Phong Nha-Ke Bang National Park

1. World Heritage Property Data

1.1 - Name of World Heritage property

Phong Nha-Ke Bang National Park

1.2 - World Heritage property details

Comment

Type of property: Natural Heritage Identification Number: N951bis

1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Phong Nha-Ke Bang National Park	17.537 / 106.151	123326	220055	343381	2003
Total (ha)		123326	220055	343381	

Comment

- Coordinates: N17 21 22, E106 23 33 - Buffer zone: changing from 220.055ha to 220.055.34ha According to the map made by Management Board of Phong Nha - Ke Bang in 2020 and sent to the Vietnam National Commission for UNESCO. This is a small modification that does not affect the zoning of the property. The zoning of the property remains like when it was recognized.

1.4 - Map(s)

Title	Date	Link to source
Map showing the inscribed property	2003	
Phong Nha-Ke Bang National Park - map of the inscribed extended property	2015	

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

- 1. 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) is not 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

No comments

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?

No

- 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?
- 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?
- 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?

 No
- 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)

World Natural Heritage Phong Nha – Ke Bang National Park has complied with the Convention on the Protection of World Natural and Cultural Heritage, Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

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?

No

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

Currently, Phong Nha - Ke Bang National Park does not have any relevant elements recorded in the Convention on the Protection of Intangible Cultural Heritage.

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

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.

None

- 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

Phong Nha-Ke Bang National Park is located in the middle of the Annamite Mountain Range in Quang Binh province, Viet Nam, and shares its boundary with the Hin Namno Nature Reserve in the Lao PDR to the west. The property comprises an area of 123,326 ha and contains terrestrial and aquatic habitats, primary and secondary forest, sites of natural regeneration, tropical dense forests and savanna and is rich in large, often spectacular and scientifically significant caves.

The property contains and protects over 104 km of caves and underground rivers making it one of the most outstanding limestone karst ecosystems in the world. The karst formation has evolved since the Palaeozoic period (some 400 million years ago) and as such is the oldest major karst area in Asia. Subject to massive tectonic changes, the karst landscape is extremely complex, comprising a series of rock types that are interbedded in complex ways and with many geomorphic features. The karst landscape is not only complex but also ancient, with high geodiversity and geomorphic features of considerable significance.

The karst formation process has led to the creation of not only underground rivers but also a variety of cave types including: dry caves, terraced caves, suspended caves, dendritic caves and intersecting caves. With a length of over 44.5 km the Phong Nha cave is the most famous of the system with tour boats able to penetrate inside to a distance of 1,500 m. The Son Doong Cave, first explored in 2009, is believed to contain the world's largest cave passage in terms of diameter and continuity.

A large number of faunal and floral species occur within the property with over 800 vertebrate species recorded comprising 154 mammals, 117 reptiles, 58 amphibians, 314 birds and 170 fish. The property clearly has impressive levels of biodiversity within its intact forest cover, notwithstanding some gaps in knowledge of the population status of some species.

Criterion (viii): Phong Nha-Ke Bang National Park is part of a larger dissected plateau, which encompasses the Phong Nha, Ke Bang and Hin Namno karsts. The limestone is not continuous and demonstrates complex interbedding with shales and sandstones. This has led to a particularly distinctive topography. The caves demonstrate a discrete sequence of events, leaving behind different levels of ancient abandoned passages; evidence of major changes in the routes of underground rivers; changes in the solutional regime; deposition and later re-solution of giant speleothems and unusual features such as sub-aerial stromatolites. On the surface, there is a striking series of natural landscapes, ranging from deeply dissected ranges and plateaux to an immense polje. There is evidence of at least one period of hydrothermal activity in the evolution of this ancient mature karst system. The Son Doong Cave, first explored in 2009, could contain the world's largest cave passage in terms of diameter and continuity. The plateau is one of the finest and most distinctive examples of a complex karst landform in Southeast Asia and the property is of great importance for enhancing our understanding of the geologic, geomorphic and geo-chronological history of the region.

Criterion (ix): Phong Nha-Ke Bang National Park consists of a complex limestone landscape, which includes very large caves and underground rivers. The property includes karst formations which are some of the oldest and largest in Asia, and it has geological, climatic, hydrographic and ecological conditions which are distinct from other limestone karst landscapes. Its cave ecosystems and habitats are unique with high levels of endemism and adaptations displayed by cave-dependent species. The property constitutes one of the largest remaining areas of relatively intact moist forest on karst in Indochina, with a forest cover estimated to reach 94%, of which 84% is thought to be primary forest. Furthermore, the property protects globally significant ecosystems within the Northern Annamites Rainforests and Annamite Range Moist Forests priority ecoregions.

Criterion (x): A high level of biodiversity is found within the property, with over 2,700 species of vascular plants and over 800 vertebrate species. Several globally threatened species are also present: 133 plant species and 104 vertebrate species have been reported, including several large mammals such as the endangered Large-antlered Muntjac, Clouded Leopard, and the critically endangered Saola. The level of endemism is high, especially in the cave systems. Furthermore, it is estimated that over 400 plant species endemic to Viet Nam are found within the property, as well as 38 animal species endemic to the Annamite range. Several new species to science have recently been found, including cave scorpions, fish, lizards, snakes and turtles, and more species are likely to be discovered. Importantly, four threatened primate taxa endemic to the Annamites are found within the property: the Hatinh Langur (specialised in karst forest and endemic to Viet Nam and the People's Democratic Republic of Lao), the black form of the Hatinh Langur, sometimes considered as a separate species, the Red-shanked Douc Langur, and the largest remaining population of White-cheeked Gibbon.

Integrity

The property constitutes one of the largest protected karst landscapes in South East Asia. Covering an area of 123,326 ha and bounded to the west by the Lao People's Democratic Republic, all elements necessary to manifest the outstanding geological values of the property of Phong Nha-Ke Bang National Park are contained within the boundaries of the property. The inscribed property is completely surrounded and protected by a buffer zone of 220,055 ha and is designated into three management zones: a strictly protected, an ecological restoration and an administrative/service zone. The watershed protection forests in the buffer zone also protect the integrity of the property. Furthermore, the extension of the property enhances its integrity and connectivity with the karst landscape in Lao PDR.

There are, however, a number of issues that affect the integrity of the property. Wildlife poaching and illegal harvesting of forest products are a direct threat to biodiversity values. The property has also suffered from past developments and its integrity could be threatened by further uncontrolled tourism developments, notably by the proposed construction of a cable car and access roads. There is a need for the implementation of Environmental Impact Assessments for any projects which could negatively affect the site. This would ensure that the natural landscape, geologic and geomorphic values, and key features such as primitive forest, caves, rivers and streams within the inscribed area remain intact. The property is situated within an area of high population density and as such a number of activities, such as cultivation, tourism, transport and freshwater fisheries could also impact on its integrity.

Protection and management requirements

Originally designated as a Nature Reserve in 1986, Phong Nha-Ke Bang National Park was established in 2001 under the Decision 189/QD-TTg by the Prime Minister and is managed by a Management Board. The Management Board is responsible for protection of forest resources and biodiversity and was established in 1994. Cave conservation and the provision of a tourism service are the responsibility of the Cultural and Ecological Tourist Centre under the Management Board. The property is also included in the Special National Heritage List (2009), and the Special Use Forest system (1999). The National Park is effectively protected by a number of national laws and government decisions, which prohibit any action inside or outside the boundaries of the National Park or a World Heritage property that may have a significant impact on the heritage values.

A Strategic Management Plan has been in place since 2012 and is based on existing plans, including the Sustainable Tourism Development Plan, the National Park Operation Management Plan and the Buffer Zone Development Plan. The Management Board oversees law enforcement programmes including ranger patrols and joint law enforcement operations on the border with Lao PDR. Nevertheless, the rugged nature of the country and community dependence on natural resources coupled with relatively limited resources for enforcement means that wildlife poaching and illegal timber gathering are difficult to eradicate and remain a challenging

issue.

