

PERIODIC REPORTING EXERCISE ON THE APPLICATION OF THE WORLD HERITAGE CONVENTION

SECTION II

State of Conservation of specific World Heritage properties

State Party:INDIA

Property Name:KAZIRANGA NATIONAL PARK

PERIODIC REPORTING ON THE APPLICATION OF THE WORLD HERITAGE CONVENTION

(FORMAT)

SECTION II: STATE OF CONSERVATION OF SPECIFIC WORLD HERITAGE PROPERTIES

EXECUTIVE SUMMARY

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- a. State Party
- b. Name of World Heritage property
- c. Geographical coordinates to the nearest second
- d. Date of inscription on the World Heritage List
- e. Organization(s) or entity(ies) responsible for the preparation of the report
- f. Date of report
- g. Signature on behalf of State Party
- **II.2.** Statement of significance
- II.3. Statement of authenticity/integrity
- II.4. Management
- **II.5.** Factors affecting the property
- II.6. Monitoring
- 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)
 - b. Main conclusions regarding the management and factors affecting the

property (see Items II.4 and II.5. above)

- c. Proposed future action/actions
- d. Responsible implementing agency/agencies
- e. Timeframe for implementationf. Needs for international assistance.
- II.8. Assessment of the Periodic Reporting exercise for Section II
- II.9. Documentation attached

II.1. Introduction

a.	Country (and State Party if different): INDIA	001
b.	Name of World Heritage property: KAZIRANGA NATIONAL PARK N(ii)(iv)	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. 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):	003
	Centre point: N 26°40.246'; E 93°21.605'	
	North-west corner: N 26°35.026'; E 93°08.784'	
	South-east corner: N 26°41.518'; E 93°35.251'	
d.	Give the date of inscription on the World Heritage List and subsequent extension (if applicable): 6/12/1985	004
e.	Organisation(s) or entity(ies) responsible for the preparation of this report.	
	Organisation(s) / entity(ies):	005
	Person(s) responsible: NIRANJAN KUMAR VASU	
	Address: DIRECTOR KAZIRANGA NATIONAL PARK	
	City and post code: BOKAKHAT, DITRICT GOLAGHAT, ASSAM, INDIA	
	Telephone: (0376) 2668095(O); (0376) 2668086(R) Fax:	
	E-mail: unicornis@sancharnet.in	
f.	Date of preparation of the report: NOVEMBER, 2002	006
g.	Signature on behalf of the State Party	007
	Signature: Name: NIRANJAN KUMAR VASU Function: DIRECTOR, KAZIRANGA NATIONAL PARK	

II.2. Statement of significance

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:

Cultural criteria: i - ii - iii - iv - v - vi

Natural criteria: i - ii - iii - iv

Were new criteria added by re-nominating and/or extending the property after the original YES / NO inscription?

NO

If YES, please explain:

010

NOT APPLICABLE

Please quote observations concerning the property made by the Advisory Body(ies) during the evaluation of the nomination:

011

IUCN TECHNICAL EVALUATION:

Although Kaziranga has a range of natural values and provides habitat for a number of threatened species and migratory birds, these are secondary to its major importance as the world's major stronghold of the Indian rhino. For these main reasons, it meets criteria (iv) of the convention. The Brahmaputra River's fluctuations result in spectacular examples of riverine and fluvial processes and the site thus also qualifies under criteria (ii). Concerns over the integrity of the park are, at present, minor but the situation should be monitored as the park represents one of the last unmodified natural areas of this region of India.

Quote the decisions and observations / recommendations, if appropriate, made by the World Heritage Committee at the time of inscription and extension (if applicable):

012

DECISION OF THE WORLD HERITAGE COMMITTEE: 9TH SESSION

The committee encouraged the Indian authorities to provide a legal basis to protect the buffer zone south of the park (Mikir Hills and Karbi Plateau). The committee expressed concern over the proposed construction of a railway along the southern boundary of the park and asked that environmental impact studies be carried out.

Identify the actions taken as follow-up to these observations and/or decisions:

013

There is no proposal for construction of a Railway along the southern boundary now. The national highway 37, which separates the Kaziranga National Park from Karbi Anglong Hills, is becoming busier day by day and creates problem for movement of wild animals from the Kaziranga National Park to the Hills, especially during floods. To provide a safe passage for movement of animals across the National Highway 37 four animal corridors have been identified. Further an area of 96.00 Sq. Km. Contiguous to the Kaziranga National Park and also linked by Haldibari corridor (5th addition) has been identified and proposed to be declared as Karbi Anglong Wildlife sanctuary vide Govt. Notification No. FRW.57/99/42, Dated, 27th July 2000. This proposed wildlife sanctuary will link the Kaziranga National Park with other protected forest areas under Karbi Anglong Autonomous Council and will greatly help in safe movement of wild animals.

II.2. continued

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.:

KAZIRANGA NATIONAL PARK, a name known worldwide for its success in the conservation history of one horned Indian Rhinoceros, provides habitat for a number of threatened species and migratory birds. A symbol of dedication for the conservation of animals and their habitat, Kaziranga, with a National Park status represents single largest established protected area within the North-east Brahamputra Valley (9A) Biogeographical Province (Rodgers, Panwar et al 2002) to provide long term viable conservation of rhinos.

