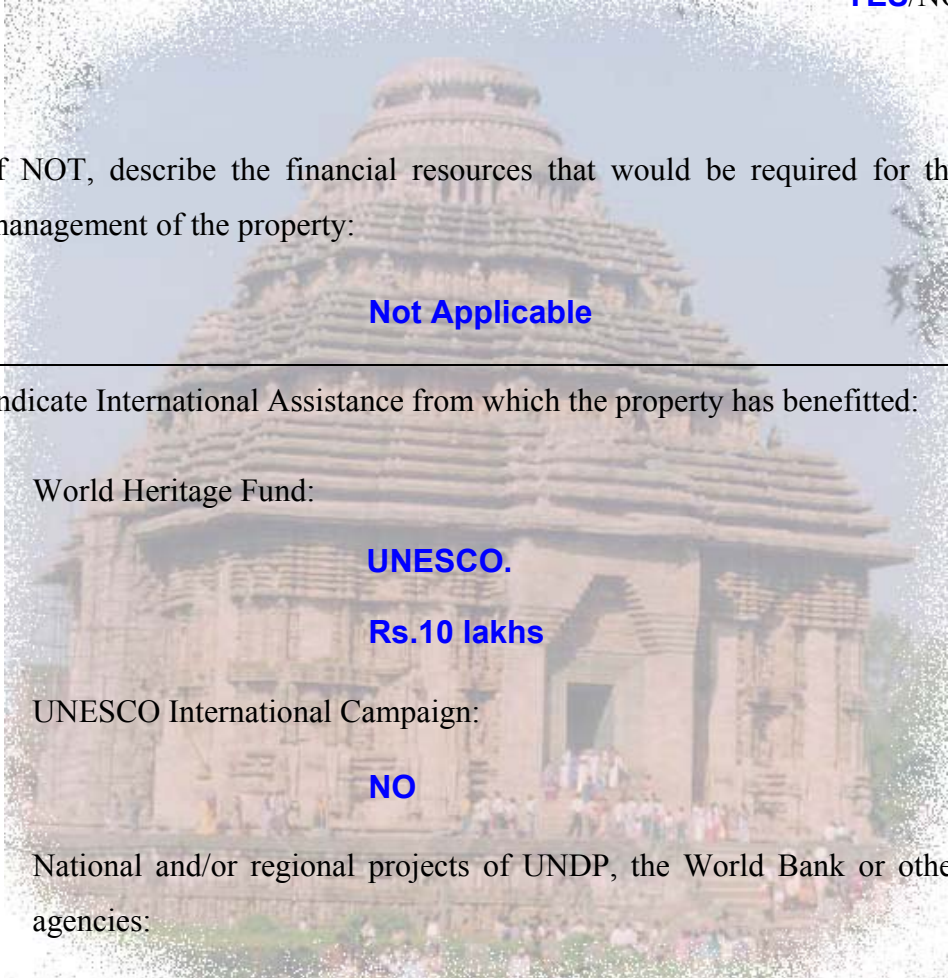


**II.4. continued**

	<p>Does the staff need additional training?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, what are the training needs for your staff?</p> <p><b>Following training are required for the field staff.</b></p> <ol style="list-style-type: none"> <li><b>1) Modern Conservation technique</b></li> <li><b>2) Scientific Analysis technique &amp; Computer Application &amp; structural engineering.</b></li> <li><b>3) Modern Safety &amp; Security technique e.g. metal detector, Close circuit Television, X-ray, Scanning machine.</b></li> <li><b>4) Modern Surveying technique e.g. Global Positioning System, Geo-radar, Remote Sensing Technique.</b></li> <li><b>5) Modern Photographic/Documentation including Aerial Survey, Digital Photography, Video Photography etc.</b></li> <li><b>6) Modern Drawing Technique as per the UNESCO guidelines.</b></li> <li><b>7) Refresher programmes and exchange of experience from other counterparts in other countries carrying out similar nature of work.</b></li> </ol> 	<p>046</p> <p>047</p>
	<p>Describe the funding and financial situation of the property, indication sources, level and regularity of financing:</p> <p style="text-align: center;"><b>Archaeological Survey of India, Govt. of India provides funds for the</b></p>	<p>048</p>

	<p><b>conservation and maintenance of the monument and the financial allotments is regulated by Director General, Archaeological Survey of India, Government of India, New Delhi.</b></p>	
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II.4. *Continued*

	<p>Is the available funding sufficient for adequate management of the property?</p> <p style="text-align: right;"><b>YES/NO</b></p> 	049
	<p>If NOT, describe the financial resources that would be required for the management of the property:</p> <p style="text-align: center;"><b>Not Applicable</b></p>	050
	<p>Indicate International Assistance from which the property has benefitted:</p> <ul style="list-style-type: none"> <li>• World Heritage Fund: <b>UNESCO.</b> <b>Rs.10 lakhs</b></li> </ul>	051
	<ul style="list-style-type: none"> <li>• UNESCO International Campaign: <b>NO</b></li> </ul>	052
	<ul style="list-style-type: none"> <li>• National and/or regional projects of UNDP, the World Bank or other agencies: <b>NO</b></li> </ul>	053
	<ul style="list-style-type: none"> <li>• Bilateral co-operation: <b>NO</b></li> </ul>	054

	<ul style="list-style-type: none"> <li>Other assistance:</li> </ul> <p style="text-align: center;"><b>NO</b></p>	055
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**II.4.continued**

	<p>Describe the IT (Computer) equipment of the site and/or management office and assess its effectiveness:</p> <p style="text-align: center;"><b>Not yet provided at the site office.</b></p> <p>Are you using (multiple indications are possible) :</p> <p>PC            ( )    <b>No</b></p> <p>Apple        ( )    <b>No</b></p> <p>Mainframe   ( )    <b>No</b></p> <p>Please, give the number of available computers:</p> <p style="text-align: center;"><b>Not Applicable</b></p> <p>Does an operational access to the Internet exist?</p> <p style="text-align: right;"><b>YES/NO</b></p>	056
	<p>Is E-mail used for daily correspondence?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p style="text-align: center;"><b>asibbsr@ori.nic.in</b></p>	057
	<p>Is there a Geographical Information System(GIS)</p> <p style="text-align: right;"><b>YES/NO</b></p>	058
		059
		060
		061



	<p>If YES, what software do you have and how is the GIS used?</p> <p style="text-align: center;"><b>Not Applicable</b></p>	062
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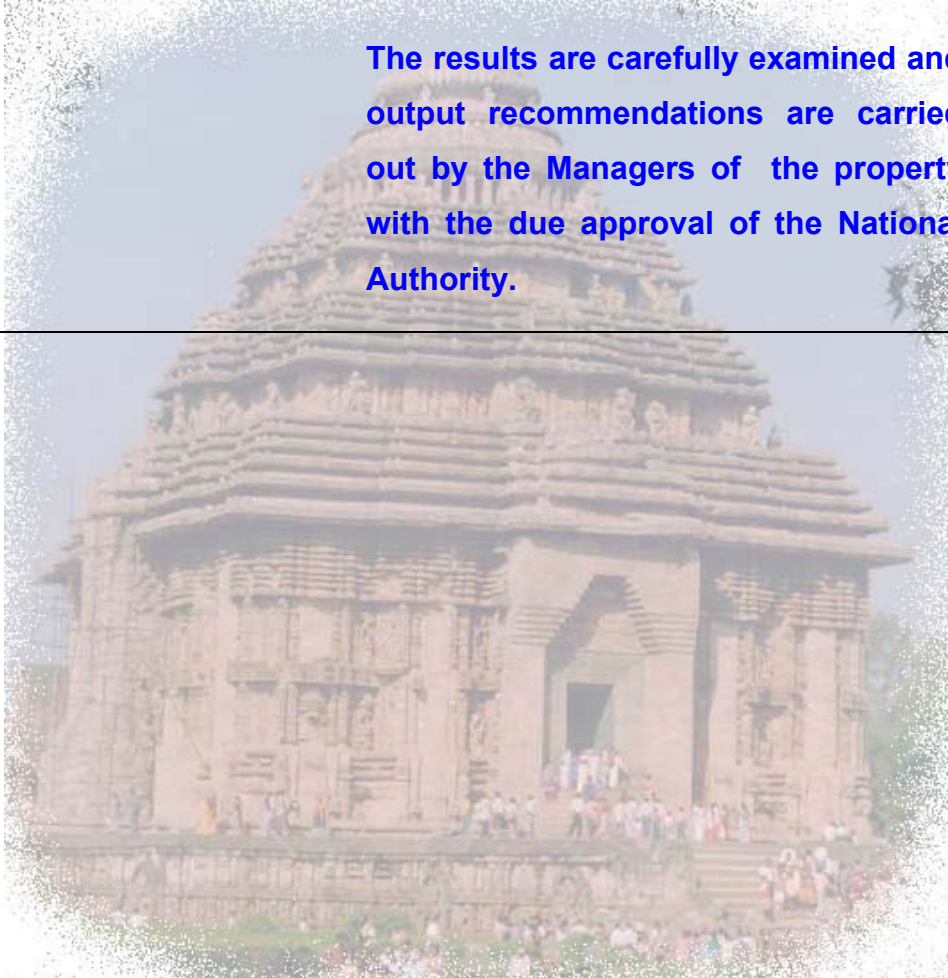
II.4. *Continued*

