

Manas Wildlife Sanctuary

1. World Heritage Property Data

1.1 - Name of World Heritage property

Manas Wildlife Sanctuary

1.2 - World Heritage property details

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Manas Wildlife Sanctuary	26.725 / 91.031	39100	0	39100	1985
Total (ha)		39100	0	39100	

1.4 - Map(s)

Title	Date	Link to source
Manas Wildlife Sanctuary. Map of the inscribed property.	2012	

1.5 - Web and Social Media data of the property (if applicable)

1. [Natural site datasheet from WCMC](#)

Comment

<http://www.manastigerproject.in/> <https://whc.unesco.org/en/list/338/> <https://www.facebook.com/groups/226681380842096>

2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)

2.1 - Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

		The World Heritage property (in whole or in part) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) <u>is not</u> designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.2	List of Cultural Property under Enhanced Protection (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.3	The List of Wetlands of International Importance (The Ramsar List) (Convention on Wetlands of International Importance (Ramsar Convention))		×
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme	×	
2.1.5	Global Geoparks Network UNESCO Global Geoparks		×

2.2 - Please provide comments on 2.1 if necessary

'Manas' is designated as a Biosphere Reserve in India under the Man and Biosphere Programme, although it is not yet included on the World Network of Biosphere Reserves.

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?

Not applicable

2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?

Not applicable

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?

No

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?

Not applicable

2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes

2.7.1	1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is no contact with the Focal Point(s) of this designation/programme.	✕
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.2	Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is no contact with the Focal Point(s) of this designation/programme.	✕
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.3	Convention on Wetlands of International Importance (Ramsar Convention)	
2.7.1	There is no contact with the Focal Point(s) of this designation/programme.	✕
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.4	Man and the Biosphere (MAB) Programme	
2.7.1	There is no contact with the Focal Point(s) of this designation/programme.	
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	✕
2.7.5	UNESCO Global Geoparks	
2.7.1	There is no contact with the Focal Point(s) of this designation/programme.	✕
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	

2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)

2.9 - Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

Not aware

2.10 - Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware

Not aware.

2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?

Not aware

2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you are aware.

3. Statement of Outstanding Universal Value

3.1 - Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

Statement of Outstanding Universal Value

Brief synthesis

Manas Wildlife Sanctuary is located in the State of Assam in North-East India, a biodiversity hotspot. Covering an area of 39,100 hectares, it spans the Manas river and is bounded to the north by the forests of Bhutan. The Manas Wildlife Sanctuary is part of the core zone of the 283,700 hectares Manas Tiger Reserve, and lies alongside the shifting river channels of the Manas River. The site's scenic beauty includes a range of forested hills, alluvial grasslands and tropical evergreen forests. The site provides critical and viable habitats for rare and endangered species, including tiger, greater one-horned rhino, swamp deer, pygmy hog and Bengal florican. Manas has exceptional importance within the Indian sub-continent's protected areas, as one of the most significant remaining natural areas in the region, where sizeable populations of a large number of threatened species continue to survive.

Criterion (vii): Manas is recognized not only for its rich biodiversity but also for its spectacular scenery and natural landscape. Manas is located at the foothills of the Eastern Himalayas. The northern boundary of the park is contiguous to the international border of Bhutan manifested by the imposing Bhutan hills. It spans on either side of the majestic Manas river flanked in the east and the west by reserved forests. The tumultuous river swirling down the rugged mountains in the backdrop of forested hills coupled with the serenity of the alluvial grasslands and tropical evergreen forests offers a unique wilderness experience.

Criterion (ix): The Manas-Beki system is the major river system flowing through the property and joining the Brahmaputra river further downstream. These and other rivers carry an enormous amount of silt and rock debris from the foothills resulting from the heavy rainfall, fragile nature of the rock and steep gradients of the catchments. This leads to the formation of alluvial terraces, comprising deep layers of deposited rock and detritus overlain by sandy loam and a layer of humus represented by bhabar tracts in the north. The terai tract in the south consists of fine alluvial deposits with underlying pans where the water table lies near to the surface. The area contained by the Manas-Beki system gets inundated during the monsoons but flooding does not last long due to the sloping relief. The monsoon and river system form four principal geological habitats: Bhabar savannah, Terai tract, marshlands and riverine tracts. The dynamic ecosystem processes support broadly three types of vegetation: semi-evergreen forests, mixed moist and dry deciduous forests and alluvial grasslands. The dry deciduous forests represent an early stage in succession that is constantly renewed by floods and is replaced by moist deciduous forests away from water courses, which in turn are replaced by semi evergreen climax forests. The vegetation of Manas has tremendous regenerating and self-sustaining capabilities due to its high fertility and response to natural grazing by herbivorous animals.

Criterion (x): The Manas Wildlife Sanctuary provides habitat for 22 of India's most threatened species of mammals. In total, there are nearly 60 mammal species, 42 reptile species, 7 amphibians and 500 species of birds, of which 26 are globally threatened. Noteworthy among these are the elephant, tiger, greater one-horned rhino, clouded leopard, sloth bear, and other species. The wild buffalo population is probably the only pure strain of this species still found in India. It also harbours endemic species like pygmy hog, hispid hare and golden langur as well as the endangered Bengal florican. The range of habitats and vegetation also accounts for high plant diversity that includes 89 tree species, 49 shrubs, 37 undershrubs, 172 herbs and 36 climbers. Fifteen species of orchids, 18 species of fern and 43 species of grasses that provide vital forage to a range of ungulate species also occur here.

Integrity

The property is a wildlife sanctuary with a focus on maintaining the integrity of the property as a natural area. It forms the core of a larger national park, the boundaries of which are clearly demarcated and supervised. Manas Wildlife Sanctuary is buffered on the north by the Royal Manas National Park of Bhutan and on the east and west less effectively by the Manas Tiger Reserve. Transboundary cooperation is therefore important to the effectiveness of its protection.

Protection and management requirements

The property, which has six national and international designations (i.e. World Heritage Site, National Park, Tiger Reserve (core), Biosphere Reserve (national), Elephant Reserve (core) and Important Bird Area) has the highest legal protection and strong legislative framework under the provisions of Indian Wildlife (Protection) Act, 1972 and Indian Forest Act, 1927/Assam Forest Regulation 1891. The property benefits from government support at both national and regional levels as well as involvement of national and international conservation organisations.