Kaziranga National Park is an outstanding example representing significant ongoing ecological and biological processes in the evolution and development of ecosystem and communities of plants and animals. Kaziranga contains the most important and significant natural habitat for *in-situ* conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science and conservation. The above mentioned values and criteria made Kaziranga National Park to get inscribed on the world heritage list of "Convention concerning the protection of the world cultural and natural heritage" in the year 1985 under criteria N(ii) and N(iv) of the Natural Heritage.

Some of the significant conservation values of Kaziranga National Park are enumerated below: -

- The largest undisturbed and representative area of Brahmaputra Valley flood plain grassland and forest with associated large herbivores, avifauna and wetland values (including Turtles, Dolphins etc.).
- THE WORLD 'S LARGEST POPULATION OF
- ❖ Indian one horned Rhinoceros (*Rhinoceros unicornis*) [1552 in (1998)]
- ❖ Asiatic Wild Buffalo (*Bubalus bubalis*) [1431 in (2001)]
- ❖ Eastern race of Swamp Deer (Cervus duvauceli ranjitsinghi) [468 in (2000)]
- High Ecological Density of Tigers (Panthera tigris) [86(2000)]
- Significant population of Asiatic Elephant (*Elephas maximus*) [1048(2002)]
- The junction of the East Asia /Australia flyway and Indo-Asian flyway exhibits considerable diversity in avifaunal species (480 species recorded).
- Transitional and successional example of grassland to forest and floodplain to hill evergreen forest communities.
- Considerable Research, Education and Recreation values.

014

following the substantive revision of to better identification or knowled property. Should a re-nomination of NO	s might be d Heritage of the criter edge of sp	ecific outstanding universal	er to recognize come desirable mmittee or due	015
If YES, please explain: NOT APPLICABLE				016
Are the borders of the World Herita the protection and conservation of t			equate to ensure YES / NO	017
If NO, please explain why not, and of the property and / or its buffer a attached to this report):		<u> </u>		018
NOT APPLICABLE				
	ring a revis	: C 41 1 1	41 1 CC	
Is the State Party actively consider zone?	ing a revis	sion of the property boundaries	YES / NO	019
1				019
zone? YES	to that end ision of th ty along : arate nation of wildli	e property boundaries. How north, west and south of nal park status either to pro fe or as a corridor for safe	YES / NO wever, six new the property ovide extended movement of	
zone? YES If YES, indicate what is being done There is no proposal for the revadditions adjoining the proper boundaries are notified with sepahabitat for increasing population animals to Karbi Anglong Hills	to that end ision of th ty along arate natio n of wildli s. The pre	e property boundaries. How north, west and south of nal park status either to profe or as a corridor for safe esent status of these additional DATE OF NOTIFICATION	YES / NO wever, six new the property ovide extended e movement of ons and their	
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zone? YES If YES, indicate what is being done There is no proposal for the revadditions adjoining the proper boundaries are notified with sepanabitat for increasing population animals to Karbi Anglong Hills functions are as given below OVERVIEW OF ADDITION/ PROPINAME OF THE ADDITION 1st Addition to KNP 2nd Addition to KNP (PROPOSED) 3rd Addition to KNP (PROPOSED)	to that end rision of th ty along arate natio n of wildli s. The pre AREA Sq.Km 043.79 006.47 000.69	e property boundaries. How north, west and south of nal park status either to profe or as a corridor for safe esent status of these additional date of notification (PRELIMINARY/FINAL) 28-05-97(FINAL) 10.07.85(PRELIMINARY) 31.05.85(PRELIMINARY)	Wever, six new the property ovide extended movement of ons and their IONAL PARK: FUNCTION HABITAT HABITAT CORRIDOR	

II.3. Statement of authenticity / integrity

Have the World Heritage values identified above been maintained since the property's inscription? YES / NO	02
If NO, please describe the changes and name the causes:	02
NOT APPLICABLE	
What was the evaluation of the authenticity / integrity of the property at the time of inscription? (Please quote from the ICOMOS / IUCN evaluation): IUCN TECHNICAL EVALUATION	02
Because its perimeter on three sides is adjacent to human settlements, protection of Kaziranga from illegal incursions of poachers and herdsmen has been a difficult task. The introduction of rinderpest and domestic buffalo has had negative effects on buffalo, including hybridisation of the remaining wild stock.	
Poaching of rhino has been a serious problem (particularly during the recent period of civil unrest) but the overall population levels are steady or rising.	
Another factor in the management of Kaziranga is the seasonal inundation of floodwaters, which causes many animals to migrate outside the park where they are susceptible to hunting and reprisal for crop damage.	
The presence of the busy national highway No. 37 along the southern border of Kaziranga has brought increased settlements, which disturb traditional wildlife migration routes. A proposal for a railway line along this corridor is also being considered by the Government.	
Here there have also as in the contraction to the contraction of the c	
Have there been changes in the authenticity / integrity since inscription? YES / NO YES	02
YES If YES, please describe the changes to the authenticity / integrity and name the main	
If YES, please describe the changes to the authenticity / integrity and name the main causes? There is no proposal for construction of a Railway line along the southern boundary of the Kaziranga National Park now. Regarding the introduction of Rinderpest and hybridisation due to intermixing of domestic buffalo with the wild buffalo, a long term doctoral study (Muley, 2001) has shown that wild buffaloes are still a distinct population in Kaziranga National Park fully worthy of conservation efforts. Are there (further) changes foreseeable to the authenticity / integrity of the property in the	02
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II.4. Management

