Tropical Rainforest Heritage of Sumatra

1. World Heritage Property Data

1.1 - Name of World Heritage property

Tropical Rainforest Heritage of Sumatra

1.2 - World Heritage property details

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Gunung Leuser National Park	0 / 0	862975	?	862975	2004
Kerinci Seblat National Park	0 / 0	1375349.867	?	1375349.867	2004
Bukit Barisan Selatan National Park	0 / 0	356800	?	356800	2004
Total (ha)		2595124.867	0	2595124.867	

1.4 - Map(s)

Title	Date	Link to source
Gunung Leuser National Park	2003	
Kerinci Seblat National Park	2003	
Bukit Barisan Selatan National Park	2003	

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

- 1. Sumatran Orangutans Face Extinction as Peace Comes
- 2. <u>Tiger Bone Contraband Seized at Taiwan Airport</u>
- 3. Natural site datasheet from WCMC

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

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?

Yes

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

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

Yes

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

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

Statement of Outstanding Universal Value Brief synthesis

The Tropical Rainforest Heritage of Sumatra (TRHS), Indonesia comprises three widely separated National Parks; Gunung Leuser (GLNP), Kerinci Seblat (KSNP) and Bukit Barisan Selatan (BBSNP), and covers a total area of 2,595,124hectares, constituting one of the biggest conservation areas in Southeast Asia. The site is located on Bukit Barisan range and holds the greatest potential for long-term conservation of the diverse biota of Sumatra, including many endangered species.

The biodiversity of the property is exceptional in terms of both species numbers and uniqueness. There are an estimated 10,000 species of plants, including 17 endemic genera. Animal diversity in TRHS is also impressive, with 201 mammal species and some 580 species of birds, of which 465 are resident and 21 are endemics. Of the mammal species, 22 are endemic to the Sundaland hotspot and 15 are confined to the Indonesian region, including the endemic Sumatran orang-utan. Key mammal species also include the Sumatran tiger, rhino, elephant and Malayan sun-bear.

The TRHS includes the highest volcano in Indonesia, Gunung Kerinci (3,805 m asl) along with many other physical features of exceptional natural beauty, including; Lake Gunung Tujuh the highest lake in Southeast Asia, numerous other volcanic and glacial high-altitude lakes, fumaroles, waterfalls, cave systems and steep rocky backdrops. Both Gunung Leuser National Park and Bukit Barisan Selatan National Park contain frontages to the Indian Ocean, making the altitudinal range of the TRHS extend from the highest mountains on Sumatra to sea level. All three protected areas in the TRHS exhibit wide altitudinal zonation of vegetation, from lowland rainforest to montane forest, extending to sub-alpine low forest, scrub and shrub thickets and covering an astounding diversity of ecosystems.

Criterion (vii): The parks that comprise the Tropical Rainforest Heritage of Sumatra are all located on the prominent main spine of the Bukit Barisan Mountains, known as the 'Andes of Sumatra'. Outstanding scenic landscapes abound at all scales. The mountains of each site present prominent mountainous backdrops to the settled and developed lowlands of Sumatra. The combination of the spectacularly beautiful Lake Gunung Tujuh (the highest lake in southeast Asia), the magnificence of the giant Mount Kerinci volcano, numerous small volcanic, coastal and glacial lakes in natural forested settings, fumaroles belching smoke from forested mountains and numerous waterfalls and cave systems in lush rainforest settings, emphasise the outstanding beauty of the Tropical Rainforest Heritage of Sumatra.

Criterion (ix): The Tropical Rainforest Heritage of Sumatra represent the most important blocks of forest on the island of Sumatra for the conservation of the biodiversity of both lowland and mountain forests. This once vast island of tropical rainforest, in the space of only 50 years, has been reduced to isolated remnants including those centered on the three components of the property. The Leuser Ecosystem, including the Gunung Leuser National Park, is by far the largest and most significant forest remnant remaining in Sumatra. All three parks would undoubtedly have been important climatic refuge for species over evolutionary time and have now become critically important refuge for future evolutionary processes.