	<p>List scientific studies and research programmes that have been conducted concerning the site:</p> <p style="text-align: center;"><b>To undertake scientific study for better conservation of Sun Temple, Konarak, following Experts carried studies and submitted their reports.</b></p> <hr style="border-top: 1px dashed blue;"/> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Year</th> <th style="text-align: center;">Name and Address of the Organisations</th> <th style="text-align: center;">Expert</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1979-80</td> <td>Prof. R. M. Lemaire Mrs. M. Tabasso</td> <td style="text-align: center;">ICCROM</td> </tr> <tr> <td style="text-align: center;">1987</td> <td>Sir B. M. Fielden Dr. Paul Beckmann</td> <td style="text-align: center;">ICCROM</td> </tr> <tr> <td style="text-align: center;">1995</td> <td>Prof. Ing Giorgio Croci</td> <td style="text-align: center;">ICCROM</td> </tr> <tr> <td style="text-align: center;">2000</td> <td>Gemini Wijesuriay</td> <td style="text-align: center;">ICOMOS</td> </tr> </tbody> </table> <p><b>Report on soil investigation, Geo Radar Studies Core-Sampling and testing of stones of Sun Temple by Central Building Research Institute, Roorkee, Government of India was carried out during 1999-2000.</b></p>	Year	Name and Address of the Organisations	Expert	1979-80	Prof. R. M. Lemaire Mrs. M. Tabasso	ICCROM	1987	Sir B. M. Fielden Dr. Paul Beckmann	ICCROM	1995	Prof. Ing Giorgio Croci	ICCROM	2000	Gemini Wijesuriay	ICOMOS	063
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2000	Gemini Wijesuriay	ICOMOS															

	<p>Describe financial and human resource inputs for the research programmes and/or facilities:</p> <p style="text-align: center;"><b>1. <u>Financial Resources</u></b></p>	064
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	<p><b>Government of India &amp; UNESCO.</b></p> <p><b>2. <u>Human Resources</u></b></p> <p><b>(i) Central Building Research Institute, Roorkee</b></p> <p><b>(ii) Indian Institute of Technology, Kharagpur</b></p> <p><b>(iii) Public Works Department, Government of Orissa.</b></p>	
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**II.4.continued**

	<p>Describe how the information/results are disseminated?</p> <div style="text-align: center;">  <p><b>The results are carefully examined and output recommendations are carried out by the Managers of the property with the due approval of the National Authority.</b></p> </div>	065
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Are there any visitor statistics for the site?

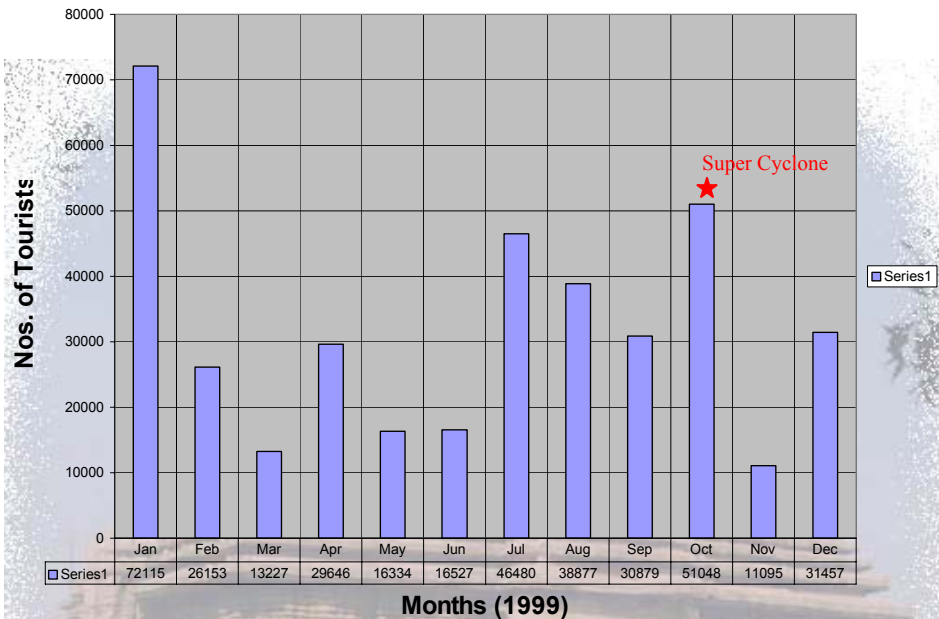
066

**YES/NO**

If YES, please summarise the statistics and attach to this report:

067

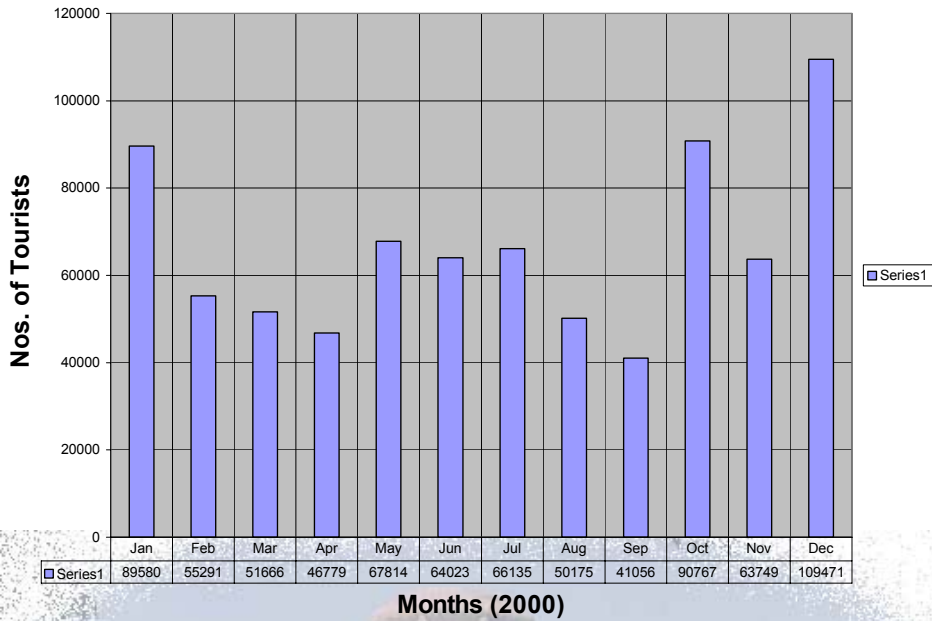
**VISITORS STATISTICS 1999 TO Nov.'2002**