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defined (more than one indication poss:	rotection and the management of the property best be ible)?	02
Legal () Contractual () Traditional ()		
	nentation and effectiveness of these arrangements for ed under item II.2 at the national, provincial and/or	02
The legal protection provided		
	correct formulation of policies and laws besides he conservation efforts taken at the Provincial and	
	ight execution of the various policies and laws that provides the financial and infrastructure support ea.	
_	he right execution of the conservation efforts. In the field manager is bound to operate.	
In general terms, can this legislative, consufficient?	ontractual and/or traditional protection be considered	03
	YES / NO	
	I LB / INO	
YES	TLS / NO	
YES Please explain:	TLS/ NO	03
Please explain: The legislative protection provided provides the maximum protection	to Kaziranga National Park is sufficient since it under Indian conditions besides providing the lined and logical framework to work with.	03
Please explain: The legislative protection provided provides the maximum protection	to Kaziranga National Park is sufficient since it under Indian conditions besides providing the	03
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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:

032

CONSERVATION LAWS:

INDIAN FOREST ACT 1927/ ASSAM FOREST REGULATION, 1891

An act to consolidate the law relating to forests, the transit of forest produce and the duty leviable on timber and other forest produce

WILDLIFE PROTECTION ACT 1972

An act to provide for the protection of wild animals, birds and plants and for the matters connected therewith or ancillary or incidental thereto

CRIMINAL PROCEDURE CODE 1973

An act to consolidate and amend the law relating to the Criminal Procedure

INDIAN PENAL CODE 1860

An act relating to all crimes and prescribing remedial measures

CUSTOMS ACT 1962

All offences against CITES and the Export-Import Policy are punishable under this Act

FOREIGN TRADE(DEVELOPMENT & REGULATION) ACT 1992

The Export-Import policy is framed under this act and it lists all prohibited and restricted items

FOREST CONSERVATION ACT 1980

An act that restricts the powers of the State Government in respect of de-reservation of forests and use of forest lands for non-forest purpose

WATER ACT 1977

An act to provide for the prevention and control of water pollution and maintaining or restoring of wholesomeness of water

AIR ACT 1981

An act to provide for the prevention, control and abatement of air pollution

ENVIRONMENT POLLUTION ACT 1986

An act to provide for the protection and improvement of environment and for matters connected therewith

BIO-DIVERSITY BILL 2000

And act to provide for conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of the use of the biological resources and for matters connected therewith

CONSTITUTIONAL SAFEGUARDS

Art 48-A The state shall endeavour to protect and improve the environment and to safe guard the forests and wildlife of the country

Art 51-A(g) It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures

Periodic Reporting Exercise on the Application of the World Heritage Convention Section II: State of conservation of specific World Heritage properties

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: Wildlife wing of Forest department, Government of Assam is mainly responsible for the administration and management of all protected areas in the state of Assam. The Chief Conservator of Forests (Wildlife), Assam is the administrative head of the wing. The Director, Kaziranga National Park is responsible for management and administration of the Kazianga National Park that executes all management activities through Divisional Forest Officer, Eastern Assam Wildlife Division, Bokakhat. 034 Please indicate under which level of authority the property is managed: Property() Director Kaziranga national Park Regional() Chief Conservator of Forests(Wildlife) National() Ministry of Environment and forests, Government of India. 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: DIRECTOR, KAZIRANGA NATIONAL PARK, BOKAKHAT, DISTRICT GOLAGHAT, ASSAM, INDIA. PHONE (0376) 2668095(O); (0376) 2668086(R) e-mail unicornis@sancharnet.in DIVISIONAL FOREST OFFICER, EASTERN ASSAM WILDLIFE DIVISION, BOKAKHAT, DISTRICT GOLAGHAT, ASSAM, INDIA. PHONE (0376) 2668007(O); (0376) 2668041(R) 036 Is it necessary to revise the administrative and management arrangements for the property? YES / NO YES 037 If YES, explain why this is the case: Details are described in the management plan.