The property is managed under the administration of the Assam Forest Department / Bodoland Territorial Council. A comprehensive and approved Management Plan is an essential requirement, together with effective patrolling and enforcement capacity to deal with the threats of encroachment, grazing and poaching. The provision of adequate infrastructure, skilled personnel and monitoring arrangements for the property are all essential requirements. Scientific research and monitoring for habitat and invasive species management and recovery of wildlife populations is a particular imperative for management to ascertain and maintain the Outstanding Universal Value of the property. The property is home to 400 varieties of wild rice, also making the management of its biodiversity values of high importance to food security.

Provision of effective tourism facilities, visitor information and interpretation is also a priority for the park management. A sustainable financing mechanism needs to be ensured to provide the necessary financial resources for the long term management of the property. The surrounding buffer zones are managed on a multiple use basis, and a balance is required between conservation and resource extraction in the management of these areas. Involvement of local communities who live and make use of the areas adjacent to the reserve in protection efforts for the property is essential, and a key management objective is to enhance their engagement and awareness in the interest of the preservation of the property. There is potential to extend the property to coincide with the boundaries of the national park of which it forms the core. The establishment of a transboundary world heritage property across the Indian and Bhutanese Manas Tiger Conservation Landscape would enable greater coordination and cooperation in the management of habitat and wildlife populations and would strengthen protection as well.

3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	Wilderness area of exceptional natural beauty	✗			
3.2.2	Dynamic ecological processes supporting a rich diversity of ecosystems	✗			
3.2.3	High plant and animal diversity	✗			
3.2.4	Threatened species of mammals	✗			
3.2.5	Threatened species of birds	✗			
3.2.6					
3.2.7					
3.2.8					
3.2.9					

3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

3.3 - Comments, conclusions and/or recommendations related to Statement of Outstanding Universal Value

4. Factors Affecting the Property

4.1. Buildings and Development

4.1.1 - Housing

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.1.2 - Commercial development

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.1.3 - Industrial areas

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (30/07/2011):

- Relevant, Positive, Potential, Outside

✕ Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
🟢 Positive ✕		✕		✕			↗
🔴 Negative							

4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

Factors selected as relevant in 4.1 are affecting the property positively.

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Inside

✕ Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
🟢 Positive							
🔴 Negative ✕		✕		✕			↗

4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Inside

Relevant	✕ Not relevant
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4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively

4.3. Services Infrastructures

4.3.1 - Water infrastructure

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Outside

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive							
🔴 Negative ✕		✕		✕		➡	

4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	📉 Decreasing	➡ Stable	📈 Increasing
🟢 Positive ✕		✕	✕				📈
🔴 Negative							

4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.3.4 - Localised utilities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.3.5 - Major linear utilities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

Renewable energy like Solar is helping to power anti-poaching camps.

4.4. Pollution

4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.2 - Ground water pollution

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.3 - Surface water pollution

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.4 - Air pollution

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.5 - Solid waste

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.6 - Input of excess energy

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.5.2 - Aquaculture

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant









4.5.3 - Land conversion

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Outside

✕ Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							

Negative							
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4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Current, Outside

Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative							

4.5.5 - Crop production

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Outside

Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative							

4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	Not relevant
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4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Inside

Relevant	Not relevant
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4.5.8 - Commercial hunting

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	Not relevant
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4.5.9 - Subsistence hunting

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	Not relevant
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4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	Not relevant
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4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

Agricultural activities outside the heritage property have potential negative impact. Similarly grazing by livestock is negatively affecting the grasslands of the heritage property.

4.6. Physical resource extraction

4.6.1 - Mining

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	Not relevant
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4.6.2 - Quarrying

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.6.3 - Oil and gas

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.6.4 - Water (extraction)

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.2 - Relative humidity

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.3 - Temperature

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.4 - Radiation/Light

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.5 - Dust

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.6 - Water (rain/water table)

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.7 - Pests

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.8 - Micro-organisms

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

4.8. Social/Cultural uses of heritage

4.8.1 - Ritual/Spiritual/Religious and associative uses

Previous answer Cycle 2 (30/07/2011):










- Not relevant

Relevant	✕ Not relevant
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4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (30/07/2011):





- Relevant, Negative, Potential, Outside

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative ✕	✕			✕			

4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Inside

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative ✕	✕			✕			

4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.8.5 - Identity, social cohesion, changes in local population and community

Previous answer Cycle 2 (30/07/2011):

- Relevant, Positive, Potential, Outside

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕		✕		✕			
 Negative							

4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (30/07/2011):

- Relevant, Positive, Potential, Outside

✕ Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕	✕		✕			
 Negative							

4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively


There is gradual increase of vendors outside the Park/Property. The tourism related infrastructure like resorts and hotels, homestay etc. are coming up and numbers are increasing. These activities are supporting in sustainable livelihoods of fringe area people as well as outsiders, tour operators and people involved in allied activities.

4.9. Other human activities

4.9.1 - Illegal activities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative ✕	✕			✕			

4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.9.3 - Military training

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.9.4 - War

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.9.5 - Terrorism

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
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4.9.6 - Civil unrest

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Outside

Relevant	✕ Not relevant
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4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively

There is significant decline in the number of incidents of poaching and illegal logging due to relentless efforts by the site management. There has been no incident of rhino poaching since 2016. The civil unrest which placed the site on the List of World Heritage in Danger in the past has transformed into political process and democratically elected representatives in the region. Local community members are involved with the site's conservation and protection in various ways.