The Ho Chi Minh highway, constructed outside and to the north of the property is appropriately located and provides important and valuable benefit to the National Park in terms of opening up views of and access to the Ke Bang forest area. However, other road construction and tourism development will require rigorous and comprehensive assessment of environmental impact before decisions are made on whether they should be permitted or not. It is paramount that such developments do not impact on the karst and biological values for which the property has been inscribed. Impacts of increased development pressure and tourism numbers will also require continual consideration, planning and management to ensure that these pressures do not damage the Outstanding Universal Value of the property. The property clearly has impressive levels of biodiversity within its intact forest cover, however, up-to-date data on large mammal species is also needed to confirm the population status of reported large mammals including tiger, Asiatic black bear, Asian elephant, giant muntjac, Asian wild dog, gaur and the recently discovered saola.

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	Ancient karst formations	×			
3.2.2	Unique landscape of cave systems, underground rivers and ecosystems	×			
3.2.3	Flora and fauna are highly endemic	×			
3.2.4	Environment, ecosystems, habitats of species	×			
3.2.5	Biodiversity and important values for scientific research	×			
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

Phong Nha - Ke Bang National Park agrees with current data on Outstanding Global Values which was declared by the World Heritage Commission in 2003 and 2015.

- 4. Factors Affecting the Property
- 4.1. Buildings and Development

4.1.1 - Housing

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Current, Potential, Outside

Relevant X Not relevant

4.1.2 - Commercial development

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant

4.1.3 - Industrial areas

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant

4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

× Relevant			Not relevant	
	Impact	Origin		Trend of impact

Impact	Current	Potential	Inside	G Outside	→ Decreasing	→ Stable	Increasing
O Positive 🗶	×			×		→	
Negative							

4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	№ Decreasing	→ Stable	Increasing
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

Last time, on the basis of implementing the planning related to tourism development in Phong Nha - Ke Bang National Park, accommodation facilities and related infrastructures were built here. This has a positive impact on the Heritage, in order to meet the demand for tourism development and the increase in the number of tourists, at the same time ensure the appropriate access of visitors to the property.

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

★ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing
O Positive X	×			×		→	
Negative X		×		×			/

4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	X Not relevant

4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (27/07/2011):

Not relevant

4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

Relevant	X Not relevant

4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (27/07/2011):

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
Positive							
○ Negative X	×			×		\Rightarrow	

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

Ground transportation infrastructure (bridges, roads, parking lots ...) provides important benefits to PNKB NP in terms of landscape access, contribute to increase revenue in the field of tourism and effectively enforce forest patrol, control and protection. However, in the rainy season, the ground transport infrastructures in PNKB NP are vulnerable to landslides, cause traffic disruption, affect forest patrol and protection, contain potential risks of impact on the ecosystem.

4.3. Services Infrastructures

4.3.1 - Water infrastructure

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

Relevant	X Not relevant
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4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

Relevant	X Not relevant
Relevant	Not relevant

4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (27/07/2011):

Not relevant

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

4.3.4 - Localised utilities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

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

4.3.5 - Major linear utilities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

X Relevant				Not relevant			
	Impact Origin		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive X	×			×		→	
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

It is necessary to install additional mobile broadcasting stations in some locations in the National Park. This is really necessary in actively supporting communication in the implementation of forest patrol and protection, effective coordination in times of unexpected situations or incidents in remote and isolated locations.

4.4. Pollution

4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (27/07/2011):

Polovont	♥
Relevant	X Not relevant

4.4.2 - Ground water pollution

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
Negative X	×			×		→	

4.4.3 - Surface water pollution

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

Relevant X Not relevant

4.4.4 - Air pollution

Previous answer Cycle 2 (27/07/2011):

Relevant, Negative, Potential, Outside

Relevant X Not relevant

4.4.5 - Solid waste

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

※ Relevant				Not relevant			
	Impact Origin			Origin Trend of impact			
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
O Positive							
○ Negative X		×		×	S		

4.4.6 - Input of excess energy

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X 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

In the rainy season, under the natural flow, garbage and sediments are drifting to the Vom cave system, potentially polluting and affecting the cave ecosystem here. Management Board of PNKB NP always strengthened propaganda, advocacy to raise awareness of local people and tourists in participating in environmental protection through restricting the use of plastic bags, single-use plastic products and prohibiting indiscriminate garbage disposal at tourist sites in the National Park.

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact Origin			gin Trend of impact			
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
O Positive							
○ Negative X	×			×	•		

4.5.2 - Aquaculture

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

✗ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	G Outside	№ Decreasing	→ Stable	Increasing
O Positive X	×			×		\rightarrow	
Negative							

4.5.3 - Land conversion

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

× Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive							
Negative X	×			×		→	

4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

✗ Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	→ Stable	Increasing
Positive							
	×			×		→	

4.5.5 - Crop production

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

✗ Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	→ Stable	Increasing
O Positive 🗶	×			×		→	
Negative							

4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

X Relevant			١	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive							
		×	×	×	S		

4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

X Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
	×			×	S		

4.5.8 - Commercial hunting

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	C Outside	→ Decreasing	→ Stable	Increasing
O Positive							
		×	×	×	>		

4.5.9 - Subsistence hunting

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×		×	S		

4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
O Positive 🗶	×		×			→	
Negative							

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

Cattle grazing, non-timber forest product exploitation and wildlife hunting and trapping are indentified as existing and potential threats to PNKB NP. In recent years, Management Board of PNKB NP has implemented many solutions with long-term sustainable goals, building livelihood development programs in the buffer zone, mobilize participation of local people in the protection of heritage values and sustainable ecotourism to reduce pressure on natural resources in the Park.

4.6. Physical resource extraction

4.6.1 - Mining

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant

4.6.2 - Quarrying

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

Relevant X Not relevant

4.6.3 - Oil and gas

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant

4.6.4 - Water (extraction)

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Potential, Inside, Outside

Relevant X 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

No comments

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

Previous answer Cycle 2 (27/07/2011):

Not relevant

× Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	→ Stable	Increasing
O Positive X	×		×			→	
○ Negative X		×		×		\rightarrow	

4.7.2 - Relative humidity

Previous answer Cycle 2 (27/07/2011):

Not relevant

× Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	© Outside	▶ Decreasing	→ Stable	Increasing
O Positive 🗶	×		×			\rightarrow	
Negative X		×	×	×		→	

4.7.3 - Temperature

Previous answer Cycle 2 (27/07/2011):

Not relevant

≭ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
Positive							
		×	×	×			<i>P</i>

4.7.4 - Radiation/Light

Previous answer Cycle 2 (27/07/2011):

• Not relevant

Relevant	X Not relevant

4.7.5 - Dust

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	✗ Not relevant

4.7.6 - Water (rain/water table)

Previous answer Cycle 2 (27/07/2011):

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
○ Positive ★	×		×	×		→	
Negative X		×		×			,

4.7.7 - Pests

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant

4.7.8 - Micro-organisms

Previous answer Cycle 2 (27/07/2011):

Not relevant

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

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

The warming of the atmosphere leads to an increase in the intensity of a series of extreme weather phenomena, in which notably the abnormal heat waves cause droughts, intense rains cause flash floods, landslides and large-scale inundation. These changes alter environmental factors such as wind, humidity, temperature, rain, mold activity, micro-organisms... and affect the structure and physical shape of the Heritage, the habitat and development of flora and fauna.

4.8. Social/Cultural uses of heritage

4.8.1 - Ritual/Spiritual/Religious and associative uses

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Outside

× Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive X	×		×	×		\rightarrow	
Negative							

4.8.2 - Society's valuing of heritage

Previous answer Cycle 2 (27/07/2011):

• Not relevant

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	G Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive X	×		×	×			7
Negative							

4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive							
Negative X	×			×	S		

4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (27/07/2011):

X Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
	×		×	×			P

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

Previous answer Cycle 2 (27/07/2011):

Not relevant

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

4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive X		×	×	×			•
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

With the advantages of cave systems and biodiversity, PNKB NP has been exploited for tourism development with diverse types such as cave exploration combined with cultural ecotourism. Thanks to tourism activities, thousands of households in the buffer zone communes have been increased their incomes and stabilize their lives; minimizing pressure on people's livelihood on natural resources of the heritage.

4.9. Other human activities

4.9.1 - Illegal activities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

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

4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	✗ Not relevant

4.9.3 - Military training

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	✗ Not relevant

4.9.4 - War

Previous answer Cycle 2 (27/07/2011):

Relevant	✗ Not relevant

4.9.5 - Terrorism

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	X Not relevant

4.9.6 - Civil unrest

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	X Not relevant

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

Recognized as a World Heritage site is a meaningful event for tourism development in PNKB NP. The number of visitors to visit and research here is increasing. This has caused many different impacts on the economic and social development, especially on the natural environment. Over the past years, hunting of wild animals and illegal logging still occurs; exploitation of non-timber forest products in PNKB NP. Some traffic activities at tourist sites make noise, affecting wildlife.