Is there a management plan for the property? YES / NO YES.
If YES, please summarise, indicating if the plan is being implemented and since when: The management plan for the Kaziranga National Park for a period of ten years has been prepared.
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.): The management plan for Kaziranga National Park (2003-2004 to 2012-2013) has been prepared. The plan includes all administrative and management arrangements to preserve the values described under item II.2. The objectives, problems, zonations and strategies are clearly defined with prescriptions to execute all activities for effective management of the protected area. (Copy of the Management Plan enclosed).
Please provide detailed information, particularly in cases where changes have occurred since the inscription of the property, on the following matters: • Conservation Make reference to all major interventions at the property and describe its present state
 Six new additions have been proposed since the inscription of the property. This would ensure adequate buffering and also as corridors for the animals to migrate to adjoining areas during floods. An area of 96 Square Km. Contiguous to Kaziranga National Park and also linked by Haldibari corridor (5th addition) has been identified and proposed as Karbi Anglong Wildlife Sanctuary in July 2000. This proposed wildlife sanctuary will link the KNP with other protected forest areas in Karbi Anglong Hills.
 The rhino population has increased from 946 in 1984 to 1552 in the year 1999. Similarly wild buffalos (677 in 1984 to 1431 in 2001), Elephants (1048 in 2002), Swamp deer (468 in 200) and tigers(29 in 1972 to 86 in 2000) inhabit the park. There has been improvement in the number of anti-poaching camps and infrastructure, though not fully commensurated with the increased area and
activities. 5. The park is also a part of Kaziranga-Karbi Anglong-Intanki Elephant Reserve, which makes it one of the four inter-state conservation areas in the state of Assam.
 Also proposed as a Tiger Reserve. Identified as Important Bird Area (IBA) under the Important Bird Area Programme of Birdlife International. This has been identified due to the presence of Globally threatened and restricted range species such as Greater Adjutant, Baer's Pochard, Swamp Francolin and Bengal Florican among others.
Ownership Make reference to all major changes in ownership of the property and describe the present state of ownership: There has not been any change in the ownership of the property. The property is a
National Park. II.4. continued

Please, give a detailed description of the staffing of the site:

043

MAN-POWER IN E.A.W.L. DIVISION

SL.	CATEGORY OF POST	SANCTIONED	STRENGTH	VACANT
NO.		STRENGTH	AS ON	
			31.3.2002	
1	D.C.F.	1	1	
2	F.V.O.	1	1	ı
3	W.L.R.O.	1	1	ı
4	A.C.F	2	2	ı
5	FOREST RANGER	7	4	3
6	Dy. RANGER/ GAME	10	5	5
	KEEPER			
7	FORESTER-I	50	39	11
8	FrII/Hd. G.W.	24	8	16
9	Fgd./G.W.	272	242	30
10	BOAT MAN	63	58	5
11	Hd.MAHUT/ MAHUT	35	31	4
12	GRASS CUTTER	34	16	18
13	DRIVER/MLD/	23	15	8
	T.DRIVER			
14	R.TECH./	2	2	-
	ELECTRICIAN			
15	OP/DR/Ckd./	27	14	13
	KHANSAMA/			
	SWEEPER ETC.			
16	HEAD ASSTT.	1	1	ı
17	UDA/	5	3	2
	ACCOUNTANT/RCIA			
18	S.A./LDA/ RK/ RA	9	9	-
19	Vety. FIELD ASSTT.	1	-	1
20	HANDIMAN	1	-	1
		569	452	117

MAN-POWER IN THE OFFICE OF THE DIRECTOR, KAZIRANGA NATIONAL PARK

POST	SANCTIONED STRENGTH	VACANT
DIRECTOR	1	-
STENO	1	-
SUPERINTENDENT	1	-
UDA	5	2
LDA	8	4
PEON	2	1
CHOWKIDAR	2	2
SWEEPER	1	-
DRIVER	2	1

Periodic Reporting Exercise on the Application of the World Heritage Convention Section II: State of conservation of specific World Heritage properties

NO	
If N	NO, what should be done to improve the situation?
pos arr	posal for filling up all the vacant post has been submitted. The creation of new ts for additional areas is proposed in the management plan. Pending new angements for staffing, incremental staff for anti-poaching activities will be taged.
Do YE	es the staff need additional training? YES / NO S.
If Y	YES, what are the training needs for your staff?
tra ma	nas been realised that there is inadequacy of training at all levels. Therefore regular ining programmes on matters of biodiversity conservation and wildlife nagement for all staff levels at field as well as at reputed training institutions has en proposed. Some of the areas in which training is required are as follows:
•	Wildlife and forest laws
•	Handling arms and modern combat
•	Management of man-animal conflict
•	
•	Management of ranging pattern of wild animals outside managed habitat
•	Nature interpretation
•	Nature interpretation Population dynamics and wildlife estimation
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition
•	Nature interpretation Population dynamics and wildlife estimation
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid Population viability analysis
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid Population viability analysis Intelligence gathering
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid Population viability analysis Intelligence gathering Wildlife forensics
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•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid Population viability analysis Intelligence gathering Wildlife forensics
•	Nature interpretation Population dynamics and wildlife estimation Animal health and nutrition Participatory rural appraisal and micro-planning Field botany Rescue during flood marooned animals First Aid Population viability analysis Intelligence gathering Wildlife forensics