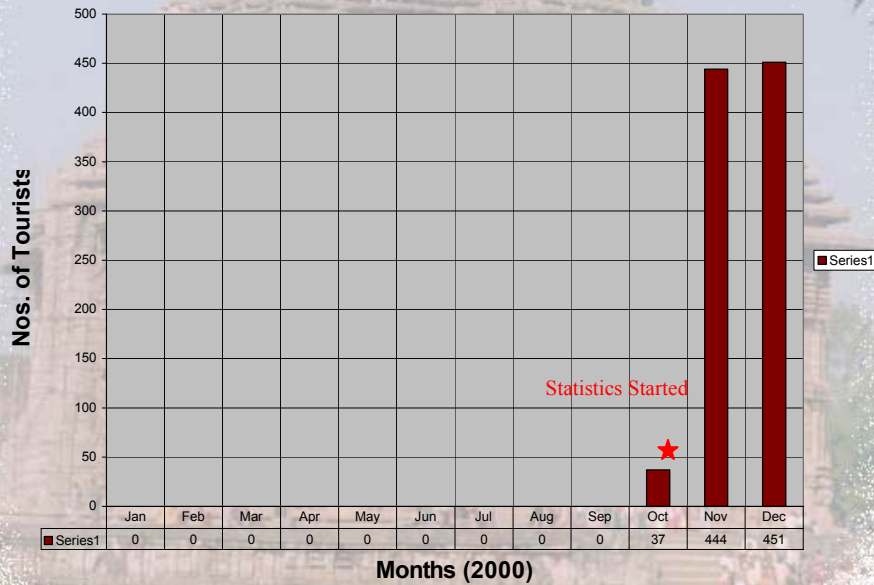
**1. CHART OF INFLUX OF INDIAN VISITORS,  
SUN TEMPLE, KONARAK, 1999**

Continued ....





**2. CHART OF INFLUX OF INDIAN VISITORS,  
SUN TEMPLE, KONARAK , 2000**

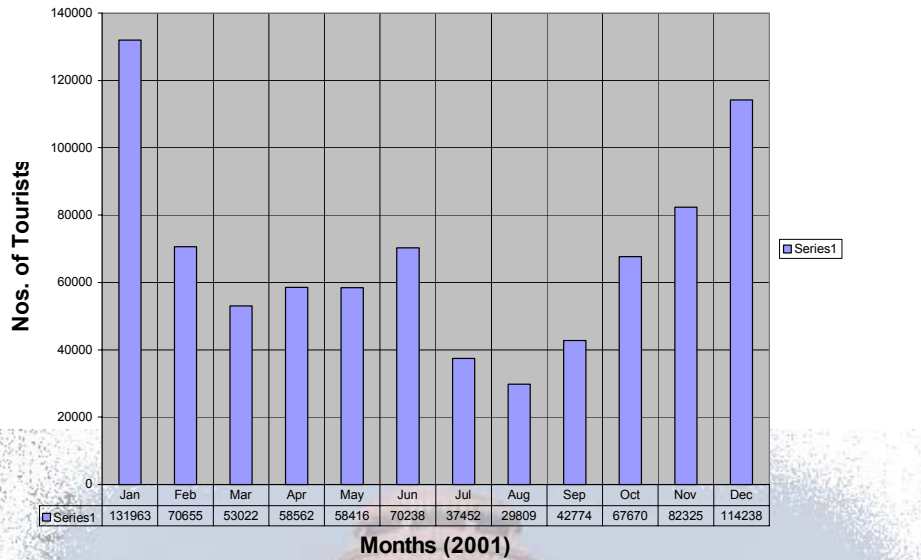


**3. CHART OF INFLUX OF FOREIGN TOURISTS,  
SUN TEMPLE, KONARAK , 2000**

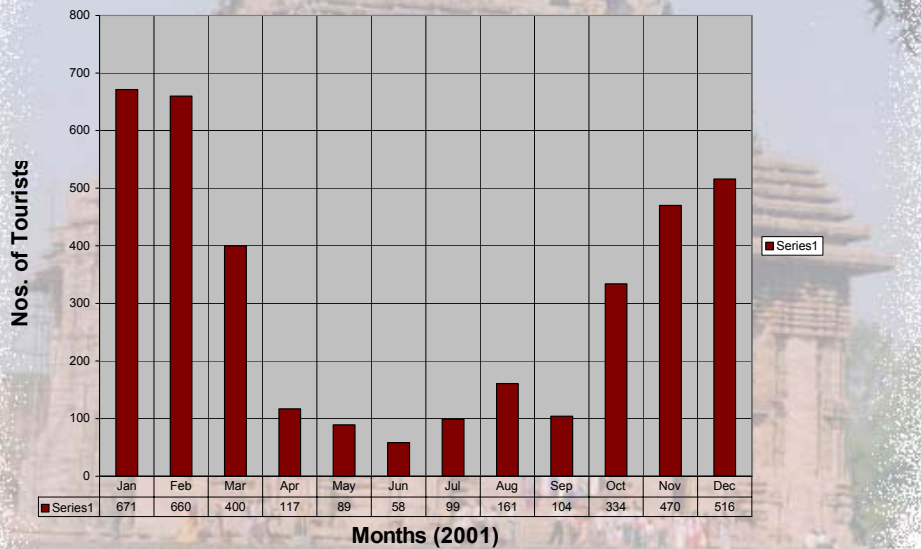
Continued ....

II.4.continued

067



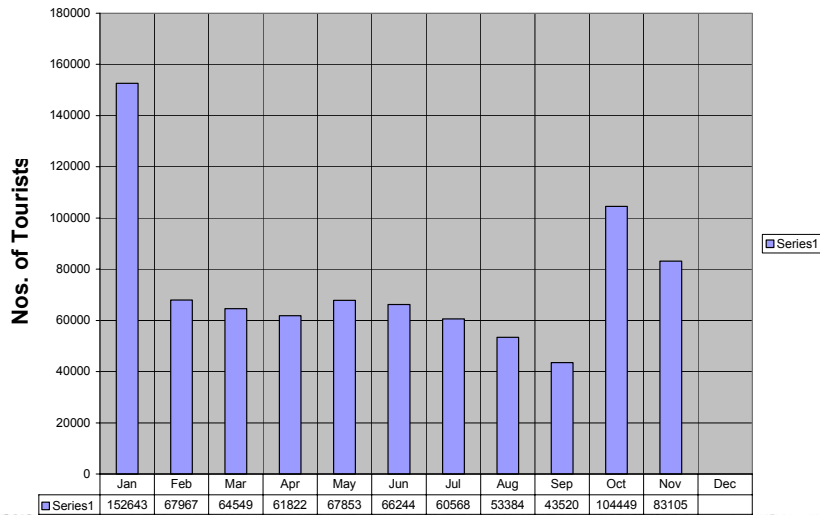
**4. CHART OF INFLUX OF INDIAN VISITORS,  
SUN TEMPLE, KONARAK , 2001**



**5. CHART OF INFLUX OF FOREIGN TOURISTS,  
SUN TEMPLE, KONARAK , 2001**

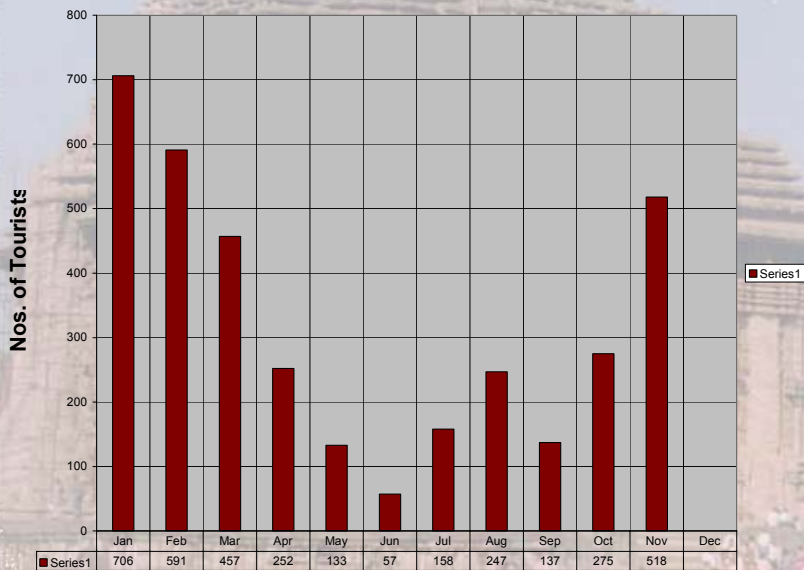
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II.4.continued