4.10. Climate change and severe weather events

4.10.1 - Storms

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing
Positive							
○ Negative X	×		×	×			<i>P</i>

4.10.2 - Flooding

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Current, Potential, Inside, Outside

× Relevant		Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive							
○ Negative X	×		×	×			-

4.10.3 - Drought

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

✗ Relevant	1	Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing
Positive							
	×		×	×		→	

4.10.4 - Desertification

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	X Not relevant

4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (27/07/2011):

Relevant	✗ Not relevant

4.10.6 - Temperature change

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Current, Potential, Inside, Outside

★ Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	→ Decreasing	→ Stable	Increasing
O Positive							
Negative X	×		×	×			7

4.10.7 - Other climate change impacts

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

X Relevant				Not relevant	nt relevant			
	Impact		Origin		Trend of impact			
Impact	G Current	Potential	Inside	Outside	▶ 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

Climate change increases extreme climatic events and natural disasters, both in frequency and intensity, making natural disasters more severe. Suffering from adverse natural phenomena such as prolonged rain, floods, landslides, sedimentation or unusual heat leading to droughts, forest fires ... conservation and protection will face difficulties.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X Not relevant	
-------------------------	--

4.11.2 - Earthquake

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	X Not relevant

4.11.3 - Tsunami/Tidal wave

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant	✗ Not relevant

4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

× Relevant				Not relevant			
	Impact Origin		Origin		Trend of impact		
Impact	Current	Potential	• Inside	Outside	→ Decreasing	→ Stable	Increasing
O Positive							
○ Negative X		×		×			7

4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (27/07/2011):

✗ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
Positive							
		×	×	×			P

4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	• Inside	© Outside	▶ Decreasing	→ Stable	Increasing
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

In the dry season, along with unusual weather phenomena, small-scale natural fires still occasionally occur in the buffer zone of Phong Nha - Ke Bang National Park.

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

Delevent	Water to the second sec
Relevant	X Not relevant

4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Inside, Outside

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

4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (27/07/2011):

• Relevant, Negative, Potential, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	© Outside	▶ Decreasing	⇒ Stable	Increasing
Positive							
○ Negative X	×			×		→	

4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (27/07/2011):

• Not relevant

Relevant	X Not relevant

4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Negative, Current, Potential, Inside, Outside

Relevant	X Not relevant
Holovalit	** Not relevant

4.12.6 - Modified genetic material

Previous answer Cycle 2 (27/07/2011):

Not relevant

Relevant X 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

Through investigation and research, up to now, Phong Nha - Ke Bang National Park has identified 14 alien species that are at risk of invasive, affecting the ecosystem and biodiversity here. In which, Merremia boisiana is identified as a type of liana plant, which has a serious level of invasiveness on the native vegetation with a rapid growth rate and affect forest land.

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 X	×		×	×			7
Negative							

4.13.2 - Legal framework

× Relevant				Not relevant			
	Impact Orig		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	⇒ Stable	Increasing
○ Positive ★	×		×	×			7
Negative							

4.13.3 - Governance

× Relevant				Not relevant					
	Impact	Origin			Trend of impact				
Impact	Current	Potential	Inside	Outside	→ Decreasing	→ Stable	Increasing		
Positive X	×		×	×		\rightarrow			
Negative									

4.13.4 - Management activities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

× Relevant				Not relevant					
	Impact Origin			Trend of impact					
Impact	Current	Potential	Inside	© Outside	→ Decreasing	⇒ Stable	Increasing		
O Positive X	×		×	×			<i>></i>		
Negative									

4.13.5 - Financial resources

✗ Relevant				Not relevant				
	Impact Origin			Trend of impact				
Impact	Current	Potential	• Inside	© Outside	▶ Decreasing	→ Stable	Increasing	
O Positive X		×	×			\rightarrow		
Negative								

4.13.6 - Human resources

X Relevant	Not relevant
relevant	THE TOTAL A

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	▶ Decreasing	→ Stable	Increasing
O Positive X	×		×	×			7
Negative							

4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (27/07/2011):

• Relevant, Positive, Current, Inside, Outside

× Relevant			1	Not relevant				
	Impact Origin			Trend of impact				
Impact	Current	Potential	• Inside	Outside	▶ Decreasing	→ Stable	Increasing	
O Positive X	×		×	×			P	
Negative								

4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (27/07/2011):

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

Management system/Management plan, Legal framework, Governance, Financial resources, Human resources are all factors that play an active role, as well as a basis for effective management activities prevent negative impacts on outstanding global values of PNKB NP. Currently, Quang Binh province is directing the construction of a new management regulation for the World Natural Heritage PNKB NP. This will be one of the effective tools to better manage, protect and promote the Heritage.

4.14. Other factor(s)

4.14.1 - Other factor(s)

None

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

e.r . asset e camma, radio						
Name				Origin		Trend
4.1 Buildings and Development						
4.1.4 Major visitor accommodation and associated infrastructure	O	q			Œ	→
4.1.5 Interpretative and visitation facilities	O	9			Œ	→
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure	O	9			Œ	\rightarrow
			9		Œ	1
4.2.5 Effects arising from use of transportation infrastructure						
		9			Œ	→
4.3 Services Infrastructures						
4.3.3 Non-renewable energy facilities	O	9			Œ	\rightarrow
4.3.4 Localised utilities	O	9		•	Œ	→
4.3.5 Major linear utilities	0	9			Œ	→

4.4 Pollution						
4.4.2 Ground water pollution						
		q			(G	
		4			Ġ	¬
4.4.5 Solid waste						
			9		G	•
4.5 Biological resource use/modification						
4.5.1 Fishing/collecting aquatic resources						
		9			(•
4.5.2 Aquaculture	O	q			Œ	→
4.5.3 Land conversion						
					Œ	→
4.5.4 Livestock farming/Grazing of domesticated animals		·				
					æ	_
		9			3	-
4.5.5 Crop production	O				G	→
4.5.6 Commercial wild plant collection						
			P	•	C	5
4.5.7 Subsistence wild plant collection						
		P			Œ	S
4.5.8 Commercial hunting						
			q	•	E	S
4.5.9 Subsistence hunting						
			q		æ	•
A F 40 Ferryland Novel and described		-31	7		G	
4.5.10 Forestry/Wood production	O	9		•		→
4.7 Local conditions affecting physical fabric						
4.7.1 Wind	•	9		•		→
			9		G	→
4.7.2 Relative humidity	O	9		•		→
			9	•	Œ	→
4.7.3 Temperature						
			9	()	Œ	7
4.7.6 Water (rain/water table)	O	q		@	Œ	→
			a		(7
4.7.8 Micro-organisms	©	q			·	_
		-1		•	9	~
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses	0	9		•	ઉ	→
4.8.2 Society's valuing of heritage	0	9		•	G	7