4.10. Climate change and severe weather events

4.10.1 - Storms

Previous answer Cycle 2 (30/07/2011):

- Not relevant














Relevant	✕ Not relevant
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4.10.2 - Flooding

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Current, Outside

✕ Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative 							

4.10.3 - Drought

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	 Not relevant
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4.10.4 - Desertification

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	 Not relevant
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4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	 Not relevant
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4.10.6 - Temperature change

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	 Not relevant
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4.10.7 - Other climate change impacts

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Potential, Outside

 Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative 							

4.10.8 - Please comment as necessary on how the factors selected as relevant in 4.10 are affecting the property either negatively or positively

The impacts of climate change are already visible in the form of erratic weather patterns. Frequency and intensity of occurrence of natural disasters such as floods, erosion and drying up of wetlands may have an impact on the site. Further rise in temperatures and changing patterns of precipitation and storm activity can drive native plants and animals out of areas where they have lived for centuries.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	 Not relevant
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4.11.2 - Earthquake

Previous answer Cycle 2 (30/07/2011):

- Not relevant

 Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative 							

4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant











4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Current, Inside

✕ Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative ✕	✕		✕				

4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.11.7 - Please comment as necessary on how the factors selected as relevant in 4.11 are affecting the property either negatively or positively

Every year during rainy season June to September, erosion take place in river banks along with siltation & deposition of sand, gravels, boulders at places. Bank erosion has very much adverse impacts by way of uprooting trees along river banks and causing loss of forest and wildlife habitat areas.

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant











4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Current, Inside

✕ Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive							
 Negative ✕	✕		✕				

4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant

✕ Not relevant

4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (30/07/2011):

- Relevant, Negative, Current, Inside

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive							
➖ Negative ✕	✕		✕				↗

4.12.6 - Modified genetic material

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
----------	----------------

4.12.7 - Please comment as necessary on how the factors selected as relevant in 4.12 are affecting the property either negatively or positively

Invasive weeds like Chromolaena spp., Eupatorium spp., Mikania, Ferns, Leea spp. and trees like Simul and Oxi are invading the existing grasslands and affecting adversely the grassland habitats.

4.13. Management and institutional factors

4.13.1 - Management system/Management plan

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive ✕	✕		✕				↗
➖ Negative							

4.13.2 - Legal framework

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive ✕	✕		✕				↗
➖ Negative							

4.13.3 - Governance

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive ✕	✕		✕	✕			↗
➖ Negative							

4.13.4 - Management activities

Previous answer Cycle 2 (30/07/2011):

- Relevant, Positive, Current, Inside

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	🔥 Current	🔥 Potential	📍 Inside	📍 Outside	↘ Decreasing	→ Stable	↗ Increasing
➕ Positive ✕	✕		✕				↗
➖ Negative							

4.13.5 - Financial resources

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕		✕				
 Negative							

4.13.6 - Human resources

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕		✕	✕			
 Negative							

4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (30/07/2011):

- Relevant, Positive, Current, Inside

✕ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	 Current	 Potential	 Inside	 Outside	 Decreasing	 Stable	 Increasing
 Positive ✕	✕		✕				
 Negative							

4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (30/07/2011):

- Not relevant

Relevant	✕ Not relevant
----------	----------------

4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

















Preparation of Tiger Conservation Plan for Manas Tiger Reserve has improved management and governance. Regular capacity building of frontline staff is carried out to improve human resource. Financial resources are gradually increasing with continuous support from government schemes and non government support. NGOs and research scholars are actively participating in research and conservation activities of the heritage site.

4.14. Other factor(s)

4.14.1 - Other factor(s)

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

Name	Impact		Origin		Trend	
4.1 Buildings and Development						
4.1.5 Interpretative and visitation facilities						
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure						
4.3 Services Infrastructures						
4.3.1 Water infrastructure						
4.3.2 Renewable energy facilities						

4.5 Biological resource use/modification						
4.5.3 Land conversion						
4.5.4 Livestock farming/Grazing of domesticated animals						
4.5.5 Crop production						
4.8 Social/Cultural uses of heritage						
4.8.2 Society's valuing of heritage						
4.8.3 Indigenous hunting, gathering and collecting						
4.8.5 Identity, social cohesion, changes in local population and community						
4.8.6 Impacts of tourism/Visitation/Recreation						
4.9 Other human activities						
4.9.1 Illegal activities						
4.10 Climate change and severe weather events						
4.10.2 Flooding						
4.10.7 Other climate change impacts						
4.11 Sudden ecological or geological events						
4.11.2 Earthquake						
4.11.5 Erosion and siltation/Deposition						
4.12 Invasive/alien species or hyper-abundant species						
4.12.2 Invasive/Alien terrestrial species						
4.12.5 Hyper-abundant species						
4.13 Management and institutional factors						
4.13.1 Management system/Management plan						
4.13.2 Legal framework						
4.13.3 Governance						
4.13.4 Management activities						

4.13.5 Financial resources						
4.13.6 Human resources						
4.13.7 Low impact research/monitoring activities						
Legend	Current	Potential	Negative	Positive	Inside	Outside

4.16. Assessment of current and potential positive and negative factors

4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

Name	Impact	Origin	Trend
4.1.5 Interpretative and visitation facilities			

Spatial scale - Area affected by the factor	
<input checked="" type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input type="checkbox"/>	Widespread
Temporal scale - Occurrence of the impact	
<input checked="" type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input type="checkbox"/>	On-going
Impact - Impact on the attributes	
<input checked="" type="checkbox"/>	Insignificant
<input type="checkbox"/>	Minor
<input type="checkbox"/>	Significant
<input type="checkbox"/>	Major
Management response - Capacity of management to respond	
<input type="checkbox"/>	High capacity
<input checked="" type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources
Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing

4.2 Transportation Infrastructure

Name		Impact			Origin		Trend
4.2.1 Ground transport infrastructure							
Spatial scale - Area affected by the factor							
	Restricted						
✕	Localised						
	Extensive						
	Widespread						
Temporal scale - Occurrence of the impact							
	One off or rare						
✕	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Impact on the attributes							
	Insignificant						
	Minor						
✕	Significant						
	Major						
Management response - Capacity of management to respond							
	High capacity						
✕	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Development over the last 6 years							
	Decreasing						
	Static						
✕	Increasing						

4.3 Services Infrastructures

Name		Impact			Origin		Trend
4.3.1 Water infrastructure							
Spatial scale - Area affected by the factor							
	Restricted						
✕	Localised						
	Extensive						
	Widespread						
Temporal scale - Occurrence of the impact							
	One off or rare						
✕	Intermittent or sporadic						
	Frequent						





	On-going
Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
	Medium capacity
✕	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

Name	Impact			Origin		Trend
4.3.2 Renewable energy facilities	+		📢	📍		↗





Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static

✕	Increasing
---	------------

4.5 Biological resource use/modification

Name	Impact			Origin		Trend
4.5.3 Land conversion						
						

Spatial scale - Area affected by the factor	
✕	Restricted
	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact			Origin		Trend
4.5.4 Livestock farming/Grazing of domesticated animals						
						