Months (2002)

**6. CHART OF INFLUX OF INDIAN VISITORS,  
SUN TEMPLE, KONARAK UPTO NOV. 2002**

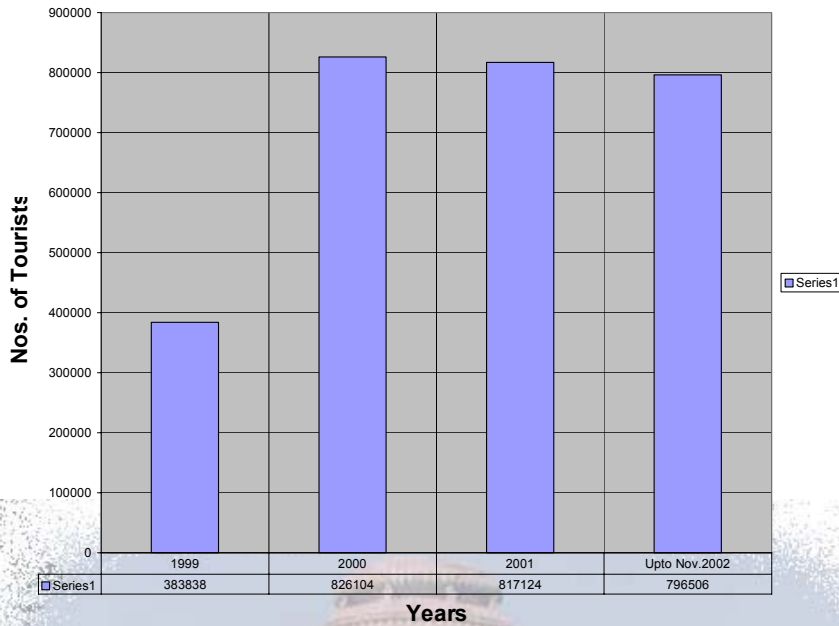


Months (2002)

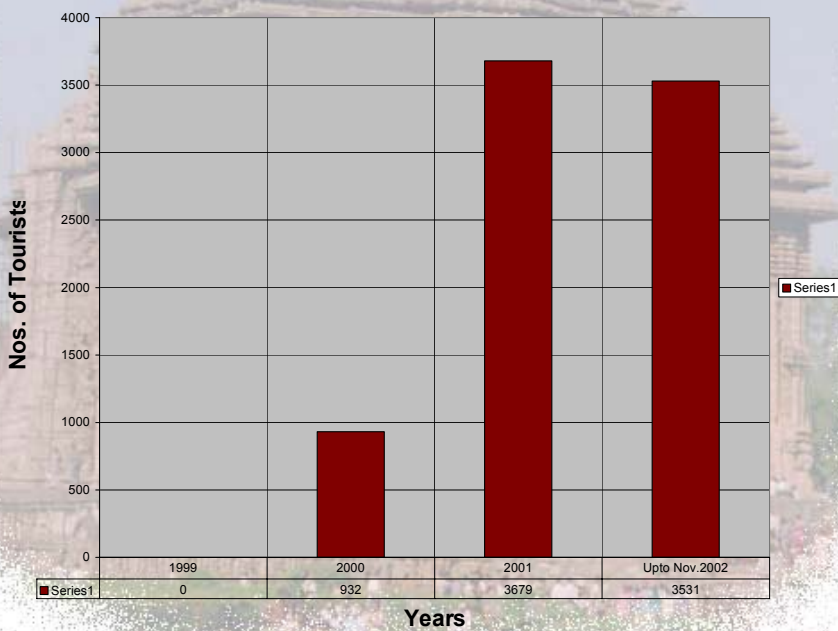
**7. CHART OF INFLUX OF FOREIGN TOURISTS,  
SUN TEMPLE, KONARAK UPTO NOV. 2002**

Continued ....





**8. CHART OF INFLUX OF INDIAN VISITORS,  
FOR THE LAST FOUR YEARS  
SUN TEMPLE, KONARAK, 1999-Nov.2002**



**9. CHART OF INFLUX OF FOREIGN TOURISTS,  
FOR THE LAST THREE YEARS  
SUN TEMPLE, KONARAK , 2000-Nov.2002**

II.4.continued

	<p>What visitor facilities do you have at the property?</p> <ul style="list-style-type: none"> <li>✓ <b>Drinking Water</b></li> <li>✓ <b>Toilet</b></li> <li>✓ <b>Visitor's benches</b></li> <li>✓ <b>Wheel-chair for handicapped</b></li> <li>✓ <b>Cultural Notice Board</b></li> <li>✓ <b>Departmental Publication Counter</b></li> <li>✓ <b>Daily limited illumination.</b></li> <li>✓ <b>Services of the qualified guides are available and controlled by the Department of Tourism.</b></li> </ul>	068
	<p>What visitor facilities are you in need of?</p> <ul style="list-style-type: none"> <li>✓ <b>Elevator for handicapped/ disabled persons.</b></li> <li>✓ <b>Kiosk for Tourist Information including Computer, Audio-Visual Information System of the property.</b></li> <li>✓ <b>Planning for amenities location.</b></li> <li>✓ <b>Defined movement pattern of tourist.</b></li> <li>✓ <b>Development of Pedestrian road and battery operated vehicles.</b></li> <li>✓ <b>Alternative support attraction.</b></li> </ul>	069
	<p>Is a public use plan (tourism/visitor management plan) in existence for the property?</p> <p style="text-align: right;"><b>YES/NO</b></p>	070
	<p>If YES, please summarize, if NO explain if one is needed:</p> <p style="text-align: center;"><b>A development plan for surrounding areas (including Tourist/ Visitors management programme) have already been prepared and in the final stage of approval by the State Authorities.</b></p>	071

II.4.continued

Indicate how the property's World Heritage values are communicated to residents, visitors and the public (please attach examples of leaflets, videos, posters etc. and print-outs and/or the address of a web-page):

**By celebrating World Heritage Day (18th April) and observing World Heritage Week (19th November to 25th November), and other awareness programmes such as National Service Scheme activities conducting debate, essay competitions, by holding symposium, seminars, conference, dance festivals among the youths and by publishing leaflets, brochures, research papers etc.**

**4. Documents attached**

**Slides (08 nos.)**



**GLIMPSES OF AWARENESS PROGRAMME**



Continued ....



II.4.continued

072



### GLIMPSES OF AWARENESS PROGRAMME

II.4.continued






	<p>Are there educational programmes concerning the property aimed at Schools?</p> <p style="text-align: right;"><b>YES/NO</b></p>	<p>073</p>
	<p>If yes, please describe:</p> <ul style="list-style-type: none"> <li>✓ <b>Essay, Drawing, Elocution competitions are conducted at local school level and district level by involving the students in the locality in National Service Scheme to promote the cultural awareness.</b></li> <li>✓ <b>Street dramas are enacted by the school children/volunteers to deliver the message of saving the cultural heritage.</b></li> </ul>	<p>074</p>

### II.5. Factors affecting the property

	<p>What role does World Heritage inscription play for the site concerning the visitor number, the research programmes and/or the awareness building activities?</p> <ul style="list-style-type: none"> <li>✓ <b>The number of visitors/researchers increased phenomenally since inscription. Research programme by the scholars from India and abroad intensified.</b></li> <li>✓ <b>Awareness building activities in terms of essay, debate, drawing competitions among school children in the locality have been conducted.</b></li> <li>✓ <b>Seminars, Conferences, Symposia have also been held since its inscription.</b></li> </ul>	<p>075</p>
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**II.5. Continued**

	<p>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.</p> <p style="text-align: center;"><b>The factors affecting the monuments are as under :-</b></p> <p style="text-align: center;"><b>1. <u>DEVELOPMENT PRESSURE</u></b></p> <p style="text-align: center;"><b>Modernisation and urban growth affects the environment of the monument.</b></p>      <p><b>GLIMPSES OF DEVELOPMENTAL PRESSURE</b></p>	<p>076</p>
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		Continued ....
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**II.5. Continued**