4.0.2 Indianance builting mathering and collecting						
4.8.3 Indigenous hunting, gathering and collecting		ø			₹ 6	
4.8.4 Changes in traditional ways of life and knowledge system		-0			3	
		q		()	Œ	7
4.8.5 Identity, social cohesion, changes in local population and community	③	9		•	·	7
4.8.6 Impacts of tourism/Visitation/Recreation	•		9	•	Œ	7
4.9 Other human activities						
4.9.1 Illegal activities						
		9			Œ	\rightarrow
4.10 Climate change and severe weather events						
4.10.1 Storms						
		9		•	C	>
4.10.2 Flooding						
		9		•	Œ	-
4.10.3 Drought						
		9		•	G	→
4.10.6 Temperature change		~3			~	
440 T Other Allerty when the large large state of the large state of t		4		•	Œ	
4.10.7 Other climate change impacts						
		m and a			70	
4.11 Sudden ecological or geological events		9		•	Œ	,
4.11 Sudden ecological or geological events		9		•	(,
4.11 Sudden ecological or geological events 4.11.4 Avalanche/Landslide		9	a	•	3	
4.11.4 Avalanche/Landslide		9	9	•	G	,
	•	9	q		3	7
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition		9	9	0	9	,
4.11.4 Avalanche/Landslide		व	9		9	<i>,</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition	•	q	q		·	<i>,</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire)	•	q	4		·	<i>,</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species	•	9	9		·	<i>> > > > > > > > > ></i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species	•	q	9		·	<i>/</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species	•	4	व		·	<i>/</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species			व		E	/
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species			व		E	<i>y</i> → → <i>y</i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species 4.13 Management and institutional factors	•	9	व	•		<i>> > > > > > > > > ></i>
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species 4.13 Management and institutional factors	•	9	व	•		/ // / / / / / / // / / / / / / // / / / / / / // / / / / / / // / / / / / / // / / / / / / //
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species 4.13 Management and institutional factors 4.13.1 Management system/Management plan	•	9	व	0		/
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species 4.13 Management and institutional factors 4.13.1 Management system/Management plan	•	9	व	0		/ / / / / / / / / / / / / / / / / / /
4.11.4 Avalanche/Landslide 4.11.5 Erosion and siltation/Deposition 4.11.6 Fire (wildfire) 4.12 Invasive/alien species or hyper-abundant species 4.12.2 Invasive/Alien terrestrial species 4.12.3 Invasive/Alien freshwater species 4.13 Management and institutional factors 4.13.1 Management system/Management plan 4.13.2 Legal framework		9	व	•		/

4.13.5 Financial re	sources				O		9	•		→
4.13.6 Human reso	ources				O	9		•	(-
4.13.7 Low impact	research/monitoring acti	vities			O	9		•	(-
Legend	Current	Potential	Negative	O Positive	Insi	de		Outsi	de	

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

Spatial scale - Area affected by the factor X Restricted Localised Extensive Weigheread Temporal scale - Occurence of the Impact	Name		Impact		Origin		Trend
Coalised Coalised	4.1.4 Major	visitor accommodation and associated infrastructure	•	9		F	\rightarrow
Coalised Coalised							
Coalised Coalised	Spatial sca	le - Area affected by the factor					
Localised Extensive Widespread Temporal = Cocurence of the Impact One off or are Intermitent or sporadic Irrequent On-going Impact = Impact = Impact Insignificant Minor Significant Major Management to respond Management to respond Management to respond Management to respond Temporal = Impact							
Extensive Widespread Temport = Voccurence of the impact A control or are A intermittent or sporadic Frequent On-going Impact - Impact on the attributes A insignificant Minor Significant Minor Major Major Major Major Major Management to response A interpolate of management to respond A interpolate of manage							
Temport = to Cocurence of the impact Temport = to Cocurence of the impact An one off or rare Intermittent or sporadic An intermittent or sporadic Impact = Impact = to the attributes Impact = Impact = to the attributes An infor Impact = Impact = to the attributes An infor Impact = Impact = to the attributes An infor Impact = Impact = to the attributes An infor Impact = Impact = to the attributes An infor Impact = Impact = to the attributes An infor Impact = to the attributes Impact							
Temporal scale - Occurence of the impact Conception rare Conception rate Conception rate							
X Intermittent or sporadic X Intermittent or sporadic X Frequent X On-going Impact - Impact on the attributes X Insignificant	Temporal s						
Frequent On-going Impact - I the attributes Impact - I significant Minor Significant Major Management response - Capacity of management to respond Medium capacity Medium capacity Low capacity and / or resources Trend - Decreasing X static							
Impact - Imsignificant Insignificant Insignifican	×	Intermittent or sporadic					
Impact - Impact - Insignificant Insignificant Minor Significant Major Management to respond Medium capacity Medium capacity Low capacity No capacity and / or resources Trend - Decreasing Static		Frequent					
Insignificant Minor Significant Major Management response - Capacity of management to respond Medium capacity Medium capacity Low capacity No capacity and / or resources Trend - Decreasing Static		On-going On-going					
Minor Significant Major Management response - Capacity of management to respond Medium capacity Medium capacity Low capacity No capacity No capacity of management to respond Trend - Devolution of the last 6 years Decreasing Static	Impact - Im	pact on the attributes					
Significant Major Management response - Capacity of management to respond High capacity Medium capacity Low capacity Low capacity No capacity and / or resources Trend - Developement over the last 6 years Decreasing Static	×	Insignificant					
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		Minor					
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		Significant					
High capacity Medium capacity Low capacity No capacity and / or resources Trend - Developement over the last 6 years Decreasing Static		Major					
Medium capacity Low capacity No capacity and / or resources Trend - Developement over the last 6 years Decreasing Static	Manageme	nt response - Capacity of management to respond					
Low capacity No capacity and / or resources Trend - Developement over the last 6 years Decreasing Static	×	High capacity					
No capacity and / or resources Trend - Developement over the last 6 years Decreasing Static		Medium capacity					
Trend - Developement over the last 6 years Decreasing X Static		Low capacity					
Decreasing Static		No capacity and / or resources					
X Static	Trend - De	velopement over the last 6 years					
		Decreasing					
Increasing	×	Static					
		Increasing					

Spatial sca	ale - 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 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

4.2 Transportation Infrastructure

Name		Impact			Origin		Trend
4.2.1 Groun	4.2.1 Ground transport infrastructure		9			Œ	→
				9		Œ	-
0	Associated by the forter						
Spatial Sca	lle - 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	elopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend

Name	Impact		Origin			Trend
4.2.5 Effects arising from use of transportation infrastructure						
		9			Œ	→

		9		Œ	→
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	elopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				

4.3 Services Infrastructures

Name		Impact		Origin		Trend
4.3.3 Non-	4.3.3 Non-renewable energy facilities		q		G	→
Spatial co	ale. Area offered by the factor					
Spatial Sc	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 Control of the Control of t					
Impact - Ir	npact on the attributes					
×	Insignificant					
	Minor					
	Significant					
	Major					
Managem	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		Trend
4.3.4 Loca	lised utilities	O	9	•	F	→
Spatial sc	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	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					
Name		Impact		Origin		Trend
4.3.5 Major	linear utilities	•	9		G	→
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 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

4.4 Pollution

Name		Impact		Origin		Trend	
4.4.2 Groui	nd water pollution						
			9			C	\rightarrow
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 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						

Name	Impact		Origin			Trend
4.4.5 Solid waste						
			9		Œ	•

Spatial sc	ale - Area affected by the factor					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal	Temporal scale - Occurence of the impact					
	One off or rare					

×	Intermittent or sporadic
	Frequent
	On-going 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

4.5 Biological resource use/modification

Name		Impact		Origin		Trend
4.5.1 Fishir	g/collecting aquatic resources					
			9		G	•
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	relopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
Name		Impact		Origin		Trend
4.5.2 Aqua	culture	•	9		F	→
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	relopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name 4.5.3 Land	conversion	Impact		Origin		Trend
			a		(S	→
					4	
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	elopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
Name		Impact		Origin		Trend
4.5.4 Livest	ock farming/Grazing of domesticated animals					
4.5.4 Livest	ock farming/Grazing of domesticated animals		q		Œ	→
	ock farming/Grazing of domesticated animals e - Area affected by the factor	(2)			F	→
		©			·	→
Spatial scal	e - Area affected by the factor	•			*	→
Spatial scal	e - Area affected by the factor Restricted	•			Œ	→
Spatial scal	e - Area affected by the factor Restricted Localised	•			Œ	→
Spatial scal	le - Area affected by the factor Restricted Localised Extensive	•			Œ	→
Spatial scal	e - Area affected by the factor Restricted Localised Extensive Widespread				Œ	→
Spatial scal	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurrence of the impact				Œ	→
Spatial scal	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare				©	→
Spatial scal	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic				©	→
Spatial scal Temporal s	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent				©	→
Spatial scal Temporal s	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going				©	→
Spatial scal X Temporal s X	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes				©	→
Spatial scal X Temporal s X	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant				©	→
Spatial scal X Temporal s X	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor				&	-
X Temporal s X	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant				©	→
X Temporal s X	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major				©	→
Spatial scal X Temporal s X Impact - Im X	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major				(-
Spatial scal X Temporal s X Impact - Im X	e - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major nt response - Capacity of management to respond High capacity				©	→