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic

✕	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

Name	Impact	Origin	Trend
4.5.5 Crop production			
	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>
	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> </div>

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing

✕	Static
	Increasing

4.8 Social/Cultural uses of heritage

Name	Impact	Origin	Trend
4.8.2 Society's valuing of heritage			
	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> </div>	<div> <div></div> <div></div> </div>

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

Name	Impact	Origin	Trend
4.8.3 Indigenous hunting, gathering and collecting			
	<div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> </div>	<div> <div></div> <div></div> </div>





Spatial scale - Area affected by the factor	
✕	Restricted
	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
✕	One off or rare

	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major
Management response - Capacity of management to respond	
✕	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
✕	Decreasing
	Static
	Increasing

Name	Impact			Origin	Trend
4.8.5 Identity, social cohesion, changes in local population and community					

Spatial scale - Area affected by the factor	
	Restricted
	Localised
✕	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	

	Decreasing
	Static
✕	Increasing

Name	Impact	Origin	Trend
4.8.6 Impacts of tourism/Visitation/Recreation	  	 	

Spatial scale - Area affected by the factor	
	Restricted
	Localised
✕	Extensive
	Widespread






Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
✕	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major

Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

4.9 Other human activities





Name	Impact	Origin	Trend
4.9.1 Illegal activities	  	 	

Spatial scale - Area affected by the factor	
✕	Restricted
	Localised
	Extensive
	Widespread

Temporal scale - Occurrence of the impact	
---	--

	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major
Management response - Capacity of management to respond	
✕	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
✕	Decreasing
	Static
	Increasing

4.10 Climate change and severe weather events

Name	Impact			Origin		Trend
4.10.2 Flooding						
						

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
✕	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
	Medium capacity
✕	Low capacity

	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact			Origin		Trend
4.10.7 Other climate change impacts						
	⊖		📢		🔄	➡

Spatial scale - Area affected by the factor

✕	Restricted
	Localised
	Extensive
	Widespread

Temporal scale - Occurrence of the impact

✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes

✕	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond

	High capacity
	Medium capacity
✕	Low capacity
	No capacity and / or resources

Trend - Development over the last 6 years

	Decreasing
✕	Static
	Increasing



4.11 Sudden ecological or geological events

Name	Impact			Origin		Trend
4.11.2 Earthquake						
	⊖	📢		🔄		➡

Spatial scale - Area affected by the factor

	Restricted
	Localised





✕	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
✕	Major
Management response - Capacity of management to respond	
	High capacity
	Medium capacity
✕	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
✕	Static
	Increasing

Name	Impact			Origin		Trend
4.11.5 Erosion and siltation/Deposition						
						

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
✕	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity

	Medium capacity
✕	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

4.12 Invasive/alien species or hyper-abundant species

Name	Impact			Origin		Trend
4.12.2 Invasive/Alien terrestrial species						
						





Spatial scale - Area affected by the factor	
	Restricted
	Localised
✕	Extensive
	Widespread

Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
✕	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major

Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact			Origin		Trend
4.12.5 Hyper-abundant species						
						

Spatial scale - Area affected by the factor	
✕	Restricted





	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
✕	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Impact on the attributes	
✕	Insignificant
	Minor
	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
	Medium capacity
✕	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
✕	Decreasing
	Static
	Increasing

4.13 Management and institutional factors

Name	Impact			Origin		Trend
4.13.1 Management system/Management plan						

Spatial scale - Area affected by the factor	
	Restricted
	Localised
	Extensive
✕	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
✕	Major

Management response - Capacity of management to respond	
<input checked="" type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources
Trend - Developement over the last 6 years	
<input type="checkbox"/>	Decreasing
<input type="checkbox"/>	Static
<input checked="" type="checkbox"/>	Increasing





Name	Impact	Origin	Trend
4.13.2 Legal framework	 		

Spatial scale - Area affected by the factor	
<input type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input checked="" type="checkbox"/>	Widespread

Temporal scale - Occurence of the impact	
<input type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input checked="" type="checkbox"/>	On-going




Impact - Impact on the attributes	
<input type="checkbox"/>	Insignificant
<input type="checkbox"/>	Minor
<input type="checkbox"/>	Significant
<input checked="" type="checkbox"/>	Major

Management response - Capacity of management to respond	
<input checked="" type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources
Trend - Developement over the last 6 years	
<input type="checkbox"/>	Decreasing
<input type="checkbox"/>	Static
<input checked="" type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.3 Governance	 	 	

Spatial scale - Area affected by the factor	
---	--

	Restricted
	Localised
✕	Extensive
	Widespread
Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
✕	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact			Origin		Trend
4.13.4 Management activities						

Spatial scale - Area affected by the factor	
	Restricted
	Localised
	Extensive
✕	Widespread
Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
✕	Major

Management response - Capacity of management to respond	
<input checked="" type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources
Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input type="checkbox"/>	Static
<input checked="" type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.5 Financial resources	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Spatial scale - Area affected by the factor	
<input type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised
<input checked="" type="checkbox"/>	Extensive
<input type="checkbox"/>	Widespread

Temporal scale - Occurrence of the impact	
<input type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input checked="" type="checkbox"/>	On-going

Impact - Impact on the attributes	
<input type="checkbox"/>	Insignificant
<input type="checkbox"/>	Minor
<input checked="" type="checkbox"/>	Significant
<input type="checkbox"/>	Major

Management response - Capacity of management to respond	
<input type="checkbox"/>	High capacity
<input checked="" type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources
Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input type="checkbox"/>	Static
<input checked="" type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.6 Human resources	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Spatial scale - Area affected by the factor	
---	--

	Restricted
	Localised
✕	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major
Management response - Capacity of management to respond	
	High capacity
✕	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✕	Increasing

Name	Impact			Origin		Trend
4.13.7 Low impact research/monitoring activities						

Spatial scale - Area affected by the factor	
	Restricted
✕	Localised
	Extensive
	Widespread
Temporal scale - Occurrence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✕	On-going
Impact - Impact on the attributes	
	Insignificant
	Minor
✕	Significant
	Major

Management response - Capacity of management to respond	
	High capacity
✗	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Development over the last 6 years	
	Decreasing
	Static
✗	Increasing

4.17. Serial inscriptions (national or transnational)

4.17.1 - If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor

4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.