048 Describe the funding and financial situation of the property, indication sources, level and regularity of financing: Kaziranga National Park gets funds from Central Government and State Government under various Plan and Non-Plan Budgets. The major expenditures for maintenance of the Park and other anti-poaching activities are incurred from the fund under following Plan and Non-Plan budgets: **PLAN CENTRAL SECTOR:** Development of National park& Sanctuaries 100%. 1) 2) **Eco-development Scheme 100%.** Elephant Project Scheme 100%. 3) 4) Bridging infrastructure gap in Protected Areas. **STATE SECTOR:** Conservation of Rhinos in Assam (R.C. Scheme). 1) 2) **Development and Management of Protected Area.** 3) Control of poaching. Since the infrastructures of the Park are damaged by flood every year, the extent of damages are estimated after the recession of flood and reports submitted to the State Government for providing financial assistance for restoration work. Although the budget of Kaziranga National Park seems to be a big budget, the major portion of the amount is spent for paying salaries of staff and wages for anti-poaching works. There is very little scope for under taking any developmental works and absolutely necessary logistic needs. This often results in accrual of huge amount as arrear for procurement of supplies and maintenance cost of assets on credit in effective protection of the Park. Every year the park envisages an Annual Plan of Operation (APO) based on the various strategies proposed in the Management Plan. However, timely allocation and release of funds will greatly help in carrying out the works allotted for that year. 049 Is the available funding sufficient for adequate management of the property? YES / NO NO 050 If NOT, describe the financial resources that would be required for the management of the Though the main funding has to come from state and union government, the assistance from national and international Non-Governmental Organisations for raising funds for the management of the property is proposed. A proposal for ploughing back the revenue generated by tourism is under consideration. 051 Indicate International Assistance from which the property has benefited: List containing International Assistance/ sponsorship from various NGOs enclosed World Heritage Fund:

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Г			
	•	UNESCO International Campaign:	052
	•	National and/or regional projects of UNDP, the World Bank or other agencies:	053
	NIL		
	•	Bilateral co-operation:	054
	NIL		
	•	Other assistance:	055
	List en	nclosed	
	effective Though	h the computer equipments are available, they are not very effective due to old as and need replacement with advanced features that are compatible with new	056
	Are yo	u using (multiple indications are possible): PC () Apple () Mainframe ()	057
	Please,	give the number of available computers:	058
	Does a YES.	n operational access to the Internet exist? YES / NO	059
		hil used for daily correspondence? YES / NO he facility is recently acquired.	060
	Is there NO	e a Geographical Information System (GIS) for the site? YES / NO	061
	If YES	, what software do you have and how is the GIS used?	062
	NOT A	APPLICABLE	
	II.4. co	ntinued	
	List sc	ientific studies and research programmes that have been conducted concerning the	063

site:

Anecdotal references date back to 1908 when the first published reports were written in the Imperial gazetteer of the state (Anon, 1908). Popular articles that have mainly concentrated on the Rhino and its conservation at Kaziranga are (Gee 1952, Spillet 1966, Lahan 1973, Lahan and Sonowal 1973, Patar 1980, Vigne and Martin 1989 and Martin and Vigne 1991, Ahmed 1992, Deb Roy 1993, Goswami 1993, Talukdar 1994 and Menon 1996) among others. Two books (Hajra and Jain 1985, Dutta, 1991) describe the botany of Kaziranga and the Natural history of the One-horned Rhino respectively.

The projects which were more scientifically oriented and involved systematic data collection and analysis have been undertaken only in the recent years. Only one doctoral work (Muley, 2001) and two MSc. dissertations (Bannerjee, 2001 and Srivastava 2002) have been carried out. Several projects that have been carried out include Surveys / Studies on Natural History of wild animals (Choudhury 1964, Rahmani *et al* 1988, Karanth et al 1999, Biswas *et al* 2002) and flood dynamics (Boruah and Goswami 1996, Kushwaha and Unni 1986 and Parihar and Panigrahy 1997, Kushwaha *et al* 2000).

The need to undertake long term studies especially on the population dynamics of the large mammals and the flood dynamics are of utmost importance today. The list of various references that have been quoted here and elsewhere in the document is provided as follows:

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Describe financial and human resource inputs for the research programmes and or facilities:

Mainly research institutions and conservation agencies such as WWF, WII, universities etc have externally funded majority of Studies/Research programmes so far.

The research has been done mostly by research students who in turn would obtain an educational degree/ credit from the work carried out. In some studies however experts having specialised knowledge in their field have been requested to conduct the specific research work with full cooperation from the park authorities.

Describe how the information / results are disseminated?

The information/ results have found place in the Management Plan for the Kaziranga National Park. The information / results have not only been important from conservation point of view but has also helped in evolving suitable management strategies from time to time.

Are there any visitor statistics for the site?

YES / NO

066

065

064

YES

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

067

Kaziranga was opened to interested visitors in 1937 & two elephants were posted for taking the visitors into the sanctuary. Kaziranga's name and fame has spread as one of the best areas for wildlife viewing and its popularity amongst the tourists has been growing since then. One can easily see a rhinoceros with cent percent certainty on any day of the year and at any time of the day along with various other animals such as the swamp deer, hog deer, wild buffalo, elephants, and sometimes even tigers. Kaziranga occupies a significant position in the international tourist map today as one of the best wildlife resorts in the world. Flow of tourists indicate a continuous rise in their number with almost 46,306 persons visiting the park in 2001-02.