Criterion (x): All three parks that comprise the Tropical Rainforest Heritage of Sumatra are areas of very diverse habitat and exceptional biodiversity. Collectively, the three sites include more than 50% of the total plant diversity of Sumatra. At least 92 local endemic species have been identified in Gunung Leuser National Park. The property contains populations of both the world's largest flower (*Rafflesia arnoldi*) and the tallest flower (*Amorphophallustitanium*). The relict lowland forests in the sites are very important for conservation of the plant and animal biodiversity of the rapidly disappearing lowland forests of Southeast Asia. Similarly, the montane forests, although less threatened, are very important for conservation of the distinctive montane vegetation of the property.

Integrity

The serial property straddles the equator and comprises three widely separated nationally protected areas along the Bukit Barisan Mountain Range, running from Aceh in the north-west to Bandar Lampung in the south-east and representing whole or part of the three most significant remnant "islands" of the once vast Sumatran forests. Biological and ecological processes are preserved within the property because it contains a sufficiently large number of ecosystems, forest types, ranges of altitudes and topographies. The exceptionally beautiful features of Sumatra such as Gunung Tujuh and Gunung Kerinci are contained within the site in their entirety.

The unique shape and size of the property provide significant habitat for in-situ conservation of thousands of Sumatran species, in particular species that require larger home ranges like Sumatran tiger, Sumatran orang-utan, Sumatran elephant, Sumatran rhino and Sumatran ground cuckoo. The property is a living laboratory for science and contains some of the most distinguished research centres in Indonesia (Way Canguk, Ketambe and Suaq Belimbing) and hosts international high-level collaborations from world renowned institutions.

Threats to the integrity of the property include road development plans as well as agricultural encroachment. The main fundamental threatening processes are directly linked to the access provided by roads and failure to effectively enforce existing laws. Road access facilitates illegal logging, encroachment and poaching which all pose significant threats to the integrity of the component parks of the property. Collaboration with stakeholders, including Rhino Protection Unit (RPU), WWF Elephant Patrol, FFI Tiger Protection and Conservation, Zoological Society of London – Tiger Conservation has significantly reduced poaching incidents. Joint patrols with related parties including police officers and local government officers, and rangers recruited from local communities, support the Ministry of Forestry to enforce existing laws.

Protection and management requirements

The TRHS is comprised of three national parks, and as such benefits from the highest protected area status under Indonesian law. All three parks are public lands designated as national parks by the Government of Indonesia and are managed by the Directorate General of Forest Protection and Forest Conservation (PHKA) within the Ministry of Forestry. The boundaries of the three component parts of the property require clear demarcation to indicate their location in the field. This is particularly important with regards to effective management of the property and the inclusion of important habitat national resources, but only a limited proportion of the property's perimeter can be marked per year. For Kerinci Seblat National Park, the inclusion of 14,160 hectares former production forest of the Sipurak Hook area in 2004, delayed the recent boundary demarcation process due to the negative response from the inhabitants of the area.

The property has strong and clearly explained management plans and each is included in the Indonesian Biodiversity National Strategy and Action Plan. Stakeholder forums have been established in each park and include bi-annual dialogue with local governments, national and international NGOs, local people and private sectors. However, there is variation in the involvement and contribution of these stakeholders in the three parks, which needs to be addressed. Intensive coordination among park management remains a priority with acknowledgement that coherent and coordinated protection measures among the three parks are paramount in the effective protection of flora and fauna, and particularly for threatened species.

A Presidential decree on illegal logging and saw-mill eradication issued in 2005 was followed-up by an integrated effort from the provincial and district governments, as well as from the Departments of Justice, Police and Forestry. As a result these threats have been virtually eradicated from the property. Mining, which occurs exclusively outside the boundaries of the property, remains a potential threat to the property. Within the property anti-poaching units are active, while site-specific human-wildlife conflict mitigation and anti-encroachment efforts are in place. Encroachment remains the most complex and difficult issue affecting the property and attempts to address it at a national level through the "Kelompok Kerja Penanganan Perambahan", an Indonesian-wide Anti Encroachment Task Force are required. The threat to the integrity of the property from road development requires effective planning, environmental assessment and regulatory measures to protect the property from damage to its Outstanding Universal Value.