4.18.1 - Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	Wilderness area of exceptional natural beauty	✗			
4.18.1.2	Dynamic ecological processes supporting a rich diversity of ecosystems	✗			
4.18.1.3	High plant and animal diversity	✗			
4.18.1.4	Threatened species of mammals	✗			
4.18.1.5	Threatened species of birds	✗			

5. Protection and Management of the Property

5.1. Boundaries and Buffer Zones

5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The boundaries **do not limit the ability to maintain** the property's Outstanding Universal Value but they **could be improved**

5.1.2 - Are the boundaries of the World Heritage property known and recognised?

The boundaries **are known by both** the management authority and local communities/landowners

5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The buffer zones **do not limit** the ability to maintain the property's Outstanding Universal Value but they could be improved

5.1.4 - Are the boundaries of the buffer zones known and recognised?

The buffer zones of the World Heritage property **are known and recognised** by the management authority **but are not known** by local communities/landowners

5.1.5 - Comments, conclusions and/or recommendations related to boundaries and buffer zones of the World Heritage property

The boundary of the World Heritage Property is well defined but the buffer zone is not clearly known to local communities. There is sufficient buffer zone on the west, north and east sides of the World Heritage Property. However, there is no buffer zone/area on the southern side of the World Heritage Property.

5.2. Protective Measures

5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).

The area was originally declared a reserve forest as early as 1907 and received sanctuary status in 1928. In 1973 it was given added protection when it was designated also as a Tiger Reserve in 1973 under Project Tiger. The overall legislative authority is contained in the Wildlife Protection Act of 1972 - a national legislation of the Government of India, - which is administered by the Assam Forest Department.

Source: Periodic Reporting Cycle 2

5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

1990 / Manas National Park / Govt. of Assam Notification No. FRW.55/86/64, dt. 7/9/1990 / 2007 /

5.2.3 - Is the legal framework (i.e. legislation and/or regulation including spatial planning) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The **legal framework** for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an **adequate basis for effective management and protection**

5.2.4 - Is the legal framework (i.e. legislation and/or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

An **adequate legal framework** in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists **but there are some deficiencies in implementation**

5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

An **adequate legal framework** exists for the broader setting of the World Heritage property, **but there are some deficiencies in implementation** which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property

5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?

There is **adequate capacity/resources** to enforce legislation and/or regulation in the World Heritage property

5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice

There are designated Field Director, Dy. Director, ACF, Rangers and other frontline staff to carry out enforcement of the laws. The protected site is well demarcated and divided into Ranges, Beats and Anti Poaching camps. These are connected by wireless network system and equipped with arms for wildlife personnel. Monitoring through cooperation between forest department, police forces, civil administration is carried out as required.

5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property

5.3. Management System/Management Plan

5.3.1 - Please check the box which most closely match the character of the governance and management system of the property

Public management system at provincial/regional level

If 'Other', please specify

5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.

- ☐ A statutory Management Plan or zoning plan for the property.
- ☐ Other forms of statutory or non-statutory plans (e.g. strategic plans)
- ☐ Traditional ways of management recognised by local communities and other specific groups
- ☐ Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property
- ☐ An integrated management plan combining World Heritage and any other designations
- ☐ A management plan
- ☐ An annual work plan or business plan
- ☐ A disaster, climate or conflict risk management plan
- ☐ A visitor/visitation management plan
- ☐ An environmental management framework
- ☐ An assessment of biological and cultural diversity and ecosystem services provided by the property

5.3.3 - Please give a brief description of the management system currently in place at your property

There are designated Field Director, D. Director, ACF, Forest Rangers and other frontline for management of the site. The Annual Operation Plan are prepared every year and works/schemes are executed/implemented. The source of funding are- (i) CSS-Project Tiger (ii) CSS-Biosphere (iii) CSS-Project Elephant (iv) SOPD State/BTC (v) CAMPA Fund (vi) APFBC (vii) Fund from Powergrid for five years- a special fund supposed to get.

5.3.4 - Management Documents

Comment

Tiger Conservation Plan, Manas Tiger Reserve (2014-2024) is approved

5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best practices for the protection of this property?

The 2011 Recommendation on the Historic Urban Landscape is **not relevant** to this property

5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

No use has been made of the World Heritage Policy for Climate Change

5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts

of Climate Change on the property:

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ?

Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

Disaster Management Plan as well as Human-Elephant Conflict Management Plan for Manas National Park have been prepared. Constant vigilance and preparedness to deal with/tackle the situation arising out of any disaster is taken by the authority of the World Heritage Property and attended/addressed accordingly. All plans and strategies are mentioned in detail in above Disaster Plan and Human-Elephant Conflict Management Plan.

5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state; local/municipal etc.) involved in the management of the World Heritage property

There is **coordination** between the range of administrative bodies involved in the management of the property, **but it could be improved**

5.3.12 - Is the management system/plan adequate to maintain the property's Outstanding Universal Value?

The management system/plan is **fully adequate** to maintain the property's Outstanding Universal Value

5.3.13 - Is the management system being implemented?

The management system is being **fully implemented and monitored**

5.3.14 - Is there an annual work/action plan and is it being implemented?