		<p><b>2. ENVIRONMENTAL PRESSURE</b> Urban growth, deforestation due to cyclone and human beings, saline breeze and sand blasting, pollution caused by vehicular movement, micro-biological growth;</p>	076
<p><b>GLIMPSES OF ENVIRONMENTAL PRESSURE.</b></p>			

	Continued ....	
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***II.5. Continued***

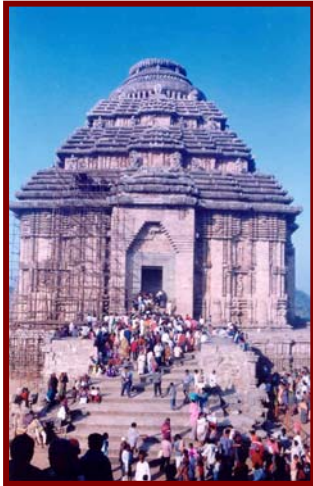
	<p><b>3. <u>NATURAL DISASTER</u></b> <b>Flood and Cyclone are the common features of the Coastal Regions of Orissa.</b></p> <p><b>5. Documents Attached :</b> Su</p>    	076
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**NATURAL DISASTER,  
SUPER CYCLONE OCT' 1999**

Continued ...

**II.5. Continued**

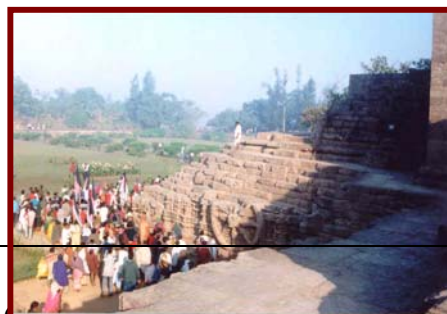
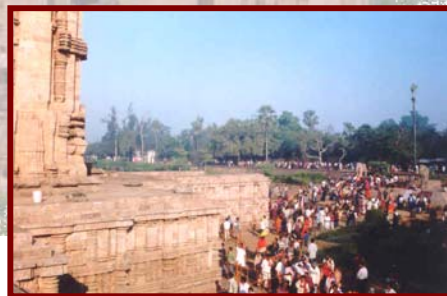


**4. TOURISM PRESSURE**

076

- ✓ The numbers of the Indian Tourists have increased 40.04% within 3 years (1999-2002) and their sudden pressure is felt during peak seasons.
- ✓ Foreign Tourists have increased 4.70% within 2 year (2001-2002).

**6. Documents Attached Slides (07 nos.)**





<p><b>GLIMPSES OF VISITOR'S PRESSURE.</b></p> <p style="text-align: right;">Continued ....</p>
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**II.5. Continued**

	<p style="text-align: center;"><b>5. <u>NUMBER OF INHABITANTS</u></b></p> <p style="text-align: center;">As per 2001 census : 15,015 nos. (within Notified Area Council, Konarak).</p> <p style="text-align: center;"><b><u>PREPAREDNESS</u></b></p> <p style="text-align: center;"><b>1. <u>DEVELOPMENT</u></b></p> <p style="text-align: center;">Master plan has been prepared for the development of the property and its buffer zone by the Tata Consultancy Services and is in the final stage of approval. To arrest the unplanned urban growth, the Puri-Konark Development Agency, Puri and Notified Area Council, Konarak are taking care of house building regulations.</p> <p style="text-align: center;">7. Documents attached Master Plan prepared by the TATA Consultancy Service Ltd.</p> <p style="text-align: center;"><b>2. <u>ENVIRONMENTAL</u></b></p> <p style="text-align: center;">1.50 lakhs Nos. of saplings have already been planted in 377 Hectares coastal area of the Sun Temple, Konarak to prevent the saline wind and sand blasting by the Forest Department, Government of Orissa for supplementing the already existed green belt zone, which was heavily damaged by Super Cyclone 1999. Besides, to check illegal felling of the trees, the</p>	<p>076</p>
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	<p><b>Orissa Forest Act 1972 has been enforced.</b></p> <p><b>8. Documents Attached</b> <b>Orissa Forest Act 1972</b></p> <p style="text-align: right;">Continued ....</p>	
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**II.5.continued**

	 <p><b>3. <u>NATURAL DISASTER</u></b></p> <p>Govt. of Orissa has already conceptualized Orissa State Disaster Mitigation Authority (OSDMA) to combat the natural disaster.</p> <p><b>4. <u>TOURISM PRESSURE</u></b></p> <p>To regulate the tourist influx to the properties, Archaeological Survey of India has its own arrangements with cooperation of local authorities who are entrusted in the maintenance of law &amp; order, if any.</p>	<p>076</p>
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<p>Is there an emergency plan and/or risk preparedness plan for the property in existence?</p>	<p style="text-align: right;"><b>YES/NO</b></p>	<p>077</p>
<p>If YES, please summarise the plan and provide a copy:</p>	<p style="text-align: center;"><b>Proper documentation like preparation of drawing photography of the</b></p>	<p>078</p>

	<p><b>of drawing, photography of the property is completed. The property is well equipped with Tools &amp; Plants to combat the emergency. Besides, Orissa State Disaster Mitigation Authority (OSDMA) formulated by Govt. of Orissa is the agency to meet the eventualities in case of natural disaster.</b></p>	
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**II.5.continued**

	<p>If NO, describe what is being done – and by whom – to counteract the dangers that threaten or may threaten the property:</p> <p><b>Not Applicable</b></p>	079
	<p>Indicate areas where improvement would be desirable and/or towards which the State Party is working:</p> <p><b>A full time agency to co-ordinate all the Government Organisations and Non-Government Organisation is necessary.</b></p>	080
	<p>Give an indication if the impact of the factors affecting the property is increasing or decreasing:</p> <p><b>After the super cyclone 1999, due to deforestation, the southern and western side of the monument (Jagamohana) is found deteriorating alarmingly due to saline breeze factor and sand blasting.</b></p>	081
	<p>What actions have been effective taken, or are planned for the future, to</p>	082



	<p>address the factors affecting the property?</p> <ol style="list-style-type: none"> <li>1. To arrest the saline action on the stone members of the property, paper pulp treatment is done and subsequent preservatives are applied periodically.</li> <li>2. 1.5 lakhs of tree saplings have been planted all along the sea beach to protect the monument from the deleterious saline breeze effect.</li> </ol>	
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### II.6. Monitoring