Routine forest patrols take place in every park, along with site-specific law enforcement actions and encroachment eradication programmes. The State Party has

made financial support for the TRHS a priority, with the aim to improve ground level management, particularly concerning building staff capacity to combat illegal wildlife trade and encroachment. The size of the property, while providing a degree of protection, requires adequate and increased patrolling efforts and human resources to adequately cover the property, and establishment of an effective GIS based monitoring system would assist with this. The recruitment of local rangers is also encouraged. Invasive species also provide an additional emerging management issue in certain components of the property.

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	Sumatran tiger population		×		
3.2.2	Sumatran elephant population		×		
3.2.3	Sumatran rhino population		×		
3.2.4	Management of invasive species		×		
3.2.5	Boundary demarcation	×			
3.2.6	Road mitigation		×		
3.2.7	Ecosystem services	×			
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 (29/07/2011):
 - Relevant, Negative, Current, Outside

X Relevant			I	Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	 Inside 	C Outside	Solution Decreasing	⇒ Stable	Increasing	
Positive								
Negative X	×		×			→		
 4.1.2 - Commercial development Previous answer Cycle 2 (29/07/2011): Relevant, Negative, Current, Outside 								
Relevant			X Not relevant					
 4.1.3 - Industrial areas Previous answer Cycle 2 (29/07/ Relevant, Negative, Curre 	-							
Relevant			× Not relevant					
Previous answer Cycle 2 (29/07/	 4.1.4 - Major visitor accommodation and associated infras Previous answer Cycle 2 (29/07/2011): Relevant, Positive, Current, Outside 							

× Not relevant

Relevant

4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	 Inside 	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×		×			→	
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

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	C Outside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×		×			→	
Negative X		×	×			\rightarrow	
4.2.2 - Underground transp Previous answer Cycle 2 (29/07/ • Relevant, Positive, Currer	(2011):	ure					
Relevant			× Not relevant	t			
4.2.3 - Air transport infrast Previous answer Cycle 2 (29/07/ • Relevant, Positive, Currer Relevant	(2011):		× Not relevant				
Nelevant			A NOT relevant	L			
4.2.4 - Marine transport inf Previous answer Cycle 2 (29/07/ • Relevant, Negative, Curre	(2011):						
Relevant			× Not relevant	t			
4.2.5 - Effects arising from Previous answer Cycle 2 (29/07/ • Not relevant	-	ortation infrastru	icture				
Relevant			× Not relevant	t			

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 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.3.2 - Renewable energy facilities Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant

4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant			× Not relevant	t			
 4.3.4 - Localised utilities Previous answer Cycle 2 (29/07/2011): Relevant, Positive, Current, Outside 							
X Relevant				Not relevant			
	Impact		Origin Trend of impact				
Impact	4 Current	9 Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×			×			
Negative							

Relevant			Not rele	vant			
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative							

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

4.4. Pollution

4.4.1 - Pollution of marine waters

- Previous answer Cycle 2 (29/07/2011):
 - Not relevant

 Relevant
 X Not relevant

 4.4.2 - Ground water pollution
 Previous answer Cycle 2 (29/07/2011): • Not relevant

 Relevant
 X Not relevant

 4.4.3 - Surface water pollution
 Y Not relevant

 Previous answer Cycle 2 (29/07/2011): • Relevant, Negative, Potential, Outside
 X Not relevant

X Relevant				Not relevant			
	Impact	Impact		Origin		Trend of impact	
Impact	4 Current	Potential	 Inside 	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×		×			

4.4.4 - Air pollution

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

× Not relevant

4.4.5 - Solid waste

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant				Not relevant				
	Impact		Origin	Origin		Trend of impact		
Impact	4 Current	Potential	 Inside 	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×			×				
4.4.6 - Input of excess ene Previous answer Cycle 2 (29/07								

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 (29/07/2011):

Relevant, Negative, Current, Outside

Relevant	X Not relevant
 4.5.2 - Aquaculture Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant

4.5.3 - Land conversion

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×		×				

4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant
 4.5.5 - Crop production Previous answer Cycle 2 (29/07/2011): Relevant, Negative, Current, Outside 	