An annual work/action plan **exists and many of its activities are being implemented**

5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities				×	
5.3.15.2	Local authorities			×		
5.3.15.3	Landowners in the property and the buffer zone	×				
5.3.15.4	Indigenous peoples				×	
5.3.15.5	Women				×	
5.3.15.6	Other specific groups				×	
	If you selected, 'Other specific groups' please specify	NGOs				

5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups

		Not applicable	Non-existent	Poor	Fair	Good
5.3.16.1	Local communities					×
5.3.16.2	Local/Municipal authorities				×	
5.3.16.3	Indigenous peoples					×
5.3.16.4	Landowners			×		
5.3.16.5	Women				×	
5.3.16.6	Youth/Children				×	
5.3.16.7	Researchers					×
5.3.16.8	Local Visitors/Tourists					×
5.3.16.9	National/International tourists					×
5.3.16.10	Tourism Industry				×	
5.3.16.11	Local businesses and industries				×	
5.3.16.12	NGOs					×
5.3.16.13	Other specific groups	×				
	If you selected 'Other specific groups', please specify					

5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention

		Not applicable	No contribution	Limited	Significant	Full achievement
5.3.17.1	The management system of the property contributes to gender equality			✗		
5.3.17.2	The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)				✗	
5.3.17.3	The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status				✗	
5.3.17.4	The management system of the property integrates a human rights-based approach				✗	
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood				✗	
5.3.17.6	The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property				✗	

5.3.18 - Please provide further details on the ratings of the management system given in the table above

The establishment of Eco Development Committees that comprise of representation from indigenous tribal communities contribute towards social inclusion and improving opportunities for all, irrespective of ethnicity and origin. The heritage site also through eco tourism, is a source of local economic development, and livelihood enhancement. The growth of sustainable tourism in the form of home stays, resorts, jungle jeep safari , local guide and other allied activities have improved the socio economic condition of indigenous communities around the heritage property and have reduced conflicts

5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan

6. Financial and Human Resources

6.1. Funding

6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.6	Governmental (national/federal)	37 %	79 %
6.1.1.7	Governmental (regional/provincial/state)	5 %	10 %
6.1.1.8	Governmental (local/municipal)	58 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	0 %	11 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	0 %
6.1.1.12	Other	0 %	0 %
		Total 100 %	Total 100 %

6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above

6.1.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is acceptable but could be further improved to fully meet the management needs

6.1.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding are secure over the medium-term and planning is underway to secure funding over the long-term

6.1.5 - Comments, conclusion, and/or recommendations related to finance and infrastructure

6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.

		From local communities %	From elsewhere %
6.1.6.1	Men	52 %	95 %

6.1.6.2	Women	48 %	5 %
		Total 100 %	Total 100 %

6.1.7 - Are available human resources adequate to manage the World Heritage property?

Human resources **partly meet** the management needs of the World Heritage property

6.1.8 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

Conservation	Good
Environmental sustainability	Fair
Community participation and inclusion	Fair
Risk preparedness	Fair
Capacity development and education	Fair
Administration	Good
Research and monitoring	Fair
Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
Interpretation	Fair
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

6.1.9 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Fair
Risk preparedness	Fair
Capacity development and education	Fair
Administration	Good
Research and monitoring	Fair
Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
Interpretation	Fair
Visitor management/tourism	Fair
Enforcement (custodians, police)	Good

6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?

Some use has been made of the World Heritage Strategy for Capacity Building

6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.

Capacity-building workshops on World Heritage OUVs, reporting and monitoring, conservation and management for frontline personnel, local communities and NGOs have been undertaken.

6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**

6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training

7. Scientific Studies and Research Projects

7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?

Knowledge about the values and attributes of the World Heritage property is **acceptable** for most key areas but there are gaps

7.2 - Is there a planned programme of research at the property which is directed towards management needs and/or improving understanding of Outstanding Universal Value?

There is a **comprehensive, integrated programme** of research, which is relevant to management needs and/or improving understanding of Outstanding Universal Value

7.3 - Are results from research programmes publicly available and disseminated?

Research results **are shared widely with active outreach** to local communities and national and international audiences

7.4 - Comments, conclusions and/or recommendations related to scientific studies and research projects

8. Education, Information and Awareness Building

8.1 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities	Fair
Local/municipal authorities	Fair
Indigenous peoples	Fair
Landowners	Not applicable
Women	Fair
Youth/children	Fair
Researchers	Good
Local visitors	Fair
National/international tourists	Good
Tourism industry	Good
Local businesses and industries	Fair
NGOs	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please describe	

8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?

There is a **limited and ad hoc education** and awareness programme for children and/or youth

8.3 - Who are the target audiences for education and awareness programmes at your property?

Local communities
Indigenous peoples
Women
Youth/children
Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries
NGOs

8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building

Visitor centre	Not provided but needed
Site museum	Not provided but needed
Information booths	Not provided but needed
Guided tours	Poor
Trails/routes	Poor
Printed information materials	Fair

Online (website, social media, etc.)	Fair
Transportation facilities	Fair
Other	Not needed
If 'Other' is selected, please specify	

8.5 - Comments, conclusions and/or recommendations related to education, information and awareness building

Regular educational and awareness building community outreach programs are carried out at the heritage site. With the help of NGOs like WWF, WTI, Aaranyak etc. capacity building and information sharing workshops are carried out for the frontline staff of the heritage site.

9. Visitor Management

9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report

45143 / 42987 / 38072 / 36898 / 41173 /

9.2 - What information sources are used to collect visitor statistics?

Entry tickets and registries

Accommodation establishments

Tourism industry

9.3 - What is the average length stay of a visitor to the World Heritage property?

Overnight stay

9.4 - Please provide the source of information

Reports from concerned Range Officers to the Field Director, Manas Tiger Project and records maintained.

9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)

20 / 6 / 15 / 1.5 / 0 / 7 /

9.6 - Please provide the source of information

Department Rate chart and Manas Development and Jeep Safari Association rate list.

9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?

There is a planned and **effective strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property

9.8 - Please provide any comments relating to the answer provided above in question 9.7

The Manas World Heritage also being a tiger reserve has an approved Tiger Conservation Plan, which includes a planned strategy for tourism management including eco-tourism management and nature education.

9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property?

Visitor use of the World Heritage property is **effectively managed and does not impact its Outstanding Universal Value**

9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, through the UNESCO Tourism Management Assessment Tool

If a different system, please specify

9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?

There is **good cooperation** between those responsible for the World Heritage property and the tourism industry to **present the Outstanding Universal Value and increase appreciation**

9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted?

The presentation and interpretation of the Outstanding Universal Value of the property is **acceptable but improvements could be made**

9.13 - At how many locations is the World Heritage emblem displayed at the property?

In **many locations**, but **not easily visible** to visitors

9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property?

Fees are collected and make a **substantial contribution** to the management of the World Heritage property

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

Homestays, ecotourism by local communities and Community-based Organisations

9.16 - Are the benefits of tourism shared with local communities?

Yes

If 'Yes', please specify

In the form of funding to Eco Development Committees

9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

Tourism is an important aspect of the Manas world heritage site. Tourism is promoted through eco-tourism and cooperation of local people through Eco-Development Committees. Apart from this other privately owned resorts, jeep safari and other tourist activities take place under the supervision of the site authorities.