	<p>If applicable, give details (e.g. dates, results, indicators chosen) of any previous periodic or reactive monitoring exercises of the property:</p> <p style="text-align: center;"><b>Archaeological Survey of India is conducting periodical monitoring by way of :</b></p> <ul style="list-style-type: none"> <li>✓ Sand dust collection,</li> <li>✓ Sampling of Salt accretion on stone to measure disintegration of stone members,</li> <li>✓ Periodical examination of stone members of the property,</li> <li>✓ Providing tell-tale glass in case of any cracks,</li> <li>✓ Periodical check up of salt action,</li> <li>✓ Periodical check up microbiological growth on the property,</li> <li>✓ Periodical check up of water-table around the property, are also being done regularly.</li> </ul> <p style="text-align: center;"><b>SAND DUST COLLECTION FROM THE TEMPLE STRUCTURE</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Month</th> <th colspan="3">1st Tier</th> <th colspan="3">2nd Tier</th> <th rowspan="2">Ground Level Adhistana</th> </tr> <tr> <th>South</th> <th>West</th> <th>East</th> <th>South</th> <th>West</th> <th>East</th> </tr> </thead> <tbody> <tr> <td>8/2000</td> <td>100</td> <td>30</td> <td>-</td> <td>15</td> <td>25</td> <td>-</td> <td>600</td> </tr> <tr> <td>9/2000</td> <td>350</td> <td>300</td> <td>50</td> <td>100</td> <td>25</td> <td>-</td> <td>250</td> </tr> <tr> <td>10/2000</td> <td>150</td> <td>-</td> <td>-</td> <td>25</td> <td>-</td> <td>-</td> <td>100</td> </tr> <tr> <td>11/00</td> <td>120</td> <td>100</td> <td>-</td> <td>25</td> <td>5</td> <td>50</td> <td>250</td> </tr> <tr> <td>12/00</td> <td>150</td> <td>50</td> <td>-</td> <td>70</td> <td>30</td> <td>-</td> <td>140</td> </tr> <tr> <td>1/01</td> <td>100</td> <td>200</td> <td>40</td> <td>30</td> <td>60</td> <td>20</td> <td>200</td> </tr> <tr> <td>2/01</td> <td>25</td> <td>20</td> <td>15</td> <td>25</td> <td>20</td> <td>10</td> <td>45</td> </tr> <tr> <td>3/01</td> <td>30</td> <td>15</td> <td>15</td> <td>20</td> <td>15</td> <td>15</td> <td>35</td> </tr> <tr> <td>4/01</td> <td>20</td> <td>15</td> <td>20</td> <td>25</td> <td>20</td> <td>10</td> <td>25</td> </tr> <tr> <td>5/01</td> <td>20</td> <td>10</td> <td>15</td> <td>20</td> <td>10</td> <td>10</td> <td>20</td> </tr> <tr> <td>6/01</td> <td>200</td> <td>125</td> <td>75</td> <td>75</td> <td>50</td> <td>100</td> <td>150</td> </tr> </tbody> </table> <p style="text-align: right;">1Cum=Av.2400 Kg.</p>	Month	1st Tier			2nd Tier			Ground Level Adhistana	South	West	East	South	West	East	8/2000	100	30	-	15	25	-	600	9/2000	350	300	50	100	25	-	250	10/2000	150	-	-	25	-	-	100	11/00	120	100	-	25	5	50	250	12/00	150	50	-	70	30	-	140	1/01	100	200	40	30	60	20	200	2/01	25	20	15	25	20	10	45	3/01	30	15	15	20	15	15	35	4/01	20	15	20	25	20	10	25	5/01	20	10	15	20	10	10	20	6/01	200	125	75	75	50	100	150	083
Month	1st Tier			2nd Tier			Ground Level Adhistana																																																																																																	
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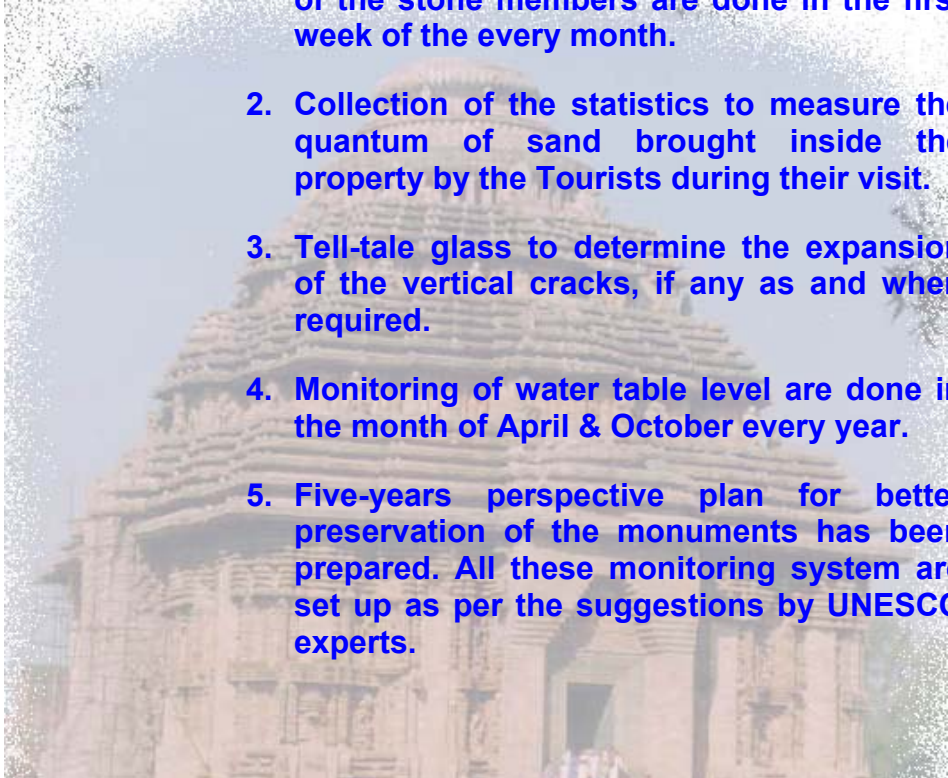
	Continued .....	

**II.6.continued**

	<p style="text-align: center;"><b><u>WATER-TABLE</u></b></p> <p style="text-align: center;"><b>Rise and fall of water table level at par with Upana of Jagamohana (in mtr.)</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">South</th> <th style="width: 20%; text-align: center;">North</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>Maximum down (April)</b></td> <td style="text-align: center;">(-) 4.17</td> <td style="text-align: center;">(-) 4.01</td> </tr> <tr> <td style="text-align: center;"><b>Maximum Up (-) 1.09 (October)</b></td> <td style="text-align: center;">(-)</td> <td style="text-align: center;">1.16</td> </tr> </tbody> </table>		South	North	<b>Maximum down (April)</b>	(-) 4.17	(-) 4.01	<b>Maximum Up (-) 1.09 (October)</b>	(-)	1.16	083
	South	North									
<b>Maximum down (April)</b>	(-) 4.17	(-) 4.01									
<b>Maximum Up (-) 1.09 (October)</b>	(-)	1.16									

	<p>Is there a formal monitoring system established for the site ?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, please give details of its organization:</p> <p style="text-align: center;"><b>Superintending Archaeologist, Bhubaneswar Circle, is monitoring all such personnel engaged in the preservation of the property. Besides a local Coordination Committee having members from Government of Orissa, local people, Non Government Organisation are monitoring for allround development of the property. First meeting of the Local Coordination Committee was held on September 2001.</b></p> <p style="text-align: center;"><b>9. Documents Attached Minutes of the Local Co-ordination Committee held in Sept.2001.</b></p>	<p>084</p> <p>085</p>
<p>II.6.continued</p>		
	<p>If not already in place, is the establishment of a formal monitoring system planned?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>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):</p> <p style="text-align: center;"><b>Not Applicable</b></p>	<p>086</p> <p>087</p>



	<p>Are there any indicators established for monitoring the state of conservation of the property?</p> <p style="text-align: right;"><b>YES/NO</b></p> <p>If YES, please provide upto-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:</p> <ol style="list-style-type: none"> <li>1. <b>Collection of statistics on the saline effect of the stone members are done in the first week of the every month.</b></li> <li>2. <b>Collection of the statistics to measure the quantum of sand brought inside the property by the Tourists during their visit.</b></li> <li>3. <b>Tell-tale glass to determine the expansion of the vertical cracks, if any as and when required.</b></li> <li>4. <b>Monitoring of water table level are done in the month of April &amp; October every year.</b></li> <li>5. <b>Five-years perspective plan for better preservation of the monuments has been prepared. All these monitoring system are set up as per the suggestions by UNESCO experts.</b></li> </ol> 	<p>088</p> <p>089</p>
<p><b>II.6.continued</b></p>		
	<p>If NO indicators have been identified and/or used so far, please define key indicators for future use in monitoring:</p> <p style="text-align: center;"><b>Not Applicable</b></p>	<p>090</p>

	<p>Indicate which partners, if any, are involved or will be involved in the regular monitoring exercise:</p> <ol style="list-style-type: none"> <li>1. <b>Central Building Research Institute, Roorkee.</b></li> <li>2. <b>Geological Survey of India</b></li> <li>3. <b>Institute of Geo-Physics, Hyderabad</b></li> <li>4. <b>Indian Institute of Technology, Kharagpur</b></li> <li>5. <b>Regional Research Laboratory, Bhubaneswar</b></li> </ol>	091
	<p>Identify the administrative provisions for organizing the regular monitoring of the property:</p> <p><b>Superintending Archaeologist, Bhubaneswar Circle, Bhubaneswar is monitoring all round action as per the directions of Director General, Archaeological Survey of India.</b></p>	092
	<p>Describe what improvement the State Party foresees or would consider desirable in improving the monitoring system:</p> <p><b>An expert Committee to be headed by a Director level (Archaeology/ Conservation/ Science of Archaeological Survey of India) is suggested.</b></p>	093

**II.6.continued**

	<p>In specific cases, the World Heritage Committee and/or its Bureau may</p>	094
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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:

<u>Name of the UNESCO Experts</u>	<u>Year</u>
1. Prof. R. M. Lemaire Mrs. M. Tabasso	1979-80

10. Documents Attached  
Recommendation : 7 pages

Action taken Report

- ✓ Periodical chemical preservation works are being carried out.
- ✓ Forestation all along the sea beach planted.