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	 Inside 	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×			×			
 4.5.6 - Commercial wild pla Previous answer Cycle 2 (29/07/2 Relevant, Negative, Curre 	2011):						
Relevant			× Not relevant				

4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (29/07/2011):

Relevant, Negative, Current, Outside

Relevant	X Not relevant
 4.5.8 - Commercial hunting Previous answer Cycle 2 (29/07/2011): Relevant, Negative, Current, Outside 	
Relevant	X Not relevant
4.5.9 - Subsistence huntingPrevious answer Cycle 2 (29/07/2011):Not relevant	
Relevant	X Not relevant
 4.5.10 - Forestry/Wood production Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant

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

4.6. Physical resource extraction

4.6.1 - Mining

- Previous answer Cycle 2 (29/07/2011):
 - Not relevant

Relevant	X Not relevant	
 4.6.2 - Quarrying Previous answer Cycle 2 (29/07/2011): Not relevant 		
Relevant	× Not relevant	
 4.6.3 - Oil and gas Previous answer Cycle 2 (29/07/2011): Not relevant 		
Relevant	× Not relevant	
 4.6.4 - Water (extraction) Previous answer Cycle 2 (29/07/2011): Relevant, Positive, Current, Inside 		
X Relevant	Not relevant	
Impact	Origin	Trend of impact

	Impact		Origin		Trend of Impact		
Impact	4 Current	9 Potential	 Inside 	C Outside	Solution Decreasing	⇒ Stable	Increasing
Positive X	×		×				1
Negative							

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	(29/07/2011):

Not relevant

Relevant

× Not relevant

4.7.2 - Relative humidity

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant
 4.7.3 - Temperature Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.7.4 - Radiation/Light Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.7.5 - Dust Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.7.6 - Water (rain/water table) Previous answer Cycle 2 (29/07/2011): Relevant, Negative, Current, Inside 	
Relevant	X Not relevant
 4.7.7 - Pests Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.7.8 - Micro-organisms Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
4.7.9 - Please comment as necessary on how the factors s positively	selected as relevant in 4.7 are affecting the property either negatively or
4.8. Social/Cultural uses of heritage	
 4.8.1 - Ritual/Spiritual/Religious and associative uses Previous answer Cycle 2 (29/07/2011): Relevant, Positive, Current, Outside 	
Relevant	X Not relevant
 4.8.2 - Society's valuing of heritage Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.8.3 - Indigenous hunting, gathering and collecting Previous answer Cycle 2 (29/07/2011): Not relevant 	
Relevant	X Not relevant
 4.8.4 - Changes in traditional ways of life and knowledge s Previous answer Cycle 2 (29/07/2011): Not relevant 	system
Relevant	X Not relevant

4.8.5 - Identity, social cohesion, changes in local population and community

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×			×			

4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

Relevant

🗙 Not relevant

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

4.9. Other human activities

4.9.1 - Illegal activities

- Previous answer Cycle 2 (29/07/2011):
 - Relevant, Negative, Current, Outside

X Relevant				Not relevant					
	Impact C		Origin		Trend of impact				
Impact	4 Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×			×					
 4.9.2 - Deliberate destruction Previous answer Cycle 2 (29/07/2) Not relevant 	-								
Relevant			× Not relevant	X Not relevant					
 4.9.3 - Military training Previous answer Cycle 2 (29/07/2 Not relevant 	2011):								
Relevant			× Not relevant	t					
4.9.4 - WarPrevious answer Cycle 2 (29/07/2Not relevant	2011):								
Relevant			X Not relevant						
4.9.5 - Terrorism Previous answer Cycle 2 (29/07/2 • Not relevant	2011):								
Relevant			× Not relevant	t					
 4.9.6 - Civil unrest Previous answer Cycle 2 (29/07/2 Relevant, Negative, Curre 									
Relevant			× Not relevant	t					

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

4.10. Climate change and severe weather events

4.10.1 - Storms

- Previous answer Cycle 2 (29/07/2011):
- Not relevant

Relevant

× Not relevant

4.10.2 - Flooding

- Previous answer Cycle 2 (29/07/2011):
 - Relevant, Negative, Current, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Image: Current Image: Potential Image: Current Image		 Inside 	Outside	Stable → Stable		Increasing
O Positive							
Negative X		×		×			