10. Monitoring

10.1 - Is there a monitoring programme at the property directed towards management needs and/or towards improving the understanding of the Outstanding Universal Value?

There is a **comprehensive, integrated programme of monitoring**, which is relevant to management needs and/or improving understanding of the Outstanding Universal Value

10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is **adequate and key indicators have been defined but monitoring of the status of indicators could be improved**

10.3 - Are key indicators defined and in place for the following principal aspects of the property?

	Extend of indicators	Not applicable	No indicators	Indicators have been defined but are not yet in use	Indicators are in place and in use since the last Periodic Reporting cycle
10.3.1	State of conservation				×
10.3.2	Effectiveness of the management system				×
10.3.3	Character of governance			×	
10.3.4	Appropriate synergy with other conservation designations		×		
10.3.5	Contribution to sustainable development			×	
10.3.6	Capacity development			×	

10.4 - Please provide information on relevant key indicators adopted at the property

The periodic management effectiveness evaluation (MEE) report is used as an indicator for assessing the above important aspect of the property.

10.5 - Please rate the level of involvement in monitoring of the following groups:

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Fair
Local communities	Fair
Indigenous peoples	Fair
Landowners	Not applicable
Women	Fair
Researchers	Good
Tourism industry	Good
Local businesses and industry	Fair
NGOs	Good
Other specific groups	Not applicable
If you selected 'Other specific groups', please specify	

10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?

Implementation is underway

10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

In regards to implementation of recommendations from the World Heritage Committee, protection level of the site has been increased with new anti-poaching camps and mobile patrolling team. This has resulted into no rhino poaching since 2016. A proposal has been submitted to the BTC, Govt of Assam for eviction of illegal encroachment in Betbari area of the site. Grassland and habitat management programmes have been started in various parts of the site including under state CAMPA, CSS PT 2020-21. Site level transboundary meeting and agreements have been formulated. In addition to that translocation programmes, Eco Development committees, local community initiatives have ensured that the site's Outstanding Universal Value is intact

10.8 - Comments, conclusions and/or recommendations related to Monitoring

The monitoring of the heritage site is carried out using periodic management effectiveness evaluation (MEE) reports, regular action plans like Tiger Conservation

Plan, Disaster Management Plan etc. Moreover patrolling activities using M STRIPES patrolling, smart patrolling, boat and vehicular patrolling, research activities has helped in regular ground level monitoring of the heritage site.

11. Identification of Priority Management Needs

11.1 - Identification of Priority Management Needs

5.1	Boundaries and Buffer Zones						
5.1.4	The buffer zones of the World Heritage property are known and recognised by the management authority but are not known and recognized by local communities/landowners						
5.2	Protective Measures						
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation						
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property						
5.3	Management System/Management Plan						
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property						
5.3.9	Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property						
5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved						
5.3.17	<ul style="list-style-type: none"> In a limited manner, the management system of the World Heritage property does contribute to gender equality 						
6.1	Funding						
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property						
6.1.7	Human resources partly meet the management needs of the World Heritage property						
6.1.10	Some use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property						
6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff						
8	Education, Information and Awareness Building						
8.2	There is a limited and ad hoc education and awareness programme for children and/or youth						
9	Visitor Management						
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made						
10	Monitoring						
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved						
Please select 0 more issues.							
<input checked="" type="checkbox"/> Please save this question to reflect changes							

12. Summary and Conclusions

12.1. Summary - Factors affecting the Property

12.1.1 - Summary - Factors affecting the Property

4.2	Transportation Infrastructure						
4.2.1	Ground transport infrastructure	Criteria ix, x	Impact assessments and rerouting of road projects	Regular consultation and ground-level monitoring	Ongoing	Forest Department, Highway Authority	NA
4.3	Services Infrastructures						
4.3.1		Water infrastructure					
4.5	Biological resource use/modification						

4.5.3	Land conversion	Criteria ix, x	Strengthening protection and enforcement mechanism	Ecological research and forest staff monitoring	Ongoing	Forest Department	NA
4.5.4	Livestock farming/Grazing of domesticated animals	Criteria ix, x	Strengthening protection, increasing awareness	Forest staff monitoring	Ongoing	Forest Department, Local communities	NA
4.5.5		Crop production					
4.8	Social/Cultural uses of heritage						
4.8.2		Society's valuing of heritage					
4.10	Climate change and severe weather events						
4.10.2		Flooding					
4.11	Sudden ecological or geological events						
4.11.2	Earthquake	Criteria vii, ix, x	Disaster management plan will be implemented.	This is an unexpected event.	As per event occurrence.	Forest department, Civil administration	NA
4.11.5	Erosion and siltation/Deposition	Criteria vii, ix, x	Preventing illegal logging, Creating embankments	Monitoring upstream-downstream river water flow and river bank	Ongoing	Forest Department, Water resources Department	NA
4.12	Invasive/alien species or hyper-abundant species						
4.12.2	Invasive/Alien terrestrial species	Criteria ix, x	Research on invasive species, Habitat management, Manual extraction, Regulated fire/burning regime	Continuous monitoring through research and physical observations.	Ongoing	Forest Department, NGOs and research agencies	NA

Question not completed

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.2	Protective Measures				
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	The National Park was extended in the west to include another Reserved Forest under common management with the property. An integrated Tiger Conservation Plan now governs the larger Tiger Reserve area which includes the property.	Done and ongoing.	Forest Department.	NA
5.3	Management System/Management Plan				
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Climate Change policy document will be examined for use at the property through workshops and implementation of mitigating measures.	2 years	Forest Department, Scientific institutions	The State of Assam has also formulated an Assam State Action Plan on Climate Change.Di

5.3.9	Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Disaster risk reduction is included in the property's Management Plan. Provisions of the World Heritage strategy document will be examined for use and implementation in the property.	Ongoing	Forest Department, Department of Water Resources, Assam State Disaster Management Authority	NA
5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved	Greater synergy is established between the Forest Department, Civil administration and Police authorities for dealing with law and order matters and with the local Government line departments for socio-economic schemes.	Ongoing	Forest Department, District administration, Police Authorities, Local Government line departments	NA