068 What visitor facilities do you have at the property? Prior to 1950 the facilities for tourists were limited and the accommodation consisted mainly of a P.W.D. inspection bungalow at Kaziranga and a Forest rest house at Baguri. This accommodation was found grossly inadequate for meeting the demands of increasing number of incoming visitors due to which one visitors camp at Kaziranga and later on two tourist lodge were constructed by the department on small hillock at Kohora and one Forest Rest House was also constructed at Arimora. The management of these two Tourist Lodges was handed over to the Tourism Department in 1963 after the creation of this new department under the Govt. of Assam. At present 4 numbers of Govt. tourist lodges of different categories exist at Kohora that come under the jurisdiction of the Tourism Department. In the recent past some private lodges have also come into existence in this locality. The Park has 3 number of tourist routes located inside the Park under the jurisdiction of 3 Ranges viz. Kohora, Bagori and Agaratoli. These roads are open to light vehicles from November to mid May. Visitors willing to view wild life by motorcars are conducted through these roads by the staff of this department. The visitors are allowed to take in there own vehicles also. The visit to the park by road is much more interesting and thrilling as one can travel with the hope of coming across Rhinos and elephants besides the elusive animals such as the tiger. One can also see the entire span of different vegetation types interspersed with numerous Beels and the snow covered mountains at a distance. There are few watchtowers located in the tourist zone from where wild animals can be Foot safari is not allowed at the movement and driving inside the park at night is prohibited. No visitor is allowed to enter the park without a man of the forest department accompanying him. 069 What visitor facilities are you in need of? The visitor facilities especially for nature interpretation are at its infancy. There is an urgent need to develop and organise A nature education centre Audio-Video (visual) media published material (souvenirs, broachers etc.) and signage Construction and maintenance of new watch towers Maintenance of roads and the state owned lodging facilities The details are included in the management plan of the Kaziranga National Park. Is a public use plan (tourism / visitor management plan) in existence for the property? YES / NO NO II.4. continued

If YES,	1 ' '01'0 1 ' '0 ' 1 1	
	please summarise, if NO explain if one is needed:	071
	A more comprehensive tourism plan is called for in respect of the following	
	points,-	
	(a) Allowing maximum number of tourists in a day with respect to	
	a particular range / routes. (b) Type and conditions of vehicles to be allowed.	
	(c) Execution of agreements with vehicle owners.	
	(d) Registration of vehicles with the park management.	
	(e) Minimum & maximum number of tourists in a vehicle.	
	(f) Provision of tourist guides and role to be played by them.	
	(g) Publicity & wildlife/ nature Interpretation.	
	(h) Strict adherence of Do's & Don't's by all parties concerned.	
	(i) Advance booking for elephant ridings and number of trips per	
	day to be allowed.	
	(j) Dealing with protocol tourism pressure.	
	(k) Involvement of local people in tourism.	
	(l) Strict adherence of fixed time for trip in the park.	
	(m) Maintaining roster system for tourist vehicles.(n) Displaying rates of hiring of vehicle, entry and other related	
	charges at suitable places.	
	(o) Ways for accommodation of demands of tour operators &	
	hoteliers.	
	(p) Addressing the problem of engaging forest staff for	
	accompanying tourists.	
	(q) Measures to be taken against violation of rules of the National	
	Park.	
	(r) Mechanism for sorting out all complaints of tourists on	
	hoteliers & other operators, corrupt practices and negligence of different stake holders.	
	(s) Any other relevant issues of wildlife tourism at Kaziranga	
	National Park.	
	- (
Indicate	how the property's World Heritage values are communicated to residents, visitors	072
	how the property's World Heritage values are communicated to residents, visitors public (please attach examples of leaflets, videos, posters etc. and print-outs and/or	072
and the	how the property's World Heritage values are communicated to residents, visitors public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page):	072
and the j	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page):	072
and the j the addre The fact	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or	072
and the jand the address factorists	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of	072
and the j the addre The fact tourists	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage	072
and the j the addre The fact tourists values h	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage	072
and the jathe address the factourists values have there	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate.	
and the j the addre The fact tourists values h Are ther Yes	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO	073
and the j the addre The fact tourists values h Are ther Yes If yes, p	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO lease describe:	073
and the j the addre The fact tourists values h Are ther Yes If yes, p. Nature	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO lease describe: education is one of the prime aims of the conservation. Several educational	073
and the j the addre The fact tourists values h Are ther Yes If yes, p Nature program	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO lease describe: education is one of the prime aims of the conservation. Several educational names concerning the property have been aimed at school children e.g.	
and the j the addre The fact tourists values h Are ther Yes If yes, p. Nature program	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO lease describe: education is one of the prime aims of the conservation. Several educational names concerning the property have been aimed at school children e.g. concessional rates for students entering the park for nature education.	073
and the inthe address the factourists values have there are the interest and the interest a	public (please attach examples of leaflets, videos, posters etc. and print-outs and/or ess of a web-page): t that Kaziranga National Park is a World Heritage has attracted a number of especially the foreigners. The signage/ leaflets indicating the world heritage ave been brought out from time to time but not have been adequate. e educational programmes concerning the property aimed at schools? YES / NO lease describe: education is one of the prime aims of the conservation. Several educational names concerning the property have been aimed at school children e.g.	073

II.4. continued	
What role does World Heritage inscription play for the site concerning the visitor number, the research programmes and/or the awareness building activities?	075
The world inscription that enlists the outstanding natural values of the park enables the visitors to appreciate the importance given to the park. The scientific management and planning process including monitoring and evaluation through UNESCO and	
other projects has created awareness at all levels resulting into better understanding of various problems and management strategies to overcome the same.	