4.10.3 - Drought

- Previous answer Cycle 2 (29/07/2011):
 - Relevant, Negative, Current, Inside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	9 Potential	 Inside 	C Outside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×		×					
4.10.4 - Desertification Previous answer Cycle 2 (29/07/2 • Not relevant	2011):							
Relevant			X Not relevant					
4.10.5 - Changes to oceanid Previous answer Cycle 2 (29/07/2 • Not relevant								
Relevant			× Not relevan	nt				
4.10.6 - Temperature chang Previous answer Cycle 2 (29/07/2 • Relevant, Negative, Curren	2011):							
Relevant			X Not relevan	nt				
4.10.7 - Other climate change Previous answer Cycle 2 (29/07/2 • Relevant, Negative, Current	2011):							
X Relevant				Not relevant				

X Relevant			1	Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive									
Negative X	×			×					

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

4.11. Sudden ecological or geological events 4.11.1 - Volcanic eruption Previous answer Cycle 2 (29/07/2011): • Relevant, Negative, Current, Inside Relevant × Not relevant 4.11.2 - Earthquake Previous answer Cycle 2 (29/07/2011): Not relevant Relevant × Not relevant 4.11.3 - Tsunami/Tidal wave Previous answer Cycle 2 (29/07/2011): Not relevant Relevant × Not relevant

4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (29/07/2011):

Relevant, Negative, Current, Inside

X Relevant							
	Impact		Origin		Trend of impact		
Impact	Image: Current Image: Potential		Inside	C Outside	Stable → Stable		Increasing
O Positive							
Negative X	×		×				

4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Image: Second system Image: Second system Image: Second system Image: Second system Image: Second system Image: Second system		Inside	C Outside	Stable → Stable		Increasing
O Positive							
Negative X		×		×			

4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant	K Relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	 Inside 	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X		×		×			

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

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

Previous answer Cycle 2 (29/07/2011):

Not relevant

× Not relevant

4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (29/07/2011):

• Relevant, Negative, Current, Outside

X Relevant			1	Not relevant				
	Impact		Origin	Origin				
Impact	4 Current	Potential	 Inside 	C Outside	Secreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×		×					
4.12.3 - Invasive/Alien fres Previous answer Cycle 2 (29/07/ • Not relevant	•	5						
Relevant	Relevant X Not relevant							
4.12.4 - Invasive/Alien mar Previous answer Cycle 2 (29/07/ • Not relevant	•							
Relevant			× Not relevant					
4.12.5 - Hyper-abundant sp Previous answer Cycle 2 (29/07/ • Not relevant								
Relevant			× Not relevant					
4.12.6 - Modified genetic m Previous answer Cycle 2 (29/07/ • 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

4.13. Management and institutional factors

4.13.1 - Management system/Management plan

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×		×					
Negative								

4.13.2 - Legal framework

Relevant			Not rele	Not relevant					
	Impact		Origin		Trend of impact				
Impact	4 Current	9 Potential	 Inside 	Cutside	Solution Decreasing	⇒ Stable	Increasing		
O Positive									
Negative									
4.13.3 - Governance									

Relevant			Not relev	Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing	

O Positive				
Negative				

4.13.4 - Management activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Outside

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Image: Power of the second sec		 Inside 	C Outside	> Decreasing	⇒ Stable	Increasing
Positive X	×			×			
Negative							

4.13.5 - Financial resources

Relevant			Not rele	vant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	 Inside 	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative								

4.13.6 - Human resources

Relevant				Not relevant						
	Impact Ori				Trend of impact					
Impact	4 Current	9 Potential	 Inside 	Cutside	> Decreasing	⇒ Stable	Increasing			
O Positive										
Negative										

4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Outside

X Relevant				Not relevant						
	Impact Origin									
Impact	4 Current	Potential	Inside	C Outside	Solution Decreasing	⇒ Stable	Increasing			
O Positive X	×		×							
Negative										