Trend - Dev	relopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
4.5.5 Crop	production	•	9			C	\rightarrow
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	relopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name	nercial wild plant collection	Impact			Origin		Trend
4.5.6 COIIII	rercial wild plant conection	<u> </u>		n (3)	•	n#	
				-1	Q.	G	31
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 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	elopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
Name		Impact		Origin		Trend
4.5.7 Subsis	stence wild plant collection					
			9		(S
Spatial scal	e - Area affected by the factor		9		F	S
Spatial scal	e - Area affected by the factor Restricted		9		G	•
Spatial scal			q		(`
	Restricted		q		(•
	Restricted Localised		q		(•
×	Restricted Localised Extensive		q		•	•
×	Restricted Localised Extensive Widespread		q		.	
×	Restricted Localised Extensive Widespread cale - Occurence of the impact		q		.	`
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare		q		.	
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic		q		.	
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent		q		.	
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going		q		•	
× Temporal s ×	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Cact on the attributes		q		•	
× Temporal s ×	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant		q			
× Temporal s ×	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor		q			
X Temporal s X	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Cact on the attributes Insignificant Minor Significant		q		•	
× Impact - Im	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor Significant Major		q		•	
X Impact - Im X	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Cact on the attributes Insignificant Minor Significant Major Attresponse - Capacity of management to respond		q			
X Impact - Im X	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor Significant Major at response - Capacity of management to respond High capacity		q			

Trend - Dev	elopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
Name		Impact		Origin		Trend
	ercial hunting	Impact		Origin		Tiena
			q	@	F	\
Spatial sca	e - 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	elopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					
Name	stones hunting	Impact		Origin		Trend
4.J.S SUDSI	stence hunting		9		Œ	S
			7		G	A
Spatial sca	e - 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	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	elopement over the last 6 years				
×	Decreasing				
	Static				
	Increasing				
Name		Impact		Origin	Trend
4.5.10 Fore	stry/Wood production	0	9	•	→
Spatial sca	e - 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 On-going				
Impact - Im	and or the attributes				
	pact on the attributes				
	Insignificant				
×					
×	Insignificant				
×	Insignificant Minor				
	Insignificant Minor Significant				
	Insignificant Minor Significant Major				
	Insignificant Minor Significant Major Intresponse - Capacity of management to respond				
Manageme	Insignificant Minor Significant Major Intresponse - Capacity of management to respond High capacity				

Trend - Developement over the last 6 years				
	Decreasing			
×	Static			
	Increasing			

4.7 Local conditions affecting physical fabric

Name		Impact		Origin		Trend	
4.7.1 Wind		O	9		•		→
				9		C	→
Custial sas	le. Area affected by the factor						
Spatiai 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 - 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
4.7.2 Relati	ve humidity	•	9		•		\rightarrow

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 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	elopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact		Origin		Trend
4.7.3 Tempo	erature					
			_			
		•	9	•	Œ	1
	e - Area affected by the factor	9	9	@	Œ	,
	e - Area affected by the factor Restricted	•	9	•	(<i>P</i>
		•	9	©	F	,
	Restricted	•	q	•	Œ	,
	Restricted Localised		q	•	G	,
Spatial scal	Restricted Localised Extensive		9	•	(,
Spatial scal	Restricted Localised Extensive Widespread		q	•		
Spatial scal	Restricted Localised Extensive Widespread cale - Occurrence of the impact		q	•	©	
Spatial scal	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare		q	•		
Spatial scal	Restricted Localised Extensive Widespread cale - Occurrence of the impact One off or rare Intermittent or sporadic		q	•	.	
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent		q	•		
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going		q	•	©	
× Temporal s	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes		q	•		
× Temporal s	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Cact on the attributes Insignificant		q	•		
X Temporal s Impact - Im	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor		q	•	©	
X Temporal s X Impact - Im	Restricted Localised Extensive Widespread Cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going Cact on the attributes Insignificant Minor Significant		q	•	©	
X Temporal s X Impact - Im	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor Significant Major		q	•		
X Temporal s X Impact - Im	Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going cact on the attributes Insignificant Minor Significant Major Attresponse - Capacity of management to respond		q	•		

	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
×	Decreasing						
	Static						
	Increasing						
Name		Impact					Trend
4.7.6 Water	(rain/water table)	•	9		•	G	\rightarrow
				9		Œ	1
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 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	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name		lmmaat			Outsin		Trend
4.7.8 Micro	organisms	Impact	q		Origin	Œ	→
On attal and	And the standard of the standa						
opatial 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 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

4.8 Social/Cultural uses of heritage

Name		Impact			Origin		Trend
4.8.1 Ritual/Spiritual/Religious and associative uses		O	9		•	Œ	\rightarrow
Spatial scale - Area affected by the factor							
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	relopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact		Origin		Trend
4.8.2 Socie	ty's valuing of heritage	O	9	•	G	-
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	relopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					
Name		Impact		Origin		Trend
4.8.3 Indige	enous hunting, gathering and collecting					
			A		G	S

Spatial sca	Spatial scale - 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						
×	Decreasing						
	Static						
	Increasing						
Name							
		Impact			Origin		Trend
	ges in traditional ways of life and knowledge system	Impact					Trend
	ges in traditional ways of life and knowledge system	Impact	9		Origin	Ğ	Trend
4.8.4 Chang	ges in traditional ways of life and knowledge system le - Area affected by the factor	Impact					Trend
4.8.4 Chang		Impact					Trend
4.8.4 Chang	le - Area affected by the factor	Impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted	impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted Localised	Impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted Localised Extensive	Impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted Localised Extensive Widespread	Impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact	Impact					Trend
4.8.4 Chang	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare	impact impac					Trend
4.8.4 Chang	Restricted Localised Extensive Widespread Cale - Occurence of the impact Intermittent or sporadic	Impact					Trend
4.8.4 Change Spatial sca	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent	impact					Trend
4.8.4 Change Spatial sca	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going	impact					Trend
4.8.4 Change Spatial sca	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes	impact					Trend
4.8.4 Change Spatial sca	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant	[mpact					Trend
4.8.4 Change Spatial sca X Temporal s	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor	impact					Trend
X Temporal s Impact - Im	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant	impact impac					Trend
X Temporal s Impact - Im	le - Area affected by the factor Restricted Localised Extensive Widespread cale - Occurence of the impact One off or rare Intermittent or sporadic Frequent On-going pact on the attributes Insignificant Minor Significant Major						Trend

	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
							_
Name	ty, social cohesion, changes in local population and community	Impact	9		Origin	Œ	Trend
4.0.5 Ideliti			-1			G	•
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						
	Decreasing						
	Static						
×	Increasing						
Name		Impact			Origin		Trend
4.8.6 Impac	ets of tourism/Visitation/Recreation	O		9	•	(-
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 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

4.9 Other human activities

Name	Name		Impact			Trend
4.9.1 Illegal activities						
			9		C	\rightarrow
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	pact 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 - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

4.10 Climate change and severe weather events

Name	ame		Impact			Origin	
4.10.1 Storms							
			9		•	G	-
Spatial sca	le - Area affected by the factor						
opana. ooa	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						
	Decreasing						
	Static						
×	Increasing						

Spatial sca	ale - Area affected by the factor		
	Restricted		

Name

4.10.2 Flooding

Trend

Origin

Impact

	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 - De	velopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					
Name		Impact		Origin		Trend
4.10.3 Drou	gnt		en en		04	
			4	•	G	→
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					

Management response - Capacity of management to respond

On-going

Impact - Impact on the attributes

Insignificant

Minor

Significant

Major

	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	relopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact			Origin	Trend	
4.10.6 Temperature change						
		9		•	G	-

		9	•	Œ	>
Spatial sc	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				

Name	Impact		Origin		Trend	
4.10.7 Other climate change impacts						
		A		•	Œ	/

Spatial sca	ale - Area affected by the factor	
	Restricted	

	Localised
	Extensive
×	Widespread
Temporal s	icale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going 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

Name		Impact		Origin		Trend
4.11.4 Aval	4.11.4 Avalanche/Landslide					
			9		G	<i>P</i>
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

Name	Impact		Origin		Trend	
4.11.5 Erosion and siltation/Deposition						
			9	•	F	<i>P</i>
Spatial scale - Area affected by the factor						

			9	Q	Ġ.	
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 - De	velopement over the last 6 years					
	Decreasing					
	Static					
×	Increasing					