2. Sir B. M. Fielden Dr. P. Beckmann	1987
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11. Documents Attached  
Recommendation : 17 pages  
Slides : nos.

Action taken Report

- ✓ Platform of the Jagamohan have been consolidated.
- ✓ Periodical chemical preservation workshop are being carried out.
- ✓ Research works are going on in respect of removal of sand filling.

**GLIMPSES OF  
ACTION TAKEN**

Continued....

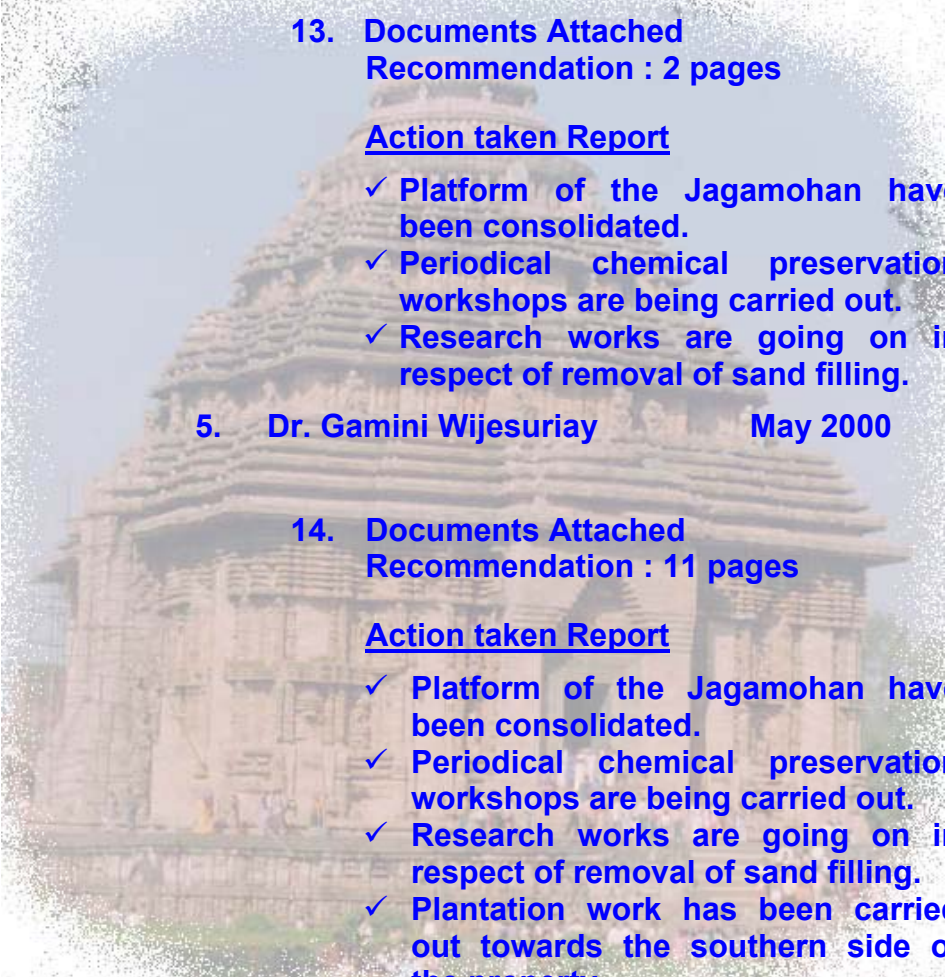
**II.6.continued**





**GLIMPSES OF ACTION TAKEN**

Continued ....

	<p><b>3. Prof. I. G. Croci 1995</b></p> <p><b>12. Documents Attached Recommendation : 26 pages</b></p> <p><b><u>Action taken Report</u></b></p> <ul style="list-style-type: none"><li>✓ Research work is going on in respect of removal of sand filling from inside the Jagamohana.</li></ul> <p><b>4. Ajay Sankar Committee Report July 1997</b></p>  <p><b>13. Documents Attached Recommendation : 2 pages</b></p> <p><b><u>Action taken Report</u></b></p> <ul style="list-style-type: none"><li>✓ Platform of the Jagamohan have been consolidated.</li><li>✓ Periodical chemical preservation workshops are being carried out.</li><li>✓ Research works are going on in respect of removal of sand filling.</li></ul> <p><b>5. Dr. Gamini Wijesuriya May 2000</b></p> <p><b>14. Documents Attached Recommendation : 11 pages</b></p> <p><b><u>Action taken Report</u></b></p> <ul style="list-style-type: none"><li>✓ Platform of the Jagamohan have been consolidated.</li><li>✓ Periodical chemical preservation workshops are being carried out.</li><li>✓ Research works are going on in respect of removal of sand filling.</li><li>✓ Plantation work has been carried out towards the southern side of the property.</li><li>✓ Comprehensive development plan has been prepared for 2002-2007.</li></ul>	<p>094</p>
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## II.7. Conclusions and recommended actions

	<p>Please summarize the main conclusions regarding the state of the World Heritage values of the property (see items II.2 and II.3 above):</p> <p style="text-align: center;"><b>World heritage or Universal value, significance and authenticity/integrity of the property have been retained and status quo thereof is maintained.</b></p>	095
	<p>Please summarize the main conclusion regarding the management and factors affecting the property (see items II.4 and II.5 above):</p> <p style="text-align: center;"><b>The core zone of the property is managed and preserved by the Archaeological Survey of India, as per UNESCO recommendations. Management of buffer zone of the property is maintained/regulated by Puri-Konarak Development Authority, Puri and Notified Area Council, Konarak and Department of Forest, Government of Orissa.</b></p>	096
	<p>Give an overview over proposed future action / actions:</p> <ol style="list-style-type: none"> <li><b>1. Five years perspective plan for the conservation and maintenance of the property is ready for execution.</b> <ol style="list-style-type: none"> <li><b>15. Documents Attached Five years perspective plan (54 Pages)</b></li> </ol> </li> <li><b>2. Comprehensive Tourist-Friendly Development Plan for buffer zone of the property by Tata Consultancy Services, in final stage for implementation.</b> <ol style="list-style-type: none"> <li><b>16. Documents Attached Master plan report , Sun Temple, Konarak by TATA Consultancy Services (68 pages)</b></li> </ol> </li> </ol>	097



**II.7. Continued**

	<p>Name the agency responsible for implementation of these actions (if different from 005):</p> <p style="text-align: center;"><b>Not Applicable</b></p>	098
	<p>Give a timeframe for the implementation of the actions described above:</p> <p style="text-align: center;"><b>Five Years Plan (2002-2007)</b></p>	099
	<p>Indicate for which of the planned activities International Assistance from the World Heritage Fund may be needed (if any):</p> <p style="text-align: center;"><b>For the execution of the main recommendation of UNESCO (the removal of sand filling from the inner part of the monument) and consolidation of the structure, technical and financial assistance are sought.</b></p>	100
	<p>Are there any contacts with management units of other properties within or outside your country ?</p> <p style="text-align: right;"><b>YES/NO</b></p>	101

	<p>If YES, please explain:</p> <p><b>Periodic discussions/Workshops are held inside the country at different World Heritage sites and attended by concerned Site Managers and Field Managers. Their opinions/suggestions are considered while executing various conservation measures.</b></p>	102
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**II.7. Continued**