4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

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

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			
4.1.1 Housing			

	9	9		٢		→
4.1.5 Interpretative and visitation facilities	٢	9		۲		→
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure	٢	9		٢		→
	9		9	٢		→
4.3 Services Infrastructures						
4.3.4 Localised utilities	٢	9			Ċ	
4.4 Pollution						
4.4.3 Surface water pollution						
	9		9		Ċ	
4.4.5 Solid waste						
	9	9			Ċ	
4.5 Biological resource use/modification						
4.5.3 Land conversion						
	9	9		٢		
4.5.5 Crop production						
	9	9			Ċ	
4.6 Physical resource extraction						
4.6.4 Water (extraction)	٢	4		٩		
4.8 Social/Cultural uses of heritage						
4.8.5 Identity, social cohesion, changes in local population and community						
	9	9			Ċ	
4.9 Other human activities						
4.9.1 Illegal activities						
	9	9			Ċ	
4.10 Climate change and severe weather events						
4.10.2 Flooding						
	9		9		Ċ	
4.10.3 Drought		_				
	9	4		٢		
4.10.7 Other climate change impacts		_				
	9	9			Ċ	
4.11 Sudden ecological or geological events						
4.11.4 Avalanche/Landslide						
	9	9		٢		
4.11.5 Erosion and siltation/Deposition						
	9		9		Ċ	
4.11.6 Fire (wildfire)						
	9		9		Ċ	

4.12 Invasive/alien species or hyper-abunda	ant species							
4.12.2 Invasive/Alien terrestrial species								
				0	9	٢		1
4.13 Management and institutional factors								
4.13.1 Management system/Management pla	an			٢	9	۲		
4.13.4 Management activities				٢	9		Ċ	
4.13.7 Low impact research/monitoring activ	vities			٢	9	٢		
Legend Current	4 Potential	Negative	O Positive	 Insi 	de	C Outsic	le	

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	t	Origin	Trend
4.1.1 Hous	ing				
		0	4	۲	→
Spatial sca	le - 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 - In	pact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
	High capacity				
×	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - De	velopement over the last 6 years				
×	Decreasing				
	Static				

Name	Impact	Impact		Origin		Trend
4.1.5 Interpretative and visitation facilities	٢	9		۲		→

Spatial scale - Area affected by the factor

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.2 Transportation Infrastructure

Name		Impact			Origin		Trend
4.2.1 Grou	nd transport infrastructure	٢	9		۲		→
		0		9	۲		→
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						

	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

4.3 Services Infrastructures

Name		Impact		Origin		Trend
4.3.4 Local	sed utilities	٢	9		Ċ	
0	her have affected by the factor					
Spatial sca	le - Area affected by the factor					
	Restricted					
×	Localised					
	Extensive					
	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
×	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					

Tropical Rainforest Heritage of Sumatra

	Decreasing
×	Static
	Increasing

4.4 Pollution

Name	Impact			Origin		Trend
4.4.3 Surface water pollution						
	0		9		۴	
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 - Developement over the last 6 years						
Decreasing						
Static						
Increasing						
Name	Imment			Origin		Trend
Name 4.4.5 Solid waste	Impact			Origin		rend
	0	9			Ċ	
Spatial scale - Area affected by the factor						
Restricted						
Localised						
Extensive						
Widespread						

Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	apact on the attributes
	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
	Increasing

4.5 Biological resource use/modification

Name	Impact	npact		Origin		Trend
4.5.3 Land conversion	impact			Origin		Trenu
4.5.5 Land conversion						
	0	9		۲		
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 - Dev	velopement over the last 6 years
	Decreasing
	Static
	Increasing

Name	Impact	npact		mpact		ct Origin			Trend
4.5.5 Crop production									
	0	9			۴				

Spatial scale - Area affected by the factor

Spatial Scal	e - Area anected by the factor
	Restricted
	Localised
	Extensive
	Widespread
Temporal so	cale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Imp	pact on the attributes
	Insignificant
	Minor
	Significant
	Major
Managemen	at response - Capacity of management to respond
	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	elopement over the last 6 years
	Decreasing
	Static
	Increasing

4.6 Physical resource extraction

Name		Impact			Origin		
4.6.4 Water (extraction)		9		۲			
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 - In	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