Name	Impact		Origin		Trend	
4.11.6 Fire (wildfire)						
		9			Œ	→

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

Restricted
Localised
Extensive
Widespread
scale - Occurence of the impact
One off or rare
Intermittent or sporadic
Frequent
On-going On-going
ppact on the attributes
Insignificant
Minor
Significant
Major
ent response - Capacity of management to respond
High capacity
Medium capacity
Low capacity
No capacity and / or resources
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 Invas	4.12.2 Invasive/Alien terrestrial species					
			q		Œ	\rightarrow
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 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					
Name		Impac	i	Origin		Trend
4.12.3 Inva	sive/Alien freshwater species		a		(\$	_
			7		G	~
Spatial sca	lle - 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 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					

4.13 Management and institutional factors

No capacity and / or resources

Trend - Developement over the last 6 years

Decreasing
Static
Increasing

Name	Impact		Origin		Trend	
4.13.1 Management system/Management plan	•	9		•	(/

Spatial scal	e - 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 On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Managemei	t 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		Impact		Origin		Trend
	framework	©	q	<u>•</u>	Œ	/
Spatial scal	e - Area affected by the factor					
	Restricted					
	Localised					
×	Extensive					
_	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
~	Frequent Co. maior.					
X Impact Im	On-going					
ımpact - Im	pact on the attributes					
	Insignificant					
	Minor					

×	Significant					
	Major					
Managemer	t 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		Impact		Origin		Trend
4.13.3 Gove	rnance	O	9	•	F	→
Spatial scal	e - 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 On-going					
Impact - Imp	pact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Managemer	t 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					
						_

4.13.4 Management activities

Spatial sca	e - 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 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	elopement over the last 6 years				
	Decreasing				
×	Static				
	Increasing				
Name		Impact		Origin	Trend
4.13.5 Fina	ncial resources	O	9	•	→
Spatial sca	e - 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 On-going				
Impact - Im	pact on the attributes				
	Insignificant				

×	Significant					
	Major					
Managemei	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		Impact		Origin		Trend
4.13.6 Huma	an resources	(9	•	F	7
Spatial scal	e - 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					
Managemei	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		Impact		Origin		Trend

4.13.7 Low impact research/monitoring activities

Spatial sca	ale - 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	Impact - Impact 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						

4.17. 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

World Natural Heritage Phong Nha - Ke Bang National Park has not yet registered a transnational heritage.

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	Ancient karst formations	×			
4.18.1.2	Unique landscape of cave systems, underground rivers and ecosystems	×			
4.18.1.3	Flora and fauna are highly endemic	×			
4.18.1.4	Environment, ecosystems, habitats of species	×			
4.18.1.5	Biodiversity and important values for scientific research	×			

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 are **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 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 both the management authority and local communities/landowners

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

Along with enhancing the roles and responsibilities of stakeholders as well as local authorities and communities living in the buffer zone of Phong Nha - Ke Bang National Park, the clear identification of the boundaries and buffer zone of the property has contributed effectively to the coordination of forest protection and management and biodiversity conservation of Phong Nha - Ke Bang National Park in general, for buffer zone in particular.

5.2. Protective Measures

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

The World Heritage property of Phing Nha-Ke Bang National Park is owned by the State according to the following decisions:

- Decision N° 194/ CT dated 9/8/1986 by the Chairman of the Council of Ministers on the establishment of Phong Nha Nature Reserve.
- Decision N° 194/ QD/UB dated 18 November 1993 by the People's Committee of Quang Binh province on establishing the management board of Phong Nha Nature Reserve
- Decision N°236 dated 12 December 1986 by the Minister of Culture and Information to recognize Phong Nha-Xuan Son as a national relic landscape area
- Decision N° 914 QD/UB dated 3 December 1998 by the People's Committee of Quang Binh province on approval of the technical and economic management plan for Phong Nha Nature Reserve.
- Decision N° 315/UB dated 1 August 2000 by the Quang Binh People's Committee on approval of the management plan of Phong Nha Ke Bang National Park.
- Official Dispatch N° 741/BNN-KH of the Ministry of Agriculture and Rural Development dated 8 March 2000 on proposing Prime Minister to approve the management plan of Phong Nha – Ke Bang National Park.
- Agreement Official Dispatch N° 1330/BKHCNMT-MTG dated 19 May 2000 by the Ministry of Planning and Investment on proposing Prime Minister to change the Phong Nha Nature Reserve to the Phong Nha-Ke Bang National Park.

The park is effectively managed under conventions and relevant laws:

- TheConvention Concerning the Protection of the World Cultural and Natural Heritage;
- The Environmental Protection Law (2005);
- The Cultural Heritage Law 2001 (amended in 2009);
- The Bio-Diversity Law (2009);
- The Tourism Law 2005;
- The Land Law;
- The Law on Forest Protection and Development.

Source: Periodic Reporting Cycle 1; Periodic Reporting Cycle 2

Comment

From 2007 up to now, Phong Nha - Ke Bang National Park is operating a management regulation based on the Law on Forest Protection and Development in 2004 and relevant guiding documents, law provisions. However, at present, a number of legal provisions have expired and have been replaced by new legal documents, such as: the Law on Forestry in 2017; Decree No.109/2017/ND-CP dated September 21, 2017 on the protection and management of World Cultural and Natural Heritage in Vietnam.

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

2014 / Law on environmental protection / No.55/2014/QH13 dated June 23 2014 issued by National Assembly of the Socialist Republic of Vietnam / 2017 /

Law on Forestry / No.16/2017/QH14 dated November 15, 2017 issued by National Assembly of the Socialist Republic of Vietnam / 2017 / Law on Tourism /

No.09/2017/QH14 dated November 15, 2017 issued by National Assembly of the Socialist Republic of Vietnam / 2010 / the Sustainable Tourism Development Plan (STDP) for the Phong Nha Ke Bang National Park (PNKB NP) Region / Decision No.2822/Q -UBND dated November 1st 2010 issued by the People's Committee of Quang Binh province /

2013 / Strategic Management Plan 2013 – 2025 for Phong Nha Ke Bang National Park / Decision No.808/Q -UBND dated April 09, 2013 issued by the People's Committee of Quang Binh province /

2013 / Operational Management Plan 2013 – 2020 for Phong Nha Ke Bang National Park / Decision No.809/QD-UBND dated April 09, 2013 issued by the People's Committee of Quang Binh province /

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?

The **legal framework** in the buffer zone for the maintenance 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**

5.2.5 - 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 provides an adequate basis for effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and/or Integrity

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

There is acceptable capacity/resources to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain

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

Beside the management and conservation of PNKB NP has complied with the provisions of Vietnamese law as stated in Section 5.2.2. Currently, the People's Committee of Quang Binh province is directing the development of a Master Plan Task of the World Heritage Site of PNKB NP in the period of 2021 - 2030, with a vision to 2050 and a new regulation on heritage management to replace in accordance with the current regulations on the management, conservation and promotion of Heritage values.

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

No comments

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 joint national/ local

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)

Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management

Mechanisms to promote equal participation among and within groups, including different levels of authority, local communities, indigenous people, women and men, and other specific groups

An integrated management plan combining World Heritage and any other designations

A management plan

An annual work plan or business plan

An assessment of biological and cultural diversity and ecosystem services provided by the property

A joint approach to management of cultural and natural heritage

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

Management Board of PNKB NP is a non-business unit under Quang Binh PPC, has the function of advising and assisting the PPC in implementing the responsibility of management, protection, special-use forest development; conservation and promotion of natural values, ecosystem standard models, biodiversity, biological genetic resources, historical and cultural relics, landscapes of PNKB NP; scientific research; to provide forest environment services according to the provisions of law.

5.3.4 - Management Documents

Comment

- Sustainable Tourism Development Plan (STDP) for the Phong Nha Ke Bang National Park (PNKB NP) Region; - Strategic Management Plan 2013 – 2025 for Phong Nha Ke Bang National Park; - General Plan for Phong Nha – Ke Bang National Park to 2030; - The master plan for developing National Tourist Area of Phong Nha – Ke Bang until 2030.

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?

 $\textbf{No}\ \textbf{use}$ has been made of the 2011 Recommendation on the Historic Urban Landscape

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?