	<p>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:</p> <p><b>Structural conservation's of properties of coastal area/hinterland or alike monuments to be clubbed together for undertaking further researches.</b></p>	103
	<p>Provide the name(s) and address(es) of organization(s) or specialist(s) who could be contacted for this purpose:</p> <p>Agency/Organization : <b>Archaeological Survey of India</b></p> <p>Person responsible : <b>Superintending Archaeologist, Archaeological Survey of India.</b></p> <p>Address : <b>Bhubaneswar Circle, Bhubaneswar.</b></p> <p>City and Post Code : <b>751002</b></p> <p>Telephone : <b>0674-2340590, 2340588</b></p> <p>Fax : <b>0674-2340590</b></p> <p>E-mail : <b><a href="mailto:asibbsr@ori.nic.in">asibbsr@ori.nic.in</a></b></p>	104

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

	<p>Was sufficient and adequate information made available to the responsible authorities and individuals during the preparation phase of the Periodic Reporting exercise (information given, meeting etc.)?</p> <p style="text-align: center;"><b>YES</b></p>	105
	<p>Was the questionnaire clear and did it help to comply with the reporting requirements of the State Party?</p> <p style="text-align: center;"><b>YES</b></p>	106

### II.8. Continued

	<p>What are the perceived benefits and lessons learnt of the exercise?</p> <p style="text-align: center;"><b>It has an impact on the systematic planning and management of World Heritage Monument for next 5 Years.</b></p>	107
	<p>Please describe the expected outcome of the Periodic Reporting exercise and the desired follow-up by the World Heritage Committee:</p> <p style="text-align: center;"><b>1. Proper technical guidance for carrying out various conservation measures from the international experts is awaited.</b></p> <p><b>6. Following training are required for the field staff.</b></p> <ul style="list-style-type: none"> <li>✓ <b>Modern Conservation technique</b></li> <li>✓ <b>Scientific Analysis technique &amp; Computer Application</b></li> <li>✓ <b>Modern Safety &amp; Security technique e.g. metal detector, Close Circuit Television, X-ray, Scanning machine.</b></li> <li>✓ <b>Modern Surveying technique e.g. Global Positioning System, Geo-radar, Remote Sensing Technique.</b></li> </ul>	108



	<p>✓ <b>Modern Photography/Documentation including Aerial Survey, Digital Photography, Video Photography etc.</b></p> <p>✓ <b>Modern Drawing Technique as per the UNESCO guidelines.</b></p> <p><b>3. Refresher programmes and exchange of experience from other counterparts in other countries carrying out similar nature of work.</b></p>	
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### 11.9 Documentation attached

The state party is invited to supply the materials listed below. Please check those items that were attached.

1. 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).  
**Detailed drawings and maps (003): (13 nos.)**
2. Photo of general view (aerial view) of the property.  
**Photograph slides: (SI. No.1-35).**
3. Illustrations of the state of conservation of the site (photographs, slides and, if available, film/videos).  
**Photograph slides: (SI. No.36-48).**
4. Details of the important aspects of the property (landscapes, animal and vegetable species, monuments etc.)
5. Photos illustrating the main threats to the site and its surroundings and other activities.  
**Photograph slides: (SI. No.49-85).**
6. Extras of relevant laws and regulations concerning the protection of cultural and natural heritage at national, provincial and municipal levels.
  - i) **(032) Ancient Monuments and Archaeological Sites and Remains Act' 1958 and Rule 1959 and Amendment 1992, Govt. of India.**
  - ii) **(032) Orissa Forest Act' 1972, Govt. of Orissa.**
  - iii) **(032) Puri-Konarak Development Authority Act' 1993, Govt. of Orissa.**

<b>iv) (032) Orissa Municipal Act 1950 (Notified Area Council), Govt. of Orissa.</b>
7. 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.)
<p><b>i) (076) Master Plan Report by Tata Consultancy Service.</b></p> <p><b>ii) (085) Minutes of the Meeting of Local Co-ordination Committee in respect of Sun Temple, Konarak – 2001.</b></p> <p><b>iii) (094) Reports of UNESCO Experts</b></p> <ul style="list-style-type: none"> <li>✓ Prof. R. M. Lemaire &amp; Mrs. M. Tabasso – 1979-80.</li> <li>✓ Sir B. M. Fielden &amp; Dr. P. Beckmann – 1987.</li> <li>✓ Prof. I. G. Croci – 1995.</li> <li>✓ Ajay Sankar Committee Report – 1997.</li> <li>✓ Dr. G. Wijesuriya – 2000.</li> </ul> <p><b>iv) (097) Five years perspective plan, Archaeological Survey of India, Bhubaneswar, Orissa.</b></p>

**11.9 Continued.**

8. Indicative Bibliography.		
<b>Balakrishnan R.</b>	<b>2002</b>	<b>Konark “The light of life” in Discover India, New Delhi.</b>
<b>Balakrishnan R.</b>	<b>2002</b>	<b>New lights on ancient contacts between Kalinga &amp; Indonesia (Unpublished).</b>
<b>Balakrishnan R.</b>	<b>2002</b>	<b>Toponymy of Konark in Orissa Chronicle, Bhubaneswar.</b>
<b>Banerjee R. D.</b>	<b>1931</b>	<b>History of Orissa, 2<sup>nd</sup> Ed. 2 Vols., Calcutta.</b>
<b>Behera K. S.</b>	<b>1996</b>	<b>History of Man Kind, Konarak, 2 Vols, New Delhi.</b>
<b>Boner E.</b>		
<b>Das R. P. &amp; Rathsharma S.</b>	<b>1973</b>	<b>New Light on Sun Temple, Konarak, Varanasi.</b>
<b>Brown P.</b>		<b>Indian Architecture (Buddhist &amp; Hindu Period), Bombay</b>
<b>Donaldson T. E.</b>	<b>1985</b>	<b>Hindu Temple Art of Orissa, 3 Vols., Leiden.</b>

<b>Fazal Abul</b>		<b>Ain-E-Akbari.</b>
<b>Fergusson James</b>	<b>1848</b>	<b>Picturesque Illustrations of Ancient Architecture in Hindostan, London.</b>
<b>Fergusson James</b>	<b>1876</b>	<b>History of India and Eastern Artchitecture, London.</b>
<b>Ganguly M. M.</b>	<b>1912</b>	<b>Orissa and her remains, Calcutta.</b>
<b>Mahatab H. K.</b>	<b>1962</b>	<b>History of Orissa, 2 Vols. Cuttack.</b>
<b>Mitra D.</b>	<b>1976</b>	<b>Konark, New Delhi.</b>
<b>Mitra R. L.</b>	<b>1880</b>	<b>Antiquities of Orissa, 2 Vols. Calcutta</b>
<b>Panigrahi K. C.</b>	<b>1981</b>	<b>History of Orissa (Hindu period), Cuttack.</b>
<b>Sarup Bishan</b>	<b>1910</b>	<b>Konarak, Cuttack.</b>
<b>Senapati N.</b>	<b>1968</b>	<b>Puri District Gazetteer (Ed.), Cuttack.</b>

### DOCUMENTS ATTACHED

<b>1.</b>	<b>II.1.b. (002)</b>	<b>Photograph Slides</b>  (Refer page No.3 to 14)	<b>1 to 35 nos.</b>
<b>2.</b>	<b>II.1.c. (003)</b>	<b>Maps &amp; Drawings</b>  (Refer page No.15 to 27)	<b>1 to 13 nos.</b>
<b>3.</b>	<b>II.4. (032)</b>	<ul style="list-style-type: none"> <li><b>i. Ancient Monuments and Archaeological Sites and Remains Act 1958 Rule 1959 and amendments 1992</b></li> <li><b>ii. Orissa Forest Act 1972.</b></li> <li><b>iii. Puri-Konark Development Authority Act 1993.</b></li> <li><b>iv. Notified Area Council Act 1950</b></li> </ul>	



		(Refer page No.38)	
4.	II.4. (041)	Photograph slides (Refer page No.41 to 44)	36 to 48 nos.
5.	II.4. (072)	Photograph slides (Refer page No.56 & 57)	49 to 56 nos.
6.	II.5 (076)	Photograph slides (Refer page No.60 to 62)	57 to 83 nos.
7.	II.6 (094)	Photograph slides (Refer page No.71)	84 & 85 nos.