4.8 Social/Cultural uses of heritage

Name	Impact	Impact		Origin		Trend
4.8.5 Identity, social cohesion, changes in local population and community						
	0	9			Ċ	
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 - Dev	elopement over the last 6 years
	Decreasing
	Static
	Increasing

4.9 Other human activities

Name		Impact		Origin		Trend
	I activities					
		0	4		Ċ	
Spatial sca	ale - 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 - In	npact on the attributes					
	Insignificant					
×	Minor					
	Significant					
	Major					
Manageme	ent response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - De	velopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

4.10 Climate change and severe weather events

Name	Impact	Origin	Trend
4.10.2 Flooding			

		9	4	Ē	
Spatial scal	e - Area affected by the factor				
	Restricted				
	Localised				
	Extensive				
	Widespread				
Temporal se	cale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
	On-going				
Impact - Imp	pact on the attributes				
	Insignificant				
	Minor				
	Significant				
	Major				
Managemer	nt response - Capacity of management to respond				
	High capacity				
	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - Dev	elopement over the last 6 years				
	Decreasing				
	Static				
	Increasing				

Name		:	Origin	Trend
4.10.3 Drought				
	0	9	٢	
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

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

Name	Impact		Origin	Origin		
4.10.7 Other climate change impacts						
	0	9			Ċ	

Spatial scale - Area affected by the factor

Increasing

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

4.11 Sudden ecological or geological events

Trend

Origin

Impact



Spatial sca	ale - 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 - Im	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
	Increasing

Name	Impact		Origin	Origin		
4.11.5 Erosion and siltation/Deposition						
	0		9		Ċ	

Spatial scale - Area affected by the factor

	Restricted
	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant

	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
	Increasing

Name	Impact		Origin		Trend	
4.11.6 Fire (wildfire)						
	٢		9		Ċ	

Spatial scale - Area affected by the factor

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

4.12 Invasive/alien species or hyper-abundant species

Name		Impact		Origin	Trend
4.12.2 Inva	sive/Alien terrestrial species				
		٢	4	۹	
Spatial sca	le - 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 - In	pact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
×	High capacity				
	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - De	velopement over the last 6 years				
	Decreasing				
	Static				
×	Increasing				

4.13 Management and institutional factors

Name		Impact	Impact		Origin		Trend
4.13.1 Man	agement system/Management plan	o 9			۲		
Spatial cor	ale - Area affected by the factor						
Spatial Sca							
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						

×	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

Name	Impact	ł	Origin		Trend
4.13.4 Management activities	٢	9		Ċ	

Spatial sca	ale - 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 - Im	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static

Name	Impact		Origin	Trend
4.13.7 Low impact research/monitoring activities	٢	9	٢	

Spatial Sca	
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement 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					
4.18.1.2					
4.18.1.3					
4.18.1.4					
4.18.1.5					

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?

5.1.2 - Are the boundaries of the World Heritage property known and recognised? The boundaries are known by the management authority but are not known by 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

5.2. Protective Measures

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

All three parks are public lands designated as national parks by the Government of Indonesia. National Park status is the appropriate level of legal protection in Indonesia.

Source: Periodic Reporting Cycle 1; 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

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?

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

5.2.4 - 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?

The legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property is inadequate

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? The legal framework for the broader setting of the World Heritage property is inadequate to ensure 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 are major deficiencies in 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

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.

A management plan

An annual work plan or business plan

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

5.3.4 - Management Documents

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?

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?

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?

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

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 but few 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					

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

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

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 adequate for effective management of the World Heritage property

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

The existing sources of funding are secure over both the medium- and 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	%	%
6.1.6.2	Women	%	%
		Total 0 %	Total 0 %

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

Human resources are **inadequate** for management needs

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

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

Conservation	Fair
Environmental sustainability	Fair
Community participation and inclusion	Fair
Risk preparedness	Not available
Capacity development and education	Not available
Administration	Good
Research and monitoring	Fair
Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Fair

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.

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 has been developed but it is not implemented and skills are not being transferred

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?

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?