Some 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:

Policy on the impacts of climate change on the World Heritage has been reviewed and integrated into the master plan for socio-economic development in the buffer zone of PNKB NP in the direction of conservation till 2020 and vision to 2030. On the basis of potential risks from climate change affecting the buffer zone of PNKB NP, challenges have been identified that contribute to the harmonious combination of sustainable economic development and biodiversity conservation in here.

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

Building hydro-meteorological monitoring system in PNKB NP region has contributed effectively to data and information collection, allows the development of projections of threats and risk scenarios to reduce the impact of natural disasters on the Heritage.

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 adequate coordination between all bodies/levels involved in the management of the property

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 all of its activities are being implemented and monitored

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 None

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

In order to better implement the management, protection and promotion of the values of World Natural Heritage Phong Nha - Ke Bang National Park, Management Board of Phong Nha - Ke Bang National Park will submit to competent authorities for approval and implementation of the master plan of Phong Nha - Ke Bang National Park in the coming time.

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	30 %	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.)	40 %	0 %
6.1.1.6	Governmental (national/federal)	30 %	30 %
6.1.1.7	Governmental (regional/provincial/state)	0 %	20 %
6.1.1.8	Governmental (local/municipal)	0 %	20 %
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 %	10 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	20 %
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

No comments

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

Funding sources for investment in propaganda and awareness raising on conservation, research, environmental monitoring, natural resource development monitoring and wildlife rescue is still limited. Recommend that the World Heritage Committee and UNESCO organizations continue to support in informing, calling for coordinating conservation development programs and projects and research activities in Phong Nha - Ke Bang National Park.

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	40 %	60 %
6.1.6.2	Women	60 %	40 %
		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	Fair
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Not available
Capacity development and education	Fair
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
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	Not available
Community participation and inclusion	Fair
Risk preparedness	Poor
Capacity development and education	Fair
Administration	Fair
Research and monitoring	Fair
Awareness raising and public information/communication	Fair
Marketing and promotion	Not applicable
Interpretation	Fair
Visitor management/tourism	Not applicable
Enforcement (custodians, police)	Fair

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

Training and capacity building at this property is **fully based** on 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.

- Organize training courses for Park staff on management and professional skills, improve law enforcement skills, and develop thematic maps. - Training on World Heritage site management skills for key staff of the Park according to UNESCO guidelines. - Provide facilities, equipment for forest rangers to serve the patrol and biodiversity monitoring.

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 fully implemented; all technical skills are being transferred to those managing the property locally

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

With a current total of 341 staff and employees, the human resources of PNKB NP Managment Board have partially met the management needs for the property. However, the lack of funding for the training and fostering of skills and knowledge for the staff led to the ineffectiveness in the protection, conservation and promotion of the heritage values.

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?

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

The Management Board of PNKB NP has actively promoted research and cooperation in scientific research and initially recognized many important achievements. From 1990 up to now, the park has recorded 404 caves in this heritage area; Completed the publication of the list of fauna and flora, recording 2,952 plant species and 1,394 animal species. At the same time, this is also the place to record 42 new species for science in the early 21st century.

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	Good
Indigenous peoples	Fair
Landowners	Fair
Women	Good
Youth/children	Fair
Researchers	Fair
Local visitors	Fair
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Good
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?

Local communities
Local/municipal authorities
Indigenous peoples
Landowners
Women
Youth/children
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries

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 needed
Information booths	Fair

Guided tours	Good
Trails/routes	Good
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

No comments

9. Visitor Management

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

383.512 / 894.322 / 865.594 / 701.213 / 655.748 /

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

This information is statistics from accommodation establishments in the area of Phong Nha - Ke Bang National Park.

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

45 / 20 / 15 / 300 / 150 / 10 /

9.6 - Please provide the source of information

This information is statistics from accommodation establishments in the area of Phong Nha - Ke Bang National Park.

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

Up to now, tourist sites in Phong Nha - Ke Bang National Park have been implementing separate tourist management contents for each destination. However, the Phong Nha - Ke Bang National Park Management Board has not developed a general strategy in terms of tourist management, tourism activities and its arising impacts on the Heritage.

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

 $\label{thm:could} \textit{Visitor use of the World Heritage property is managed but \textbf{improvements could be made} \\$

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 one location and 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

Contributing to the development of sustainable tourism in the Heritage, Management Board of PNKB NP has conducted research and assessment on climatic factors, cave environment, outstanding geo-heritage values; Application of GIS and remote sensing technology in building disaster prevention and warning systems

and resource monitoring ... in order to promote sustainable tourism development. In addition, the Park Management Board also encourages and creates conditions for capable and experienced businesses to invest in projects to diversify types of ecotourism, limiting the number of people in each group of tourists, promoting the role of the local community in tourism service activities such as porter participation, homestay accommodation, photography, boat sightseeing services...

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

Voc

If 'Yes', please specify

Tourism has brought many economic and conservation benefits to local communities. Over the past years, thanks to tourism activities, jobs have been created for communities in the buffer zone communes, improving incomes and stabilizing people's lives, contributing to reducing pressure on livelihoods of people up the heritage's natural resources. In addition, community participation in tourism activities associated with livelihoods also helps improve foreign language knowledge, business skills, expanding cultural exchanges and conservation awareness for local people.

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

Tourism development is one of the important goals, but this is also a big challenge for the conservation and promotion of the World Natural Heritage PNKB NP. This has the potential to directly affect the natural environment and conservation of the Park. Therefore, rigorous assessment of tourism impacts on the surroundings of the Heritage is required to limit threats to the visitor's experience, geological and geomorphological values and biodiversity in the area.

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				X
10.3.3	Character of governance				X
10.3.4	Appropriate synergy with other conservation designations	×			
10.3.5	Contribution to sustainable development				X
10.3.6	Capacity development			×	

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

- Effective management system: Building a professional team to improve heritage management capacity. - Properties of the management system: Effectiveness and efficiency through rearrangement of the management system. - Contribution to sustainable conservation: To build and effectively enforce regulations on the management and protection of the Heritage. - Capacity development: Building human resources capacity.

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	Poor
Landowners	Fair
Women	Fair
Researchers	Poor
Tourism industry	Poor
Local businesses and industry	Poor
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 the period from 2016 - 2020, Quang Binh PPC has directed Management Board of PNKB NP to implement strictly and responsibly the recommendations of the World Heritage Committee, always prioritizes the implementation of the best conservation solutions to minimize the impact on the Outstanding Values of Heritage; implement strictly the protection of forests, heritage resources... Therefore, heritage resources are preserved, there are no negative impact on the property.

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

Although human resources are limited (with a rate of one ranger/1,000 ha), PNKB NP has made effort to maintain effective patrols and surveys through coordination with the buffer zone resident groups and interagency coordination. Application of SMART has been deployed to monitor species since 2016. The appropriate allocation of human and financial resources to implement preventive and control measures for invasive alien species is also a major challenge in the Park's conservation and management.

11. Identification of Priority Management Needs

11.1 - Identification of Priority Management Needs

5.2	Protective Measures					
5.2.6	There is acceptable capacity/resources to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain					
5.3	Management System/Management Plan					
5.3.5	No use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property					
5.3.7	Some 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	×				
5.3.17	 In a limited manner, the management system of the World Heritage property does contribute to gender equality In a limited manner, the management system of the World Heritage property does contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status 					
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	×				
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					
9.9	Visitor use of the World Heritage property is managed but improvements could be made					
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	×				
Pleas	Please select 3 more issues.					
□ Ple	☑ 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

4.7	Local cond	ditions affecting physical fabric					
4.7.1		Wind					
4.7.3	Temperature	This factor affects all criteria viii) ix) x) of the heritage: geomorphological and historical values of the earth, the development of ecosystems and biodiversity	In 2019, the Park Management Board has installed a hydro-meteorological monitoring system at the national park in orde to observe hydro-meteorological parameters serving weather forecast and climate change in the National Park area.	There is a monitoring program.	Annual	Management Board of Phong Nha - Ke Bang National Park and related agencies	These are natural impacts, so the intervention will contribute to reducing the threat caused by natural disasters