6.1	Funding				
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property	Additional funding is secured through the Manas Tiger Reserve Conservation Plan and other Centrally Sponsored Schemes.	Ongoing	Forest Department, National Tiger Conservation Authority	NA
6.1.7	Human resources partly meet the management needs of the World Heritage property	Proposal is envisaged for new recruitment of frontline forest personnel to replace ageing and retired staff. Supplementary patrolling staff are also engaged from the Assam Forest Protection Force.	5 years	Forest Department	NA
6.1.10	Some use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	Capacity-building workshops and training have been conducted for forest personnel, local communities, civil society, teachers and students of local schools with support from NGOs and specialised institutions.	Ongoing	Forest Department, NGOs Other institutions	NA

8	Education, Information and Awareness Building				
8.2	There is a limited and ad hoc education and awareness programme for children and/or youth	Initiatives have been taken for Teacher Training Programmes and awareness schemes for children of local schools in proximity to the property.	Ongoing	Forest Department, NGOs Other institutions	NA

9	Visitor Management				
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	Proposal is envisaged for operationalising an interpretation centre. More signages are planned at appropriate locations for highlighting the OUV of the property.	3 years	Forest Department	NA

10	Monitoring				
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10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	There is greater understanding of monitoring indicators at the senior management level and efforts are underway to streamline the process for information collection and sharing from the field level.	Ongoing	Forest Department	NA
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Summary - Management Needs completed

12.3. Conclusions on the State of Conservation of the Property

12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property?

Not applicable (sites inscribed exclusively under criteria vii to x (natural World Heritage properties))

12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property?

The Integrity of the World Heritage property is **intact**

12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

The World Heritage property's Outstanding Universal Value has been **maintained**.

12.3.4 - What is the current state of the property's other values?

Other important cultural and/or natural values and the state of conservation of the World Heritage property are **intact**

12.3.5 - Comments, conclusions and/or recommendations related to the state of conservation of the property.

The Integrity and Outstanding Universal Value of the Manas Heritage Site has been preserved and kept intact. Due to efforts of the site authorities, the losses to the site in the past have been restored back. The Manas World Heritage Site has been awarded Conservation Excellence Award 2020 by the Global Tiger Forum recognizing its excellent conservation efforts.

13. Impact of World Heritage Status

13.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

Conservation	Very positive
Research and monitoring	Very positive
Management effectiveness	Very positive
Quality of life for local communities and indigenous peoples	Positive
Recognition	Very positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	Very positive
Legal/Policy framework	Very positive
Advocacy	Positive
Institutional coordination	Positive
Security	Positive
Gender equality	No impact
Provision of ecosystem services/ benefits to local communities	Positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	No impact
Fostering inclusive local economic development and enhancing livelihood	Positive
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Positive

Other	Not applicable
If 'Other', please specify	

13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

The World Heritage status has played a key role in making Manas World Heritage site the centre for conservation related activities. It has given a global recognition to its rich heritage. It has promoted tourism and subsequently improved the socio economic condition of local people depending on the site's tourism. It has encouraged research and study on the flora and fauna found inside the heritage site.

14. Good Practice in the Implementation of the World Heritage Convention

14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

The Manas World Heritage Site has successfully protected and conserved its faunal diversity. Through a robust rhino translocation programme under Indian Rhino Vision (IRV) 2020, the number of rhinos in the site has increased from zero in 2001-02 to 45 in 2020-21. Through swamp deer translocation programme, its population increased to 99 in 2020-21. The Heritage Site increased the tiger population from 10 in 2010 to 30 in 2020. This has been achieved through regular use of M-STrIPES patrolling. Recognizing the efforts of the site in tripling the tiger population, Manas has been awarded Global Conservation Excellence Award 2020 by the Global Tiger Forum. Involvement of local communities in conservation and protection of the World Heritage property is also a good practice example in Manas. Support to local youth to establish ecotourism enterprise around the site has been a big success story. Encouragement of the site management authorities has also provided a key role for NGOs to contribute to conservation practice, research, monitoring and capacity-building activities for the site with mutually beneficial results.

14.2 - Define which topics are covered by this example of best practice at the property level

Sustainable Development
Synergies
State of Conservation
Management
Governance
Capacity Building

15. Assessment of the Periodic Reporting Exercise

15.1. Relevance of Periodic Reporting

15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

The <i>World Heritage Convention</i>
The concept of Outstanding Universal Value
The property's Outstanding Universal Value
The concept of Integrity and/or Authenticity
The property's Integrity and/or Authenticity
Management effectiveness to maintain the Outstanding Universal Value
Monitoring and reporting

15.1.2 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

State Party	Good
Site Managers	Good
UNESCO World Heritage Centre	Fair
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Fair

15.2. Use of Data

15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?

Revision of priorities/strategies/policies for the protection, management and conservation of heritage
Update of management plans
Fundraising
Awareness raising
Advocacy

15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

The data can be used for improving management and monitoring. It will be crucial in identifying the aspects that require improvement and taking priority action.

15.3. Timing and resources

15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage
Site Manager/Coordinator World Heritage property staff
Non-Governmental Organizations
External experts

15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire?

Gender balance has been **explicitly considered** in the process **but there are still deficiencies in the implementation**.

15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire?

Yes

15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

315 / 140 / 49 /

15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources		✕
15.3.5.2	Financial resources for organizing consultation meetings/ training	✕	

15.4. Format and content of the Periodic Report

15.4.1 - How accessible was the information required to complete this questionnaire?

Most required information was accessible.

15.4.2 - Was the questionnaire easy to use and clear to understand?

		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire			✕	
15.4.2.2	Clarity of questions			✕	

15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

None

15.5. Training and Guidance

15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Good
UNESCO (other sectors/field offices)	Good
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Fair
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities

UNESCO World Heritage Centre	Good
State Party Representative (national Focal Point)	Good
UNESCO other sectors (e.g. field office)	Fair
National Commission for UNESCO	Not applicable
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable

ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable
IUCN International	Not applicable

15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?

Yes

15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented?

The online training resources were adequate.

15.6. Actions that will require formal consideration by the World Heritage Committee

15.6.1 - Summary of actions that will require formal consideration by the World Heritage Committee

No item were proposed for update

15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.