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

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

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	Good
Local/municipal authorities	Good
Indigenous peoples	Non-existent
Landowners	Non-existent
Women	Poor
Youth/children	Fair
Researchers	Good
Local visitors	Good
National/international tourists	Fair
Tourism industry	Fair
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 planned education and awareness programme for children and/or youth but it only partly meets the needs

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

ocal communities	
ocal/municipal authorities	
lomen	
buth/children	
ocal Visitors	

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	Fair
Site museum	Not provided but needed
Information booths	Good
Guided tours	Good
Trails/routes	Good
Printed information materials	Good
Online (website, social media, etc.)	Good
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

9. Visitor Management

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

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

Entry tickets and registries

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

One day (no overnight stay)

9.4 - Please provide the source of information

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

9.6 - Please provide the source of information

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 no 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

9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property? Visitor use of the World Heritage property is **not being actively managed despite an identified need**

9.10 - Is the effectiveness of tourism management regularly monitored?

No

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?

Although the tourism industry is active in the property, there is no contact between those responsible for the World Heritage property and the tourism industry

9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted? The Outstanding Universal Value of the property is not adequately presented and interpreted

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, but make no contribution to the management of the World Heritage property

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

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

If 'Yes', please specify

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

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?

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?

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

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

World Heritage managers/coordinators and staff	
Local/municipal authorities	
Local communities	
Indigenous peoples	
Landowners	
Women	
Researchers	
Tourism industry	
Local businesses and industry	
NGOs	
Other specific groups	
If you selected 'Other specific groups', please specify	

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

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

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

11. Identification of Priority Management Needs

11.1 - Identification of Priority Management Needs

5.1	Boundaries and Buffer Zones
5.1.2	The boundaries of the World Heritage property are known by the management authority but are not known by local communities/landowners
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
5.2.3	An adequate legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation
5.2.4	The legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property is inadequate
5.2.5	The legal framework for the broader setting of the World Heritage property and the buffer zone is inadequate to ensure the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property
5.2.6	There are major deficiencies in capacity/resources to enforce legislation and/or regulation in the World Heritage property
5.3	Management System/Management Plan
5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved
5.3.14	An annual work/action plan exists for the property but few of the activities are being implemented
5.3.17	 In a limited manner, the management system of the World Heritage property does contribute to gender equality The management system of the World Heritage property does not contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status In a limited manner, the management system of the World Heritage property does integrate a human rights-based approach
6.1	Funding
6.1.7	Human resources are inadequate for 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 has been developed but it is not implemented and skills are not being transferred
8	Education, Information and Awareness Building
8.2	There is a planned education and awareness programme for children and/or youth but it only partly meets the needs
9	Visitor Management

9.7	There is no strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property	
9.9	Visitor use of the World Heritage property is not being actively managed despite an identified need	
9.11	Although the tourism industry is active in the property, there is no contact between tourism operators and those responsible for the World Heritage property	
9.12	The Outstanding Universal Value of the property is not adequately presented and interpreted	
Pleas	se select 10 more issues.	
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

Please assess the current negative factors in question 4.16 before filling in the summary table.

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

The answers you provided have not outlined any serious management need, therefore this table is empty. Please Save to complete the question.

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?

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

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

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

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

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	
Research and monitoring	
Management effectiveness	
Quality of life for local communities and indigenous peoples	
Recognition	
Education	
Infrastructure development	
Funding for the property	
International cooperation	
Political support for conservation	
Legal/Policy framework	
Advocacy	
Institutional coordination	
Security	
Gender equality	
Provision of ecosystem services/ benefits to local communities	
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	

Fostering inclusive local economic development and enhancing livelihood	
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	
Other	
If 'Other', please specify	

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

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

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

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?

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

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

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?

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

15.3. Timing and resources

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

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

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

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

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?

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

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

UNESCO (other sectors/field offices)

UNESCO National Commission	
ICOMOS International	
IUCN International	
ICCROM international/regional	
ICOMOS national/regional	
IUCN national/regional	

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

UNESCO World Heritage Centre	
State Party Representative (national Focal Point)	
UNESCO other sectors (e.g. field office)	
National Commission for UNESCO	
ICOMOS International	
ICCROM International/regional	
ICOMOS national/regional	
IUCN national/regional	
IUCN International	

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

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

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.