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

Threats to wildlife of Kaziranga National Park can be summed up as follows:

- 1. Poaching: Poaching of wild animals mainly Great One horned rhinoceros.
- 2. Annual flood: Floods of mild nature are favourable for maintaining the habitat of the Park; however floods of severe intensity, which is in fact a regular phenomenon, causes great loss to the Park in terms of mortality of wild animal in large extent, damage to protection structures etc.
- 3. Erosion: Brahmaputra River erodes large area along the northern boundary of the Park, which causes shrinkage of the Park geographical area and thereby reduces the habitat for the wild animal.
- 4. Siltation and weeds: Continuous siltation and invasion of *Eichornia*, *Mikenia*, *Mimosa* etc. of the existing water bodies and on the land have posed a big problem on the existence of the wet lands of the Park. Since the wetlands of the Park is an integral part for continuous survival of the many important Fauna such as Rhinos, Wild Buffalo, myriad bird species etc. the Park authority is facing tremendous management problem for containing siltation and weed invasion
- 5. Illegal fishing in the fringe areas.
- 6. Heavy traffic on the National High way no. 37.
- 7. Live stock grazing particularly in the Addition areas.
- 8. Brach of Embankments on the eastern boundary of the Park results in sudden increase of water level along the south boundary leading to large scale mortality of wild animals.

YES / NO
YES
If YES, please summarise the plan and provide a copy:
The management plan of Kaziranga National Park (2003-2013) has been finalised. The various problems stated earlier are being dealt with separately in individual theme plans that have been described elaborately in the document.
If NO, describe what is being done – and by whom – to counteract the dangers that threaten or may threaten the property:
Indicate areas where improvement would be desirable and/or towards which the State Party is working: Same as 078 above
decreasing: While some of the major factors affecting the property are certainly on a decline (e.g.
poaching cases of Rhino have drastically reduced in the last 10 years) other factors such has unabated tourism, and siltation of waterbodies are on a rise.
poaching cases of Rhino have drastically reduced in the last 10 years) other factors

II.6. Monitoring

1 1	Dariadia consus anarotions for the major wild animals such as the One housed
] 1]	Periodic census operations for the major wild animals such as the One horned Rhino, Asiatic wild buffalo, Asiatic elephants and the Tiger are being done at the site since 1966. The census operations are carried out with the Forest Department with help from NGOs, scientific institutions etc.
	The change in the Bankline of River Brahmaputra and its impact on the site has been monitored using multi-temporal data by scientific research institutes.
Is there a	a formal monitoring system established for the site? YES / NO
If YES, _J	please give details of its organisation:
_	riodic census operations for wild animals are carried out by the Forest nent of Assam.
If not a	lready in place, is the establishment of a formal monitoring system planned? YES / NO
If YES,	please outline the functioning of that system, taking into consideration the key s you will be asked to define below (see 089 / 090):
which th	nal monitoring system is being planned under the draft management plan for the key indicators would be:
which th •]	ne key indicators would be: Population dynamics of large mammals including Rhino, Elephant, wild ouffalo, swamp deer and the Tiger.
which th	ne key indicators would be: Population dynamics of large mammals including Rhino, Elephant, wild buffalo, swamp deer and the Tiger. Ecosystem dynamics as indicated by erosion / siltation levels, flood levels, grassland habitat change etc.
which th	ne key indicators would be: Population dynamics of large mammals including Rhino, Elephant, wild puffalo, swamp deer and the Tiger. Ecosystem dynamics as indicated by erosion / siltation levels, flood levels.
which the	Population dynamics of large mammals including Rhino, Elephant, wild buffalo, swamp deer and the Tiger. Ecosystem dynamics as indicated by erosion / siltation levels, flood levels, grassland habitat change etc. Fourist inflow over the years.
which the	Population dynamics of large mammals including Rhino, Elephant, wild buffalo, swamp deer and the Tiger. Ecosystem dynamics as indicated by erosion / siltation levels, flood levels, grassland habitat change etc. Fourist inflow over the years.
which the	Population dynamics of large mammals including Rhino, Elephant, wild buffalo, swamp deer and the Tiger. Ecosystem dynamics as indicated by erosion / siltation levels, flood levels, grassland habitat change etc. Fourist inflow over the years.