	Water (rain/water table)	This factor affectiviii) ix) x) of the geomorphologic historical values the development ecosystems and	heritage: cal and s of the earth, nt of	Board ha hydro-me system a orde to of hydro-me serving w	eteorological pa veather forecas hange in the N	onitoring park in arameters		ring	Anr	ual	Management Boa of Phong Nha - K Bang National Pa and related agend	e imp rk inte cies cor rec cau	ese are natural bacts, so the ervention will htribute to lucing the threat used by natural asters
4.8	Social/Cultu	ıral uses of heri	tage										
4.8.4	Changes in traditional ways of life and knowledge system	of the heritage historical val	ffects all criteria v ge: geomorpholog ues of the earth, t of ecosystems a	ical and the	None	Re	search		Annual		Management Boar Phong Nha - Ke Ba National Park and agencies.	ang	None
4.10	Climate cha	nge and severe	weather events										
4.10.1	Storms	ix) x) of the geomorpho values of th	logical and histori	cal in er and pr	eveloping NESCO's ternational mergency assis roposal for Pho ha - Ke Bang ational Park		Identify pot threats and actual impa the propert	I acts to	From 202 - 2022	Pho Nat	nagement Board of ing Nha - Ke Bang ional Park and ted agencies.	the inte contrib threats	are impacts of phenomena, so ervention will ute to reducing caused by disasters.
4.10.2			Flooding										
4.10.3			Drought										
4.10.7	Other climate change impact	ix) x) of the geomorpho values of the	ological and historine earth, the ent of ecosystems	rical	None	threats	/ potential and actual s to the ty.	Annu	al	Phong	ement Board of Nha - Ke Bang al Park and related es.	natural p the inter- contribut	re impacts of henomena, so vention will e to reducing aused by isasters.
4.11	Sudden eco	logical or geolo	gical events										
4.11.5	Erosion and siltation/Depo	sition the heri	tor affects all crite tage: geomorphol al values of the ea	ogical and			Develop a program to monitor the impacts in the	ie cave	Annual		Management Boar Phong Nha - Ke Ba National Park and agencies.	ang	None
4.12	Invasive/alie	en species or hy	per-abundant s	oecies									
4.12.2			Invasive/Alien terrestrial species										
Question i	not completed												

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.3	Management System/Management Plan					
		Actions	Timeframe	Lead agency (and others involved)	More info / comment	
5.3.7	Some use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	To identify potential challenges and risks that climate change impacts on the World Heritage site, develop action plans that are ready to respond to natural heritage.	Annual	Management Board of Phong Nha - Ke Bang National Park and related agencies.	None	

5.3.9	Some use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Strengthening preparedness for emergency situations through the installation of fire protection equipment, rescue equipment for floods. To use the traditional knowledge system of the local community to alert and respond to emergencies.	Annual		Management Board of Pho - Ke Bang National Park, re agencies and local commun	lated	ne
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	To enhance the promotion of international cooperation, call for conservation development programs and projects and research activities in Phong Nha - Ke Bang National Park.	Annual	-	ent Board of Phong Nha - National Park and related	focused on inf There has bee monitoring, pa and research	ne Park has been mainly frastructure development. en inadequate funding for atrolling activities, survey programmes. Therefore, it sary to support external
6.1.7	Human resources partly meet the management needs of the World Heritage property	Training on technical and managerial skills for key staff of the Park to effectively manage and conserve the world heritage site. To provide the Park with necessary equipment and facilities needed to effectively carry out the operational programmes.	Annual	Management Board of Phong Nha - Ke Bang National Park and related agencies.		The lack of funding for the training and fostering of skills and knowledge for the staff led to the ineffectiveness in the protection, conservation and promotio of the heritage values.	
8	Education, Inform	ation 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	To organize propaganda programs, train biodiversity conservation communication for children and youth through extracurri activities at schools in the buffer zone communes.	skills		Management Board of Pr Bang National Park and r	-	None .
9	Visitor Managem	ent					
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	To strengthen the professional capabilities of the Guides team at World Heritage site; raise common awareness among local authorities and communities to promote sustainable and responsible tourism within the heritage site.	Annual	-	nt Board of Phong Nha - ational Park and related	heritage tourisi improving publ	nonstration skills on m will contribute to lic understanding of the ppreciate and preserve sritage.
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	- Building a monitoring framework related to indicators that need to be periodically monitored of world heritage To develop specific indicators of monitoring, management effectiveness assessment and conservation status.	Annual		ment Board of Phong Nha - I National Park and related S.	periodic mo supplemen new factors conservation manageme	and evaluating the onitoring program to t criteria for monitoring s and risks that affect the on of the Heritage or adjust int performance evaluation o suit the reality.

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?

The Authenticity of the World Heritage property has been preserved

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.

World Natural Heritage Phong Nha - Ke Bang National Park is well preserved, and its Outstanding Universal Values are maintained.

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	Positive
Management effectiveness	Very positive
Quality of life for local communities and indigenous peoples	No impact
Recognition	Very positive
Education	Positive
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Very positive
Political support for conservation	Positive
Legal/Policy framework	Very positive
Advocacy	No impact
Institutional coordination	Positive
Security	No impact
Gender equality	Positive
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	Positive
Fostering inclusive local economic development and enhancing livelihood	Very 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 management and conservation of World Natural Heritage PNKB NP has always been interested in Quang Binh province and through which there have been many positive changes. Many research programs and investment projects of domestic and international organizations have been implemented, contributing to preserving the regional values, support indigenous communities to cooperate in implementing programs to conserve, exploit and promote the heritage's values towards sustainable development.

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

PNKB NP has effectively implemented forest protection, biodiversity protection and forest fire prevention and fighting in the buffer zone communes; support and transfer appropriate production models to reduce the people's pressure on heritage resources,...; at the same time, proactively researching and giving applications

in resource management and monitoring based on geographic and information systems, remote sensing as well as application of many scientific topics in order to increase efficiency in heritage value conservation. Planning has been focused on: Phong Nha - Ke Bang National Park was approved by the Prime Minister under Decision No.2335/QD-TTg dated December 8, 2010. The Provincial People's Committee has approved the Planning for sustainable tourism development in Phong Nha - Ke Bang National Park for the period 2010 - 2020, with a vision to 2025 according to Decision No.2822/QD-UBND dated November 1st 2010. Strategic management plan for the period 2013 - 2025 and operation management plan 2013 - 2020 according to Decision No.808/QD-UBND and No.809/QD-UBND dated April 9, 2013. So far, 404 caves have been discovered and surveyed, especially the new discovery of the world's largest cave is Son Doong cave. This is a very important contribution that adds OUVs to the history of the Earth's crust formation and important geological features in Phong Nha - Ke Bang. Database and list of fauna and flora species have been built and updated with 2,952 plant species and 1,395 animal species; updated cultural and historical information in Phong Nha - Ke Bang region; completing digital map thematic classes such as carpet, fauna, flora, hydrology, culture - society, endangered species, invasive species, heat and rain, geology, topography; building species lookup tools and resource monitoring. The above research results are an important scientific basis in direction, administration and implementation of conservation programs and promote the OUVs of the property.

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

ustainable Development	
ynergies	
tate of Conservation	
lanagement	
overnance	
apacity 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 World Heritage Convention
The accept of Outstanding Universal Value
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	Fair
Site Managers	Fair
UNESCO World Heritage Centre	Good
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Good

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

No comments

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
Staff from other World Heritage properties
UNESCO National Commission

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

Gender balance has been given limited consideration and implementation is in process.

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

3600 / 720 / 100 /

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?

All 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

No suggestion

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	Good
ICOMOS International	Not applicable
IUCN International	Good
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Good

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)	Fair
UNESCO other sectors (e.g. field office)	Good
National Commission for UNESCO	Good
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Good
IUCN International	Good

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?

No comments

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

Geographic information table

Reason for update: - Coordinates: N17 21 22, E106 23 33 - Buffer zone: changing from 220.055ha to 220.055.34ha According to the map made by Management Board of Phong Nha - Ke Bang in 2020 and sent to the Vietnam National Commission for UNESCO. This is a small modification that does not affect the zoning of the property. The zoning of the property remains like when it was recognized.

Changes to these items will need to go through the proper processes.

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

Through the development of periodic reports, it helps us to be more fully aware of the policies of UNESCO in the protection and conservation of World Natural Heritage. Contribute to raising awareness of all levels, sectors and communities in protecting the Outstanding Universal Value of Heritage, fulfilling obligations and responsibilities in the implementation of the World Heritage Convention in order to to sustainable development.

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