II.6 continued 089 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: The periodic census operations carried out for large mammals such as the Rhino, Tiger, wild buffalo and the elephants can serve as an effective indicator in monitoring the population dynamics of the wildlife in the site. Similarly a study done by a scientific research organization to assess the bank line changes in the Brahmaputra river system using multi temporal data can also serve as an indicator of the health of the ecosystem. However following key indicators are defined for future use in monitoring. Population dynamics of large mammals such as Rhino. Elephant, Tiger, Wild buffalo and the Swamp deer. Flood levels in the Brahmaputra river system. Siltation levels in the wetlands. Grassland dynamics. Tourist inflow. Attitudinal change of local people towards conservation (settlement of rights, Man-animal coexistence etc.). If NO indicators have been identified and / or used so far, please define key indicators for future use in monitoring: Indicate which partners, if any, are involved or will be involved in the regular monitoring exercise: Forest department **Research institutions** Non-Governmental Organisations. Identify the administrative provisions for organizing the regular monitoring of the property: The monitoring will be done at the park management level, however collaborative projects with other institutions/ NGOs where required facilities and infrastructure is not available with the park will be taken up for regular monitoring. Describe what improvement the State Party foresees or would consider desirable in improving the monitoring system: The monitoring system should be backed by a strong database, which is to be established at the field level. Adequate Data Base Management Systems and training facilities should be made available for data collection and monitoring. 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: Same as 025

II.7. Conclusions and recommended actions

Please summarise the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above):	095
Kaziranga is a remarkable success story in the Indian conservation History. It is known worldwide for it immense natural values besides protecting and preserving the unique ecosystems of the Brahmaputra valley flood plains for eternity.	
There has been no change whatsoever in the world heritage values of the property since its inscription. Rather there has been an augmentation in the natural values of the site.	
Please summarise the main conclusions regarding the management and factors affecting the property (see items II.4. and II.5. above):	096
The major threat at the time of inscription was of poaching of rhinos. This has been more or less controlled with the development of a strong network of anti-poaching camps and intelligence backup. This has enabled the Park managers to focus on other factors affecting the site such as floods, siltation, weeds and tourism. A detailed management plan strictly according to the guidelines given by Wildlife Institute of India, a recognised research institutions	
has been drafted. All the factors listed in the preceding pages have been taken care of in this plan.	
Give an overview over proposed future action / actions: While the management plan has been drafted for a period of 10 years (2003-2013), annual action plan are inbuilt to tackle with the various factors. Control of floods, Siltation, Weeds and anti-poaching activities are taken up annually. An effective wildlife tourism and eco-development plans are currently on the anvil.	097
Name the agency responsible for implementation of these actions (if different from 005): Same as 005	098
Give a timeframe for the implementation of the actions described above: Timeframe of the Management plan for Kaziranga National Park = 10 years from (2002-2013).	099
Indicate for which of the planned activities International Assistance from the World Heritage Fund may be needed (if any): Development of research infrastructure, GIS based management information system, Interpretation and conservation education and Training are the planned activities where International Assistance from the World Heritage Fund will be of great help.	100
Are there any contacts with management units of other properties within or outside your country? NO	101
If YES, please explain: NOT APPLICABLE	102

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Please indic	eate which experience made during the periodic reporting exercise and/or during
the on-goir	eg conservation / protection efforts of the property could be shared with other es dealing with similar problems or issues:
	is anti-poaching activities, animals rescue and rehabilitation during floods, weeds and siltation are some of the activities that can be shared with other es.
	e name(s) and address(es) of organization(s) or specialist(s) who could be or this purpose:
Agency / O	rganisation:
• Inc	lian council of Forestry Research and Education- Dehradun India.
• Ce	ntre for Environment education- Ahmedabad, India
• Wi	ldlife Institute of India – Dehradun, India
• Inc	lian Institute of Forest Management- Bhopal, India.
• Ch	itawan National Park and Annapurna Conservation Area (ACA) in Nepal
• Wi	ldlife Conservation Society (WCS)- USA
• Sm	ithsonian Institute- USA
• Ne	w Jersey Wildland trust- U.K.
• Wo	orld Conservation and Monitoring Centre (WCMC), U.K.
• Inc	lian Institute of Remote Sensing Dehradun
• Ass	sam Remote Sensing Application Centre, Guwahati.
Person resp	onsible:
Address:	
City and po	st code:
Telephone:	
Fax:	
E-mail:	

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

given, meetings etc.)?
YES
Was the questionnaire clear and did it help to comply with the reporting requirements of the State Party?
YES
What are the perceived benefits and lessons learnt of the exercise?
Whereas the site managers have always looked the protection aspects of wild animals as priority area, the reporting exercise has provided an approach for considering all other important layers of managing the site. This will greatly help in maintaining the
continuity in all management activities and strengthening the integrity of the World Heritage.
Heritage.
Please describe the expected outcome of the Periodic Reporting exercise and the desired
Please describe the expected outcome of the Periodic Reporting exercise and the desired follow-up by the World Heritage Committee: It is expected that the periodic reporting exercise will reinstate and strengthen the faith of the World Heritage Convention (WHC) in the party, which is effectively

II.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)
- 2. (Photo of general view (aerial view) of the property
- 3. (*) Illustrations of the state of conservation of the site (photographs, slides and, if available, film/videos)
- 4. () Details of the important aspects of the property (landscapes, animal and vegetable species, monuments etc.)
- 5. (\checkmark) Photos illustrating the main threats to the site and its surroundings
- 6. (*) Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage at national, provincial and municipal levels
- 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.)
- 8. () Indicative bibliography